

William Kleinsasser

DOUBLE CONCERTO

for viola, cello, chamber orchestra, and computer

(1996, 1998)

Duration: c. 28 minutes

This project was supported in part by a grant from the National Endowment for the Arts, a federal agency that supports the visual, literary and performing arts to benefit all Americans and through a grant from the Faculty Research Committee of Towson State University

DOUBLE CONCERTO for viola, cello, chamber orchestra, and computer

Orchestra

1 flute (doubling on piccolo)
1 oboe
1 clarinet in Bb
1 bassoon

1 horn in F
1 trumpet in C
1 trombone

1 marimba

piano

computer-controlled electro-acoustic music
(detailed below)

3 violins
2 violas
3 cellos
1 bass

Score is in C with the following exceptions:

All piccolo notes sound 8va higher than written
All bass notes sound 8va lower than written

Computer music system requirements

The computer music in this work can be controlled by a single operator. The equipment necessary for performance is listed below:

Macintosh computer running MAX/MSP software
(v. 4.1 or higher) The computer must have at least a 1 GB free hard drive space capable of playing 8-ch digital audio files.

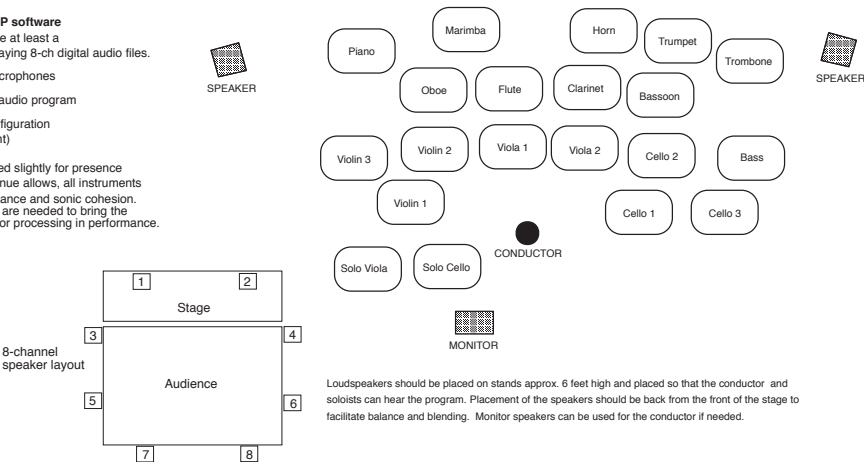
Mixer for computer audio outputs and microphones

Amplifiers for two-channel or 8-channel audio program

Two or eight loudspeakers in stereo configuration
(suggested placement diagrammed to right)

The solo viola and cello should be amplified slightly for presence and balance. If the mixing system and venue allows, all instruments may be amplified for greater control of balance and sonic cohesion. At least two stereo mics over the orchestra are needed to bring the orchestral instruments into the computer for processing in performance.

Stage setup



Notational Information

All glisses begin immediately and last the entire duration of the initiating note

All natural harmonics are notated at sounding pitch except bass, which sound an octave lower than written

{ For winds and brass: indicates flutter tongue
For percussion: indicates a roll
For strings: indicates an unmeasured tremolo

{ For winds and brass: indicates alternate fingering trill
For strings: indicates a 1/4-tone trill

Gradual accelerando or ritard independent of overall tempo

Indicates a gradual change from one mode of playing to another, eg. sul pont. to sul tasto.

Use alternate fingerings to produce a timbral trill.
For strings: alternate different harmonic fingerings.

Play beamed grace-note group as fast as possible

s. p. Sul ponticello

- All grace-notes are to be played immediately prior to the beat (or subdivision) of their associated note
- Following a fermata the tempo should return to the last consistent tempo which preceded the fermata unless otherwise indicated

Because the tradition of the concerto spans a considerable number of centuries, the genre offers composers a rich context within which to present new ideas. As in traditional concerto's, Double Concerto for viola, cello, chamber orchestra and computer, presents two primary agents of contrast: the two soloist and the orchestra and adds a third dimension of computer music. The interaction of these three forces (an expanded concertato principal) represents the primary means of building and shaping the concerto. During the past century the concertato principal has formed the basis of considerable exploration in design. Among the most intriguing of these developments has been the inclusion of multi-layered contrasts of forces. This has led to the inclusion of computer music in concertos and it is out of this developmental line that this work emerges. Like others of its kind, the inclusion of computer music in this concerto folds a new agent of contrast into the traditional model creating a third dimension in the design of the concerto: soloists — orchestra — computer transformation of solo and orchestral music. This three-fold interaction is yet expanded by the special relationship between the solo viola and cello. The resulting four-dimensional relationship is particularly potent due to the fact that all contemporary performance roles are represented: the master performer in concert (each soloist), individual performers in an intimate chamber music setting (the duo of soloists), large ensemble performance (the orchestra), and the technological reproduction of pre-realized music (the computer). Our contemporary world of concert music is mirrored in this set of relationships—each element vying for attention, interaction, survival, and celebration.

The Double Concerto also builds on the history of the concerto in its formal design. The work contains several sections which feature the orchestra without soloists (historically described as *ritornelli*) which contain the motives and phrase fragments from which the entire work develops. These six *ritornelli* are presented in alternation with sections highlighting the soloists and sections combining the orchestra and soloists. In each of these presentational modes the soloists and orchestra remain essentially separate, offering contrasting modes of expression and overlaid streams of music rather than finding integration and co-resolution.

Throughout the compositional process, my thoughts on the relationship between the viola and cello—who remain equal protagonists—centered on an idea that the solo violist was internally heard only in the mind of the solo cellist. The viola solo was originally conceived as a kind of spirit or muse to the cellist. In the final manifestation of the piece this haunted nature of their relationship isn't straightforwardly presented; it remains a ghost of the creative process.

Another initial idea that persisted during the creation of the Double Concerto was an idea of the disintegrating and transformative forces that are associated with the transition (on personal and cultural levels) from youth's simplicities to the inevitably embraced complexities of maturity. These forces play creatively on memory and perception challenging one's believed-in mental cohesion, affecting the apprehension and comprehension of past, present, and future relationships. First, the flattening, white-light recognition of all that is arbitrary and seemingly meaningless; later, with care, giving way to potential realization that the *terra incognita*, the dark, dangerous mystery that surrounds all that is known and remembered as meaningful, can also represent poignant opportunity. To a great extent, this metaphor is pervasive in the Double Concerto; an opportunity for cohesion emerges from disparate elements but it remains a cloud of transient potential—cohesion unwitnessed.

The computer music integrated with the orchestra and soloist in this work is realized in concert by a computer running MAX/msp real-time signal processing software that records music played during live performance and presents transformations of that music back into the fabric of the piece in near-real-time. Some pre-recorded sound files are also presented during performance. Using these methods, the soloists and orchestra freely perform—engaging in temporal nuance and a traditional approach to musical timing and ensemble playing which allows a more fluid, and musically-timed experience than would be available if they were required to synchronize with pre-recorded music. In performance, a computer performer controls the timing for the playback of digitally recorded music and near-real-time signal processing programs designed by the composer. These software tools are primarily used to produce transformations based on cross-synthesis, granular synthesis manipulations, and complex dynamic filtering. The control of these systems is managed by a program designed by the composer with inclusion of shared elements from many others including Miller Puckette, David Zicarelli, Cort Lippe, and Christopher Dobrian.

This concerto is the second of two works composed between 1996 and 1998 under a Composers Special Project Grant from the National Endowment for the Arts. Partial support for the composition of this work was also made possible by grants from the Faculty Development and Research Committee and support from the Department of Music and College of Fine Arts and Communication at Towson University in Baltimore Maryland.
W. Kleinsasser

Score in C

Double Concerto

for viola, cello, chamber orchestra and computer

William Kleinsasser
(1996, 98)

Computer 9 Ritornello one
Prelude 8 $\text{♩} = 80$

Flute ca. 45 sec. $\text{♩} = 120$ *non rubr.*

Oboe

Clarinet

Bassoon

Horn

Trumpet *cup mute*

Trombone

Mallets *Marimba hard yarn mallets*

Piano

Computer *8-channel soundfile playback "Prelude" derived from viola and cello fragments* *Orchestra begins immediately on end of prelude file with very slight overlap*

Viola solo

Cello solo

Computer 9 Ritornello one
Prelude 8 $\text{♩} = 80$ $\text{♩} = 120$

Violin 1

Violin 2

Violin 3

Viola 1

Viola 2

Cello 1 *arco pizz*

Cello 2 *arco pizz*

Cello 3 *arco pizz*

Bass *arco pizz*

© 1999 William Kleinsasser All rights reserved.

This composition was made possible, in part,
by grants from the National Endowment
for the Arts and Towson University

Fl. *ff* *f* *ff* *p*
 Ob. *ff* *f* *ff* *p*
 Clar. *ff* *p*
 Bsn. *p*
 Hn. *ff* (alt. fing. trill) *p*
 Tpt. *p* (*p*) *p*
 Trb. *pp* *ff*
 Mallets
 Piano
 Computer
 Vla. Solo
 Cello solo
 Vln. 1 *ff*
 Vln. 2 *ff*
 Vln. 3 *ff*
 Vla. 1 *ff* *p*
 Vla. 2
 Vc. 1 *arco* *f* *f*
 Vc. 2 *arco* *f* *f*
 Vc. 3 *arco* *ff* *f* *f*
 Bs. *arco* *ff* *f* *p* *sul A*

4 5 6 7

- 3 -

4/4

Fl.

Ob.

Clar.

Bssn.

Hrn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

4/4

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

14

15

16

17

Fl. *f* *ff* *f* *ff* *ff*
 Ob. *p* *ff* *f* *f* *ff*
 Clar. *ff* *f* *ff* *ff* *ff*
 Bsns. *p*
 Hn.
 Tpt.
 Trb.
 Mallets
 Piano
 Computer
 Vla. Solo
 Cello solo
 Vln. 1 *ff* *ff*
 Vln. 2 *ff* *ff*
 Vln. 3 *ff* *ff*
 Vla. 1 *ff* *p*
 Vla. 2 *ff* *ff* *p*
 Vc. 1 *f* *ff* *ff*
 Vc. 2 *f* *ff* *ff*
 Vc. 3 *f* *ff* *ff*
 Bs. *f* *ff* *ff* *f*

18 19 20 21

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

24

22

23

24

25

26

2/4 4/4 7/8 (2+2+3) 4/4

Fl. *p* *ff* *f* *non rall.*

Ob. *f* *p* *f* *ff* *f*

Clar. *f* *ff* *f*

Bssn. *sfz p* *ff* *f*

Hn. *p* *ff*

Tpt. *p* *ff*

Trb. *ff*

Mallets

Piano

Computer

Vla. Solo

Cello solo

2/4 4/4 7/8 (2+2+3) 4/4

Vln. 1

Vln. 2

Vln. 3

Vla. 1 *ff* *ff* *p* *f*

Vla. 2 *ff* *ff* *p* *f*

Vc. 1 *ff* *ff* *f* *f*

Vc. 2 *ff* *ff* *f* *sfz p*

Vc. 3 *ff* *ff* *f*

Bs. *ff* *f* *f*

27 28 29 30

4/4 5/4 4/4

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

4/4 5/4 4/4

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2


Vc. 3


Bs.

31 32 33 34

34

This musical score is for the piece 'The Great Wall of China' by John Williams. It is a full orchestral score with a computer track. The instruments listed on the left are Flute (Fl.), Oboe (Ob.), Clarinet (Clar.), Bassoon (Bssn.), Horn (Hn.), Trumpet (Tpt.), Trombone (Trb.), Mallets, Piano, and Computer. The score is written for a 4/4 time signature. The key signature has one flat (B-flat). The score is divided into measures, with a large section of the score being a single measure of rest for most instruments, followed by a section of music. The music features a prominent melody in the Flute and Oboe, with the Piano providing a rhythmic accompaniment. The Computer track is also present, likely for electronic effects or additional instrumentation.

Vla. Solo 

Cello solo 

34

35

36

37

38

3/4 4/4

Fl. *non rubr.*
p

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano
f
p
p

Computer

Vla. Solo

Cello solo

3/4 4/4

Vln. 1
p

Vln. 2

Vln. 3

Vla. 1
f

Vla. 2
f
f

Vc. 1
f
f

Vc. 2

Vc. 3

Bs.
f
p
f

39 40 41 42

[illegible]

Fl. *ff* *p* *ff* *f* *f* *f* *f*

Ob. *ff* *p* *ff* *p* *f* *f* *f*

Clar. *ff* *p* *ff* *f* *f* *f* *f*

Bssn. *p*

Hn.

Tpt.

Trb. *p* *ff*

Mallets *f*

Piano

Computer

Vla. Solo

Cello solo

Vln. 1 *ff* *pp* *ff* *p* *f* *ff* *ff*

Vln. 2 *ff* *pp* *ff* *p* *f* *ff* *ff*

Vln. 3 *ff* *pp* *ff* *p* *f* *ff* *ff*

Vla. 1 *ff* *pp* *p*

Vla. 2

Vc. 1 *f* *ff* *f*

Vc. 2 *f* *ff* *f*

Vc. 3 *f* *ff* *f*

Bs. *f* *ff* *f*

55 56 57 58

3/4 4/4

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

3/4 4/4

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

59 60 61 62

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

Fractured

Computer

Begin live processing of viola and cello. This section uses the processing preset "Fractured" which transposes, spatializes, and adds ringing tones to the solo viola and cello lines

FRACTURED PROCESS

Vla. Solo

Cello solo

66 67 68 69

Computer

Vla. Solo

Cello solo

70 71 72 73

Computer

Vla. Solo

Cello solo

74 75 76 77

The musical score is divided into three systems, each with a Computer section and two solo sections (Viola Solo and Cello solo). The Computer section at the top of each system contains a box labeled 'FRACTURED PROCESS' and a text instruction: 'Begin live processing of viola and cello. This section uses the processing preset "Fractured" which transposes, spatializes, and adds ringing tones to the solo viola and cello lines'. The solo parts are written in 12/8 time. The first system (measures 66-69) features a Viola Solo part with dynamics ranging from *ff* to *mp* and articulations like *spic.*, *marc.*, and *arco*. The Cello solo part also includes *ff*, *mf*, *p*, and *mp* dynamics. The second system (measures 70-73) continues the solo parts with various dynamics and articulations. The third system (measures 74-77) concludes the section with similar musical notation and dynamics.

Computer

Vla. Solo

Cello solo

78 79 80 81

Computer

Vla. Solo

Cello solo

82 83 84 85

Computer

Vla. Solo

Cello solo

86 87 88 89

Computer

Vla. Solo

Cello solo

90 91 92 93

Computer

Vla. Solo

Cello solo

ff *mp* *p* *f* *mp* *f* *p* *f* *p* *ff* *p*

94 95 96 97

ppp. *s.p.* *norm.* *sul D* *s.p.*

Computer

Vla. Solo

Cello solo

ff *p* *f* *fp* *f* *f* *p* *sfz* *p* *f* *spic.*

98 99 100 101

norm. *sul G* *(open str.)* *s.p.* *placid*

Computer

Vla. Solo

Cello solo

p *ff* *mf* *f* *placid* *ff* *mf* *ff* *6* *pp*

102 103 104 105

placid *placid*

Computer

Vla. Solo

Cello solo

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

106 107 108 109

s.p. *norm.* *s.p.* *norm.* *pizz.* *arco* *s.p.* *norm.*

Computer

Vla. Solo

Cello solo

110 111 112 113

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

sp. *norm.* *sp.* *placid.*

Computer

Vla. Solo

Cello solo

114 115 116 117

f *p* *p* *ff* *ff* *f* *p*

sp. *norm.* *sp.* *pizz.* *arco*

Computer

Vla. Solo

Cello solo

118 119 120 121

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

sp. *norm.* *sp.* *norm.*

pizz. *arco* *sp.* *pp* *p* *pp*

Computer

Vla. Solo

Cello solo

122 123 124 125

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

pizz. *arco* *sp.* *norm.*

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

Ritornello two

♩ = 120-132

78

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Computer process ends

Vla. Solo

Cello solo

mf *pp* *pizz* *arco* *ff* *p* *pp* *p* *ff*

Ritornello two

● = 120_132

78

Violins 1-3, Violas 1-2, Violas 3, and Basses. The score shows a complex rhythmic pattern with triplets and sixteenth notes, starting with a forte (ff) dynamic. The key signature has one flat (B-flat), and the time signature is 4/4. The score is divided into measures by vertical bar lines.

126

127

128

9/8 4/4 7/8 (3+2+2) 4/4

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

136 137 138

4/4

Fl. *p* *f* *ff* *f*

Ob. *ff* *f*

Clar. *p* *f* *ff* *f*

Bssn. *ff* *p* *f* *f*

Hn. *ff* *pp* *ff*

Tpt. *ff* *pp* *ff*

Trb. *ff* *pp* *ff*

Mallets *6*

Piano

Computer

Vla. Solo

Cello solo

4/4

Vln. 1 *ff* *f* *f*

Vln. 2 *ff* *p* *f*

Vln. 3 *ff* *p* *f*

Vla. 1 *ff* *p* *ff* *f*

Vla. 2 *p* *f*

Vc. 1 *f* *pizz*

Vc. 2 *f* *pizz*

Vc. 3 *f* *pizz*

Bs. *f*

139

140

141

Fl.

Ob.

Clar.

Bssn.

Hrn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

142

143

144

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

arco
sfz p
f
p
ff
p
ff

pizz
arco
f
pizz
arco
p
ff

pizz
arco
f
pizz
arco
p
ff

arco
p
f
arco
f
pizz
ff
sfz p
p
f
pizz
ff

ff
3
f
ff
3
f
p

ff
3
f
ff
3
f
p

ff
3
f
ff
3
f
p

pizz
ff

145

146

147

148

9 8 4 4

Fl.

Ob.

Clar.

Bsn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

149

150

151

152

4 **8**

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Detailed description: This block contains the musical notation for measures 153, 154, and 155 for the woodwind and percussion section. The time signature is 4/4. The Flute (Fl.) part starts with a forte (f) dynamic, followed by fortissimo (ff) and then piano (p). The Oboe (Ob.) and Clarinet (Clar.) parts also start with f, then ff, and then p. The Bassoon (Bssn.) part starts with f, then ff, and then p. The Horn (Hn.) part starts with ff, then p, and then f. The Trumpet (Tpt.) and Trombone (Trb.) parts start with ff, then p, and then f. The Mallets part starts with a 6-measure rest, followed by a 6-measure rest, and then a 6-measure rest. The Piano part starts with a 6-measure rest, followed by a 5-measure rest, and then a 5-measure rest.

4 **8**

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

Detailed description: This block contains the musical notation for measures 153, 154, and 155 for the string section. The time signature is 4/4. The Violin 1 (Vln. 1) part starts with a fortissimo (ff) dynamic, followed by a 3-measure rest, and then a 3-measure rest. The Violin 2 (Vln. 2) and Violin 3 (Vln. 3) parts also start with ff, followed by a 3-measure rest, and then a 3-measure rest. The Viola 1 (Vla. 1) and Viola 2 (Vla. 2) parts start with arco, followed by f, then pizz, and then ff. The Violoncello 1 (Vc. 1), Violoncello 2 (Vc. 2), and Violoncello 3 (Vc. 3) parts start with f, followed by a 3-measure rest, and then a 3-measure rest. The Double Bass (Bs.) part starts with arco, followed by f, then a 3-measure rest, and then a 3-measure rest.

153

154

155

9 8 4 4

Fl.

Ob.

Clar.

Bssn.

Hrn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

156 157 158 159

rall. *(rall)* *norm.*

Fl. *f* *fl.t.* *f*

Ob. *f*

Clar. *f*

Bssn. *f*

Hn.

Tpt. *sfz p* *f*

Trb. *f sfz p*

Mallets

Piano

Computer

Vla. Solo

Cello solo

rall. *(rall)* *norm.*

Vln. 1 *p* *ff* *f* *pizz* *f*

Vln. 2 *f* *pizz* *f*

Vln. 3 *f* *pizz* *f*

Vla. 1 *p* *ff* *pizz* *f* *arco* *mf*

Vla. 2 *p* *f* *pizz* *f* *arco* *mf*

Vc. 1 *f* *p* *mf*

Vc. 2 *f* *p*

Vc. 3

Bs. *f* *p*

160 161 162 163 164

..... (♩ = 72)

Serene ♩ = 60

Fl. *non vibr.* *p*

Ob.

Clar. 5

Bssn. *p*

Hn.

Tpt.

Trb.

Mallets

Piano 6 6

Computer

PROCESS
SERENE

Begin live processing of solo viola, cello, and orchestra.
This process time-stretches the input slightly and adds
spatialized reverberation with dynamic reverb time and levels

Vla. Solo *espr.* 7 *p* 5 7

Cello solo *espr.* 9-8 *p*

..... (♩ = 72)

Serene ♩ = 60

Vln. 1 *arco sul fusto* *pp*

Vln. 2

Vln. 3

Vla. 1 *pizz* *p*

Vla. 2 *pizz* *p*

Vc. 1 *Sul A* *p*

Vc. 2 *Sul A* *p*

Vc. 3 *Sul A* *p*

Bs.

165

166

167

168

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

7.8

6.8

9.8

5

arco
sul tasto

pp

3

6

169

170

171

172

Fl. *pp* *norm.* 5

Ob.

Clar. *pp* 6 7

Bssn. *pp* 3 6 3

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo 5

Cello solo 9.8 7.8

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1 *pp* *sul tasto*

Vc. 2

Vc. 3

Bs.

173

174

175

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

arco sul tasto

pp

3

5

9:8

9:8

9:8

3

5

3

3

184

185

186

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

pp

arco

pp

arco sul tasto

pp

pp

pp

187

188

189

190

Fl.

Ob.

Clar.

Bssn.

Hr.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

191

192

193

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

194

195

196

Fl.

Ob.

Clar.

Bssn.

Hr.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

197

198

199

Fl.

Ob.

Clar.

Bssn.

Hr.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

203

204

205

206

ca. 1:50

Computer Interlude

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

END PROCESS
Begin 8-channel interlude
soundfile playback.

Interlude is a pre-recorded processed and obscured
foreshadowing of the ending section of the piece.

211

212

213

214

215

● = 132

Ritornello three

216

217

218

3/4 4/4 2/4

Fl. *mp*

Ob. *mp* *pp* *mp*

Clar. *mp*

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

3/4 4/4 2/4

Vln. 1

Vln. 2

Vln. 3

Vla. 1 *sfz p* *mp*

Vla. 2

Vc. 1 *mf* *mf* *mf*

Vc. 2 *mf* *mf* *mf*

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

Bs. *mf*

222 223 224 225

Obsessed

(♩ = 96)

Computer

PROCESS
OBSSESSED

Begin live processing of solo viola and cello. This process is similar to "fractured" with added time stretching

Vla. Solo

Cello solo

235 236 237 238 239

Computer

Vla. Solo

Cello solo

240 241 242 243 244 245

Computer

Vla. Solo

Cello solo

246 247 248 249 250

Computer

Vla. Solo

Cello solo

251 252 253 254 255 256

Computer

Vla. Solo

Cello solo

257 258 259 260 261 262

col. I. battuto norm.

col. I. battuto norm.

11
8

3
4 *Ritornello four*
♩ = 104

7
8 (2+2+3)

4
4

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

11
8

3
4 *Ritornello four*
♩ = 104

7
8 (2+2+3)

4
4

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

263

264

265

266

Fl. *f* *pp* *sfz p* *f*

Ob. *p* *sfz p* *p*

Clar. *p* *pp* *p* *f*

Bssn. *sfz p* *f p*

Hn.

Tpt. *pp*

Trb. *pp*

Mallets

Piano *p*

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1 *p* *f* *p*

Vla. 2

Vc. 1 *ff* *f* *ff* *p*

Vc. 2 *ff* *ff*

Vc. 3 *ff* *f p*

Bs. *ff* *ff* *ff*

267 268 269 270

3/4 4/4 3/4 3/8

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

3/4 4/4 3/4 3/8

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

271 272 273 274

Measures 275-278

Instrument List: Fl., Ob., Clar., Bssn., Hn., Tpt., Trb., Mallets, Piano, Computer, Vla. Solo, Cello solo, Vln. 1, Vln. 2, Vln. 3, Vla. 1, Vla. 2, Vc. 1, Vc. 2, Vc. 3, Bs.

Time Signature: 3/8, 4/4

Dynamics: <f, f, sfz p, p, pp, ff, mf, f

Performance Markings: Accents, slurs, fingerings (6, 5, 3, 7)

3
4

4
4

Fl.

Ob.

Clar.

Bssn.

Hr.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

3
4

4
4

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

279

280

281

4/4 6/8 4/4 9/8

Fl. *f* *p* *mp* *f*

Ob. *f* *f* *f* *f*

Clar. *p* *mp* *f* *p*

Bssn. *ff* *pp*

Hn. *f* *pp*

Tpt. *f* *pp*

Trb. *f* *p*

Mallets *f* *f*

Piano *f*

Computer

Vla. Solo

Cello solo

4/4 6/8 4/4 9/8

Vln. 1

Vln. 2

Vln. 3 *pp* *f*

Vla. 1 *p* *ff*

Vla. 2 *pp* *f*

Vc. 1 *ff*

Vc. 2 *ff*

Vc. 3 *ff*

Bs. *ff*

282 283 284

Compelled

♩ = 112-120

Fl. *lip gliss.*

Ob. *pp*

Clar. *pp*

Bssn. *pp*

Hn. *(con sord.) tr*

Tpt. *sfz pite*

Trb. *sfz p*
str. mute

Mallets *Marimba*
f

Piano *f*
pp

Computer
Begin 8-channel soundfile playback that runs underneath the orchestral crescendo during mm 289-366. →

Vla. Solo *with intensity*
p

Cello solo *with intensity*
p

Compelled

♩ = 112-120

Vln. 1 *ff*
p

Vln. 2 *ff*

Vln. 3 *ff*

Vla. 1 *ff*
p

Vla. 2 *ff*

Vc. 1 *p*

Vc. 2 *ff*

Vc. 3 *ff*

Bs. *p*

288

289

290

291

292

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

293

294

295

296

297

Detailed description of the musical score: The score is for measures 293 to 297. The Flute part has a melodic line starting in measure 294 with a *pp* dynamic. The Oboe, Clarinet, and Bassoon parts have sustained notes. The Horn, Trumpet, and Trombone parts are empty. The Mallets, Piano, and Computer parts are empty. The Violoncello Solo part has a complex melodic line. The Cello Solo part has a complex melodic line. The Violins 1-3 parts have sustained notes. The Violas 1-2 parts have sustained notes. The Violas 1-2 parts have sustained notes. The Cellos 1-3 parts have sustained notes. The Bass part has a sustained note.

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

pp

mp

mp

mp

298

299

300

301

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

con sord.
pp

302

303

304

305

306

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

307

308

309

310

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

311

312

313

314

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

320

321

322

323

324

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

325

326

327

328

329

Fl.

Ob.

Clar.

Bssn.

Hr.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

330

331

332

333

334

3 (3+2)

Fl.

Ob.

Clar.

Bssn.

Hr.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

3 (3+2)

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

335

336

337

338

339

340

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

348 349 350 351 352 353 354 355

6 **3** *Ritornello five* **4** **9**
 $\text{♩} = 122$

Fl. *ff* *p* *f*

Ob. *ff* *f* *p*

Clar. *ff* *sfz p* *f* *sfz p*

Bssn. *ff* *p* *ff* *p*

Hn. *ff*

Tpt. *ff*

Trb. *ff*

Mallets
Marimba
hard yarn mallets
mf *ff* *f* *p* *ff* *p* *mf*

Piano
mf *ff* *ff* *f* *f* *p* *f*

Computer
END SOUNDFILE PLAYBACK

Vla. Solo

Cello solo

6 **3** *Ritornello five* **4** **9**
 $\text{♩} = 122$

Vln. 1 *f* *p*

Vln. 2 *f* *p*

Vln. 3 *f*

Vla. 1 *sfz p* *p*

Vla. 2

Vc. 1 *ff* *f* *sim.*

Vc. 2 *ff* *f* *sim.*

Vc. 3 *ff* *f* *sim.*

Bs. *ff* *f* *sim.*

366 367 368 369 370

9/8 4/4

Fl. *p* *mf* (alt. fing. trill) *ffz p*

Ob. *p* *ff* *p* *mf*

Clar. *mf* *p* *pp*

Bssn. *ffz p* *f* *p* *ff*

Hrn.

Tpt.

Trb.

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

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

Computer

Vla. Solo

Cello solo

9/8 4/4

Vln. 1 *f* *ff* *ff*

Vln. 2 *f* *ff*

Vln. 3

Vla. 1 *f* *p* *ff* *ff*

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs. 3

371 372 373

3/4 4/4 9/8

Fl. *sfz p* *f*

Ob. *p* *mf*

Clar. *mp*

Bssn. *pp* *sfz p*

Hn.

Tpt.

Trb. *harmonic mutes stem 1/2 out* *p* *f*

Mallets *f* *p* *mf* *p* *f* *6* *p* *f* *p* *f* *mf* *f* *p*

Piano *p* *f* *f* *p* *f* *p* *f* *p* *f*

Computer

Vla. Solo

Cello solo

3/4 4/4 9/8

Vln. 1 *p* *f*

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1 *3* *5*

Vc. 2 *3*

Vc. 3 *3* *5*

Bs. *3*

374 375 376 377

9/8 4/4 7/8 (2+2+3) 4/4

Fl. (alt. fing. trill) *sfz p* *p* *mf* *sfz p*

Ob. *p* *mf* *sfz p*

Clar. *p* *ff* *p* *mf* *pp*

Bssn. *sfz p* *mf* *f* *pp*

Hn. *harmoni mute stem 1/2 out* *tr* *p* *mf*

Tpt. *p* *mf*

Trb.

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

Piano *f* *p* *p* *f*

Computer

Vla. Solo

Cello solo

9/8 4/4 7/8 (2+2+3) 4/4

Vln. 1 *sfz p* *pp* *mf*

Vln. 2

Vln. 3

Vla. 1 *sfz p* *f* *p*

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

378 379 380 381

2/4 4/4

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

2/4 4/4

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

385 386 387 388

7/8 (2+2+3) 4/4

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

389

390

391

392

p, *mf*, *f*, *pp*, *sfz*, *cup mule*, *3*, *5*, *6*, *mf* *3*, *p*

4/4 5/4 4/4

Fl. *p* *p* *p*

Ob. *p* *p* *p*

Clar. *p* *p* *p*

Bssn. *p* *p* *p*

Hr. *pp* *pp* *pp*

Tpt. *pp* *pp* *pp*

Trb. *pp* *pp* *pp*

Mallets *pp* *f* *mf*

Piano *f* *f* *f*

Computer

Vla. Solo

Cello solo

4/4 5/4 4/4

Vln. 1 *sfz p* *p* *p*

Vln. 2 *p* *p* *p*

Vln. 3 *p* *p* *p*

Vla. 1 *p* *p* *p*

Vla. 2 *p* *p* *p*

Vc. 1 *sfz p* *p* *p*

Vc. 2 *p* *p* *p*

Vc. 3 *p* *p* *p*

Bs. *mf* *mf* *ff*

393 394 395

2/4 4/4

Fl. *p* *mf* *sfz p*

Ob. *sfz p* *p* *p*

Clar. *p* *pp* *mf*

Bssn.

Hn.

Tpt.

Trb. *harmon mute stem 1/2 out* *pp*

Mallets *f* *p*

Piano *f* *p* *f*

Computer

Vla. Solo

Cello solo

2/4 4/4

Vln. 1

Vln. 2

Vln. 3

Vla. 1 *p*

Vla. 2 *p*

Vc. 1 *p* *f*

Vc. 2 *f*

Vc. 3 *f*

Bs. *f*

396 397 398 399 400

5
4
4
4
3
4

Fl. *p* *ff*

Ob. *p*

Clar. *p*

Bssn. *p* *ff*

Hn.

Tpt.

Trb.

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

Piano *f* *p* *f* *ff* *f* *So.*

Computer

Vla. Solo

Cello solo

5
4
4
4
3
4

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

401

402

403

404

3
4

ca. 1:50

4
4

Frozen
♩ = 52 (picc. as sounding)
piccolo

Computer Interlude

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

3
4

4
4

Frozen
♩ = 52
con sord.

Computer Interlude

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

Begin 8-channel Interlude soundtrack playback. This interlude includes references to Prelude and Available Instruments interludes.

High ringing just before orchestra enters.

Orchestra enters 1:50 after beginning of Interlude soundtrack which fades out.

Begin quiet background soundtrack which runs through end of piece.

405

406

407

408

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

pp

con sord.

p

pp

pp

414

415

416

417

418

This page contains the musical notation for measures 419 through 423. The instrumentation includes:

- Fl.**: Flute
- Ob.**: Oboe
- Clar.**: Clarinet
- Bssn.**: Bassoon
- Hrn.**: Horn
- Tpt.**: Trumpet
- Trb.**: Trombone
- Mallets**
- Piano**
- Computer**
- Vla. Solo**: Viola Solo
- Cello solo**
- Vln. 1, 2, 3**: Violins 1, 2, and 3
- Vla. 1, 2**: Violas 1 and 2
- Vc. 1, 2, 3**: Violoncelli 1, 2, and 3
- Bs.**: Double Bass

The score shows complex melodic development across several instruments, with frequent use of triplets and slurs. Dynamic markings such as *pp* (pianissimo) are used throughout. Measure numbers 419, 420, 421, 422, and 423 are indicated at the bottom of the page.

[illegible]

Fl. *pp* *piccolo: (picc. as sounding)* *pp*

Ob.

Clar.

Bssn.

Hr.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1 *pp*

Vln. 2 *pp*

Vln. 3 *pp*

Vla. 1 *pp*

Vla. 2 *pp*

Vc. 1

Vc. 2

Vc. 3

Bs. *pp*

433 434 435 436

Fl.

Ob.

Clar.

Bsn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

437

438

439

440

441

442

44

447

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

448

449

450

451

452

rall. *A Tempo*

♩ = 60

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

453

454

455

456

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

457

458

459

460

461

Fl. *pp* *(n.v.)*
 Ob.
 Clar. *ppp*
 Bssn.
 Hn. *mf*
 Tpt.
 Trb.
 Mallets
 Piano
 Computer
 Vla. Solo *p* *strum pizz* *mp* *pizz*
 Cello solo *p* *strum pizz* *mp* *pizz*
 Vln. 1
 Vln. 2
 Vln. 3
 Vla. 1 *pp*
 Vla. 2
 Vc. 1 *pp*
 Vc. 2 *pp*
 Vc. 3 *pp*
 Bs. *mp*

462

463

464

465

466

Fl.

Ob.

Clar.

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo

Cello solo

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

norm.

p

harmon mute stem 1/2 out

pp

mf

pp

3

pp

pizz

5

3

p

arco

jeté

pizz

arco

jeté

p

pizz

arco

jeté

mf

3

p

pp

3

sul D

3

467

468

469

470

Fl. *more color.*
p

Ob. *p*

Clar. *p*

Bssn.

Hn.

Tpt.

Trb.

Mallets

Piano

Computer

Vla. Solo *3* *p* *3* *mf* *3* *strum pizz* *mp* *arco* *3* *p*

Cello solo *3* *p* *mf* *p* *mf* *3* *strum pizz* *mp* *arco* *pp*

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1 *espr.* *mp*

Vc. 2 *espr.* *mp*

Vc. 3 *mp*

Bs. *p*

471

472

473

474

[illegible]

$\frac{3}{4}$ *rall.* $\frac{4}{4}$ ♩ = 44

Fl.

Ob.

Clar. *pp*

Bssn.

Hn.

Tpt.

Trb. *pp*

Mallets

Piano

Computer

Vla. Solo

Cello solo

$\frac{3}{4}$ *rall.* $\frac{4}{4}$ ♩ = 44

Vln. 1

Vln. 2

Vln. 3

Vla. 1

Vla. 2

Vc. 1

Vc. 2

Vc. 3

Bs.

492

493

494

495

496

5/4 4/4

Fl. *non vibr.* *pp*

Ob.

Clar.

Bssn. *non vibr.* *pp*

Hrn.

Tpt.

Trb.

Mallets *soft mallets* *pp*

Piano

Computer

Begin 8-channel soundfile playback
"File 10" referring to Prelude

Fade all to silence

Vla. Solo *non vibr.* *quasi harmonic*

Cello solo

Vln. 1 *non vibr.* *quasi harmonic* *pp*

Vln. 2

Vln. 3

Vla. 1 *pp*

Vla. 2 *pp*

Vc. 1 *pp*

Vc. 2 *non vibr.* *quasi harmonic* *pp*

Vc. 3

Bs. *pp*

497 498 499 500 501