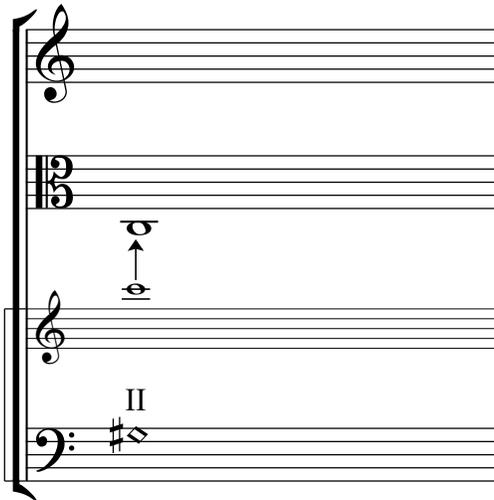


**Noah Kahrs**

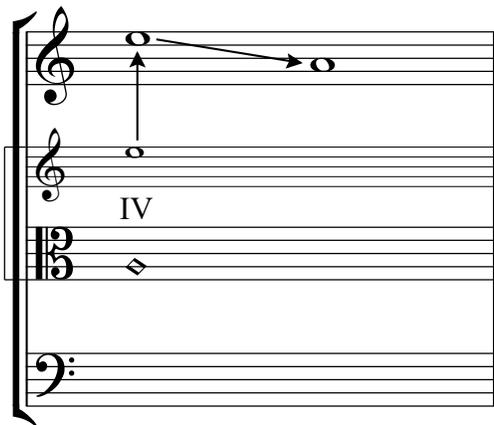
**Two Counterpoints**

**for piano quartet**

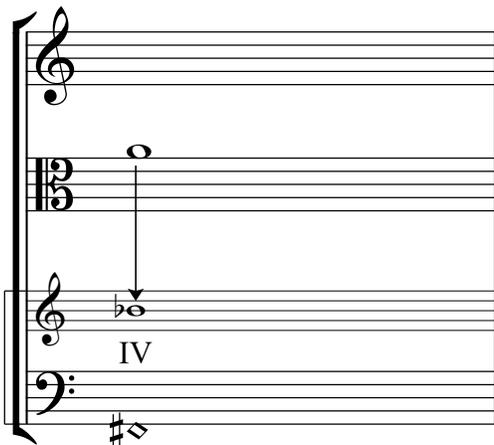
## Tuning Instructions



1. The following strings should be tuned ordinarily:  
Violin: D,G  
Viola: A,D,G  
Cello: A,D,G
2. Tune the viola C string to sound exactly three octaves below a seventh partial harmonic (sounding high C) on the cello D string.  
The viola C string will be approx. 30 cents flat.



3. Tune the violin E string to sound in unison with a fifth partial harmonic (sounding E) on the just-retuned viola C string.  
The violin E string will be approx. 45 cents flat.
4. Tune the violin A string down a normal fifth from the just-retuned violin E string.  
The violin A string will be approx. 45 cents flat.



5. Lower the cello C string so that the 7th partial harmonic (sounding B-flat) is in tune with the ordinarily-turned viola A string (or with the piano A).  
The cello C string will be approx. 70 cents flat.

## Other Performance Notes

**Dashed slurs** represent phrase marks that are not necessarily played legato.

**Piano harmonics** are notated as follows: the bottom note, with an x-notehead, indicates which key on the piano is played, and the top note, with a diamond notehead, shows the sounding pitch.

**Natural harmonics** beyond the second partial are notated with diamond noteheads at the appropriate node on the fingerboard; the string is indicated by a roman numeral. Sounding pitches are sometimes included for clarity in parentheses. Second partial (“touch octave”) harmonics are notated conventionally.

**All notes on retuned strings** are either open strings or natural harmonics, with the exception of mm. 30-31 of mvt. 2 in the viola. All notes on retuned strings are notated as played, not as sounding, again with the exception of mm. 30-31 of mvt. 2 in the viola.

**Some harmonics require two nodes** to be touched on the same string to obtain a particularly high partial, such as m. 91 of mvt. 1 and mm. 46, 66 of mvt. 2 in the cello part. Note that in the cello part, mm. 72-75 of mvt. 2 alternate between these high harmonics and actual double-stop harmonics on two separate strings; a harmonic with two nodes on one string is indicated with one stem and one string indicated; two harmonics on separate strings have two stems and two strings indicated.

Open strings and harmonics sometimes have **ties leading into rests**, which mean to let the string ring freely.

Over the course of the **second movement**, a melodic line is stated and consistently repeated in augmentation, but woven between instruments. This primary line is indicated by **thick brackets above a passage**. This line (as indicated by brackets) should be brought out, as indicated by a *Hauptstimme* in twelve-tone music.

## Program Notes

This work began as an isolated melody, which is never stated in its entirety but which serves as the source of all material in the first movement. Each of the five distinct sections of the first movement deals with a different fragment of the melody. The movement is further motivated by its tuning, which is in turn also derived from this melody; the tuning sets up just intonation against the equal-tempered piano, allowing the thirds and sevenths of the melody to be heard in several colliding intonations.

The second movement further develops this tuning system through repetition of a new melody shaped to the tuning system's nuances. With each statement of the melodic line, the rhythm is elongated in a different proportion and the pitch content becomes richer: it is stated first as a rhythm without notes attached, and eventually with the full microtonal potential of all retuned strings, each repetition slowly adding to the realm of pitches. Whereas the first movement uses all available notes for one very elongated statement of the melody, the second movement starts with few notes and adds more notes with each repetition.

Once these aspects of the form were set up, the compositional process was more fluid; each section was composed freely by ear within the constraints described above, and the boundaries between sections are occasionally somewhat blurred.

The first movement, "Inventions," was premiered on July 2<sup>nd</sup>, 2015 at Big Barn in Putney, VT by Jin Young Yoon, Cara Pogossian, Noah Koh, and Nadia Azzi, coached by Ari Isaacman-Beck. A revised version was premiered on February 7<sup>th</sup>, 2016 at Fulton Recital Hall in Chicago, IL by Clara Lyon, Doyle Armbrust, Russel Rolen, and Ann Yi.

The second movement, "Isorhythms," was premiered on June 22<sup>nd</sup>, 2016 at the Dublin School Auditorium in Dublin, NH by Hanna Hurwitz, Victor Lowrie, Mariel Roberts, and Steven Beck.

The full piece was premiered on November 21<sup>st</sup>, 2017 at Hatch Recital Hall in Rochester, NY by Shannon Leigh Reilly Steigerward, Sam Edwards, Rachel Rice, and Sean William Calhoun, conducted by Edo Frenkel.

# Two Counterpoints

## I. Inventions

Noah Kahrs

Patient but not static, ♩ = 96

Violin

Viola

Cello

Patient but not static, ♩ = 96

Piano

5

Violin

Viola

Piano

2 9 **A**

8<sup>va</sup> II

8<sup>va</sup> I

IV (e')

*p*

**A**

*mf*

*p sempre*

*mp*

6/4

6/4

6/4

6/4

6/4

6/4

12

8<sup>va</sup> I

*mp*

*mp*

**A**

**A**

**A**

6/4

6/4

6/4

6/4

6/4

6/4

14

mp > n

f, dolce

n mf f, dolce mp

11th partial harmonics - touch nodes inside piano

f, dolce

8<sup>sub</sup> f (insofar as possible) leave harmonic ringing with sostenuto pedal

19

mf



37

IV  
(d.e.)

IV

III

*mp*

*mp*

41

**D**

II

II

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

III, IV  
(e.)

(#e.)

II

IV

*mf* *ff* *pp* *poco* *p* *f*

**D**

*mf* *ff* *meno f*

*mp*

*8va*

*8va*

*8va*

Musical score for measures 45-47. The score is in 4/4 time and consists of three staves. Measure 45 is in 4/4 time. Measure 46 is in 7/8 time. Measure 47 is in 4/4 time. The first staff (treble clef) has dynamics *f* and *mf*. The second staff (bass clef) has dynamics *f* and *mf*. The third staff (bass clef) has dynamics *n* and *f*. Fingerings are indicated: II (2) in the first staff, IV (4) in the second staff, and III, IV in the third staff. A fermata is present over the final note of measure 47.

Musical score for measures 48-50. The score is in 4/4 time and consists of two staves. Measure 48 is in 4/4 time. Measure 49 is in 7/8 time. Measure 50 is in 4/4 time. The first staff (treble clef) has dynamics *f*, *mp*, and *f*. The second staff (bass clef) has a dynamic of *f*. A dashed line indicates a slur across measures 49 and 50.

Musical score for measures 51-53. The score is in 6/4 time and consists of three staves. Measure 51 is in 6/4 time. Measure 52 is in 6/4 time. Measure 53 is in 5/4 time. The first staff (treble clef) has dynamics *f* and *n*. The second staff (bass clef) has dynamics *f* and *f*. The third staff (bass clef) has dynamics *f* and *f*. Fingerings are indicated: I, II in the first staff, IV in the second staff, and IV in the third staff. Performance instructions include "move to sul pont..." and "move to ord. position".

Musical score for measures 54-56. The score is in 6/4 time and consists of two staves. Measure 54 is in 6/4 time. Measure 55 is in 6/4 time. Measure 56 is in 5/4 time. The first staff (treble clef) has dynamics *sub pp* and *f*. The second staff (bass clef) has dynamics *meno f*, *mp*, and *f*. A fermata is present over the final note of measure 56.

**E**

52

*pp* — *(mf)* — *f*

*pp* — *(mf)* — *ff* — *f*

(ord.)

*mf* — *ff*

*n* — *mp* — *n*

**E**

*mf, dolce*

*mp*

*mf, dolce*

*f*

sost.

*mp*

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56

Rising from resonance (♩ = 64) III, IV

*p*

*ppp*

*mp* — *f*

*n < mf > n* — *pp < mf >* — *ppp*

Rising from resonance (♩ = 64)

*p*

*pp*

*p*

*pp*

sost.

*p* — *mp* — *pp, but enough to last*

← ♩ = ♩ → **F** (♩ = 96 sempre)  
II

61 I, sul tasto II, sul tasto ord.

**F** (♩ = 96 sempre)

67 I

*mp* *f* *mf* *mf* *p*

73 **G**

pp

mf

IV

IV

**G**

*p*

*mp*

*mf*

*p*

78 **H**

pp

pp

*p*

**H**

*mp*

*mp*

*p*

82

*p* *mf*

*p* *mp* *mf*

*mf* *p* *mp* *mf*

*mf* *sim.*

I IV III II

*mp*

85

*p* *n* *n* *f* *mf*

*mf* *f*

II I IV

88 **I**

*mf* *n* *mp* *mp* *f* *sub mp*

(sounding)  
touch both nodal points lightly

92

*mf* *pp* *p* *sub mf* *mp*

95

*mp*

IV

*mp*

III

I

II

*mp*

*ppp*

98

*mp*

(slowly slide away from the damper on the string towards 3rd partial)

*mf*

# II. Isorhythms

*♩* = 64

sul pont.  
III

Violin *mf* *p*

Viola II *p* *mf* *p*

Violoncello *mp* *p* sul tasto

*♩* = 64

Piano

don't pedal until indicated at B

*p* *mf* *p*

4

A

*mf* *pp* *sub mp* *ord.* *mp*

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

*mf* *n* *mf* *f* *mf* *f* *mp*

A

*mf* *pp* *sub mp* *f*

Musical score for measures 8-11. The score is written for three staves: Treble, Bass, and Piano. The key signature has one sharp (F#) and the time signature is 3/4. Measure 8 starts with a treble clef and a 3/4 time signature. The piano part begins with a first fingering (I#) and a dynamic of *n*. Measure 9 has a 4/4 time signature. Measure 10 has a 3/4 time signature. Measure 11 has a 3/4 time signature. Dynamics include *f*, *mp*, *sub f*, *pp*, *mf*, and *f*. There are several triplet markings (3) and a Roman numeral IV in the piano part.

Musical score for measures 12-15. The score is written for three staves: Treble, Bass, and Piano. The key signature has one sharp (F#) and the time signature is 3/4. Measure 12 starts with a treble clef and a 3/4 time signature. The piano part begins with a second fingering (II) and a dynamic of *p*. Measure 13 has a 4/4 time signature. Measure 14 has a 3/4 time signature. Measure 15 has a 3/4 time signature. Dynamics include *p*, *mf*, *sub mp*, and *ff*. There are several triplet markings (3) and a Roman numeral B in a box above the staff. The piano part includes a *Red.* marking.

Musical score for measures 17-15. The system includes three staves: Treble, Bass, and Piano. Measure numbers 17 and 15 are indicated. Dynamics include *f*, *p*, *mf*, and *n*. A *3* (triple) is present in the Bass staff. A *mf* dynamic is also present in the Piano staff.

Musical score for measures 15-15. The system includes three staves: Treble, Bass, and Piano. Measure numbers 15 and 15 are indicated. Dynamics include *p*, *mp*, and *mf*. A *3* (triple) is present in the Treble staff. A *mf* dynamic is also present in the Bass staff. A *mf* dynamic is also present in the Piano staff.

Musical score for measures 21-15. The system includes three staves: Treble, Bass, and Piano. Measure numbers 21 and 15 are indicated. Dynamics include *p*, *mp*, and *f*. A *3* (triple) is present in the Treble staff. A *mf* dynamic is also present in the Bass staff. A *mf* dynamic is also present in the Piano staff.

Musical score for measures 15-15. The system includes three staves: Treble, Bass, and Piano. Measure numbers 15 and 15 are indicated. Dynamics include *p* and *mf*. A *3* (triple) is present in the Treble staff. A *mf* dynamic is also present in the Bass staff. A *mf* dynamic is also present in the Piano staff. A *8va* marking is present in the Treble staff. A *mf* dynamic is also present in the Bass staff. A *mf* dynamic is also present in the Piano staff. A *mf* dynamic is also present in the Bass staff. A *mf* dynamic is also present in the Piano staff. A *mf* dynamic is also present in the Bass staff. A *mf* dynamic is also present in the Piano staff.

26

mf pp mp

mp mf

mf

D

f mp mp

mf pp p sempre

D

30

(standard intonation) p mf n

IV III IV

pp n f mf

Ped. f mf > n f

34

II,III 3 IV III 3 mp mf mp mp mf f mp mf p Ped. mf

38

**E**

>n mp 3 II,III mp 3 3 f mf mp mp mp f mp Ped. mp Ped. f

41

*f* *mp* *f* *p* *mf*

*f* *mp*

*mf*

44

**F**

*mp* *f* *sub mp* *f*

*mp* *mf*

*mf* *p* *mf* *f* *p* *p* *mf*

*mf* *f* *n* *p* *mf*

Ped. Ped.

47

*p* *sub f* *mf*

*mf* *mp*

*p* *mf* *n*

*p* *mf* *p* *mf* *f* *mp*

Ped.

51

*mf* *mp* *f*

*mf* *f* *mp*

Ped. *f* *mp*

54

mp < f sub mp

mp < f p < mp

n < mf mp

mf mf > p

Ped. Ped.

58

mp < f mp n < mp

f mp p

mf f

Ped. Ped.

61

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

Ped.

64

*p* *mf* *f* *mf* *mp* *p* *mf* *p* *p*

Ped.

68

Violin I: *pp*, *p*, *n*, *mf*

Violin II: *p*, *pp*, *n*

Piano: *mp*, *pp*, *ppp*

*Ped.*

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71

Violin I: *pp*, *p*, *mp*, *pp*, *p*, *p*, *mp*, *n*

Violin II: *p*, *pp*, *p*, *mp*, *mp*, *pp*, *n*

Piano: *p*, *mp*, *p*, *mp*, *pp*, *pp*, *mp*, *p*, *n*

*Ped.*

78

Musical score for measures 78-79. The system consists of two staves: a treble clef staff and a bass clef staff. Measure 78 features a treble staff with a melodic line starting on G4, marked *mp*, and a bass staff with a melodic line starting on G2, marked *p*. Measure 79 continues the melodic lines, with the treble staff marked *I* and *mp*, and the bass staff marked *mp*. Both staves include triplet markings and slurs.

Continuation of the musical score for measures 78-79. The system consists of two staves: a treble clef staff and a bass clef staff. Measure 78 features a treble staff with a melodic line starting on G4, marked *p*, and a bass staff with a melodic line starting on G2, marked *mp*. Measure 79 continues the melodic lines, with the treble staff marked *mp* and the bass staff marked *mp*. Both staves include triplet markings and slurs.

80

Musical score for measures 80-82. The system consists of two staves: a treble clef staff and a bass clef staff. Measure 80 features a treble staff with a melodic line starting on G4, marked *mp*, and a bass staff with a melodic line starting on G2, marked *mf*. Measure 81 continues the melodic lines, with the treble staff marked *mf* and the bass staff marked *p*. Measure 82 concludes the system, with the treble staff marked *pp* and the bass staff marked *pp*. Both staves include triplet markings and slurs.

Continuation of the musical score for measures 80-82. The system consists of two staves: a treble clef staff and a bass clef staff. Measure 80 features a treble staff with a melodic line starting on G4, marked *mf*, and a bass staff with a melodic line starting on G2, marked *mp*. Measure 81 continues the melodic lines, with the treble staff marked *mf* and the bass staff marked *n*. Measure 82 concludes the system, with the treble staff marked *pp* and the bass staff marked *pp*. Both staves include triplet markings and slurs.