

Only for for persuual  
Only for for persuual

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osho-chaos

Farreza Farhang

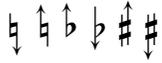
For "Arditti" string quartet  
and real-time electronic device  
Paris, Spring 2007

To Gérard Pesson

**Only for persual**  
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## notation

### microtones



1/8 of tone lower or higher

1/4 of tone higher

3/4 of tone higher

1/4 of tone lower than flat

1/4 of tone higher than flat

### bowing



overpressure

### fingers



pizzicato and tapping with the same hand. The body of the instrument (the violin may be used in vertical position (on the leg) to achieve the wanted pitches.



both hands may play the indicated pitches without using the bow.

### percussion effects



tap with the side of the thumb on tail piece.



tap on the bridge.

### miscellaneous



damped string

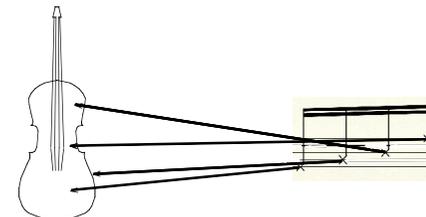


effleuré

l.v.  
f.s.  
f.p.  
f.n.

let vibrate  
side of the finger  
pad of the finger  
nail of the finger

Attention: use the pedal, if indicated, at the beginning of the bar (on the first beat).



# echo-chaos

for string quartet  
and real-time electronic device

Alireza Farhang  
Paris, spring 2007  
To Gérard Pesson

The image shows a musical score for a string quartet and piano. The score is written for Violin I, Violin II, Viola, Cello, and Piano. The tempo is marked as quarter note = 48. The score includes various performance instructions such as *senza arco*, *col legno tratto*, *col legno battuto jeté*, *III pizz.*, *III s.p. arco*, and *jeté*. Dynamics range from *pp* to *mp*. There are also markings for *f.s.* and *f.p.* (fortissimo sul ponticello and fortissimo plectrum). The score features complex rhythmic patterns, including a 7-measure rest and a 3-measure rest. A large, diagonal watermark reading "Only for persual" is overlaid on the score.

\*The IVth string keeps sustaining between every plucked note. \*\*Use the fingers of your both hands. \*\*\*Move the bow towards the bridge.



The musical score is arranged in five systems. The first system (Vln. I) features a melodic line with dynamics *pp*, *mp*, and *pp*, and includes a section marked *s.p.* and *arco*. The second system (Vln. II) starts with *arco* and *col legno tratto*, followed by *ppp* and *p*. The third system (Vla.) includes *arco*, *lv.*, and *sfz*. The fourth system (Vc.) has *m.v.*, *mf*, and a section with *f.s.*, *f.p.*, *f.s.*, and *f.p.*. The fifth system (piano) contains the vocal line with lyrics: "ef na kfbā ze", "nakj bā ze man", and dynamics *p* and *mf*. A large blue watermark "Only for persual" is overlaid diagonally across the entire score.

\*Use your four fingers.

The musical score is arranged in five systems. The first system is for Violin I (Vln. I), the second for Violin II (Vln. II), the third for Viola (Vla.), the fourth for Violoncello (Vc.), and the fifth for the strings. Each system contains a staff with musical notation, including notes, rests, and dynamic markings. Performance instructions are written above or below the staves. A large, diagonal watermark reading 'Only for persual' is superimposed over the entire score.

\*Fade in and fade out of the sound by moving from left hand finger and bowing. \*\*Damp the strings (next to the nut) and bow con legno towards the tail piece beginning from next to the left hand fingers. Turn back towards the nut just after the bow touches the bridge. It makes the bow thrown onto the strings resulting several rebounds. \*\*\*Bow the edge of the instrument tapping with left finger as attack.

The musical score is arranged in five systems. The first system contains Vln. I, Vln. II, Vla., and Vc. The second system contains the Piano part. The score includes various musical notations such as dynamics (pp, p, mf, sfz, mp, ppp), articulations (pizz., pizz. tremolo, arco, jeté, ord.), and performance instructions (n.v., l.v.). A large blue watermark 'Only for persual' is overlaid diagonally across the page.

\*Use your the index finger tip of your right hand with fast back and forth movement to play the tremolo while tapping on the body of the instrument. The string should be touched smoothly.

Vln. I

Vln. II

Vla.

Vc.

col legno  
s.t. pont.

pizz. tremolo

arco

s.p.

pizz. tremolo

bâ lâ bolan deef ve ga re na kfbâ

pp p mp

sfz p pp mp sfz mp sfz

l.v. pizz. p pizz. tremolo p pp p jeté mp 5 5f 3

f.s. mp 7 sfz mp mp sfz ord. sfz

mp pp 7 p pizz. tremolo mp p

f sfz p p

\*Touch the strings with your finger nail moving from the bridge towards the nut and vice versa.

The musical score is arranged in five systems. The first system is for Violin I (Vln. I), the second for Violin II (Vln. II), the third for Viola (Vla.), and the fourth for Violoncello (Vc.). The fifth system contains the vocal line with lyrics and piano accompaniment. The score includes various musical notations such as dynamics (pp, mp, mf, p), articulation (accents, slurs), and performance instructions (pizz., *sempre*). A large blue watermark is overlaid diagonally across the page.

Vln. I

Vln. II

Vla.

Vc.

ze man ku tãh kard ke e ram zo rã ze man

*pp* *mp* *mf* *mp* *pp*

*pp* *mp* *mf* *mp*

*pp* *pp* *mp* *p*

*mp* *p*

*pizz.* *mp* *p*

*sempre* *sempre*

Vln. I

Vln. II

Vla.

Vc.

15

*f.s. f.p.*

*pizz. tremolo*

*pp*

*pp*

tâh ard

ke sse ye

râ ze

râ ze man

15

\*Tap on the body of the instrument.



The image displays a musical score for five instruments: Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), Violoncello (Vc.), and Piano. The score is divided into two systems, with the first system starting at measure 19. The Vln. I part features a *jeté* marking and dynamic markings of *p*, *f*, and *p*. The Vln. II part includes *sfz*, *mp*, and *p* dynamics. The Vla. part has *ppp* and *p* dynamics, with a *s.t.* marking. The Vc. part includes *ord*, *IV*, *III*, and *p* dynamics. The Piano part starts with *pp* dynamics. The score contains various musical notations such as slurs, accents, and performance instructions like *tap*, *pizz.*, *col legno tratto*, and *s.p.*. A large, diagonal watermark reading "Only for persual" is overlaid across the entire score.

The musical score is arranged in five systems. The first system is for Violin I (Vln. I), starting at measure 21. It features a *s.p.* (sordando) marking and a *sfz* (sforzando) dynamic. The second system is for Violin II (Vln. II), with a *jeté* marking and a *mf* dynamic. The third system is for Viola (Vla.), containing multiple *jeté* markings, *p* and *mf* dynamics, and a *ppp* dynamic. The fourth system is for Violoncello (Vc.), also featuring *jeté* markings, *p* and *mf* dynamics, and a *ppp* dynamic. The fifth system is for the Piano, with a *pp* dynamic. The score includes various performance instructions such as *jeté*, *s.p.*, *sfz*, *pp*, *mf*, and *ppp*. It also contains fingering numbers (3, 5, 6, 7, 10) and articulation marks like *acc.* (accents) and *tr.* (trills). A large, diagonal watermark reading "Only for personal use" is overlaid across the entire page.

23

Vln. I

Vln. II

Vla.

Vc.

Di di de lâ keu re ri o zoh do elm ba man che kard di de ie ma shou ghe baz ze man

*pp* *pp* *p* *pp* *f*

*p* *pp* *f*

*pp* *mp* *mp*

The musical score is arranged in five systems. The first system includes Vln. I and Vln. II. Vln. I starts at measure 25 with a pizzicato instruction and a dynamic of *pp*. It features a series of sixteenth-note patterns, some with left-hand (l.h.) markings. A section of seven notes is marked with a slur and a '7' below it, with 's.t. tap' and 'f.s.' markings above. The dynamic changes to *p* and then *mp*. The system concludes with a *sfz* dynamic. Vln. II starts with a dynamic of *f* and a 'f.n.' marking, followed by a *pp* section and a *mf* section. The second system includes Vla. and Vc. Vla. begins with a dynamic of *p* and a '10' marking, moving through *pp*, *mp*, and back to *pp*. Vc. has two *pp* markings with circular icons. The third system includes Percussion (Perc.), with a dynamic of *pp* and a circular icon. The score ends at measure 30.

\*Play pizzicato and tap onto the body of the instrument with the same finger (index finger pad). The violin should be placed vertically on the leg.

The musical score is arranged in five systems. The first system (Vln. I) starts at measure 27 with a *leo* marking. It features a series of sixteenth notes, followed by a triplet of eighth notes, and ends with a tremolo. Dynamics range from *pp* to *ppp*. The second system (Vln. II) includes a *8va* marking and a *sfz* dynamic. The third system (Vla.) contains a *col legno battuto* section with a *10* measure rest, followed by a *p* dynamic and a *3* measure rest. The fourth system (Vc.) shows a *pp* dynamic and a *mp ppp* dynamic. The fifth system (Piano) includes a *8va* marking and a *pp* dynamic. A large blue watermark 'Only for persual' is overlaid diagonally across the score.

The image shows a page of a musical score for a string quartet, specifically measures 29 to 32. The score is for Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello (Vc.).

- Vln. I:** Starts with a *scordatura* (s.c.) and *arco* (arcl) section. It features a *s.f. tap* (sforzando finger tap) and a triplet. Dynamics range from *mp* to *pp*, then *mf*, and later *p* and *f*. It includes a *pizz.* (pizzicato) section with a *\*pizz.* instruction and a *s.l. tap* (sul ponticello tap).
- Vln. II:** Features a triplet and a *ppp* (pianississimo) section. It includes a *pizz.* section with a *pizz.* instruction and a *sub ponticello* section. Dynamics include *mf*, *pp*, *p*, and *mf*.
- Vla.:** Starts with a *ppp* section. It includes a *f* (forte) section and an *arco* section with a *s.l.* instruction. Dynamics include *ppp*, *f*, and *pp*.
- Vc.:** Features a *scordatura* and a *s.p.* (sul ponticello) section. It includes a *f* section and a *pp* section. Dynamics include *f*, *pp*, and *p*.

A large, diagonal watermark reading "Only for persual" is overlaid across the entire score.

\*Play pizzicato with the finger nail.

**Vln. I**  
31 *pizz. tap pizz.* *pizz. tremolo*  
*p* *pp* *p*

**Vln. II**  
*p* *pp* *mf* *pp* *ppp*  
*tap* *f.s.*

**Vla.**  
*p* *12* *12* *12* *12* *12*

**Vc.**  
*col legno tratto* *s.p.* *col legno battuto* *sub ponticello* *sub ponticello* *arco ord.*  
*5* *3* *5* *3* *3*  
*pp* *mp* *pp*

**Percussion**  
31

*Only for persual*

The musical score is arranged in five systems. The first system contains the Violin I (Vln. I) and Violin II (Vln. II) staves. The second system contains the Viola (Vla.) and Violoncello (Vc.) staves. The third system contains the string section staves. The score includes various musical notations such as notes, rests, and dynamic markings. A large, diagonal watermark reading "Only for persual" is overlaid across the entire score.

**Vln. I**  
33  
f.  
f.s. \*\*

**Vln. II**

**Vla.**  
s.t.  
I2  
p  
mf  
f.  
b.

**Vc.**  
II  
III  
ord  
III 1  
f.  
mf  
pp  
f.  
b.

33

\*Bowed trill on the I, II and III strings, plucking the tail pice with the thumb.

The musical score is arranged in five systems. The first system includes Vln. I and Vln. II. The second system includes Vla. and Vc. The third system includes the Piano. The score contains various musical notations such as dynamics (mf, pp, p, f, mp, ppp), articulation (accents, slurs), and performance instructions (con sord., arco, arco ord., tap s.l., s.p.). There are also circled numbers 1 and 2, and a circled number 6, likely indicating fingerings or specific performance techniques. A large blue watermark is overlaid diagonally across the score.

\*Rub the strings with the finger nail starting from the bridge to the nut.

The musical score is arranged in five systems. The first system contains the Violin I (Vln. I) part, starting at measure 37 with a *legno* marking. The second system contains the Violin II (Vln. II) part, featuring *s.l.* (sul ponticello) and *pizz. f.n.* (pizzicato fortissimo) markings. The third system contains the Viola (Vla.) part, with *tap s.l.* and *col legno tratto* markings. The fourth system contains the Violoncello (Vc.) part, with *s.p. ord.* (sul ponticello ordinario) markings and fingerings. The fifth system contains the Piano part, with a *legno* marking. The score includes various dynamic markings such as *mf*, *ppp*, *p*, *f*, and *pp*, as well as performance instructions like *sub ponticello*, *tap f.s.*, *col legno tratto*, and *col legno tutto*. A large blue watermark is overlaid diagonally across the page.

Only for persual

The image displays a page of a musical score for the piece "echo-chaos", page 20. The score is arranged in five systems, each corresponding to a different instrument or voice part:

- Vln. I:** Violin I part, starting at measure 39. It features a melodic line with dynamics ranging from *mp* to *ppp* and *p*. A fermata is present over a note in measure 45.
- Vln. II:** Violin II part, starting at measure 39. It includes a variety of textures, including pizzicato (*pizz.*) and *tap s.t.* (tap sul tasto) effects. Dynamics range from *f* to *pp*.
- Vla.:** Viola part, starting at measure 39. It features pizzicato (*pizz.*) and *sub ponticello* (sub-ponticello) techniques. Dynamics range from *mp* to *f*.
- Vc.:** Violoncello part, starting at measure 39. It includes *s.p. ord.* (sul ponticello ordinario) and *jeté ord.* (jeté ordinario) techniques. Dynamics range from *p* to *f*.
- Piano:** The piano accompaniment is shown at the bottom of the page, with measures 39 and 40 visible. It includes a triplet in measure 39 and a fermata in measure 40.

The score is heavily overlaid with a large, diagonal watermark that reads "Only for persual" in a blue, sans-serif font.

The musical score is arranged in five systems. The first system is for Vln. I, starting at measure 41. The second system is for Vln. II, also starting at measure 41. The third system is for Vla., starting at measure 41. The fourth system is for Vc., starting at measure 41. The fifth system is for the piano, starting at measure 41. The score includes various musical notations such as dynamics (pp, p, f, ff), articulation (pizz., tap), and performance instructions (senza sord., sub ponticello). There are also fingerings and bowings indicated throughout the score.

\*Use two fingers in order to obtain a quicker tremolo.

43

Vln. I

Vln. II

Vla.

Vc.

43

43

*pizz. tremolo*

*ppp*

*arco*

*s.f.*

*V*

12

12

1

1

Detailed description: This is a page of a musical score for the piece 'echo-chaos', page 22. The score is arranged in a system with five staves: Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), Violoncello (Vc.), and a grand staff for strings. The Vln. I staff has a treble clef and a key signature of one sharp (F#). The Vln. II staff has a treble clef and a key signature of one sharp (F#). The Vla. staff has an alto clef (C4) and a key signature of one sharp (F#). The Vc. staff has a bass clef and a key signature of one sharp (F#). The string grand staff has two treble clefs and a key signature of one sharp (F#). The Vln. II staff includes the instruction 'pizz. tremolo' and a dynamic marking of 'ppp'. The Vc. staff includes the instruction 'arco' and a dynamic marking of 's.f.'. There are two measures of sixteenth-note tremolos in the Vc. staff, each marked with '12'. The string grand staff has a first finger fingering '1' indicated in both staves. A large blue watermark 'Only for persuual' is overlaid diagonally across the page.

The image shows a page of a musical score for the piece 'echo-chaos', page 23. The score is arranged in four systems, each with a different instrument:

- Vln. I:** Violin I part, starting at measure 45. It features a sixteenth-note tremolo pattern with dynamic markings *p*, *mp*, *p*, *mp*, *p*, and *mf*. A circled 'C' with an arrow points to the first measure.
- Vln. II:** Violin II part, also starting at measure 45. It features a similar sixteenth-note tremolo pattern with dynamic markings *p*, *mp*, *p*, *mp*, *p*, and *mf*. A circled 'C' with an arrow points to the first measure.
- Vla.:** Viola part. It begins with a *pizz. tremolo* (pizzicato tremolo) section marked *p*, followed by a rest, and then re-enters with a sixteenth-note tremolo pattern marked *mf* and *mp*.
- Vc.:** Violoncello part. It starts with a sixteenth-note tremolo pattern marked *p* and a circled 'C' with an arrow. A measure rest of 12 measures is indicated above the staff.

A large, diagonal watermark in blue text reads "Only for persual" across the center of the page.

\*For obtaining best result use the back and forth movement of the index finger.

The musical score is arranged in five systems. The first system contains Vln. I and Vln. II. The second system contains Vla. and Vc. The third system contains the strings (Violins I and II, Viola, and Violoncello/Double Bass). The score is divided into two measures by a double bar line. The first measure (measures 47-50) features Vln. I and Vln. II with sixteenth-note patterns and dynamic markings of *mp* and *f*. Vla. has a melodic line with a fermata. Vc. has a complex rhythmic pattern with dynamic markings of *ff* and *p*. The second measure (measures 51-54) features Vln. I and Vln. II with dynamic markings of *mf*, *mp*, and *f*. Vla. has a sustained chord. Vc. has a rhythmic pattern with dynamic markings of *p*. The strings are marked *p*. A large blue watermark 'Only for persual' is overlaid diagonally across the score.

The musical score consists of four staves: Vln. I, Vln. II, Vla., and Vc. The Vln. I staff begins at measure 49 with a treble clef and a key signature of one sharp (F#). The Vln. II staff begins at measure 49 with a treble clef and a key signature of one sharp (F#), and includes the instruction *arco* above the staff and *pp* below. The Vla. staff begins at measure 49 with a treble clef and a key signature of one sharp (F#), and includes the instruction *8va* above the staff. The Vc. staff begins at measure 49 with a bass clef and a key signature of one sharp (F#), and includes the instruction *ppp* below the staff. The score includes various musical notations such as slurs, ties, and dynamic markings. A large blue watermark reading "Only for persual" is overlaid diagonally across the score.



The image shows a page of a musical score for the piece "echo-chaos", page 27. The score is arranged in five systems, each with a different instrument or section:

- Vln. I:** Violin I part, starting at measure 53. It features a melodic line with a *pp* dynamic and a *6* (sixteenth) note grouping.
- Vln. II:** Violin II part, also starting at measure 53. It mirrors the Vln. I part with a *mp* dynamic and a *6* note grouping.
- Vla.:** Viola part, starting at measure 53. It includes *arco* and *s.t.* markings, with *pp* and *ff* dynamics and *6* and *12* (twelfth) note groupings.
- Vc.:** Violoncello part, starting at measure 53. It features a *ff* dynamic and a *3* (triple) note grouping.
- Strings:** Indicated by a brace on the left, with measure numbers 53 for both the upper and lower staves.

The score is marked with various dynamics including *pp*, *p*, *mp*, and *ff*. There are also performance markings such as *arco*, *s.t.*, and *6* or *12* indicating note groupings. A large, diagonal watermark reading "Only for persual" is overlaid across the entire page.

Musical score for Vln. I, Vln. II, Vla., Vc., and strings. The score is for measures 55-56. Vln. I and Vln. II play sixteenth-note patterns with sixteenth-note triplets, marked *ppp*. Vla. has a short melodic phrase marked *p*. Vc. plays a sixteenth-note pattern with sixteenth-note triplets, marked *p*, *pp*, and *f*. The strings are marked with measure numbers 55.

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Musical score for Vln. I, Vln. II, Vla., Vc., and strings. The score is in 4/4 time and features sixteenth-note patterns with sixteenth rests. The Vln. I part starts at measure 57 with a *mp* dynamic, followed by a *pp* dynamic. The Vln. II part starts at measure 57 with a *mp* dynamic, followed by *pp*, *pp*, and *pppp* dynamics. The Vla. part starts at measure 57 with a *mp* dynamic, followed by *pppp*. The Vc. part starts at measure 57 with a *pp* dynamic, followed by *arco*, *ff*, *p*, *mf*, and *p* dynamics. The strings part starts at measure 57 with a *pp* dynamic. The score includes various musical notations such as sixteenth notes, sixteenth rests, and dynamic markings.

Only for persuual

The musical score is arranged in five systems. The first system is for Violin I (Vln. I), starting at measure 59. It features a melodic line with a dynamic marking of *p* and a hairpin crescendo leading to *pp*. The second system is for Violin II (Vln. II), with a dynamic marking of *mf* and a hairpin crescendo leading to *p*. The third system is for Viola (Vla.), with a dynamic marking of *p* and a hairpin crescendo leading to *pp*. The fourth system is for Violoncello (Vc.), featuring a dense texture of sixteenth notes with a dynamic marking of *pp* and a hairpin crescendo. Above the Vc. staff, there are markings for *s.t.* (sordina) and *rd.* (ritardando) with arrows, and the number 12 is written above the staff. The fifth system is for the strings, starting at measure 59, and is currently blank.

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The musical score is arranged in five systems. The first system contains the staves for Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello (Vc.). The piano part is shown in the second system, with a grand staff consisting of a right-hand and left-hand staff. The score is divided into three measures by vertical bar lines. The first measure shows the beginning of the piece with various dynamics and articulations. The second measure features a dynamic shift from *pp* to *mf* in the strings and *ppp* to *f* in the cello. The third measure continues the musical development with *pp* dynamics in the strings. The score includes various musical notations such as sixteenth-note runs, slurs, and dynamic markings.

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Musical score for Vln. I, Vln. II, Vla., Vc., and strings. The score is divided into three measures. The first measure (measures 64-65) shows rests for all instruments. The second measure (measures 66-67) features complex rhythmic patterns with sixteenth and thirty-second notes, including triplets and sextuplets. The third measure (measures 68-69) shows a continuation of these patterns, ending with a fermata. Dynamics include *pp*, *f*, *fff*, and *ppp*. Performance markings include *8va* and *8<sup>va</sup>*. A large blue watermark "Only for persual" is overlaid diagonally across the score.

Musical score for Vln. I, Vln. II, Vla., Vc., and piano. The score is divided into three measures. Vln. I has a whole rest in the first measure and a sixteenth-note pattern in the second and third measures. Vln. II has a whole rest in the first measure and a sixteenth-note pattern in the second and third measures. Vla. has a whole rest in the first measure and a sixteenth-note pattern in the second and third measures. Vc. has a whole rest in the first measure and a sixteenth-note pattern in the second and third measures. The piano part has a whole rest in the first measure and a sixteenth-note pattern in the second and third measures. Dynamics include *ppp*, *p*, and *mp*. A large blue watermark 'Only for persual' is overlaid diagonally across the score.