

Tolga
Yayalar

THE BOOK OF INGENIOUS DEVICES

for ensemble

The title of the piece is taken from a 9th century book by three Persian brothers (Ahmad, Muhammad and Hasan bin Musa ibn Shakir), working in the House of Wisdom in Baghdad, a major intellectual center of the Islamic Golden Age. The book is hailed as one of the most important achievements of medieval Islam. It contains detailed and illustrated descriptions of about one hundred devices, most of which are early models of what we use today, including the earliest known model of a mechanical musical instrument. This work is a fascinating example of the interfaces between the East and the West; an essential node in the circulation of knowledge from ancient Greece to the Middle East in medieval ages, finally finding an audience in Early Renaissance Europe. Taking its cue from this strange collection of bizarre instruments, *The Book Of Ingenious Devices* plays with the idea of assembling relatively complex structure from simple elements. Just like a watch, made up of numerous small and basic parts, the piece is constructed almost entirely from quite simple musical elements, such as lines and dots. They form more elaborate mechanical structures through the trajectory of the piece although none of them achieve ultimate perfection in their construction. The piece cycles through these little automata until they accumulate into the most elaborate form at the end but that also comes with its own glitches just like the frustrating experience of building a mechanical device.

Commissioned by the Callithumpian Consort

Premiered by the Callithumpian Consort, December 2, 2009
Brown Hall, New England Conservatory

Instrumentation

Flute

Clarinet in B \flat (doubling Bass Clarinet)

Percussion I Marimba
 Crotales
 Tam-tam
 Suspended Cymbal

Percussion II
 Vibraphone
 Crotales
 Suspended Cymbal

Piano

2 Violins

Viola

Violoncello

The score is written at actual pitch except Crotales

Duration: 12 minutes

Abbreviations and symbols

Notations of Microtones

♭ = quarter tone flat

♯ = quarter tone sharp

♭ - ♭ - ♯ = 1/6 tone lower

For all instruments

⊕ = Abruptly stop an explosive crescendo. The resulting effect should resemble a normal sound played backwards on a tape.

○ = Niente

Wind instruments

◇ ◆ = Diamond noteheads indicate airy sounds, half pitch - half air.

■ = toneless playing with relaxed lip pressure

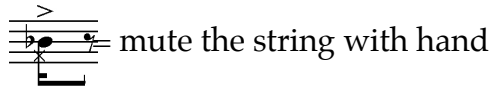
○ ————— ● = gradually from air to pitch

bisbi = alternate between different fingerings

× = x shaped noteheads indicate key slap

●^x = slap tongue

For piano



glissandi should always be played inside the piano

For strings

⤿ = hard pizzicato, should be played with the flesh of the finger

✱ = coll legno battuto

■ = toneless playing

◇ = Empty diamond noteheads indicate harmonics

◆ = Blackened diamond noteheads indicate very light left hand pressure (between normal playing and harmonics) as well as light bow pressure.

The Book of Ingenious Devices

for Callithumpian Consort

Score

Tolga Yayalar *1973

♩ = 56

[illegible]

5

Fl.

B♭ Cl.

Perc. I

Perc. II

Pno.

Vln. I

Vln. II

Vla.

Vc.

p

mf

mf *pp* subito

p

f

mf

f

mp

pizz.

mf

pizz.

ppp

f

pizz.

mf

arco

ponte

p

f

pp

8^{va}

pizz.

arco ord.

I

II

arco ord.

pizz.

f

f

pizz.

pizz.

Fl. *11* *f* *pp*

B♭ Cl.

Perc. I

Perc. II *f*

Pno. *15* *ff* *mf* *f* *3*

Vln. I *11* *8va* *8va* *arco* *pizz. 8va* *mf* *f* *3*

Vln. II *5* *8va*

Vla. *f* *ff* *3* *V*

Vc. *f* *V*

Detailed description: This page of a musical score covers measures 11 through 15. The instrumentation includes Flute (Fl.), B♭ Clarinet (B♭ Cl.), Percussion I (Perc. I), Percussion II (Perc. II), Piano (Pno.), Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello (Vc.). The score is written in 3/4, 2/4, and 4/4 time signatures. Measure 11 features a flute entry with a forte (*f*) dynamic and a B♭ clarinet entry. Measure 12 has rests for most instruments. Measure 13 shows a piano entry with fortissimo (*ff*) and mezzo-forte (*mf*) dynamics, and a violin I entry with an 8va marking. Measure 14 continues the piano and violin I parts, with a triplet of eighth notes in the piano. Measure 15 concludes with a piano triplet of eighth notes and a violin I entry with an 8va marking. Dynamics range from fortissimo (*ff*) to pianissimo (*pp*). Performance markings include *arco* (bowed) and *pizz.* (pizzicato) for the violin I.

Fl. *p* *mf* *pp* *f* *tonlos* *ton*

B♭ Cl. *bisbi.* *pp* *mf* *ppp* *f*

Perc. I *f*

Perc. II *mf*

Pno. *f*

Vln. I *mf* *f* *f sempre* *8va-1 pizz.* *arco*

Vln. II *f sempre* *pizz. 8va* *loco*

Vla. *p* *mf* *p* *mf* *pp* *f*

Vc. *p* *mf* *pp* *ponte* *f*

[illegible]

accel. poco a poco -----
tonlos → *ton*

Fl. ²⁶ *f* *ff* *p*

B♭ Cl. *f*

Perc. I ²⁶ *p* *mp*

Perc. II *f*

Pno. *fff*

Vln. I ²⁶ *f* *f* *arco* *f*

Vln. II *f* *f* *arco* *f*

Vla. *f* *f* *ord.* *p* *pizz.* *mf*

Vc. *f* *f* *ord.* *f*

[illegible]

(*accel.*) – = 78

[illegible]

34

Fl. *f*

B♭ Cl. *f* 5

Perc. I *p* *f* *f* Crotales

Perc. II *f* 3 Crotales

Pno. *p* *ff* 5

Vln. I *pp* *mp* *ff* *tonlos* *ton*

Vln. II *pp* *f* 3 3

Vla.

Vc. *pp* *f*

Detailed description: This page of a musical score covers measures 34 to 44. The score is for a symphonic ensemble. The Flute (Fl.) plays a single note in measure 34 with a forte (*f*) dynamic. The B♭ Clarinet (B♭ Cl.) enters in measure 35 with a melodic line, marked forte (*f*), featuring a quintuplet (5) in measure 40. Percussion I (Perc. I) has a dynamic crescendo from piano (*p*) to forte (*f*) in measure 35, with a crotales section in measure 41. Percussion II (Perc. II) has a dynamic crescendo from piano (*p*) to forte (*f*) in measure 35, with a crotales section in measure 41. The Piano (Pno.) has a dynamic crescendo from piano (*p*) to fortissimo (*ff*) in measure 35, with a quintuplet (5) in measure 40. The Violin I (Vln. I) part starts in measure 34 with a pianissimo (*pp*) dynamic, marked *tonlos* (without tone), and transitions to *mp* (mezzo-piano) and *ff* (fortissimo) in measure 35, marked *ton* (with tone). The Violin II (Vln. II) part starts in measure 34 with a pianissimo (*pp*) dynamic and transitions to forte (*f*) in measure 35, featuring triplet (3) markings. The Viola (Vla.) and Violoncello (Vc.) parts are also present, with the Vc. marked *pp* in measure 34 and *f* in measure 35.

36

Fl.

B♭ Cl.

Perc. I

Perc. II

Pno.

Vln. I

Vln. II

Vla.

Vc.

p

p

ppp

p

p

p

p

f

p

f

p

p

p

p

ppp

Tam-tam

p

w/bow

pizz.

arco

pizz.

arco

III

← . = ♩ → ♩ = 38

39

Fl.

p *pp*

B♭ Cl.

p *mp* *pp* *f*

Perc. I

Perc. II

p

Pno.

mp *mf* *sff*

Vln. I

p *ppp* *p* *pp* *f*

Vln. II

pizz. *8va-* arco *p* *mp*

Vla.

p *p* *pp* *f*

Vc.

mf *p* *f*

42

Fl.

B♭ Cl.

Perc. I

Perc. II

Pno.

Vln. I

Vln. II

Vla.

Vc.

III
IV
3

ponte

3

pp

pp *f* *pp* *sub* *f* *pp* *subito* *mp*

ff

pp

ppp

pp

f

pp

f *pp* *subito* *pp* *mp* *pp*

46

Fl.

B♭ Cl.

Perc. I

Perc. II

Pno.

Vln. I

Vln. II

Vla.

Vc.

key slap

p

mf

f

mf

ff

mf > *pp*

p

mf

pp

V ponte

I II

I II

mf

ff

ff

Detailed description: This page contains a musical score for measures 46 through 49. The instruments are Flute (Fl.), B♭ Clarinet (B♭ Cl.), Percussion I (Perc. I), Percussion II (Perc. II), Piano (Pno.), Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello (Vc.). The score is written in 4/4 time, with a key signature of one sharp (F#). Measure 46 begins with a treble clef and a key signature change to one sharp. The Flute part has a key slap in measure 48. The B♭ Clarinet part has a piano (*p*) dynamic in measure 46 and a mezzo-forte (*mf*) dynamic in measure 48. The Percussion I part has a rest in measure 46 and a forte (*f*) dynamic in measure 48. The Percussion II part has a rest in measure 46 and a forte (*f*) dynamic in measure 48. The Piano part has a rest in measure 46 and a forte (*f*) dynamic in measure 48. The Violin I part has a piano (*p*) dynamic in measure 46 and a mezzo-forte (*mf*) dynamic in measure 48. The Violin II part has a piano (*p*) dynamic in measure 46 and a mezzo-forte (*mf*) dynamic in measure 48. The Viola part has a mezzo-forte (*mf*) dynamic in measure 46 and a piano (*pp*) dynamic in measure 48. The Violoncello part has a piano (*p*) dynamic in measure 46 and a mezzo-forte (*mf*) dynamic in measure 48. The score includes various musical notations such as notes, rests, dynamics, and articulation marks.

← $\frac{1}{2}$ = 52

49

Fl.

B \flat Cl.

Perc. I

Perc. II

Pno.

Vln. I

Vln. II

Vla.

Vc.

p

p sempre

ord.

p

arco tasto

mf

ord.

pp

ord.

pp

f

Detailed description of the musical score: The score is for measures 49 through 52. Measure 49 is in 4/4 time. Measures 50 and 51 are in 3/4 time. Measure 52 is in 4/4 time. The Flute part has three accented eighth notes in measure 49. The B-flat Clarinet part has a half note in measure 50. The Piano part has a continuous sixteenth-note pattern in measure 49. The Violin I part has a half note in measure 50. The Violin II part has a half note in measure 49 and a half note in measure 50. The Viola part has a half note in measure 50. The Violoncello part has a half note in measure 49. Dynamics include p (piano), p sempre (piano sempre), mf (mezzo-forte), pp (pianissimo), and f (forte). Performance instructions include arco tasto (arco tasto) and ord. (ordinario).

52

Fl.

B \flat Cl.

Perc. I

Perc. II

Pno.

Vln. I

Vln. II

Vla.

Vc.

f

ff

ff

ff

pp

mf

pizz.

arco

ppp

ff

mf

f

ff

ppp

ff

ponte

pp

fff

[illegible]

58

Fl.

ff *f* *ff* *f*

B♭ Cl.

ff *ff* *ff*

Perc. I

Perc. II

Pno.

58

Vln. I

ff *mf* *ord.*

Vln. II

ff *ff*

Vla.

ff *ff* *ord.* *ff*

Vc.

ff *ff* *ff*

ponte

pizz.

arco

ord.

ponte

ord.

ponte.

60

Fl.

ff *p* *f*

B♭ Cl.

ff *pp* *mp* *pp* *ff*

Perc. I

Marimba

pp *mf*

Crotales

mf

Perc. II

Vibraphone

mp *f* *mf*

Crotales

Pno.

p *f*

Vln. I

ff *ff* *pp* *mp*

pizz. *arco* *ord.* *tasto*

Vln. II

mf *ff* *ff*

tasto

Vla.

mf *p*

Vc.

ff *ff* *ff*

ord. *tasto*

[illegible]

70

Fl.

f

B \flat Cl.

pp *ff*

Perc. I

sf

Cymbal

w/bow

Perc. II

ppp *f* *mf* *pp* *f*

Vibraphone

3

Pno.

sf *ff* *Red.*

Vln. I

pp *p* *f*

Vln. II

ord. *ppp* *f* *ff* *p* *f*

I II

Vla.

→ ponte. *ff* *p* *ff*

ponte 3

Vc.

ord. *ff* *pp* *f*

74

Fl.

p *flz.* 3

B♭ Cl.

p

Perc. I

Perc. II

Vibraphone *w/bow* 3 *mf*

Pno.

Vln. I

fff *f* *pp*

Vln. II

fff *f* *pp*

Vla.

fff *p* *pp* 3 V

Vc.

fff *f*

[illegible]

82

Fl.

flz.
p

p

B♭ Cl.

ppp *mp* *p*

Perc. I

mp

Perc. II

mf *mp*

Pno.

82

Vln. I

→ ponte.
ord.
3 pp *mf* *mp* *pp* *mf* *pp* *pp*

Vln. II

3 ponte *ord.* *tasto* *ord.*
mp *pp* *mf* *pp* *mp* *pp*

Vla.

▶ ponte. *ord.*
mp *pp* *mp* *mf* *mp* *mp*

Vc.

mp *pp* *mp* *mp*

Detailed description: This page of a musical score covers measures 82, 83, and 84. The instruments are Flute (Fl.), B♭ Clarinet (B♭ Cl.), Percussion I (Perc. I), Percussion II (Perc. II), Piano (Pno.), Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello (Vc.). The key signature has one sharp (F#) and the time signature is 4/4. The Flute part begins with a *flz.* (flautando) marking and a *p* dynamic. The B♭ Clarinet part has dynamics of *ppp*, *mp*, and *p*. Percussion I has a *mp* dynamic. Percussion II has *mf* and *mp* dynamics. The Piano part is silent. Violin I has a *→ ponte.* marking at measure 82, followed by *ord.* (ordine) markings. Its dynamics include *3 pp*, *mf*, *mp*, *pp*, *mf*, *pp*, and *pp*. Violin II has a *3 ponte* marking, followed by *ord.*, *tasto* (tasto), and *ord.*. Its dynamics include *mp*, *pp*, *mf*, *pp*, *mp*, and *pp*. Viola has a *▶ ponte.* marking, followed by *ord.*. Its dynamics include *mp*, *pp*, *mp*, *mf*, *mp*, and *mp*. Violoncello has dynamics of *mp*, *pp*, *mp*, and *mp*. There are various musical notations including triplets, slurs, and accents throughout the score.

85

Fl.

p *pp* *ppp* *p*

B♭ Cl.

p *pp* *ppp*

Perc. I

p *pp* *p*

Perc. II

mp *Crotales* *w/bow*

Pno.

Vln. I

mp *p* *p* *pp*

Vln. II

mf *p* *pp* *pp*

Vla.

pp *mp* *pp*

Vc.

p *p* *pp* *mp*

[illegible]

91

Fl.

p

5

3

B♭ Cl.

p

3

ppp

Bass Clarinet

Perc. I

91

Perc. II

p

3

Pno.

Vln. I

91

mf

c.l. batt.

5

ponte

mf

ord.

8va ord.

ppp

f

Vln. II

mf

c.l. batt.

ppp

f

Vla.

mf

c.l. batt.

ord.

ppp

f

Vc.

ponte

ord.

3

mf

ppp

f

Detailed description: This page of a musical score covers measures 91 to 94. The Flute (Fl.) part begins at measure 91 with a five-measure rest, followed by a triplet of eighth notes, and then a three-measure rest. The Bass Clarinet (B♭ Cl.) part also starts with a three-measure rest, followed by a triplet of eighth notes, and then a three-measure rest. The Percussion I (Perc. I) and Percussion II (Perc. II) parts have rests in measures 91 and 92, followed by a triplet of eighth notes in measure 93. The Piano (Pno.) part has rests in measures 91 and 92, followed by a triplet of eighth notes in measure 93. The Violin I (Vln. I) part begins at measure 91 with a five-measure rest, followed by a five-measure rest, and then a five-measure rest. The Violin II (Vln. II) part begins at measure 91 with a five-measure rest, followed by a five-measure rest, and then a five-measure rest. The Viola (Vla.) part begins at measure 91 with a five-measure rest, followed by a five-measure rest, and then a five-measure rest. The Violoncello (Vc.) part begins at measure 91 with a five-measure rest, followed by a five-measure rest, and then a five-measure rest. The score includes various dynamics such as *mf*, *ppp*, and *f*, and includes markings for *c.l. batt.*, *ord.*, *8va ord.*, *ponte*, and *5*.

← ♩ = ♩ → ♩ = 69

95

Fl.

pp *ff*

B♭ Cl.

f

Perc. I

pp *f* *mp*

Crotales

Perc. II

mf

Crotales

Pno.

Vln. I

pp *f* *pp* *ff* *mf*

flaut.

Vln. II

pp *p* *ppp* *p* *ff* *mp*

Vla.

pp *p* *ff* *ppp* *tonlos*

Vc.

pp *p* *mf*

[illegible]

103

Fl.

Clarinet

B♭ Cl.

pp \curvearrowright mf \curvearrowright pp_{sub} \curvearrowright f \curvearrowright ff

Marimba

Perc. I

103

f

Perc. II

pp \curvearrowright mp

Pno.

15

3

ff

f

(Sost.)

Vln. I

103

pizz. 8va - -

5

f

ponte

pp \curvearrowright f

Vln. II

pizz.

f

ponte

pp \curvearrowright f

Vla.

3

ff

ponte

pp \curvearrowright f

Vc.

flaut.

f

ord.

pp

III

\curvearrowright f mf \curvearrowright

106

Fl.

pp

B♭ Cl.

ppp

Perc. I

Crotales

f

Perc. II

Crotales

f

mp

Pno.

15

(Sost.)

mp

f

Vln. I

106

c.l. batt.

p

ord.

ppp

fpp

mp

Vln. II

ppp

fpp

mp

Vla.

mp

Vc.

ff

mp

ppp

ord.

Detailed description: This page of a musical score covers measures 106 to 110. The Flute (Fl.) part begins in 3/4 time with a *pp* dynamic, then changes to 2/4 time. The B♭ Clarinet (B♭ Cl.) part is mostly silent, with a *ppp* dynamic at the end. Percussion I (Perc. I) and Percussion II (Perc. II) play crotales. Perc. I has a *f* dynamic, while Perc. II has *f* and *mp* dynamics. The Piano (Pno.) part features complex rhythmic patterns, including triplets and sixteenth notes, with a *(Sost.)* marking and dynamics of *mp* and *f*. The Violin I (Vln. I) part starts with a *c.l. batt.* marking and a *p* dynamic, then has a *ppp* dynamic and a *fpp* dynamic. The Violin II (Vln. II) part has a *ppp* dynamic and a *fpp* dynamic. The Viola (Vla.) part has a *mp* dynamic. The Violoncello (Vc.) part has a *ff* dynamic and a *ppp* dynamic. The score includes various musical notations such as slurs, ties, and dynamic markings.

111 *flz.*
Fl. p

111 mp ff
B♭ Cl. mf pp f fff

111
Perc. I f f f

Vibraphone

Perc. II f f

Pno. 15 3 3 3 3 5

111 *ponte*
Vln. I p mp

111 *ponte*
Vln. II p mp

111 *ponte*
Vla. p mp

111 *ponte*
Vc. mp

Detailed description: This page of a musical score covers measures 111 to 114. The instruments are Flute (Fl.), B♭ Clarinet (B♭ Cl.), Percussion I (Perc. I), Percussion II (Perc. II), Piano (Pno.), Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello (Vc.). The Flute part begins with a 'flz.' (flautando) marking and a triplet of eighth notes, followed by a crescendo to *p*. The B♭ Clarinet part features a triplet of eighth notes, a crescendo to *mp*, then *ff*, followed by a decrescendo to *pp*, then *f*, and finally *fff*. Percussion I and II play rhythmic patterns with accents, marked *f*. The Piano part includes a triplet of eighth notes, a crescendo to *f*, and a decrescendo to *pp*, followed by a crescendo to *f*. The Violin I, Violin II, and Viola parts all play a triplet of eighth notes, marked *p*, followed by a crescendo to *mp*. The Violoncello part plays a triplet of eighth notes, marked *mp*. The score includes various musical notations such as triplets, accents, and dynamic markings.

Fl.

B♭ Cl.

Perc. I

Perc. II

Pno.

Vln. I

Vln. II

Vla.

Vc.

117

Fl. *ff* *pp* *mf*

B♭ Cl. *pp* *mf*

Perc. I Tam-tam *mp*

Perc. II Cymbal *f* *mp* *w/bow*

Pno. *f* *3*

(Sost.)

Vln. I *ff* *f* *pizz. 8va* *arco ponte* *pp* *ff* *f* *pizz. 8va*

Vln. II *pp* *ff* *f*

Vla. *ff* *p* *ff* *5* *ponte.*

Vc. *ff* *pp*

55

119

Fl.

B♭ Cl.

Perc. I

Perc. II

Pno.

Vln. I

Vln. II

Vla.

Vc.

Marimba

15

8va

8va

ponte

pizz.

ppp

p

f

ff

f

mf

[illegible]

123

Fl.

B♭ Cl.

Perc. I

Perc. II

Pno.

Vln. I

Vln. II

Vla.

Vc.

ff

ffz.

ff

p

Vibraphone

f

p

ff

fff

ord.

5

3

3

3

f

f

f

128

Fl.

ff

f

B♭ Cl.

flz.

f

Perc. I

Perc. II

f

p

Pno.

Vln. I

ff

p

f

Vln. II

f

p

f

ff

Vla.

f

f

f

Vc.

f

fff

fff

mf

ff

ponte.

[illegible]

[illegible]

135

Fl.

B♭ Cl.

Perc. I

Perc. II

Pno.

Vln. I

Vln. II

Vla.

Vc.

ff

f

Sost. Red.

ponte

ord.

139

Fl.

B♭ Cl.

Perc. I

Perc. II

Pno.

(Sost.)

Vln. I

Vln. II

Vla.

Vc.

139

Text

ff

mp

f

p

8va

ord.

ff

mp

f

p

8va

ord.

mp

ff

mf

f

p

ord.

f

p

mp

♩ = 69

145

Fl.

B♭ Cl.

Perc. I

Perc. II

Pno.

(Sost.)

Vln. I

Vln. II

Vla.

Vc.

ff *pp* *sub* *mf* *f* *sempre* *p* *f* *pp* *f* *p* *ord.* *p* *f* *pp* *f* *p* *p* *f* *pp* *mf* *ord.* *p* *f* *p* *ff* *p* *f*

Detailed description of the musical score: The score is for measures 145 and 146 of a piece in 4/4 time. The tempo is marked as ♩ = 69. The instruments are Flute (Fl.), B♭ Clarinet (B♭ Cl.), Percussion I (Perc. I), Percussion II (Perc. II), Piano (Pno.), Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Cello (Vc.). Measure 145 features a long flute line with a slur and a five-measure rest, marked *mf*. The B♭ Clarinet has a five-measure rest, marked *ff pp sub*. Percussion I has a *f* *sempre* marking with an accent. Percussion II has a *p* marking with a five-measure rest. The Piano has a *f* marking with an accent and a five-measure rest. The Violin I part has a *ord.* marking and a dynamic range from *p* to *f* to *pp* to *f* to *p*. The Violin II part has a *p* marking and a dynamic range from *p* to *f* to *pp* to *mf*. The Viola part has a *ord.* marking and a dynamic range from *p* to *f* to *p*. The Cello part has a *ff* marking and a dynamic range from *p* to *f*. Measure 146 continues the flute line with a slur and a five-measure rest, marked *mf*. The B♭ Clarinet has a five-measure rest, marked *ff pp sub*. Percussion I has a *f* *sempre* marking with an accent. Percussion II has a *p* marking with a five-measure rest. The Piano has a *f* marking with an accent and a five-measure rest. The Violin I part has a *ord.* marking and a dynamic range from *p* to *f* to *pp* to *f* to *p*. The Violin II part has a *p* marking and a dynamic range from *p* to *f* to *pp* to *mf*. The Viola part has a *ord.* marking and a dynamic range from *p* to *f* to *p*. The Cello part has a *ff* marking and a dynamic range from *p* to *f*.

147

Fl. *pp* < *ff* *ppp* *sub* *ff* *pp* *sub*

B♭ Cl. *f* *p* < > *f* *p* < > *pp* *ff* *p* *sub* *ff* *p* < >

Perc. I

Perc. II

Pno.

Vln. I *p*

Vln. II *p* *ff* *p*

Vla. *f* *f* *p* *mf* *tasto* *ord.*

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

150

Fl.

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

B♭ Cl.

ff p sub *ff p* *ff p ff pp*

Perc. I

3

Perc. II

f p

Pno.

Vln. I

Vln. II

Vla.

ff p

Vc.

Detailed description: This page of a musical score covers measures 150 to 154. The instruments are Flute (Fl.), B♭ Clarinet (B♭ Cl.), Percussion I (Perc. I), Percussion II (Perc. II), Piano (Pno.), Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello (Vc.). The score is written in 2/4 time. Measures 150-151 are in 2/4 time, and measures 152-154 are in 3/4 time. The Flute and B♭ Clarinet parts feature melodic lines with dynamic markings such as *ff*, *pp*, *sub*, *p*, *f*, and *ff*. The Percussion parts include rhythmic patterns with triplets and accents. The Piano part features complex rhythmic figures with triplets and accents. The Violin and Viola parts have long, sustained notes with dynamic markings like *ff* and *p*. The Violoncello part has a melodic line with dynamic markings like *ff* and *p*.

♩ = 54

153

Fl.

p *f* *p_{sub}* *mf* *p* *ff*

B♭ Cl.

f *p_{sub}* *mf* *p* *ff*

Perc. I

Cymbal w/bow

mf

Perc. II

mf

Pno.

sfz
Red. →

Vln. I

mf *sfz* *ppp* *mp*

Vln. II

mf *sfz* *pp* *mf* *pp* *mp*

Vla.

mf *sfz* *pp* *ff* *pp* *mp*

Vc.

mf *sfz* *pp* *mp*

[illegible]

[illegible]

164

Fl.

B♭ Cl.

Perc. I

Perc. II

Pno.

Vln. I

Vln. II

Vla.

Vc.

f

f *mf* *fff*

p *f*

pizz.

mf sempre

pp *f*

p *ff*

[illegible]

[illegible]

170

Fl.

B♭ Cl.

Perc. I

Perc. II

Pno.

15

Vln. I

170

Vln. II

Vla.

arco
ponte

f

pizz.

f *p*

Vc.

ponte

f *p*

arco
ponte

f

172

Fl.

B♭ Cl.

Perc. I

Perc. II

Pno.

Vln. I

Vln. II

Vla.

Vc.

173

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463

This musical score page contains measures 174 through 180. The instruments are arranged as follows:

- Fl. (Flute I):** Measures 174-179 have whole rests. Measure 180 has a whole note G₄ with a "freeze!" instruction above it.
- B♭ Cl. (B♭ Clarinet):** Measure 174 has a triplet of eighth notes (F₃, E₃, D₃) with a "freeze!" instruction below. Measures 175-179 have whole rests. Measure 180 has a whole rest with a "freeze!" instruction below.
- Perc. I (Percussion I):** Measure 174 has a quarter note F₂ (*f*). Measure 175 has a half note G₂ (*p*). Measure 176 has a half note A₂ (*f*). Measure 177 has a half note B₂ (*p*) with a triplet of eighth notes. Measure 178 has a half note C₃. Measure 179 has a half note D₃. Measure 180 has a whole rest with a "freeze!" instruction below.
- Perc. II (Percussion II):** Measures 174-179 have whole rests. Measure 180 has a whole rest with a "freeze!" instruction below.
- Pno. (Piano):**
 - Right hand: Measure 174 has a quarter note F₄ (*f*). Measure 175 has a quarter note G₄. Measure 176 has a quarter note A₄. Measure 177 has a quarter note B₄. Measure 178 has a quarter note C₅. Measure 179 has a quarter note D₅. Measure 180 has a whole rest with a "freeze!" instruction below.
 - Left hand: Measure 174 has a quarter note F₂ (*f*). Measure 175 has a quarter note G₂. Measure 176 has a quarter note A₂. Measure 177 has a quarter note B₂. Measure 178 has a quarter note C₃. Measure 179 has a quarter note D₃. Measure 180 has a whole rest with a "freeze!" instruction below.
- Vln. I (Violin I):** Measures 174-179 have whole notes (G₄, A₄, B₄, C₅, D₅) with a "freeze!" instruction above measure 180.
- Vln. II (Violin II):** Measures 174-179 have whole notes (G₄, A₄, B₄, C₅, D₅). Measure 180 has a whole rest with a "freeze!" instruction below.
- Vla. (Viola):** Measures 174-179 have whole notes (G₃, A₃, B₃, C₄, D₄). Measure 180 has a whole rest with a "freeze!" instruction below.
- Vc. (Cello):** Measures 174-179 have whole notes (G₂, A₂, B₂, C₃, D₃). Measure 180 has a whole rest with a "freeze!" instruction below.

Musical score for measures 177-180. The tempo is marked as $\text{♩} = 60$. The score includes parts for Flute (Fl.), B-flat Clarinet (B♭ Cl.), Percussion I (Perc. I), Percussion II (Perc. II), Piano (Pno.), Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello (Vc.).

Key musical elements and dynamics:

- Flute (Fl.):** Measures 177-180 are mostly rests.
- B-flat Clarinet (B♭ Cl.):** Measure 178 features a triplet of eighth notes.
- Percussion I (Perc. I):** Measures 177-180 feature complex rhythmic patterns with dynamics *f* and *p*.
- Percussion II (Perc. II):** Measures 177-180 are mostly rests.
- Piano (Pno.):**
 - Measure 177: Treble clef has a half note *mf*; Bass clef has a half note *f*.
 - Measure 178: Treble clef has a half note *f*; Bass clef has a half note *ff*.
 - Measure 179: Treble clef has a half note *ff*; Bass clef has a half note *ff*.
 - Measure 180: Treble clef has a half note *ff*; Bass clef has a half note *ff*.
- Violin I (Vln. I):** Measures 177-180 feature a rhythmic pattern of eighth notes with dynamics *f* and *p*.
- Violin II (Vln. II):** Measures 177-180 feature a rhythmic pattern of eighth notes with dynamics *f* and *p*.
- Viola (Vla.):** Measures 177-180 feature a rhythmic pattern of eighth notes with dynamics *f* and *p*.
- Violoncello (Vc.):** Measures 177-180 feature a rhythmic pattern of eighth notes with dynamics *f* and *p*.

[illegible]

[illegible]

[illegible]

188

Fl.

B♭ Cl.

Perc. I

Perc. II

Pno.

Vln. I

Vln. II

Vla.

Vc.

p *3* *f* *p* *3* *5* *f*

ff *f*

p *mf* *p* *mf* *p* *mf* *p*

f *p* *f* *p* *f*

pizz. *c.l. batt.* *arco ponte* *pizz.* *c.l. batt.* *arco ponte*

190

Fl.

3

p

f

3

slap tongue

B♭ Cl.

3

p

f

3

3

Perc. I

190

p

f

p

f

3

3

Perc. II

5

f

5

Pno.

5

ff

5

5

5

5

Vln. I

190

5

p

mf

5

pizz.

c.l. batt.

3

Vln. II

mf

p

mf

p

mf

p

mf

pizz.

c.l. batt.

3

Vla.

p

f

p

f

c.l. batt.

3

arco ponte

Vc.

p

f

p

f

p

c.l. batt.

3

arco ponte

192

Fl.

p *f* 3

B♭ Cl.

3 *p* *f* 3

Perc. I

192 *f* *p* 3 *f*

Perc. II

5

Pno.

f *f* *ff* 5

Vln. I

192 5 3 c.l. batt. *p* 5

Vln. II

c.l. batt. *p* 3

Vla.

c.l. batt. 3 *p* arco ponte *f* *p* c.l. batt. *f*

Vc.

arco ponte *f* arco ponte *f* c.l. batt. 3 *p*

Detailed description: This page contains the musical score for measures 192 and 193. The score is written for seven instruments: Flute (Fl.), B♭ Clarinet (B♭ Cl.), Percussion I (Perc. I), Percussion II (Perc. II), Piano (Pno.), Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello (Vc.). The key signature has one flat (B♭) and the time signature is 3/4. Measure 192 begins with a treble clef and a key signature of one flat. The Flute part starts with a triplet of eighth notes (piano, *p*) followed by a quarter note (forte, *f*) and a triplet of eighth notes. The B♭ Clarinet part starts with a triplet of eighth notes (piano, *p*) followed by a quarter note (forte, *f*) and a triplet of eighth notes. The Percussion I part starts with a quarter note (forte, *f*) followed by a quarter note (piano, *p*) and a triplet of eighth notes. The Percussion II part starts with a quarter note (piano, *p*) followed by a quarter note (forte, *f*) and a triplet of eighth notes. The Piano part starts with a quarter note (forte, *f*) followed by a quarter note (forte, *f*) and a quarter note (fortissimo, *ff*). The Violin I part starts with a quarter note (piano, *p*) followed by a quarter note (piano, *p*) and a quarter note (piano, *p*). The Violin II part starts with a quarter note (piano, *p*) followed by a quarter note (piano, *p*) and a quarter note (piano, *p*). The Viola part starts with a quarter note (piano, *p*) followed by a quarter note (piano, *p*) and a quarter note (piano, *p*). The Violoncello part starts with a quarter note (piano, *p*) followed by a quarter note (piano, *p*) and a quarter note (piano, *p*). Measure 193 begins with a treble clef and a key signature of one flat. The Flute part starts with a quarter note (piano, *p*) followed by a quarter note (piano, *p*) and a quarter note (piano, *p*). The B♭ Clarinet part starts with a quarter note (piano, *p*) followed by a quarter note (piano, *p*) and a quarter note (piano, *p*). The Percussion I part starts with a quarter note (piano, *p*) followed by a quarter note (piano, *p*) and a quarter note (piano, *p*). The Percussion II part starts with a quarter note (piano, *p*) followed by a quarter note (piano, *p*) and a quarter note (piano, *p*). The Piano part starts with a quarter note (piano, *p*) followed by a quarter note (piano, *p*) and a quarter note (piano, *p*). The Violin I part starts with a quarter note (piano, *p*) followed by a quarter note (piano, *p*) and a quarter note (piano, *p*). The Violin II part starts with a quarter note (piano, *p*) followed by a quarter note (piano, *p*) and a quarter note (piano, *p*). The Viola part starts with a quarter note (piano, *p*) followed by a quarter note (piano, *p*) and a quarter note (piano, *p*). The Violoncello part starts with a quarter note (piano, *p*) followed by a quarter note (piano, *p*) and a quarter note (piano, *p*).

194

Fl.

3 3 5

tonlos

tonlos

10"

pp

B♭ Cl.

3 5

tonlos

tonlos

5

pp

Perc. I

194

3

10"

mp

Perc. II

3

Pno.

5

p

10"

Rub the strings with fingernails,
very slowly and pressed

p

Vln. I

194

5 5

p

pressed bowing behind the bridge,
close to the tailpiece

10"

Vln. II

3 5

p

pressed bowing behind the bridge,
close to the tailpiece

Vla.

f

Vc.

3 5 3

p