

# Full Score

Katharina S. G. Mueller (2025)

# 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 image shows two staves of musical notation. The top staff is for the Violin, which has a treble clef and four lines. The bottom staff is for the Violoncello, which has a bass clef and four lines. Above the Violin staff, the numerals IV, bIII, II, and bI are written sequentially from left to right. Above the Violoncello staff, the numerals bIV, III, II, and bI are written sequentially from left to right. This indicates that the notes should be played on the strings corresponding to these numerals, despite the instruments being detuned.

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.

The image shows a single measure of musical notation. It starts with a 5/8 time signature, followed by a 2/4 time signature, and then back to a 5/8 time signature. The measure consists of six eighth-note strokes. Above the first two strokes is the string numeral bIII. Above the third stroke is the string numeral II. Above the fourth stroke is the string numeral 0. Above the fifth and sixth strokes is the string numeral bIII. This indicates a pattern where the first two notes are on string bIII, the third note is on string II, and the last three notes return to string bIII.

**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.

# Artifacts

*for Violin and Cello Duet*

*Violin: IV, bIII, II, bI*

*Cello: bIV, III, II, bI*

Katharina S. G. Mueller

## Flint Sticks

$\text{♩} = 142$  Bright, Spirited

*LH-shoulder*

Violin:  $\text{♩} = 142$

*LH-shoulder*

*R L R L R L R L R L R L R L L R*

Violoncello:  $p \longrightarrow f$ ,  $p \longrightarrow f$ ,  $p \longrightarrow ff$

11 Inquisitive?

Vln.:  $\text{♩} = 142$

*IV, bIII*

*simile*

Vc.:  $mp \longrightarrow f$ ,  $pp \longrightarrow f \longrightarrow p$

Vln.:  $\text{♩} = 142$

Vc.:  $f$ ,  $pp$

22 Growing Incensed

Vln.:  $\text{♩} = 142$

Vc.:  $pp \longrightarrow p \longrightarrow pp \longrightarrow p$

27 *gradually broaden stroke*

Vln.

**33** Heavy, Odd Swing

32

Vln. *brushy stroke*

Vc. *ff*

*III bIV*

*mf*

*II bIII*

*subf*

*submf*

RH Bow open strings,  
LH slap shoulder of cello

39

Vln. *subf*

*bI*

*II*

**42**

Vc.

44

Vln.

Vc.

49

Vln.

Vc.

54

Vln. Vc.

*II bIII bIII IV*

**57** Light, Spirited

*ff* *p*

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

60

Vln. Vc.

R L L R L L R

*simile*

*f* *mp*

65

Vln. Vc.

*decresc. al fine*

*decresc. al fine*

71

Vln. Vc.

*ppp*

*ppp*

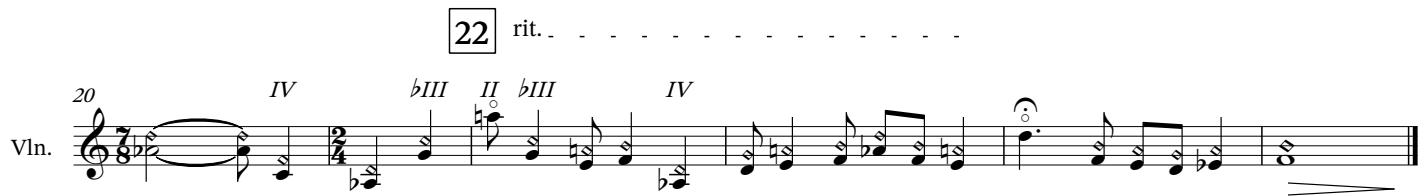
# Stylus 1

$\text{♩} = 60$  Airy, Delicate

Vln. 

Vln. 

Vln. 

Vln. 

# Iron Filings (Magnetized)

5

**J=120 Rugged**

Vln. 1 *bow bounce* *bIV* *mf* *bIII II* *0 bIII simile* *bI*

Vc. *f* *mf* *3* *3*

**11 Light, Prickly**

Vln. 7 *bIII IV* *p*

Vc. *3* *3*

**12**

Vln. *ord.* *bI* *f p* *8* *2* *8* *3* *3*

Vc. *mp* *II* *I* *II* *I* *II* *I* *II*

**20 Growing more Frenzied**

Vln. *f* *II* *f*

Vc. *f* *II* *simile* *3*

**25 Raging**

Vln. *ff* *bIII II* *bIII II* *bIII molto stacc.* *f*

Vc. *ff* *ff* *ff* *ff* *ff*

6

Musical score for Violin (Vln.) and Cello (Vc.) showing measures 26-30. The Violin part features sixteenth-note patterns with dynamic markings *f* and *ff*. The Cello part provides harmonic support with sustained notes and sixteenth-note patterns. Measure 26 starts with a dynamic *ff*. Measure 27 begins with a dynamic *f*. Measures 28-30 feature sixteenth-note patterns in the Violin and sustained notes in the Cello. Measure 30 concludes with a dynamic *ff*.

**42** Unraveling, Slightly Slower

### *bounce bow*

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

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

Musical score for strings (Vln., Vc.) showing measures 47-48. The score consists of two staves. The top staff is for the Violin (Vln.), which starts with a sixteenth-note pattern at  $p$ , followed by a rest, and then a sixteenth-note pattern at  $pp$  with the instruction *col leg.*. The bottom staff is for the Cello (Vc.), which plays eighth-note patterns throughout. Measure 48 begins with a dynamic  $p$  and leads into section *bIV III*.

52

Vln. Vc.

*bIV III*

55

Vln. Vc.

## Threads

 $\text{♩} = 120$  Whispy*con sord.**sul tasto, flautando*

1

12

10

21  $\text{♩} = 66$  Ghostly Dance*sul pont.**II*

20

27

36  $\text{♩} = 90$  With More Energy*sul tasto, flautando**II**bIII*

34

9

40

Vln. II  
Vc.

*bI*

*f*

*bIV* *III* *bIV* *III bIV* *III*

*bI*

49 Shadowy

Vln. IV *ord.* *IV bIII* *IV* *D* *II F# II* *simile* *C#*

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

*mf* *p* *p* *G C D C B G* *G C D G*

molto sul pont.

59  $\text{♩} = 66$  Ghostly Dance

sul pont. *bIII*

Vln. *bIV III* *II* *molto sul pont.* *pp* *p*

Vc. *C B* *II/III*

61

Vln. *mp*

Vc.

72

IV

Vln. *pp* *p* *pp* *pp*

Vc. *mp* *p* *pp*

# Adhesive

$\text{♩} = 60$  Stretching  
*senza sord.*

Violin (Vln.)

Cello (Vc.)

Measure 1:  $\text{♩} = 60$  Stretching, *senza sord.*

Measure 2:  $\text{♩} = 60$  Stretching, *senza sord.*

Measure 3:  $\text{♩} = 60$  Stretching, *senza sord.*

Measure 4:  $\text{♩} = 60$  Stretching, *senza sord.*

Measure 5:  $\text{♩} = 60$  Stretching, *senza sord.*

Measure 6:  $\text{♩} = 60$  Stretching, *senza sord.*

Measure 7:  $\text{♩} = 60$  Stretching, *senza sord.*

Measure 8:  $\text{♩} = 60$  Stretching, *senza sord.*

Measure 9:  $\text{♩} = 60$  Stretching, *senza sord.*

Measure 10:  $\text{♩} = 60$  Stretching, *senza sord.*

**10**  $\text{♩} = 44$  As If Against Great Resistance     $\text{♩} = 60$  Wind Up    **15** Spinning in Space

Violin (Vln.)

Cello (Vc.)

Measure 9:  $\text{♩} = 44$  As If Against Great Resistance

Measure 10:  $\text{♩} = 60$  Wind Up

Measure 11:  $\text{♩} = 60$  Wind Up

Measure 12:  $\text{♩} = 60$  Wind Up

Measure 13:  $\text{♩} = 60$  Wind Up

Measure 14:  $\text{♩} = 60$  Wind Up

Measure 15:  $\text{♩} = 60$  Wind Up

**20** Timid

Violin (Vln.)

Cello (Vc.)

Measure 17:  $\text{♩} = 60$  Wind Up

Measure 18:  $\text{♩} = 60$  Wind Up

Measure 19:  $\text{♩} = 60$  Wind Up

Measure 20:  $\text{♩} = 60$  Wind Up

Measure 21:  $\text{♩} = 60$  Wind Up

Measure 22:  $\text{♩} = 60$  Wind Up

Measure 23:  $\text{♩} = 60$  Wind Up

**24** Stretching, Broad

Violin (Vln.)

Cello (Vc.)

Measure 23:  $\text{♩} = 60$  Stretching, Broad

Measure 24:  $\text{♩} = 60$  Stretching, Broad

Measure 25:  $\text{♩} = 60$  Stretching, Broad

Measure 26:  $\text{♩} = 60$  Stretching, Broad

Measure 27:  $\text{♩} = 60$  Stretching, Broad

Measure 28:  $\text{♩} = 60$  Stretching, Broad

# X-Acto Knife

11

*I* ♩ = 54 Lethargic and Resistant

Vln. Vc.

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

Vln. Vc.

15 ♩ = 120 Tumultuous      accel.

Vln. Vc.

18

Vln. Vc.

24 Wild, Eruptive

Vln. Vc.

12

27

Vln.

**31** ♩ = 100 Quietly Seething

Vln.

**35** Slowly Smoothening Out

34

Vln.

39

Vln.

42

Vln.

## Push Pins

$\text{♩} = 140$  Perpetual

Musical score for strings (Vln., Vc.) showing measures 1-4. The Vln. part starts with a pizzicato pattern in 5/4 time, followed by a melodic line in 3/4 time. The Vc. part provides harmonic support with sustained notes in 5/4 time. Measure 1 ends with a dynamic 'p'.

7

Vln.

Vc.

p

III

bIV

III

II

bIV

bI

15 Sneaking

22 With Some Flair

**29** Sneaking

Vln. *pp*

*IV bIII*

Vc. *pp*

*simile*

0

Vln.

33

0 II bIII 0 0 II bIII II

Vc.

*f pp* *pp f p*

Vln.

38

0 bIII II 0 II bI

Vc.

*f pp* *f pp* *f pp* *f pp*

Vln.

45

0 bIII IV bIII IV simile

Vc.

*ff pp f* *mf* *II bI* *II bI* *II simile*

*p*

Vln.

48

*ff pp subff*

Vc.

*ff pp subff*

54

Vln. - | 4 4 4 - | 2 4 4 4 - | 5 4 4 4 - | 4 4 4 - | 4 4 4 - |

subp ————— pp

Vc. - | 4 f b p - | 2 4 4 4 - | 5 4 4 4 - | 4 f b p - | 4 4 4 - |

subp ————— pp

Violin and Cello parts for measures 54-55. The Violin part consists of eighth-note patterns in various time signatures (3/4, 4/4, 2/4, 5/4). The Cello part follows a similar pattern with a forte dynamic (f) at the start of measure 55. Dynamics 'subp' and 'pp' are indicated with slurs.

60

Vln. - | 4 4 4 4 4 4 - | 4 4 4 4 4 4 - | 4 4 4 4 4 4 - | 4 4 4 4 4 4 - | 4 4 4 4 4 4 - | 4 4 4 4 4 4 - |

pp ————— ff

Vc. - | 4 4 4 4 4 4 - | 4 4 4 4 4 4 - | 4 4 4 4 4 4 - | 4 4 4 4 4 4 - | 4 4 4 4 4 4 - | 4 4 4 4 4 4 - |

pp ————— ff

Violin and Cello parts for measures 60-61. The Violin part consists of eighth-note chords in 4/4 time. The Cello part follows a similar pattern with a forte dynamic (ff) at the start of measure 61. Dynamics 'pp' and 'ff' are indicated with slurs.

# Stylus 2

Musical score for orchestra, page 10, measures 62-63. The score includes parts for Violin (Vln.) and Cello (Vc.). Measure 62 starts with a dynamic of 1/4 time, 60 BPM, arco, legato, espr., with dynamics pp and mp. It features slurs and grace notes. Measure 63 begins with a dynamic of pp and continues with 3/4 time, followed by 4/4 time with dynamics mp and p. The cello part shows sustained notes and rhythmic patterns.

11

Musical score for Violin (Vln.) and Cello (Vc.) showing measures 7 through 11. The Violin part features melodic lines with grace notes and slurs, labeled with Roman numerals *bIII*, *bI*, *II*, and *bI*. The Cello part provides harmonic support with sustained notes and rhythmic patterns. Measure 7 starts with a dynamic of 7.

16 In the Distance

Musical score for strings (Vln., Vc.) showing measures 14-15. The score consists of two staves. The top staff is for the Violin (Vln.), which starts with a melodic line of eighth notes followed by rests. The bottom staff is for the Cello (Vc.), which provides harmonic support with sustained notes and rhythmic patterns. Measure 14 concludes with a dynamic marking of ***ppp***. Measure 15 begins with a dynamic marking of ***ppp***, followed by a melodic line for the Vln. The Vc. continues its harmonic function. Measure 15 ends with a dynamic marking of ***ppp***.

## Scouring Pad

♩ = 60 Churning Forward

Musical score for Violin (Vln.) and Cello (Vc.) showing measures 1-10. The Violin part features melodic lines with dynamic markings *p*, *mp*, *mf*, and *pp*. The Cello part provides harmonic support with sustained notes and rhythmic patterns. Measure 10 concludes with a dynamic *ff*.

## **8** ♪ = 60 With Immense Gravity

Musical score for Violin (Vln.) and Cello (Vc.) showing measures 6-10. The Violin part features sixteenth-note patterns with grace notes, primarily in 5/4 time. The Cello part provides harmonic support with sustained notes and rhythmic patterns. Measure 6 starts with a dynamic of *fff*. Measure 7 includes a dynamic of *ff*. Measures 8-10 conclude the section.

Musical score for Violin (Vln.) and Cello (Vc.) showing measures 11 through 15. The Violin part consists of six measures of eighth-note patterns, with measure 11 starting at bI and ending at II, and measures 12-15 starting at bI and ending at II. The Cello part consists of five measures, starting at bI and ending at II. Measure 15 includes a dynamic instruction *mp* and a measure number 3.

**16** Released, Fading

Musical score for Violin (Vln.) and Cello (Vc.) showing measures 11-12. The Violin part features a melodic line with grace notes and slurs, while the Cello part provides harmonic support with sustained notes and bass lines. Measure 11 ends with a dynamic of **p**. Measure 12 begins with a dynamic of **pp**.