

GEORGE CRUMB

Handwritten musical score for a string quartet, showing a sequence of notes and dynamics across multiple staves. The score includes annotations such as "actual sound:", "on the keys", "left hand - touch given strings at proper node to produce 5th partial harmonics", and "PI. (sempre)". The notation is complex, with many notes and dynamic markings like "f", "p", "ppp", and "ppppp".

ECO 2. Languidamente, quasi lontano (hauntingly) [ $\text{♩} = 40$ ]

Violin

whistle (oct. pitch)

Piano

PI. (sempre) - - - -

Draw a piece of rather hard rubber (or similar material) very slowly along the indicated strings. When the correct pressure is exerted a 7th partial harmonic emerges. The tone will tend to phase in and out, but the whistled tones will fortify the harmonic and give the illusion of a continuous sound. It may be necessary to apply rosin to the strings beforehand.

Hold the violin like a mandolin. Make a very rapid tremolo on the G string with the fingernail (forefinger) or the fingernail and thumbnail (held closely together). A very rapid lateral motion of the nail should produce an effect resembling a plectrum tremolo on a mandolin.

Eco 3. Prestissimo (allegro possibile, e.g. ♩ = 72)

[illegible]

\*\*) In case the violinist cannot achieve a sufficiently beautiful mandolin effect, these passages had best be played with the bow, tremolando sul ponticello.

Violin

Alto Flute

Clarinet

Piano

*sempre sul G (come sopra)*

*poco scherzando*

*mp*

*pppp*

*port*

*sempre*

*Knuckles*

*CB II*

*CB III*

*fz*

*fuggevole*

*poco scherz.*

*mp*

*poco f*

*CB II*

*(come sopra)*

*CB I*

*fz*

*PII. sempre*

*pizz.*

*crisallino*

*ppp*

*delicatiss.*

*p*

*sempre*

*sempre sul G (trem. come sopra)*

*attacca subito*

*ppp*

*on keys*

*ffz*

*mf*

*sub.*

*poco f*

*pp*

*pppp*

*3*

*mp*

*f*

*mp*

*fuggevole*

*pppp*

*CB II*

*(come sopra)*

*CB I*

*pochiss. fz*

*(lasc. vibr.)*

*PII. sempre*

*+ PI.*

*(senza PI.)*

*\* \* \**

*\* \* \** Play like guitar harmonics, i.e. left hand finger off string immediately after string is plucked. A true harmonic will ring like a tiny bell.

[illegible]

## Eco 5. Dark, intense [♩ = 52]

Alto Flute (seated)

Clarinet (seated)

Violin

Piano

Dark, intense [♩ = 52]

Start with breathy tone and gradually change to normal

ppppp

pp molto vibr.

(off with piano attack)

whispered: don-de-su-fre el tiem-po (accel... rit...)

Start with breathy tone and gradually change to normal

ppppp

pp molto vibr.

whispered: lenamente, eguale y los ar-cas ro-to-s

rapid gliss. over strings with fingertip (6)

mp

on keys

(lasc. vibr.)

(sim.)

(lasc. vibr.)

PI. (sempre) -

press strings at node for 5th partial harmonics

Scrape fingernails (smoothly, with gradual crescendo) along metal winding of the two strings. Start at point about 4 inches from dampers and stop at node (for 5th partial harmonics). The harmonics should be struck at top of crescendo (without pause) so that the gesture is continuous.

\* Quotation from Federico García Lorca.  
 \*\* A medium-fast, wide vibrato.

"... and the broken arches where time suffers"

Cadenza I [♩ = 190, but freely] (pressando - - -)

Violin and Piano begin circle-music (Molto ritmico)

lenfo

tempo I.

Alto Flute

Alto Flute

Alto Flute

Alto Flute

Alto Flute

Clarinet

attacca subito

whispered: don-de-su-fre el tiem-po (accel... rit...)

Start with breathy tone and gradually change to normal

ppppp

pp molto vibr.

whispered: lenamente, eguale y los ar-cas ro-to-s

rapid gliss. over strings with fingertip (6)

mp

on keys

(lasc. vibr.)

(sim.)

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 \*\* A medium-fast, wide vibrato.

Make a 3 sec. pause, then repeat upper segment (with II da Volta variation); then make a 5 sec. pause and proceed to lower segment.

Cadenza II (very free)

**Cadenza II (very free)**

*J = ca. 60, ma con rubato*  
place left hand over fingerboard  
place bow behind left hand (near peg)  
*(Frailty, like cries of a wounded bird)*  
arco sul pont.  
lento e poco pressando -  
sul A  
Violin (Begin at cue (4) on circle)  
Sul G (sempre) arco sim.  
ppp sempre (quasi lontano) poco languido, come sospiro  
arco, modo ord. throw bow  
fuggevole Lh pizz.  
Vivace ppp  
Alto Flute  
ppp (fig.) (modo ord.) molto ff  
accelerando

Eco 6. Dark, intense [ $\text{Flz}$  ♩ = 52][illegible]

\* This passage to be fingered as indicated. After pizz. glissando (string plucked at usual point, about 4" from bridge), the first finger remains in position (on C#). The next pitch (F#) is automatically produced when bow is placed behind left hand. The G and F# are taken with 2nd and

### Cadenza III (very free)

**Cadenza III (very free)**

Alto Flute and Piano  
begin circle-music  
(Quasi meccanico)

7

Clarinet

modo ord.

f f f f (accel.)

Clarinet

f fppsub. f f ff

(accel.) (accel.)

Clarinet

fz p mp p (=ca.176) p

Clarinet

ff molto ritmico cresc. poco a

Clarinet

poco ff

[♩] = 52]

ered:

Eco 7. Dark, intense [ $\text{♩} = 52$ ]

lunga gradual change to breathy tone

whispered:

don-desu-fre el tiempo

pp sub. non vibr.

attacca subito

al niente

Quasi meccanico (146) Begin circle at cue (3) in Clarinet cadenza (sempre sim)

poco f

Alto Flute

actual sounds

rapid gliss. over strings (come sopra)

on the keys

Piano

mp

ff

(touch strings at 5th partial note)

PI. (sempre)

lasc. vibr.

PI. (sempre)

pp subito

attacca subito poco Eco B

Pianist N.B. - There should be absolutely no break between Eco 7 and Eco 8! The 32nd note figure should be regarded as an upbeat to the first chord of Eco 8.

7 attacca subito l'eco 8

Pianist N.B. - There should be absolutely no break between Eco 7 and Eco 8! The 32nd note figure should be regarded as an upbeat to the first chord of Eco 8.

Eco 8. Feroce, violento  
[♩ = 184]

**Eco 8. Feroce, violento**  
[Op. 184]

Violin  
Alto Flute  
Clarinet  
Piano

*shri!! screaming*  
*(bell in the air!)*  
*Sempre*  
*(modo ord.)*  
*acuto*  
*mp sub.*  
*(loco)*  
*meno f (accel. - -)*  
*sub.*  
*molto*  
*PI. (sempre) - - -*  
*move toward inside of piano while holding G# then play close to strings*  
*(poco allarg. -)*  
*metallico*  
*(loco)*  
*Sempre*  
*diminuendo - - - poco*  
*(Sul A)*  
*accel.*  
*rit.*  
*a rit.*  
*poco*  
*Blow gliss.*  
*mournfully*  
*(f)*

## 9

N.B. The dashes  
in violin part  
indicate portamento  
throughout Eco 9.

attacca  
subito  
l'eco 9

quasi improvvisando (timidly, hesitantly) (accel. - - - -)

(♩ = ca. 60, come sopra)

ppp sul G      sul D      sul G      (ppp) sul G      (al niente)

(whistling)  
flauti

(return to normal seated position)  
 (Kinuckles)  
 CB III.  
 CB II.  
 CB I.  
 string)  
 (I.v. sempre)  
 (come sopra)  
 poco  
 f  
 pizz.  
 on keys  
 pp  
 ppsub  
 lasc. vibr.  
 rapid gliss. fingertip - come sopra  
 ma distinto  
 (♩ = 60) cristallino





Eco 11. Adagio; like a prayer [ $\text{♩}=40$ ]

ECO II. Adagio; like a prayer [ $\text{♩} = 40$ ]

Violin

con sordino

actual sound:

ppppp

quasi lontano, senza colore  
(il più piano possibile)

gliss.

sul D

gliss.

sul G

gliss.

sul D (sempre)

gliss.

sul pont.

bow position; mode ord.

PI. (sempre)

Piano

on keys 5

ppp

touch strings at (♯ 8)

mode to produce 5th partial harmonic

pizz. (♯)

on keys

pizz. (♯)

pppp

mute strings (near pins)

(on keys) †

ppppp sempre

mute strings (sim.)

pizz. (♯)

ppppp (frailly, plaintively)

Violin

(sul pont.) - - -

modo ord. (I)

sul pont. - - -

(sul pont.) (V) (4)

the last note should be indistinct

gliss.

ppppp

(gliss. sempre)

3

5

7

ppppp (quasi niente)

hold str. until sound has expired

PI. (sempre) - - -

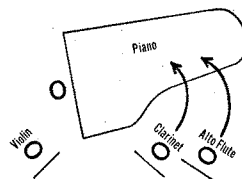
Media, Pennsylvania Spring, 1986

## Performance Notes

- 1) All players read from score.
- 2) Each note is preceded by an accidental, except in case(s) of an immediate repetition of a pitch or a pattern of pitches. Larger accidentals will apply to more than one note, e.g.:



- 3) The clarinet part should be played on the B-flat instrument. Both the clarinet and the alto flute parts are transposed for the convenience of the players.
- 4) The most practical seating arrangement for the players is the following:



The clarinetist and the flautist are required to play directly into the piano in several passages. The change from the seated to the standing position should be as unobtrusive as possible.

N. B. Copies of pages 4, 7, 8 and 9 should be taped to the lid of the piano unless the clarinetist and flautist prefer to memorize these passages.

- 5) The piano part of ELEVEN ECHOES includes many special techniques such as pizzicato playing, muted tones, and harmonics of various partials. In order that the execution of these effects be as accurate as possible, it is important that the strings be clearly marked by affixing bits of tape to the dampers with the pitches labeled thereon. The following table of pitches includes all those to be specially marked (N. B. The precise nodal point for harmonics can be indicated by affixing a tiny sliver of tape to the strings. The strings to be prepared in this manner are distinguished by the symbol  $\circ$ . The harmonics within bracket "A" are 5th partial, within bracket "B" 2nd partial.):



- 6) Special symbols for the piano:
  - a) Pedal indications:

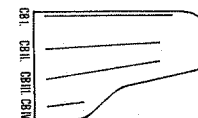
$\left\{ \begin{array}{l} \text{P.I.} \\ \text{P.II.} \\ \text{P.III.} \end{array} \right.$  = right (damper) pedal  
 = middle (sostenuto) pedal  
 = left (una corda) pedal

N. B. **P.I. (sempre)** = keep damper pedal depressed throughout (let sounds vibrate through pauses)

- b) Three modes of pizzicato are required:

$\left\{ \begin{array}{l} \text{♩} \\ \text{♩} \\ \text{♩} \end{array} \right.$  = pluck with fingertip at center of string  
 = pluck with fingernail at center of string  
 = pluck with fingernail at extreme end of string (near pins)

- c) The metal crossbeams of the piano frame are numbered as follows:



If there are more than four beams, use the four longest (leftmost).

The preferred manner of striking the beams is with the knuckles; however, if the pianist finds this uncomfortable, he may substitute the side of the thumb or even percussion beaters.

- 7) All glissandi occupy the total duration of the note to which they are affixed. The portamento effect should be used only where specifically indicated in the score.

- 8)  $\left( \begin{array}{c} 1 \\ 3 \end{array} \right)$  = three seconds (approximately)

$\overline{5}$  = five seconds (approximately)

$\text{—} \cdot \text{—}$  = fermata lunga

$\text{—} \cdot \text{—}$  = normal fermata

$\text{—} \cdot \text{—}$  = slight pause or "breath"

$\text{—} \cdot \text{—}$  = extremely short pause or "breath"

$\uparrow$  = a quarter tone higher than written pitch

$\downarrow$  = a quarter tone lower than written pitch

$\text{♩} = \text{♩}$

$\text{♩} = \text{♩}$

- 9) The whispered quotation from Lorca must project! It may be necessary to slightly voice these passages, depending on the acoustics of the hall.
- 10) If ELEVEN ECHOES is to be performed in other than a very small hall, it is recommended that the instruments be amplified (with conventional microphones). It is especially important that the piano be considerably amplified since this will enhance the sympathetic echo effects produced by the flute and clarinet. The microphone for the piano amplification should be suspended over the bass strings of the instrument.
- 11) A special stage lighting may be used with ELEVEN ECHOES, if desired. The composer would envisage two possibilities:
  - a) a deep green or deep blue lighting throughout
  - b) a deep blue lighting at the beginning; then very gradually (almost imperceptibly) brightening until reaching a fiery red at the beginning of eco 8; then very gradually dimming until reaching total darkness at the beginning of eco 11.