
cassiopeia (string quartet #2)

(2012; rev. 2017)

Notes for cassiopeia

Tuning

Violin 1



Violin 2



Viola



Cello



Stopped notes, open strings, and natural and artificial harmonics that are played on retuned strings are **transposed** in this score. There is a small staff that appears which shows the sounding pitch(es) beneath the main staff.

Microtones

Each equal tempered half-step is divided into three equal intervals:



Strange Clefs

String clef



shows which string to play with the bow,
with which articulation and dynamic.

Bow placement

Depending on layout issues, the following abbreviations are sometimes used:

msp *molto sul ponticello*

sp *sul ponticello*

st *sul tasto*

mst *molto sul tasto*

Vibrato

There should be no vibrato except where indicated, either by markings describing vibrato type (*poco*, *molto*, *senza*, etc.) or passages marked *espr.* which should use an appropriate amount of vibrato.

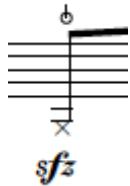
Poco, *molto*, etc. refer to the size of the vibrato. Vibrato speed should always remain roughly the same.

Molto, *poco*, and *senza* are sometimes abbreviated to *m*, *p*, and *s*.

Pizzicati

Dampened Bartok pizzicato Fingernail pizzicato:

Drape fingers over string to prevent pitch, producing only a percussive sound.



Glissandi

In general, glissandi should evenly traverse the space they are given.

Glissandi that end with a grace note in parentheses should fade out without any emphasis on the final pitch.

Glissandi that end with a grace note and no articulation should be distinctly heard but not accented or dwelt upon.

Glissandi that end with a grace note and some type of articulation should be emphasized accordingly.

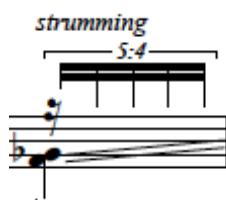
Violin II



Mm. 81-86 Lay fingers of left hand lightly (with harmonic pressure) over strings so that bow produces a grainy, highly distorted sound.

*lightly dampen strings
with left hand*

Viola



Mm. 112-115 Rapid pizzicato played in the rhythm written above the glissando double stop. Exact pizzicato technique can vary, as long as it is sufficiently loud and frantic.

Cello



M. 110 After playing the pizzicato G, slide left hand up to F-sharp. While sliding left hand up, move right hand above left hand and pluck the upper part of the string while sliding left hand back down to G.

Special notes: Section II

In Section II, the decoupling of the bow from the left hand will produce unpredictable results, which again should be embraced.

Certain dynamics in this section reflect exertion more than amplitude. Generally, when the right and left hands are decoupled, the dynamic marked describes exertion. However, the passage with natural harmonics from mm. 73-79 uses dynamics that show amplitude. Whenever these two types of material overlap, there should be a balance so that everything can be heard.

Special notes: Section III

Section III finally allows the left hand to play in a normal fashion.

This section is the most straightforward of the work. Special care should be given to using the correct amounts of vibrato as marked and to moving very evenly through the range of the many glissandi. Many of the phrases in this section should blur the boundary between discrete and continuous activity.

Special notes: Section IV

Section IV has the violins, the viola, and the cello playing highly stratified material.

The violin lines in this section should blur together slightly. They are, in a certain sense, an entire musical world like that of Section III seen from a vast distance.

The viola pizzicati near the end should seem incongruous yet completely insistent.

Score in C

cassiopeia

string quartet #2

$J = 63$

Musical score for string quartet #2, page 1, measures 1-9. The score consists of four staves: Violin 1 (top), Violin 2 (second from top), Viola (third from top), and Cello (bottom). The key signature is C major. Measure 1: Violin 1 and 2 play eighth-note pairs (A, G#) and (D, C) respectively. Viola and Cello play eighth-note pairs (E, D) and (B, A) respectively. Measures 2-3: The pattern repeats. Measures 4-5: The pattern changes to eighth-note pairs (F, E) and (C, B) respectively. Measures 6-7: The pattern repeats. Measures 8-9: The pattern changes again. Measure 10: The score begins with a dynamic of n . Measure 11: Violin 1 and 2 play eighth-note pairs (A, G#) and (D, C) respectively. Viola and Cello play eighth-note pairs (E, D) and (B, A) respectively. Measures 12-13: The pattern repeats. Measures 14-15: The pattern changes to eighth-note pairs (F, E) and (C, B) respectively. Measures 16-17: The pattern repeats. Measures 18-19: The pattern changes again. Measure 20: The score begins with a dynamic of n .

Musical score for string quartet #2, page 2, measures 10-19. The score consists of four staves: Violin 1 (top), Violin 2 (second from top), Viola (third from top), and Cello (bottom). The key signature is C major. Measure 10: Violin 1 and 2 play eighth-note pairs (A, G#) and (D, C) respectively. Viola and Cello play eighth-note pairs (E, D) and (B, A) respectively. Measures 11-12: The pattern repeats. Measures 13-14: The pattern changes to eighth-note pairs (F, E) and (C, B) respectively. Measures 15-16: The pattern repeats. Measures 17-18: The pattern changes again. Measure 19: The score begins with a dynamic of n . Measure 20: Violin 1 and 2 play eighth-note pairs (A, G#) and (D, C) respectively. Viola and Cello play eighth-note pairs (E, D) and (B, A) respectively. Measures 21-22: The pattern repeats. Measures 23-24: The pattern changes to eighth-note pairs (F, E) and (C, B) respectively. Measures 25-26: The pattern repeats. Measures 27-28: The pattern changes again. Measure 29: The score begins with a dynamic of n .

Musical score for string quartet #2, page 3, measures 21-29. The score consists of four staves: Violin 1 (top), Violin 2 (second from top), Viola (third from top), and Cello (bottom). The key signature is C major. Measure 21: Violin 1 and 2 play eighth-note pairs (A, G#) and (D, C) respectively. Viola and Cello play eighth-note pairs (E, D) and (B, A) respectively. Measures 22-23: The pattern repeats. Measures 24-25: The pattern changes to eighth-note pairs (F, E) and (C, B) respectively. Measures 26-27: The pattern repeats. Measures 28-29: The pattern changes again. Measure 30: The score begins with a dynamic of n .

Musical score for orchestra and piano, page 29, measures 29-30. The score consists of five staves. The top three staves are for the orchestra, featuring woodwind parts with dynamic markings like *n*, *pp*, *ppp*, and *l.v.*. The bottom two staves are for the piano, with bass and treble clefs, showing rhythmic patterns with 3:2 and 5:4 time signatures. Measure 29 ends with a fermata over the piano's bass line. Measure 30 begins with a forte dynamic (*pp*) in the piano's bass line.

Musical score for orchestra and piano, page 10, system 35. The score consists of four staves. The top staff (treble clef) has dynamic markings *n*, *p*, and *l.v.*. The second staff (treble clef) has dynamic *ppp*. The third staff (bass clef) has dynamic *ppp*. The bottom staff (bass clef) has dynamic *ppp*. Measure 35 begins with a forte dynamic *p* on the piano, indicated by a 3:2 ratio bracket. The piano part continues with dynamics *ppp* throughout the measure. The orchestra parts remain relatively quiet, with sustained notes and occasional accents.

Musical score for string quartet, page 14, measures 1-10. The score consists of four staves: Violin 1 (top), Violin 2, Cello, and Double Bass (bottom). The key signature is A major (no sharps or flats). Measure 1: Violin 1 and Violin 2 play eighth-note pairs with dynamic *ppp*. Measure 2: Violin 1 and Violin 2 play eighth-note pairs with dynamic *ppp*. Measure 3: Violin 1 and Violin 2 play eighth-note pairs with dynamic *ppp*. Measures 4-10: Violin 1 and Violin 2 play eighth-note pairs with dynamic *ppp*. Measures 4-10: Cello and Double Bass play eighth-note pairs with dynamic *n*. Measures 7-10: Violin 1 and Violin 2 play sixteenth-note patterns with dynamic *pp*. Measures 7-10: Cello and Double Bass play sixteenth-note patterns with dynamic *n*. Measures 7-10: Violin 1 and Violin 2 play sixteenth-note patterns with dynamic *pp*. Measures 7-10: Cello and Double Bass play sixteenth-note patterns with dynamic *n*.

50

5:4 5:4 5:4 5:4

n *pp* *l.v.* *n*

7:4 7:4

l.v. *pp*

l.v. *n*

l.v. *n*

2:4 2:4 2:4 2:4

pp 2:4 2:4 2:4

56

sul "D"

ppp *ppp* *sul "E"* *sul "C" and "G"*

ppp *ppp*

ppp

ppp

64

5:4 5:4 5:4

n *ppp* *n*

pppp

5:4 5:4

n *ppp*

pppp

5:4

n *ppp*

pppp

5:4 5:4 5:4

n *ppp* *n*

pppp

II $\text{♩} = 84$

68

68

ff

fff

ff

p *mp*

sul "C"

10:9

fff

71

71

11:9

fff

5:4

II

III

p

5:3

3:2

11:6

fff

5:3

74

floating

p

III
IV

p

II
III

p

I
II

p

III
IV

p

79

détaché

p

détaché

f

ff

détaché

f

81

détaché

ff

pp

lightly dampen strings
with left hand

pp

ff

pp

81

83

ff

pp

ff

pp

ff

pp

ff

(8^{va})

ff

pp

ff

83

85

85

exactly in time

*2nd time:
twice as long*,

ff *pp*

exactly in time

*2nd time:
twice as long*,

3:2 *5:3*

exactly in time

*2nd time:
twice as long*,

ff *pp*

exactly in time

*2nd time:
twice as long*,

ff *pp*

exactly in time

*2nd time:
twice as long*,

*slide around these
pitches erratically*

pp

fff *fffff*

*go on after a brief
but potent breath/pause*

III

 $\text{♩} = 58$

91 *senza vib.* *mf*

senza vib. *p* *3:2*

mp < ff *3:2*

senza vib. *p* *ff*

poco vib. *sfp* *3:2*

p *3:2*

95 *sul tasto* *pizz.*

p *pp* *sul tasto*

p *pp*

vibrato *msp*

mp steady

n

p

100 *secco* *p*

arco *pp* *5:4*

pizz. *mst* *f* *3:2*

f *pp* *sul "D"* *5:4*

f *pp* *sul "G"* *f*

pizz. *secco* *arco* *3:2*

p *pp* *mst* *mf > n*

f *pp* *n*

103 slow, wide vibr.
ppp

slow, wide vibr.
ppp

slow, wide vibr.
ppp

mst → *norm.* → *mst*

n → *mp* → *n*

sfz 3:2
8va poco vib.
arco
pp

f urgent
f < *f*
f 3:2
f urgent
f 3:2
f

106 *8va* norm. arco
pp < 3:2 >
sul pont.

pp 5:4 < > *mp* 5:4
sul tasto

(*8va*) lyrical
mp 5:4
pizz. *mp* 3:2
mp 5:4
mp 5:4
pp *f*

108 arco
pp
sfz

8va 3:2 > < 5:4 >
pp

lyrical
mp 6:5
m.vib. → *senza vib.* → *m.vib.*
ff < > *mp*
sfz

molto vibrato
f

sul tasto
senza vib.
pp

(pizz.)
sfz

$\text{♩} = 58$ subito

110 pizz. 3:2 ♩ 3:2 ♩ = 72 subito arco senza vib.

5:4 sfz sffz

pizz. f arco senza vib.

7:4 3:2 3:2 5:4 strumming 5:4

f f molto vib.

pizz. ff above the left hand arco ff f

113 3:2 arco m.vib. 8va senza vib.

ff ppp

5:4 7:4 as fast as possible ff

7:4 6:4 5:4 3:2 m.vib.

f pp ppp

(8va) - senza vib. 5:4

116 3:2 m.vib. m.vib. f

sf ppp sf ppp senza vib.

m.vib. \rightarrow poco vib. \rightarrow m.vib. f

ppp ppp too soft for a stable sound to form ppp ppp n f

mf ppp too soft for a stable sound to form ppp ppp

121

poco vib.
3:2
mp

poco vib.
3:2
mp

poco vib.
3:2
mp

senza vib.
3:2
f

gliss. on harmonics
senza vib.
3:2
f

senza vib.
3:2
f

vibrato
3:2
f

senza vib.
3:2
f

senza vib.
3:2
ff

vibrato
3:2
f

senza vib.
3:2
f

124

molto vibrato
5:4
pp

senza vib.
5:4
f

senza vib.
5:4
f

senza vib.
5:4
f

senza vib.
5:4
p

sul "D" senza vib.
5:4
p

senza vib.
5:4
f

senza vib.
5:4
f

senza vib.
5:4
f

molto vibrato
5:4
pp

senza vib.
5:4
f

senza vib.
5:4
f

senza vib.
5:4
f

senza vib.
5:4
p

senza vib.
5:4
f

senza vib.
5:4
f

senza vib.
5:4
f

128

→ senza vib.
3:2
f

→ senza vib.
3:2
f cresc.

tenuto
3:2
ff

with indomitable momentum
arcuato
marcato
5:4
fff

→ senza vib.
3:2
f

→ senza vib.
3:2
f cresc.

ff
fff

→ senza vib.
3:2
f

→ senza vib.
3:2
f cresc.

ff
fff

tenuto
3:2
ff

marcato
3:2
fff

131

marcato

ff

marcato

ff

ff *< < < < sff*

ff *< < < sff*

134

fff

fff

137

sostenuto

ff

140

pizz.

fff

molto sul pont.

molto rit.
(approach $\text{♩} = 30$)

$\text{♩} = 40$ (quasi a tempo)

arco

pizz.

fff

pizz.

allow final cello pizz.
pp to linger, but enter before it completely decays

arco

allow final cello pizz.
pp to linger, but enter before it completely decays

arco

allow final cello pizz.
pp to linger, but enter before it completely decays

arco

molto vibrato

pizz.

mp

f

pp

pp poco

142

144

(8va)

0

pp

pp

0

5:4

5:4

8va

pp

pp

solo
poco vib.

m.vib.

pp

< p >

IV

148

$\bullet = 63$

5:4 5:4
3:2 0 3:2 3:2

pppp
0
pppp
m.vib. → poco vib. → m.vib.
pp

153

152

pp
5:4 7:4 10:8
3:2 5:4 13:8
 pp
 pp

153

155

pp
5:4 5:3 10:8
7:4 détaché 7:4
 pp
 p 3:2
 pp <

(15^{ma}) -

159

3:2 6:4 7:4 5:4 quasi gliss.

(15^{ma}) -

7:4 tr tr 3:2 5:4 3:2 5:4

<>

3:2 5:4 3:2 5:4

3:2 5:4 3:2 5:4

3:2 5:4 3:2 5:4

3:2 5:4 3:2 5:4

161

(15^{ma}) - - - - -

soft, velvety sound

soft, velvety sound

pp

pp

5:4

3:2

5:4

165

15^{ma} - - -

15^{ma} - - -

pp

pp

hollow, bereft sound

167

hollow, bereft sound

pp

p

p

3:2

3:2

3:2

170 (15^{ma})

détaché

senza vibrato, luminous

pp

pp

n

3:2

3:2

3:2

173 (15^{ma})

détaché

11:8

5:3

pp

6:4

7:4

pizz.

mp with authority

3:2

5:4

3:2

5:4

pp

175

15^{ma} - - - - -

pp

15^{ma} - - - - -

pp

15^{ma} - - - - -

pp

n

pp

179

15^{ma} - - - - -

pp

15^{ma} - - - - -

pp

15^{ma} - - - - -

détaché

pp

15^{ma} - - - - -

pp

3:2

n

pp