

Full Score

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Artifacts

Microtonal Duos for Violin and Cello

Flint Sticks

Stylus 1

Iron Filings (Magnetized)

Threads

Adhesive

X-Acto Knife

Push Pins

Stylus 2

Scouring Pad

Duration ca. 2 minutes each

Artifacts is a series of short duos for micro-tonally tuned violin and cello. Each duo is approximately two minutes, and the performers may choose to play the entire set of nine pieces or a subsection. Performers are free to re-order the pieces, and to alternate them in a program with other short works.

Each instrument has two detuned strings:



The microtonality of this piece is achieved by performers detuning their strings to a quarter tone flat, and then playing the written pitches on detuned instruments in the exact positions they would normally be in to sound in tune. The resulting pitches on the detuned strings are a quarter tone flatter than written.

Numerals: The string on which specific notes are played is highly important to the piece. Therefore there is a running notation of which string (IV, III, II, I) to play each passage of notes. A string numeral applies to the note directly beneath it and all notes following, until the next string numeral.



Open Strings: Much of the music is built around utilizing open strings. For a one-off open string, a “0” will be marked. This may be an outlier from the string numeral instruction. An open string indication does not cancel out a previous string numeral instruction; it only applies to its note (since there are only four open strings anyway, indicating them with a 0 is just the more efficient notation).

Simile: A “Simile” indication comes only once a pattern of string numerals has been established. With a “simile” instruction, continue to play notes on their respective strings as mapped by the previous string numerals.

Cello NB: Because both string II and III have normal intonation on the cello, passages in the mid register are often marked II/III and the choice of string is at the player’s discretion.

27 *gradually broaden stroke*

Vln.

34 Heavy, Odd Swing

32 *brushy stroke* *II* *bIII*

Vln.

Vc.

*RH Bow open strings,
LH slap shoulder of cello*

39 *bI* *II* *windswept* **43**

Vln.

Vc.

44

Vln.

Vc.

49

Vln.

Vc.

54

Vln. *ff* *fff* *II damp* *bIII*

Vc. *ff* *fff* *choke*

58 Light, Spirited

Vln. *bIII* *IV* *peckish* *pp* *mp*

Vc. *p* *f*

R L R L R L R L R L R L R L L R L L R

simile

63

Vln. *mp*

Vc. *mp*

70

68

Vln. *decresc. al fine*

Vc. *decresc. al fine*

72

Vln. *ppp*

Vc. *ppp*

Stylus 1

♩=60 Airy, Delicate

Vln. 1

1 *bIII* *let ring* , *II IV bIII IV bIII* , *II bIII* *ring* ,

p

Vln. 8

II bIII IV IV *bIII II bIII* *IV bIII* *sneaky* ,

Vln. 14

(bIII) *ring* *II IV bIII IV bIII* *II bIII*

Vln. 21

II bIII IV *bIII very sneaky* *IV* *bIII II bIII*

Vln. 28

IV bIII *rit.* *ring*

Iron Filings (Magnetized)

♩=120 Rugged

Musical score for measures 1-10. The Vln. part starts with a rest, then enters with a melodic line in 3/4, 4/4, 3/4, and 4/4 time signatures. Fingerings include *bIII II*, *bI*, and *0 bIII simile*. Dynamics range from *mf* to *f*. The Vc. part features a rhythmic accompaniment with a *bow bounce* and *bIV* fingering. Dynamics include *f* and *mf*.

11 Light, Prickly

Musical score for measures 11-15. The Vln. part begins at measure 7 with a melodic line in 4/4, 3/4, and 4/4 time signatures. Fingerings include *bIII* and *IV*. Dynamics range from *p* to *f*. The Vc. part continues with a rhythmic accompaniment in 4/4, 3/4, and 4/4 time signatures.

Musical score for measures 16-20. The Vln. part starts at measure 12 with a melodic line in 3/4, 7/8, 2/4, 5/8, and 3/4 time signatures. Fingerings include *ord. bI*, *II*, and *bI*. Dynamics range from *mp* to *f*. The Vc. part features a melodic line in 3/4, 7/8, 2/4, 5/8, and 3/4 time signatures with fingerings *II* and *bI*.

20 Growing more Frenzied

Musical score for measures 21-25. The Vln. part begins at measure 17 with a melodic line in 3/4, 4/4, 3/4, and 3/4 time signatures. Fingerings include *II* and *bI*. Dynamics range from *f* to *simile*. The Vc. part features a melodic line in 3/4, 4/4, 3/4, and 3/4 time signatures with fingerings *II* and *bI*.

25 Raging

21

Vln. *ff* *f* *molto stacc.*

Vc. *molto stacc.* *ff*

bIII II bIII II bIII

26

Vln. *f*

Vc. *f*

II bIII II 0 II bIII II bIII

bIV

31

Vln. *f* *molto stacc.*

Vc. *ff*

bIII II 0 bIII simile 0 II 0

bI II/III bI

37

Vln. *ff*

Vc. *ff*

0 0 0 0 0 0 0 0

II/III bI 0 bI III bIV

42 Unraveling, Slightly Slower

Vln. *bounce bow*
p *mp* *p* *p* *mp*

Vc. *bI bounce bow*
p *mp* *p* *p* *II/III*

Vln. 47
p *p* *col leg.* *pp*

Vc. *p* *bIV III*

Vln. 52

Vc. *bIV III*

Vln. 56

Vc. *pp* *ppp*

Threads

♩=120 Whispy

*con sord.
sul tasto, flautando*

Vln. *IV* *bIII* *IV* *bIII* *IV* *bIII* *IV* *bIII* *IV*

Vc. *II* *bI* *II* *bI* *II* *bI* *II* *bI* *II* *bI*

Detailed description: This block contains the first nine measures of the piece. The Violin part (Vln.) is in the treble clef with a key signature of one sharp (F#) and a 3/4 time signature. It features a melodic line with notes G4, A4, B4, C5, and D5, with fingerings IV, bIII, IV, bIII, IV, bIII, IV, bIII, and IV. The Viola part (Vc.) is in the bass clef with the same key signature and time signature. It features a bass line with notes G3, A3, B3, C4, and D4, with fingerings II, bI, II, bI, II, bI, II, bI, and II. The tempo is marked as 'Whispy' at 120 beats per minute.

12

Vln. *bIII* *IV* *bIII*

Vc. *II* *bI*

p

Detailed description: This block contains measures 10 through 19. The Violin part (Vln.) continues the melodic line with fingerings bIII, IV, and bIII. The Viola part (Vc.) continues the bass line with fingerings II and bI. The dynamics are marked as piano (p). There are some changes in the time signature and key signature in the later measures of this block.

21 ♩=66 Ghostly Dance

*sul pont.
II*

Vln. *pp*
*sul pont.
bI*

Vc. *pp*

Detailed description: This block contains measures 20 through 26. The Violin part (Vln.) is marked *pp* and *sul pont.* with fingering II. The Viola part (Vc.) is also marked *pp* and *bI*. The tempo is marked as 'Ghostly Dance' at 66 beats per minute. The time signature changes to 6/8.

Vln. *p* *pp* *p*

Vc. *II* *bI* *II*

Detailed description: This block contains measures 27 through 35. The Violin part (Vln.) has dynamics *p*, *pp*, and *p*. The Viola part (Vc.) has fingerings *II*, *bI*, and *II*. The time signature remains 6/8.

36 ♩=90 With More Energy

sul tasto, flautando

II

bIII

Vln. *pp* *mf* *mp* *f* *mp* *III*

Vc. *pp* *mf* *mp* *f* *mp*

Detailed description: This block contains measures 34 through 39. The Violin part (Vln.) has dynamics *pp*, *mf*, *mp*, *f*, and *mp*, with fingering *III* in the final measure. The Viola part (Vc.) has dynamics *pp*, *mf*, *mp*, *f*, and *mp*. The time signature changes to 3/8. The tempo is marked as 'With More Energy' at 90 beats per minute.

40

Vln. *f* *p* *f*

Vc. *IV* *III* *bIV* *III* *bIV* *III* *bIV* *III*

48 Shadowy

46

Vln. *mf* *p* *p* *simile*

Vc. *mf* *p* *p* *G C D G*

ord. IV bIII IV III D II F# II C#

bIV III bIV III bIV III bIV III

58 =66 Ghostly Dance

52

Vln. *molto sul pont.* *pp* *p*

Vc. *pp* *p*

molto sul pont. *pp* *p*

II bIII IV bIII

bIV III II III II/III

C B

60

Vln. *mp*

Vc. *IV* *II/III*

71

68

Vln. *pp* *pp*

Vc. *mp* *p* *pp*

IV

Adhesive

10

♩ = 60 Stretching
senza sord.

Musical score for measures 1-8. The score is for Violin (Vln.) and Violoncello (Vc.). The tempo is marked as ♩ = 60 Stretching, and the performance instruction is 'senza sord.'. The key signature has one flat (B-flat). The time signature is 4/4. The Vln. part starts with a dynamic of *pp* and moves to *f* by measure 5. The Vc. part starts with a dynamic of *pp* and moves to *f* by measure 5. Fingerings and bowings are indicated above and below the notes. Measure numbers 1 through 8 are shown above the Vln. staff.

10 ♩ = 44 As If Against Great Resistance

♩ = 60 Wind Up

15 Spinning in Space

accel.

Musical score for measures 9-16. The score is for Violin (Vln.) and Violoncello (Vc.). The tempo is marked as ♩ = 44 As If Against Great Resistance and ♩ = 60 Wind Up. The performance instruction is 'accel.'. The key signature has one flat. The time signature changes from 4/4 to 3/4 and back to 4/4. The Vln. part starts with a dynamic of *p* and moves to *f* by measure 12. The Vc. part starts with a dynamic of *p* and moves to *f* by measure 12. Fingerings and bowings are indicated. Measure numbers 9 through 16 are shown above the Vln. staff.

20 Timid

Musical score for measures 17-22. The score is for Violin (Vln.) and Violoncello (Vc.). The tempo is marked as **20** Timid. The key signature has one flat. The time signature changes from 4/4 to 2/4 and back to 4/4. The Vln. part starts with a dynamic of *pp*. The Vc. part starts with a dynamic of *mp* and moves to *pp* by measure 22. Fingerings and bowings are indicated. Measure numbers 17 through 22 are shown above the Vln. staff.

24 Stretching, Broad

Musical score for measures 23-26. The score is for Violin (Vln.) and Violoncello (Vc.). The tempo is marked as **24** Stretching, Broad. The key signature has one flat. The time signature is 4/4. The Vln. part starts with a dynamic of *mf*. The Vc. part starts with a dynamic of *mf*. Fingerings and bowings are indicated. Measure numbers 23 through 26 are shown above the Vln. staff.

X-Acto Knife

1 ♩ = 54 Lethargic and Resistant

Vln. *pp* *ppp*

Vc. *p* *ppp* *mp*

6 ♩ = 60 Moving Forward accel. ♩ = 90 Careening

Vln. *mf*

Vc. *mf*

12 15 ♩ = 120 Tumultuous

Vln. *ff*

Vc. *ff*

18

Vln.

Vc.

24 Wild, Eruptive

23

Vln.

Vc.

27

Vln.

Vc.

31 ♩ = 100 Quietly Seething

Vln.

Vc.

35 Slowly Smoothing Out

34

Vln.

Vc.

39

Vln.

Vc.

rit.

44

Vln.

Vc.

Push Pins

♩ = 140 Perpetual

1 *pizz.* *bIII*
IV 0 0 IV *simile*

Vln. *p*

Vc. *pizz.* *bIV II* *bIV II* *simile*
p

7

Vln. *mf* *p*

Vc. *mf* *bIII* *bIV* *III II* *bIV* *bI*
p

15 Sneaking

14

Vln. *f* *bIII* *II* *II bIII II* *bIII II*
p *mp*

Vc. *bIV III* *II/III* *p*

22 With Some Flair

19

Vln. *f* *bI* 0 *bIII*
p

Vc. 0 *bI* *II 0* *II/III* *mp* *mf*

24

Vln. *ff* *II* *bIII II* *bIII let resound*

Vc. *p* *ff*

14 29 Sneaking

Vln. *pp* *0* *IV^bIII* *simile* *0*

Vc. *pp*

Vln. *0* *II* *bIII* *0* *0* *bIII* *II*

Vc. *f pp* *f pp* *f pp* *p*

40

Vln. *f pp* *f* *bIII II* *0* *f pp* *f* *p*

Vc. *f p* *f p* *f p* *f p*

45

Vln. *ff pp f* *bIII* *IV bIII IV* *simile*

Vc. *II bI* *let resound* *II bI* *II simile*

f p f *p*

Vln. *ff* *pp* *subff* *II*

Vc. *II bI III II* *bI II simile* *0* *in lowest possible position*

ff *pp* *subff*

54

Vln. *subp* *pp*

Vc. *subp* *pp*

60

Vln. *pp* *ff* poco rit.

Vc. *pp* *ff*

Stylus 2

$\text{♩} = 60$ Chilly
arco, leg., espr.

Vln. *pp* *mp* *pp* *mp*

Vc. *p* *mp*

11

Vln. *bIII* *II* *bI*

Vc. *0* *bI* *II* *bI* *II* *0* *bI* *II*

16 In the Distance

sul tasto

Vln. *ppp*

Vc. *sul tasto* *ppp*

Scouring Pad

♩ = 60 Churning Forward

1

Vln. *p* *mp* *mf* *pp*

Vc. *p* *mp* *mf*

IV *b*III II *b*III II *b*I

III II *b*I II *b*I *b*IV III/II

8 ♩ = 60 With Immense Gravity

6

Vln. *fff*

Vc. *fff*

II *b*I II *b*I *b*I *b*I II *b*I *b*I

*b*I II *b*I *b*IV III II 0

11

Vln. *mp*

Vc. *mp*

*b*I II *b*I II II *b*I II *b*I II *b*I II

*b*I II *b*I II *b*I II

16 Released, Fading

Vln. *ppp* *ppp*

Vc. *p* *ppp*

II *b*I II *b*I II III *b*IV