ASTRALOGRAMMY #I

ca. 130'

FOR II VIOLINS, VIOLA, CELLO, BASS, AND SHAKUHACHI

Aidan Patrick Cook

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Performance notes

Notation
There are nine large sections in this piece, each of which employs distinct performance practices, and uses different notation. There is a note before each section describing the techniques and notation used in that section.

One notational device used several times treats the staff like an auxiliary staff, in which the vertical space of the staff is used to mean something other than pitch. A “tracking line” moves through the staff to control this parameter.

Timing and counting
Traditional tempi are very rare in this piece. Instead, the two primary vehicles for organizing time are seconds, and follow-the-leader. For sections which have a certain number of seconds per bar or staff, an electronic timer run by Max MSP is used, controlled by the shakuhachi player. This timer must be visible to the entire ensemble, but within reach of the shakuhachi player. Consider using two or more monitors. This patch is available for download at aidanpatrickcook.com/astralogramy1.

Tuning
This piece requires a scordatura tuning by the string players. The pitches they must tune to are spaced from each other with just intervals; they are not all equal-tempered pitches. The table to the right shows the pitches for each player to tune to. The diapason (that thing that is usually 440 Hz) should be matched to the shakuhachi’s Re-otsu pitch, in this case E4 (thus, A4 equals the frequency of this pitch times four thirds).

When tuning together, rather than one player at a time, the ensemble should tune all together one pitch at a time. Cello might begin with D, and everyone with a D would tune that pitch together. Then cello might proceed to G, and repeat with each of its strings. Violin 1 might then take over with the pitches it has that the cello does not have. The viola’s second string is the only pitch class that is not matched by any other player.

Discrete
This piece is extremely spacious. It both demands and cultivates tremendous patience from the performer. Transitions between the 9 large sections need never feel hurried.
All players read from a score in performance except for the shakuhachi player. This is due both to the musical material, which often isolates the shakuhachi and strings, and to the impracticality of synthesizing shakuhachi notation with western notation for protracted lengths of time.

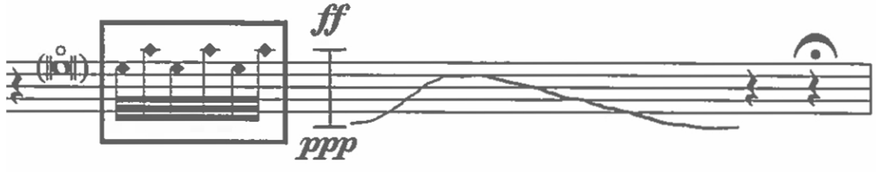
String #	Pitch	Deviation
Bass		
IV	B0	-20.5 cents
III	A1	0 cents
II	D2	0 cents
I	F#2	-20.5 cents
Cello		
IV	B1	-20.5 cents
III	F#2	-20.5 cents
II	D3	0 cents
I	G3	0 cents
Viola		
IV	B2	-20.5 cents
III	F#3	-20.5 cents
II	D#4	-41 cents
I	A4	0 cents
Violin 2		
IV	F#3	-20.5 cents
III	D4	0 cents
II	A4	0 cents
I	E5	0 cents
Violin 1		
IV	G3	0 cents
III	D4	0 cents
II	A4	0 cents
I	E5	0 cents

❖ In this section, material given in boxes is repeated or iterated on at length.

❖ There is **no fixed tempo**. Instead, the strings should **follow the pace of the shakuhachi** line, matching with it vertically. This pace will fluctuate; do not expect to move through the bars evenly.

❖ The "tracking lines" that occupy the staves represent volume, which is the most dynamic parameter.

❖ The bottom line of the staff is ***pp***, while the top line is ***f***. Markings outside the staff thus extend to ***ppp*** and ***ff***.



❖ All of the pitches given in boxes are **fingered notes for harmonics**, rather than sounding pitches. The note outside the box is played with the first finger, and should remain down always.

❖ For **solid-line boxes**, **repeat the given pattern** at a fast, even tempo until the next pattern is given. For **dashed-line boxes**, take the given fingerings and play them **quickly and erratically, in no fixed order** or tempo.

❖ Starting in bar 37, bow position instructions are replaced with an instruction to "isolate artifacts." Artifacts are unintended consequences of an instrument's physical production of sound. Interesting pitches and timbres will jump out of the instrument if the player explores different combinations of bow position, weight, and speed. Find as many of these sounds as you can during this section.

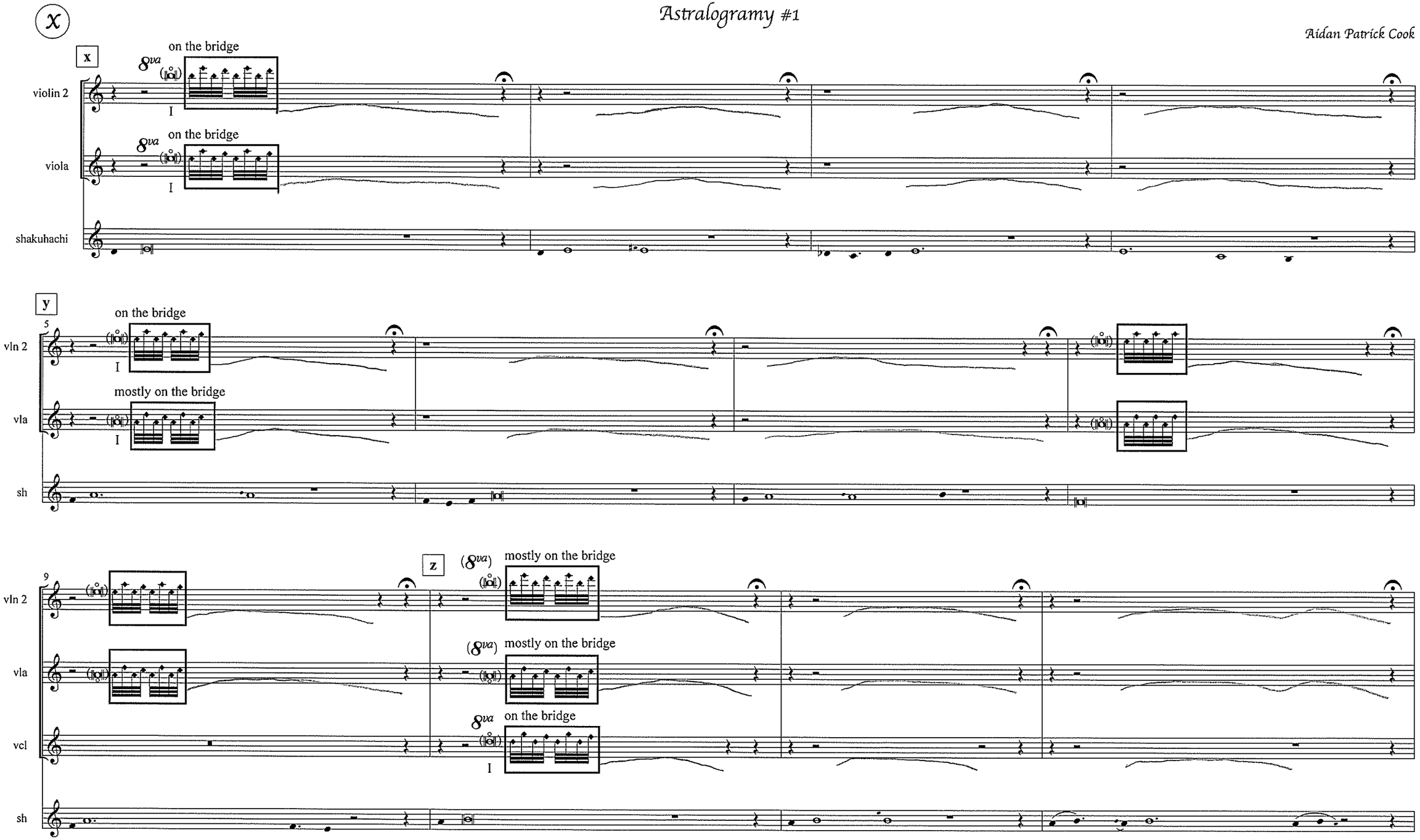
❖ At bar 84, the "tracking line" notation is replaced, leaving volume up to the player within a given range.

$\mathcal{X}$ Play freely, leading the strings, with a great deal of Ma.

When strings are ready, trigger $\mathcal{A}$.

Astralogramy #1

Aidan Patrick Cook



©

X

13

vln 2

vla

vcl

sh

x

18

vln 2

vla

mostly on the bridge

vcl

on the bridge

bs

I

sh

z

22

near the bridge

vln 2

near the bridge

vla

mostly on the bridge

vcl

mostly on the bridge

bs

sh

26

vln 2

vla

vcl

bs

sh

30

X

y

vln 2

near the bridge

vla

(8va)

near the bridge

vcl

loco

near the bridge

II

bs

near the bridge

II

sh

34

z

vln 1

mostly on the bridge

I

vln 2

bow position free, isolate artifacts

vla

bow position free, isolate artifacts

vcl

bow position free, isolate artifacts

I

bs

bow position free, isolate artifacts

I

sh

39

vln 1

vln 2

vla

vcl

bs

sh

x

44

near the bridge

loco

II

loco

II

I

y

x

49

vln 1

vln 2

vla

vcl

bs

sh

II

II

I

II

I

53

vln 1

vln 2

vla

vcl

bs

sh

x

bow position free, isolate artifacts

57

vln 1

II

touch the string
at the nut

vln 2

II

vla

II

vcl

I

bs

I

sh

y

61

vln 1

I

vln 2

II

vla

I

vcl

II

bs

II

sh

X

Z

65

vln 1

vln 2

vla

vcl

bs

sh

I

II

II

I

II

70

vln 1

vln 2

vla

vcl

bs

sh

y

x

76

vln 1

vln 2

vla

vcl

bs

sh

II

III

II

I

I

81

Dynamic free in given range

z Explore the sound, responding to Shakuhachi

X

86

vln 1

vln 2

vla

vcl

bs

sh

92

x

strings proceed directly into A (no rush)

A

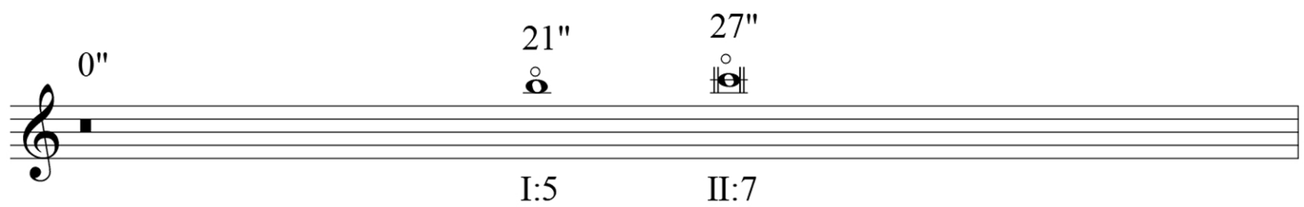
❖ The **shakuhachi and string quintet are entirely independent** of each other in this section. These notes apply to the strings.

❖ Each bar lasts for 50 seconds, except for the transitional rest bars, which each last 20 seconds.

❖ The number above each note/rest is the exact second within the bar at which it should begin. Any note/rest sustains until the next action.

❖ Most notes in this section are natural harmonics. **Each harmonic is accompanied by both the string (in roman numerals) and the partial number.** (in Arabic numerals). For instance, a fifth-partial F# on the violin's D string is marked III:5.

❖ The entrance of the shakuhachi is staggered by around 2 minutes from the strings. It is likely that the shakuhachi will still have material left for *A* when the strings finish. In this case, **strings should wait for the shakuhachi to finish.** The player will then cue *M*.



A

adapted from Rogen-Ji Taki-Ochi

Wait two cycles of 50”, then begin.

When finished, calmly trigger *M*

A

a 50"

b 50"

violin 1

violin 2

viola

cello

double bass

0" I:2 always p

9" III:4 always p

35" I:2 always p

30" I:5 always p

43" I:4

48" I:8 always p

0" III:5

26" III:3

40" III:4

29"

34" I:5

41" II:8

c 50"

vln 1

vln 2

vla

vcl

bs

3

5" III:3

16" IV:3

16" I:2

34"

38" I:3

49" I:7

20"

4"

6"

0"

2"

17"

(shakuhachi begins)

16

b 50"

5

vln 1

vln 2

vla

vcl

bs

31"

III:5

28"

II:2

39"

21"

I:5

27"

II:7

46"

II:8

A

a 50"

42"

III:6

15"

0

22"

0"

I:4

32"

II:7

44"

II:8

c 50"

7

9"

I:3

39"

III:4

20"

8"

8va

3"

I:4

13"

5"

III:3

7"

22"

I:3

2"

43"

I:9

10"

a 50"

9

vln 1

vln 2

vla

vcl

bs

41"

I:3

41"

III:5

35"

I:3

39"

II:6

47"

I:4

11"

II:7

$\mathcal{A}$

c 50"

8va

22"

III:8

40"

IV:6

29"

I:4

23"

III:7

3"

II:8

6"

I:9

b 50"

11

8va

3"

III:10

3"

I:3

2"

I:2

1"

II:4

7"

I:6

20"

39"

I:7

13"

5"

9"

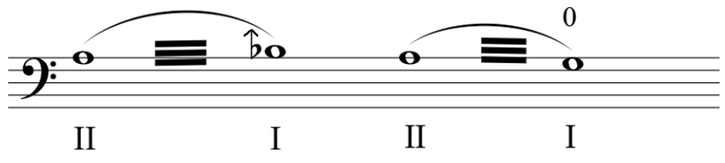
17"

16"

wait for shakuhachi to cue $\mathcal{M}$

M

❖ Each bar in this section lasts for 9 seconds.



❖ Tremolos in this section are **always across two strings.** Diads on a single string are notated as trills.

❖ This section employs 5-limit just intonation. **Bs, E flats, and Fs in this section are all raised by** a syntonic comma, effectively **20.5 cents** from their equal tempered counterparts. This is notated with an **upwards arrow attached to the accidentals.** This deviation should be achievable by ear, as it will create **just thirds and fifths within most triads.** It may take some getting used to in cases where the performer's own part includes an altered note as a member of a major or minor second, or in cases of a raised F beside an unaltered C. Preserve the deviation in these cases.

❖ Rhythmic notation in each bar is relative. Don't be too concerned about dividing the 9" bar into 4 equal parts.

❖ The **bass player** is instructed to improvise expressive melodic fragments using a given ordered sequence of pitches. **Use dynamics, articulation, rhythm, ornamentation,** and any other parameter to make these phrases expressive and unique.

❖ Bass phrases begin at the point in the bar where the box begins, as opposed to where the line begins.

❖ The shakuhachi improvises freely, emphasizing open-hole notes, the pitches of a B minor pentatonic.

1 **bar = 9"** no vibrato

violin 1

violin 2

viola

cello

double bass

shakuhachi

III
always *mp*

II

IV
always *mp*

III

I
always *mp*

II

5

vln 1

vln 2

vla

vcl

bs

sh

0

III

IV

IV

III

II

I

II

I

5"-10"

7"-14"

Improvise an expressive melody of a duration within the given range, proceeding through the given notes, in order, each once only.

20

9

M

vln 1

vln 2

vla

vcl

bs

sh

III II 0 II III

II I II I 0 II I

IV III

9"-17"

2 2

13

vln 1

vln 2

vla

vcl

bs

sh

0 II III 0 III IV

0 II III

IV III

II I 0 II III II III

3"-6" 8"-15"

2 2

vln 1

vln 2

vla

vcl

bs

5"-10"

8"-16"

sh

2

2

vln 1

vln 2

vla

vcl

bs

12"-17"

6"-9"

sh

2

2

25

M

vln 1

vln 2

vla

vcl

bs

sh

29

8"-13"

5"-9"

33

vln 1
vln 2
vla
vcl
bs
sh

37

vln 1
vln 2
vla
vcl
bs
sh

10"-16"

5"-8"

41

M

vln 1

vln 2

vla

vcl

bs

5"-8"

sh

2

2

45

vln 1

vln 2

vla

vcl

bs

7"-11"

sh

2

2

49

M

vln 1
vln 2
vla
vcl
bs
sh

IV III
III II
0 II III
IV III
IV III
III II
0 III II
IV III
5"-7"
4"-7"
2
2

53

shakuhachi proceeds alone

0 IV III
0 II III IV III
0 III IV
IV III
III II
0 III II
5"-9"
4"-6"
2
2

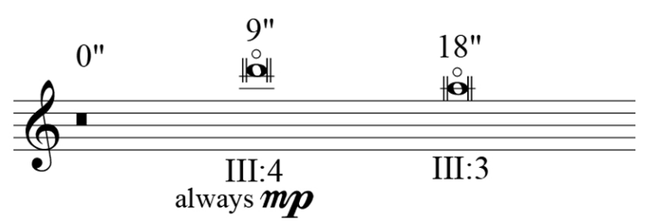
B

❖ The **shakuhachi and string quintet are entirely independent** of each other in this section. These notes apply to the strings.

❖ Each bar lasts for 50 seconds, except for the transitional rest bars, which each last 20 seconds.

❖ The number above each note/rest is the exact second within the bar at which it should begin. Any note/rest sustains until the next action.

❖ Virtually all notes in this section are natural harmonics. **Each harmonic is accompanied by both the string (in roman numerals) and the partial number.** (in Arabic numerals). For instance, a fifth-partial F# on the violin's D string is marked III:5.



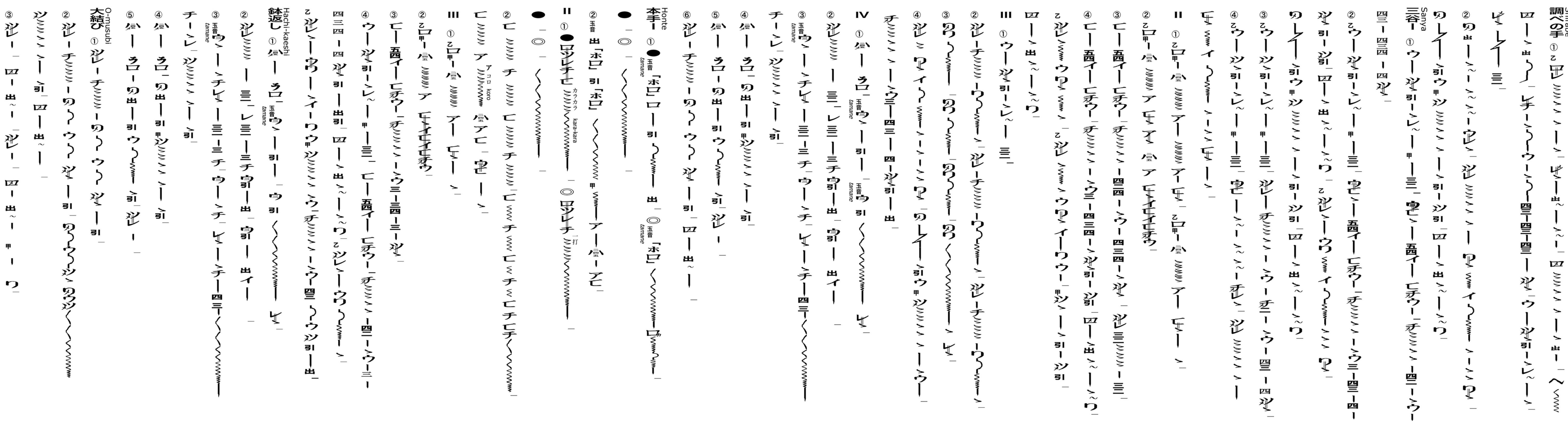
❖ The shakuhachi begins several minutes before the strings are to enter. **The shakuhachi player will cue the strings to enter using the electronic timer**, activating a 5 second countdown which cues the beginning of the section.

❖ The written material for the strings should end before the shakuhachi is finished. At this time, strings should wait around 1 minute, or until the shakuhachi is finished (whichever comes first), and tune their strings. See the front of the score for instructions on tuning.

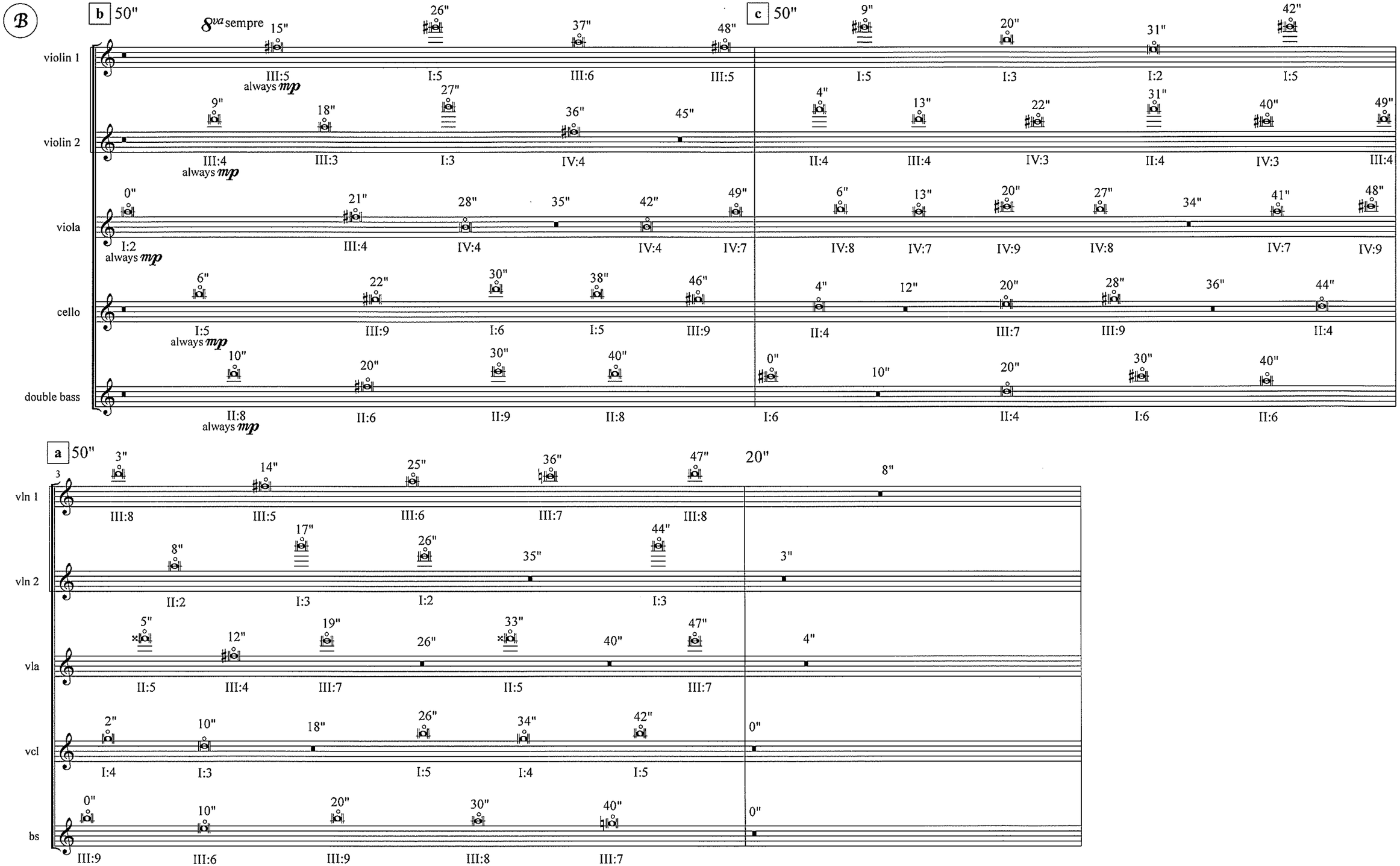
B

adapted from Renpo-Ken Tsuru no Sugomori

Begin alone, without triggering section.



Once Shakuhachi and strings are all finished, Shakuhachi triggers *Υ* and proceeds.


B
b 50"
8va sempre
c 50"
violin 1
violin 2
viola
cello
double bass
always mp
a 50"
20"
vln 1
vln 2
vla
vcl
bs

B

b 50"

5

vln 1: 10" 17" 24" 31" 38" 45"
I:5 II:8 III:7 I:5 II:8

vln 2: 8va sempre 1" 9" 17" 25" 33" 41" 49"
III:5 III:8 I:3 III:5 III:8 III:5

vla: 6" 15" 24" 33" 42"
I:2 I:3 III:8 I:3 I:2

vcl: 4" 14" 24" 34" 44"
III:7 III:8 III:9 III:7 III:9

bs: 0" 11" 22" 33" 44"
II:5 II:4 II:6 II:5 II:6

a 50"

vln 1: 2" 9" 16" 23" 30" 37" 44"
III:9 III:10 III:8 III:10 III:9 III:8

vln 2: 7" 15" 23" 31" 39" 47"
I:4 I:3 I:4 III:5 I:4

vla: 1" 10" 19" 28" 37" 46"
II:5 I:4 I:3 II:5 I:4

vcl: 4" 14" 24" 34" 44"
I:4 II:6 II:4 II:6

bs: 5" 16" 27" 38" 49"
II:8 II:7 II:8 II:4 II:7

c 50"

7

vln 1: 1" 8" 15" 22" 29" 36" 43" 20" 0"
II:8 I:5 II:5 II:8 I:5

vln 2: 5" 13" 21" 29" 37" 45" 3"
III:8 I:3 I:2 III:8 I:3

vla: 8va 5" 14" 23" 32" 41" 0"
II:5 I:2 I:3 II:5

vcl: 4" 14" 24" 34" 44" 4"
II:6 II:4 III:6 II:4 III:6

bs: 10" 21" 32" 43" 4"
II:9 II:6 I:9 II:6

b 50"

vln 1: 1" 8" 15" 22" 29" 36" 43"
III:7 I:5 III:8 III:7 I:5 III:7

vln 2: 7" 16" 25" 34" 43"
II:4 I:3 II:4 III:4 II:4

vla: 7" 15" 23" 31" 39" 47"
III:8 III:9 IV:7 III:8 III:9

vcl: 4" 14" 24" 34" 44"
II:6 I:5 I:6 I:5

bs: 6" 17" 28" 39"
II:8 II:7 II:5 II:7

B

c 50"

vln 1: 0" 7" 14" 21" 28" 35" 42" 49"
III:8 II:5 II:6 III:8 II:5 III:8

vln 2: 2" 11" 20" 29" 38" 47"
II:4 III:4 I:4 II:4 III:4

vla: 5" 13" 21" 29" 37" 45"
IV:9 IV:7 IV:8 IV:9 IV:9

vcl: 4" 14" 24" 34" 44"
I:3 III:9 III:7 III:9 II:4

bs: 0" 11" 22" 33" 44"
I:6 I:7 I:6 II:6 I:7

a 50"

vln 1: 6" 13" 20" 27" 34" 41" 48"
III:6 III:8 III:10 III:8 III:6 III:10

vln 2: 6" 15" 24" 33" 42"
III:5 III:7 III:7 I:6

vla: 3" 11" 19" 27" 35" 43"
I:2 I:4 I:3 I:2 I:3

vcl: 4" 14" 24" 34" 44"
I:4 II:7 II:8 I:4 II:7

bs: 5" 16" 27" 38" 49"
II:8 II:6 II:5 II:6 II:8

20"

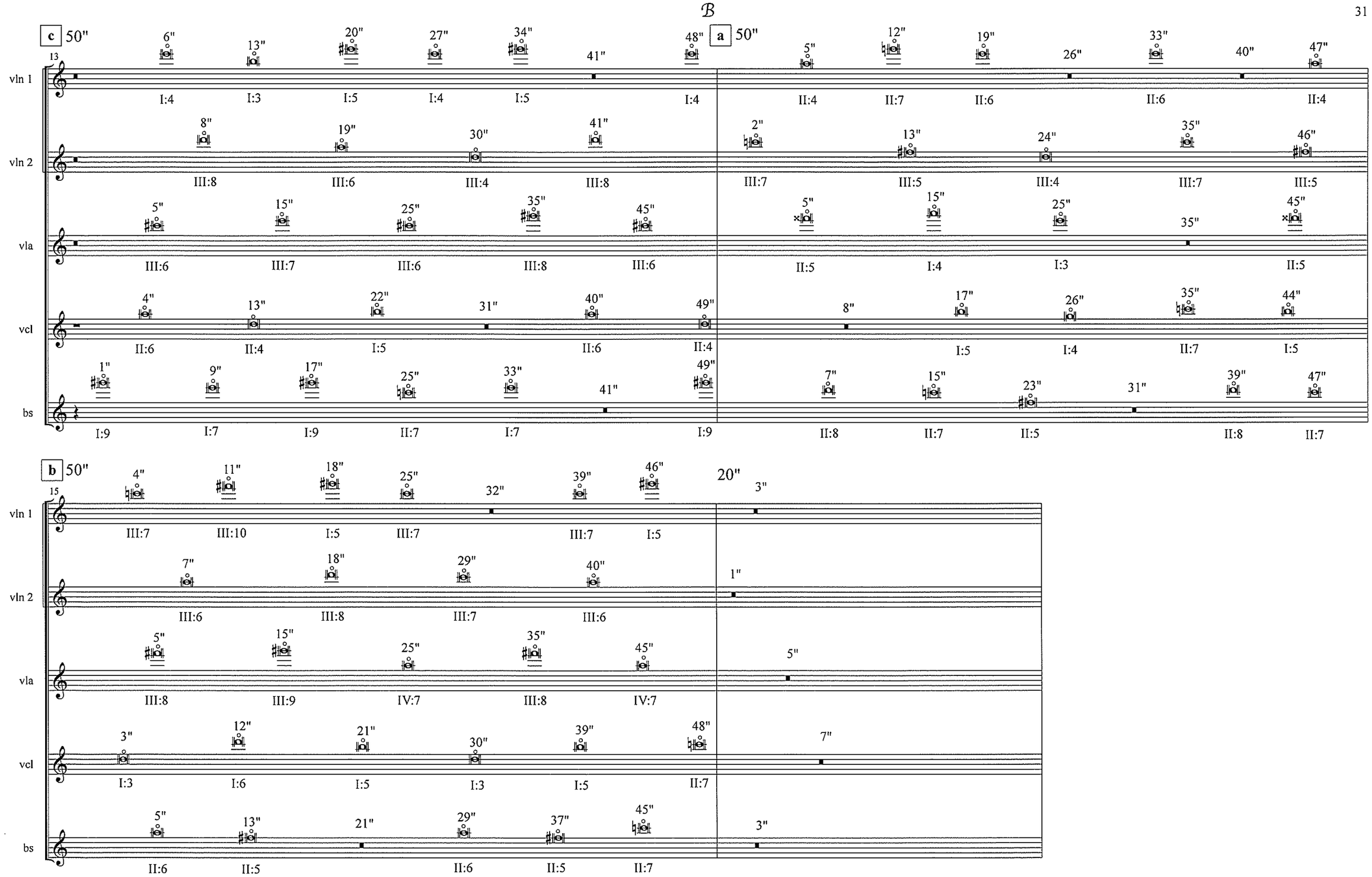
vln 1: 5"

vln 2: 1"

vla: 1"

vcl: 4"

bs: 10"


B
c 50"
a 50"
b 50"
20"
vln 1
vln 2
vla
vcl
bs
13
15
I:4 I:3 I:5 I:4 I:5 I:4 II:4 II:7 II:6 II:6 II:4
III:8 III:6 III:4 III:8 III:7 III:5 III:4 III:7 III:5
III:6 III:7 III:6 III:8 III:6 II:5 I:4 I:3 II:5
II:6 II:4 I:5 II:6 II:4 I:5 I:4 II:7 I:5
I:9 I:7 I:9 II:7 I:7 I:9 II:8 II:7 II:5 II:8 II:7
III:7 III:10 I:5 III:7 III:7 I:5
III:6 III:8 III:7 III:6
III:8 III:9 IV:7 III:8 IV:7
I:3 I:6 I:5 I:3 I:5 II:7
II:6 II:5 II:6 II:5 II:7

a 50"

B

b 50"

c 50"

20"

vln 1

vln 2

vla

vcl

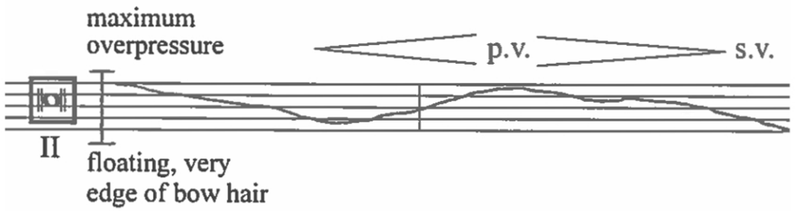
bs

While shakuhachi continues, wait 50 seconds, then tune all strings again. Proceed to Y once both Shakuhachi and strings are finished.

❖ This section operates **similarly to X**: boxes provide a note to be sustained, while the string players follow the pace of the shakuhachi.

❖ In this section, the **line specifically conveys bow pressure**, though volume should be proportional to pressure.

❖ The bottom of the line's range corresponds to a **flautando on the very edge of the bow,** playing with a single hair. The top of the range corresponds to **maximum overpressure.**

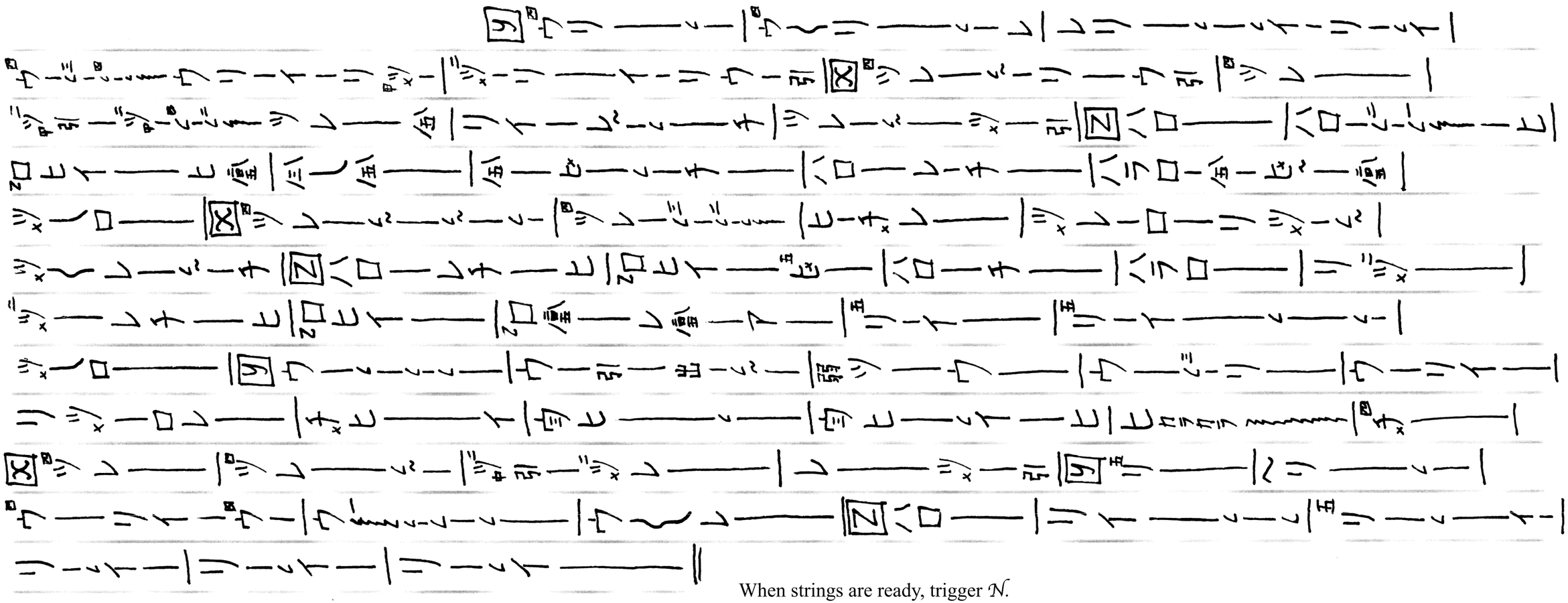


❖ Varying vibrato is also employed in this section. The four levels are **senza vibrato (s.v), poco vibrato (p.v.), ordinary vibrato (vib.),** and **molto vibrato (m.v.).**

❖ The hairpins over the staff are connected only with vibrato; they do not affect volume.

❖ While applying high bow pressure near the bridge, it should be possible to bring out different higher partials of the string, with a multiphonic effect. This is what the performer is invited to "explore" when the tracking line is replaced at measure 24.

Y Play freely, leading the strings, with a great deal of Ma.



When strings are ready, trigger N.

y

violin 1

violin 2

viola

adjacent to the bridge
s.v.

cello

III

adjacent to the bridge
s.v.

double bass

I

shakuhachi

5

x

vln 1

vln 2

adjacent to the bridge
s.v.

vla

II

vcl

I

bs

I

sh

z

y

10

vln 1

vln 2

vla

vcl

bs

sh

adjacent to the bridge

s.v.

II

II

p.v. s.v.

III

p.v. s.v.

II

x

adjacent to the bridge

s.v.

I

15

vln 1

vln 2

vla

vcl

bs

sh

p.v. s.v.

p.v. s.v.

p.v. s.v.

vib.

II

II

I

III

Y

Z as much weight as possible.
near the bridge. explore.

20

vln 1
vln 2
vla
vcl
bs
sh

p.v. s.v. p.v. s.v.

II III III II III

vib.

25

p.v. s.v. p.v. s.v. vib.

Y

y

31

vln 1 m.v.

vln 2 m.v.

vla m.v.

vcl m.v.

bs m.v.

sh

II

IV

IV

IV

IV

36

vln 1

vln 2

vla

vcl

bs

sh

y

x

41

vln 1

vln 2

vla

vcl

bs

sh

II

III

III

II

IV

47

vln 1

vln 2

vla

vcl

bs

sh

y

III

IV

IV

vib.

vib.

p.v.

vib.

52

z

𝒴

vln 1

vln 2

vla

vcl

bs

sh

III

IV

IV

vib.

vib.

vib.

p.v.

vib.

p.v.

vib.

p.v.

vib.

57

vln 1

vln 2

vla

vcl

bs

sh

proceed directly
to 𝒩 (no rush)

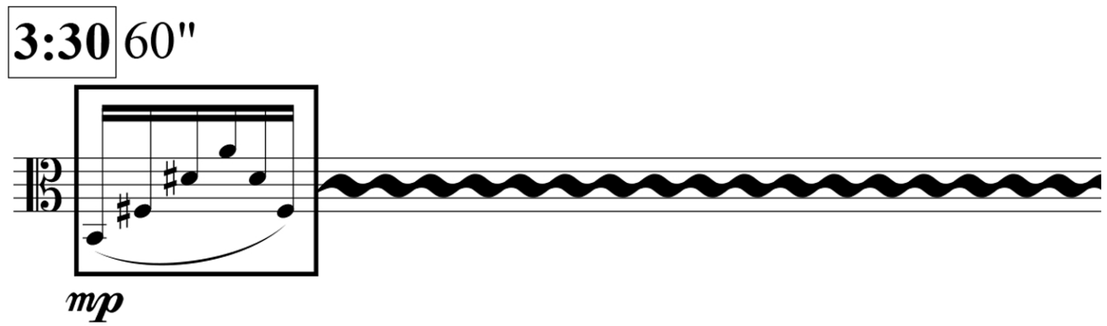
❖ This section is performed **entirely on open strings.** Always **allow strings to resonate.**

❖ The boxes contain an **ordered pattern to be repeated** as long as the zigzag line continues, or until a new pattern is given.

❖ Each system has two time indications. **The first**, in a box, is the **total elapsed time** in 𝒩 at which **the system begins. The second** is the **total duration of that system.**

❖ **Dynamic shifts** must be **extremely gradual** when marked.

❖ The sustain between the five and twelve minute marks is quite physically demanding. String players may well need to **put their bow arm down temporarily** to relieve muscular exhaustion. Try to **avoid having two players resting simultaneously**, or resting for more than 15 seconds at a time.



0:00 60"

(open strings)

somewhat near the bridge. flautando. not too fast.

viola

p

1:00 60"

end flautando

vla

mp

normal position

vcl

p

2:00 30"

vla

mp *very gradual, subtle decrescendo*

(open strings)

not too fast.

vcl

mp

sh

2:30 60"

vla

p

vcl

mp

sh

3:30 30"

N

vln 1

vln 2

vla

vcl

bs

sh

p very slow crescendo

p very slow crescendo

slightly faster

mp

slightly faster

4:00 60"

somewhat fast

mp very slow crescendo *mf*

somewhat fast

mp very slow crescendo *mf*

mf extremely slow crescendo

mf extremely slow crescendo

44 **5:00** 60"

N

vln 1 fast *f*

vln 2 fast *f*

vla fast *f*

vcl fast *f*

bs big sound, but save it *f*

sh

6:00 60"

all *ff*

7:00 5' (300")

all *fff*

all

all

all

all

12:00 40"

vln 1

vln 2

vla

vcl

bs

sh

f

gradual diminuendo to nothing

12:40 40"

still fast

mf *very slow diminuendo*

46 **13:20** 40"

N

vln 1 closer to the bridge *mp*

vln 2 closer to the bridge *mp*

vla

vcl slower *mp* *gradual diminuendo to nothing*

bs *mp*

sh

14:00 60"

vln 1 near the bridge. still fast. *p* *gradual diminuendo to nothing*

vln 2 near the bridge. still fast. *p* *gradual diminuendo to nothing*

vla

vcl

bs *p* *no diminuendo* *slight diminuendo*

sh

15:00 shakuhachi continues alone 2-3 minutes, then cues Z

all strings: loosen bow hair for Z

all strings: loosen bow hair for Z

all strings: loosen bow hair for Z

all strings: loosen bow hair for Z

all strings: loosen bow hair for Z

Z

❖ Z is similar to X and Y, with strings following the pace of the shakuhachi.

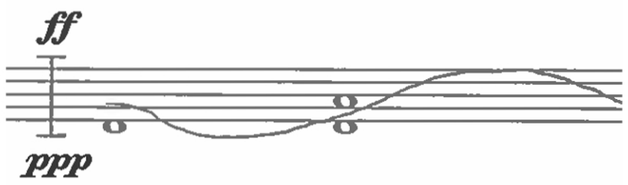
❖ The section moves through progressively softer sounds: first bowing strings, then wind sounds with the breath, to bowing on the body.

❖ The switch between techniques for a single player often elides slightly,
resulting in two lines overlapping which should be performed simultaneously.

❖ The tracking **line represents volume**. Each sound has its own possible volume range; the loudest breath
sound will naturally be softer than a bowed string, so think of the notated volume ranges as distinct from one another.

❖ Bow **hair should be very loose** for this section.

❖ When playing pitches, always play the last pitch given, while following the shakuhachi. Consequently,
the rhythmic values notated in the strings are not literal. Redundant pitches sometimes appear for clarity.



❖ In non-pitched sounds, breaks in the tracking line function as rests. Try to only
breathe here, but if you can't get volume without more frequent breaths, breathe as needed.

❖ Breath sounds are given with a consonant and a vowel. The **consonant
should be sustained throughout**, with the vocal cavity shaped to bring out the vowel.

❖ For bowing on the body, bow in the center of the bout, on the edge.

Z Play freely, leading the strings, with a great deal of Ma.

When strings are ready, trigger *O*.

Z

z No vibrato, flautando, sul tasto, bow hair loose

violin 1

violin 2

viola

cello

double bass

shakuhachi

6

y

vln 1

vln 2

vla

vcl

bs

sh

"Shee..."

(tighten bow hair)

Z

11

vln 1

vln 2

vla

vcl

bs

sh

x

16

vln 1

III

"Shee..."

(tighten bow hair)

vln 2

"Shee..."

(tighten bow hair)

vla

vcl

"Shū..."

bs

sh

y

21

vln 1

II II&III

"Fū..."

vln 2

"Fū..."

vla

"Shū..." (tighten bow hair)

vcl

Bowing on the body

bs

sh

27

sul pont. slow → fast sul tasto "Fū..." z (tighten bow hair)

vln 1

"Whō..."

vln 2

"Whō..."

vla

Bowing on the body

vcl

bs

sh

Z

33

X

"Whoa..."

vln 1

vln 2

vla

vcl

bs

sh

Bowing on the body

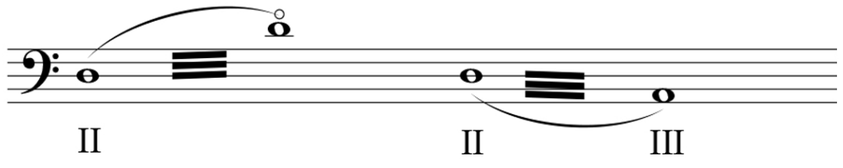
Bowing on the body

38

proceed directly
to *O* (no rush)

O

❖ Each bar in this section lasts for 20 seconds.



❖ **Octave tremolos** happen on a **single string** as harmonic tremolos, unless otherwise notated. **Other intervals** are **across two strings.**

❖ Like M, this section employs 5-limit just intonation. All **Bs, Cs, and Fs of any quality are altered** one way or the other. An arrow mark on any accidental is an instruction to adjust that pitch **by a syntonic comma, 20.5 cents**, in the direction the arrow is pointing. Listen carefully to the vertical harmonies, and these intervals should sound quite natural.

❖ A Hauptstimme marking establishes a line as the principle voice until the next such indication.

1 bar = 20"

violin 1

violin 2

viola

cello

double bass

shakuhachi

0

mp

0

mp

III

mf

0

mp

stop extension on D and allow string to resonate

0

mp

5

vln 1

vln 2

vla

vcl

bs

sh

0

mp

II

mp

mf

II

mp

Improvise using only

9

vln 1

vln 2

vla

vcl

bs

sh

mp

III

mf

ツ and レ

13

15 ♩ = 56

p

pp

II

III

H

ツ only

18

O

vln 1

vln 2

vla

vcl

bs

sh

f *mp* *mf* *mp*

f *mp* *mf* *mp*

f *mp* *mf* *mp*

2 2 2

24

H

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

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

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

mf

2 2 2

30

vln 1
vln 2
vla
vcl
bs
sh

f mp

2

36

38

vib.

0 0

III II

II I

bow liberally

42

O

vln 1

vln 2

vla

vcl

bs

sh

ff

2

48

II

II&III

f

0

54 **bar = 20"**

O slightly closer to the bridge

very close to the bridge

vln 1

vln 2

vla

vcl

bs

sh

f *mf* *mp* *p*

slightly closer to the bridge

very close to the bridge

II

2

58 shakuhachi improvises on ツ as desired, then cues *C*

C

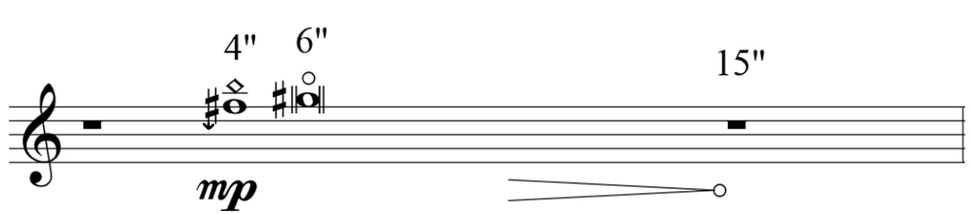
❖ Each bar in this section lasts for 20 seconds.

❖ The number over each note/rest indicates the exact second in the bar at which that note/rest begins. Each note/rest lasts until the next such indication.

❖ Hairpins terminating with a circle mean an even **decrescendo into silence.**

❖ This section employs just intonation. All Ebs are raised, and F#s lowered, by a syntonic comma, 20.5 cents.

❖ The dynamic gesture in each instrument's first entrance should be repeated in every bar for the entire section: **begin *mp*, sustain until 10", then diminish to silence at 15".**



❖ After measure 21, wait for the given cue from the shakuhachi to perform the final gesture.

C

adapted from Itchokken Koku Reibo

Wait six cycles of 20”, then begin.

リ(スル)——リ(スル)—ンイーリ
リイーンンンンン——リ(スル)—ンイーリーンイー(四)ウ—引—
ツレ(四)——ツレ(四)—ヘ~—ンーンール—レーンンンンー引ウ(四)——引—
チリ(四)——ンイーリーンイーウ(四)引チルリ—ツレ(四)ルリ——ヘ~—
ツルリウ(甲)引—ツレ(四)——ツメ(ニ)——引—
ホローンンンンロツメレ(甲)——ホ——ホローンンンンロツメレ(甲)——ルー
レーンンンンー引ウ(四)——引—ンーンンンンー引ウ(四)引チルリ—ツレ(四)ルリ——ヘ~—
チリ(乙四)——ンイーリーンイーウ(四)引チルリ—
ツルリウ(甲三)——引—ツレ(四)——ホ——ホローンンンンロツメレ(甲)——ルー
レーンンンンー引ウ(乙四)——引—
チリ(乙四)——ンイーリーンイーウ(四)引チルリ—
ツレルリ——ヘ~—ツルリウ(甲)——引—ツレ(四)——
ツメ(ニ)——引—ホローンンンンイーリーンイーリウ(四)——引—
ツレ(四)——リウ—ヘ~—リウ引ツメ(三)—引—ツレ(四)——
チヘリ(四)—レチレツメ(三)—引—ニ囚ロ——ニ囚ロ——ツロ(ニ)—ヘ~—＝＝

C

1 **bar = 20"**

violin 1

violin 2

viola

cello

double bass

0" 15"

8va sempre

1" 15"

mp

3" 15"

mp

4

vln 1

vln 2

vla

vcl

bs

5" 15"

repeat dynamics throughout

6" 15"

2" 15"

I:5

3" 15"

mp

5" 15"

repeat dynamics throughout

7

vln 1

vln 2

vla

vcl

bs

7" 15" 8" 15" 4" 15"

mp

(8va) 1" 15"

mp

3" 15" 3" 15" 2" 8" 15"

mp

0" 15"

mp

(shakuhachi enters)

10

vln 1

vln 2

vla

vcl

bs

3" 8" 15" 4" 9" 15" 2" 8" 15"

5" 15" 3" 7" 15" 5" 7" 15"

do note tune to bass

1.5" do not tune to cello 15"

II:7

mp

64

13

C

vln 1

4" 6" 15" 5" 7" 15" 3" 7" 15"

mp *p*

vln 2

(8va) 1" 15"

mp

vla

2" 10" 15" 2" 8" 15"

mp

vcl

0" 15"

mp

bs

4" 15" 5" 15"

mp *p*

16

vln 1

4" 7" 15" 3" 7" 15" 4" 6" 15"

vln 2

vla

vcl

bs

C

19

vln 1

vln 2

vla

vcl

bs

3" 10" 15" 5" 7" 15" 2" 8" 15"

mp

(8va) 1" 15"

mp

end 8va

22

(shakuhachi)

pizz let ring

ff

pizz let ring

ff

pizz let ring

ff

pizz let ring

ff

pizz let ring

ff

End