Alexandra Fol

Exhalation / Expiration

for Wind Ensemble

A thesis submitted to McGill University in partial fulfillment of the requirements of the degree of Doctor of Music in Composition

To my mother, Valeria Fol

Instrumentation (34 players)

2 Flutes
Piccolo

2 Oboes
Cor anglais

3 Clarinets in B-flat
Bass Clarinet in B-flat

Soprano Saxophone
Alto Saxophone
Tenor Saxophone
Baritone Saxophone

2 Bassoons
Contrabassoon

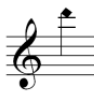
4 French Horns in F
3 Trumpets in C
3 Trombones
Euphonium
Tuba

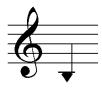
Timpani (one at 74 cm, one at 66 cm)

Percussion 1 (Glockenspiel, Bass Drum, Lion's roar, Tom-tom, Sandpaper blocks)
Percussion 2 (Xylophone, Vibraphone, Marimba, Large Tam-Tam, Small Tam-tam, Bucket with water, Water whistle)
Percussion 3 (Vibraphone, Guiro, Whip)

Harp

Legend

 Play the highest pitch possible

 Play the lowest pitch possible

Performance notes

All trills are semitone trills unless otherwise notated.

Glissando indications for large intervals in the flutes indicate that the players should combine over-blowing on the natural harmonic series with chromatic fingerings to create the impression of *glissando*.

Score is in C

All instruments sound as written except the Contrabassoon, which sounds an octave lower than written, the Glockenspiel, which sounds two octaves higher than written, and the Xylophone, which sounds one octave higher than written.

Duration

21.5 minutes

Volume 1: Score

Montréal, QC, Canada, 2010-2011

Exhalation / Expiration

To my mother, Valeria Fol

Alexandra Fol

A

♩ = 116-126

Piccolo
Flute 1
Flute 2
Oboe 1
Oboe 2
Cor Anglais
Clarinet in B♭ 1
Clarinet in B♭ 2
Clarinet in B♭ 3
Bass Clarinet in B♭
Soprano Saxophone
Alto Saxophone
Tenor Saxophone
Baritone Saxophone
Bassoon 1
Bassoon 2
Contrabassoon
Horn in F 1
Horn in F 2
Horn in F 3
Horn in F 4
Trumpet in C 1
Trumpet in C 2
Trumpet in C 3
Trombone 1
Trombone 2
Trombone 3
Euphonium
Tuba
Timpani
Percussion 1
Percussion 2
Percussion 3
Harp

8va

fff

fff

GLOCKENSPIEL

hard mallets throughout

l.v.

mf

XYLOPHONE

yarn mallets throughout

ff

f

VIBRAPHONE

9

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

ff

(8)

8va

fff

(GLOCKENSPIEL)

l.v.

mf

(XYLOPHONE)

*(sempre **f**)*

ff

(VIBRAPHONE)

l.v.

mf

♩ = ♩
♩ = 58-63

17

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

ff *fff* *(sempre ff)* *f* *mf* *mp*

8va

harmon mute stem in

l.v.

D C B♭ | E♭ F G♭ A

6

B

24

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

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

harmon mute stem in

(GLOCKENSPIEL) (XYLOPHONE) (VIBRAPHONE)

l. v.

28

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

32

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(GLOCKENSPIEL)
(XYLOPHONE)
(VIBRAPHONE)
1. v.

C

36

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

40

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre p)
(sempre pp)
pp
mf
(sempre mf)
(sempre mp)
mp
gliss.
tr
(GLOCKENSPIEL)
(XYLOPHONE)
(VIBRAPHONE)
l. v.

44

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

48

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(GLOCKENSPIEL)
(XYLOPHONE)
(VIBRAPHONE)
1. v.

52

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

56

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(GLOCKENSPIEL)
(XYLOPHONE)
(VIBRAPHONE)

60

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

64

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(XYLOPHONE)
(VIBRAPHONE)

68

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

D

18

poco rit. ..... ♩ = 52-54

72

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(XYLOPHONE)

go to Vibraphone

D# C# B | E F# G A

76

Picc. (sempre pp)
Fl. 1 (sempre ppp) mp 9 7 5 (sempre pp) ppp
Fl. 2 mf mp 9 9 mf pp ppp
Ob. 1 p mf p p
Ob. 2 p p mf
C. A. (sempre p) mp
Cl. 1 (sempre ppp) mf subito ppp
Cl. 2 mf ppp ppp
Cl. 3 ppp mp ppp
B. Cl. mp p 3
Sop. Sax. p p mf
Alto Sax. p
Ten. Sax. p
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2 p mf
Hn. 3
Hn. 4 p
C Tpt. 1
C Tpt. 2 p tr
C Tpt. 3
Tbn. 1 mp
Tbn. 2 mp ppp
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp. (sempre mf) tr tr

80

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

84

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre p)
cup mute
stopped

E

poco accel. ♩ = 58-63

88

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

stopped
open
(stopped)
change straight mute with harmon mute stem in
harmon mute stem in

92

Picc. (sempre pp) p
Fl. 1 (sempre ppp)
Fl. 2 (sempre pp) p
Ob. 1 mf p mf
Ob. 2 p p mp
C. A. mf p f mf mp
Cl. 1 p f
Cl. 2 (sempre ppp)
Cl. 3
B. Cl.
Sop. Sax. ff
Alto Sax. ff
Ten. Sax.
Bari. Sax.
Bsn. 1 p
Bsn. 2 p
Cbsn.
Hn. 1 f
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1 mp
C Tpt. 2 mp mp
C Tpt. 3
Tbn. 1 mp pp
Tbn. 2 mp pp
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

95

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

98

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

D# C# B♭ E F# G A

F

101

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

105

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

harmon mute stem in

109

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

GLOCKENSPIEL

112

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

G

115

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

poco rit.

118

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre ff)
(sempre p)
(sempre mp)
gliss.
D# C# B♭ | E F# G A♭

H

32

♩ = 52-54

122

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

I

126

Picc.
Fl. 1 — (sempre mp) — mf — mf
Fl. 2 — (sempre p) — mp
Ob. 1 — subito f — subito f — subito p — p — mf — p
Ob. 2 — p — subito f
C. A. — p — mp
Cl. 1
Cl. 2
Cl. 3 — (sempre pp) — p — mp
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1 — (sempre p) — mp
Bsn. 2 — (sempre p) — mp
Cbsn.
Hn. 1
Hn. 2 — pp — p — p
Hn. 3 — pp — p — pp
Hn. 4 — pp — pp
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

poco accel. . . . . .

130

Picc.
(sempre mf)
Fl. 1
(sempre mf)
Fl. 2
mf
Ob. 1
mf
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
(sempre mp)
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
sempre mp)
Bsn. 2
sempre mp)
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
mute out (open)
Tbn. 2
(harmon mute stem in)
Tbn. 3
Euph.
Tba.
TIMPANO 74 cm.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

♩ = 56-63

134

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

mute out (open)

J

138

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre ff)

harmon mute stem in

mute out (open)

VIBRAPHONE

l. v.

K

142

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

mf *mp* *p* *pp* *ppp* *tr* *gliss.* *(sempre f)* *p, dolce*

146

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

150

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre p)
(sempre mp)
harmon mute stem in
gliss.

L

154

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre mf)
(sempre p)
gliss.
mute out (open)
(VIBRAPHONE)

poco rit.

157

Picc.
Fl. 1 (sempre mp) mf
Fl. 2 (sempre mp) p mf
Ob. 1 mp mf p
Ob. 2
C. A. mp p
Cl. 1 p mp p p
Cl. 2 (sempre pp)
Cl. 3 p pp ppp
B. Cl.
Sop. Sax. mf mp p
Alto Sax. mp p
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3 (sempre p) pp
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3 pp
Hp. D♭ C B♭ | E♭ F G A f

42

M

♩ = 52-54

160

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

C. A.

Cl. 1

Cl. 2

Cl. 3

B. Cl.

Sop. Sax.

Alto Sax.

Ten. Sax.

Bari. Sax.

Bsn. 1

Bsn. 2

Cbsn.

Hn. 1

Hn. 2

Hn. 3

Hn. 4

C Tpt. 1

C Tpt. 2

C Tpt. 3

Tbn. 1

Tbn. 2

Tbn. 3

Euph.

Tba.

Timp.

Perc. 1

Perc. 2

Perc. 3

Hp.

p, *dolce*

*(sempre **p**)*

*(sempre **pp**)*

p, *scherzando*

(VIBRAPHONE)

*sempre **pp***

*sempre **mp***

*(sempre **f**)*

D♯

*(sempre **f**)*

164

Picc.
mp, dolce
(sempre mp)
Fl. 1
(sempre p)
Fl. 2
(sempre p)
Ob. 1
Ob. 2
C. A.
p
Cl. 1
Cl. 2
p
tr
tr
Cl. 3
B. Cl.
Sop. Sax.
(sempre p, scherzando)
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
p
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
sempre pp
Hp.
(sempre f) Db
Db
C♯
Gb
ff

poco accel.

168

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre p)
(sempre mp)
(sempre p, scherzando)
mp, scherzando
straight mute
cup mute
(VIBRAPHONE)
(sempre pp)
(sempre ff)

N

♩ = 56-63

171

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(VIBRAPHONE)

O

174

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

mute out (open)
mute out (open)
(VIBRAPHONE)

177

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

180

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre p)
(sempre mp)
gliss.
(VIBRAPHONE)

183

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

186

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

VIBRAPHONE

(VIBRAPHONE)

Q

189

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

192

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

R

195

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

198

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(VIBRAPHONE)

200

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

diminuendo
cresc. poco a poco
cresc.
(sempre p)
(sempre mp)

202

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(cresc. poco a poco)
poco crescendo
crescendo
diminuendo
(sempre p)
(VIBRAPHONE)

204

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

T

206

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

TIMPANO 66 cm
BASS DRUM
(VIBRAPHONE)
(VIBRAPHONE)

208

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

210

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(TIMPANO 66 cm)
TIMPANO 74 cm
(BASS DRUM)
(VIBRAPHONE)
(VIBRAPHONE)

U

212

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

V

214

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(TIMPANO 74 cm)
(BASS DRUM)
(VIBRAPHONE)
(VIBRAPHONE)

216

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

TIMPANO 66 cm.

W

218

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

gliss.
ff, poco dim.
fff
ff
mf
gliss.
(sempre f)
poco crescendo
(sempre p)
mp
p
fffff, relentless
ffff
diminuendo
poco cresc.
tr
bass.
(sempre f)
(TIMPANO 66 cm)
TIMPANO 74 cm
ppp
(BASS DRUM)
(sempre ppp)
(VIBRAPHONE)
(sempre f)
(VIBRAPHONE)
(sempre f)

220

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

X

222

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
(TIMPANI 74 cm)
Timp.
(BASS DRUM)
Perc. 1
(VIBRAPHONE)
Perc. 2
(VIBRAPHONE)
Perc. 3
Hp.

224

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

TIMPANO 66 cm

go to Marimba

226

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
(TIMPANO 66 cm)
Timp.
(BASS DRUM)
Perc. 1
Perc. 2
(VIBRAPHONE)
Perc. 3
Hp.

Y

228

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

230

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

poco cresc.
poco diminuendo
(diminuendo)
crescendo
gliss.
(TIMPANO 66 cm)
TIMPANO 74 cm.
(BASS DRUM)
MARIMBA
(VIBRAPHONE)
(sempre p)
(sempre pp)
(sempre ppp)

232

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

Z

234

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

p, poco cresc.
sempre crescendo
(sempre **p**)
(sempre **mf**)
(TIMPANO 74 cm)
(BASS DRUM)
(sempre **ppp**)
(MARIMBA)

236

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

238

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(TIMPANO 74 cm)

(BASS DRUM)

AA

241

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

244

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

poco diminuendo
molto diminuendo
(TIMPANO 74 cm)
loosen timpano until all sound disappears
(BASS DRUM)

BB

247

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

250

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

CC

253

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre mp)

DD

256

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

LION'S ROAR
LARGE TAM-TAM
GUIRO

EE

poco accel. ♩ = 64-70

260

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

*(sempre **mf**)* *mf* *f* *ff* *(sempre **ff**)* *tr* l. v. fast

264

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre mf)
(sempre ff)
(LION'S ROAR)
(LARGE TAM-TAM)
(GUIRO)
l. v.

FF

268

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

go to Tom-tom

TOM-TOM

l. v.

272

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre mf)
(TOM-TOM)
(LARGE TAM-TAM)
l. v.
(GUIRO)

275

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

GG

278

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(TOM-TOM)
(LARGE TAM-TAM)
l. v.
go to Small Tam-tam
(GUIRO)
prepare Whip

281

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

284

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(TOM-TOM)

HH

287

poco rit. . . . . . .

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

♩ = 58-63

290

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

293

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

C. A.

Cl. 1

Cl. 2

Cl. 3

B. Cl.

Sop. Sax.

Alto Sax.

Ten. Sax.

Bari. Sax.

Bsn. 1

Bsn. 2

Cbsn.

Hn. 1

Hn. 2

Hn. 3

Hn. 4

C Tpt. 1

C Tpt. 2

C Tpt. 3

Tbn. 1

Tbn. 2

Tbn. 3

Euph.

Tba.

Timp.

Perc. 1

Perc. 2

Perc. 3

Hp.

296

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

diminuendo

poco cresc.

299

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

JJ

302

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

harmon mute stem in
Close and open very gradually.

SANDPAPER BLOCKS

305

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

harmon mute stem in
Close and open very gradually.

308

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(SANDPAPER BLOCKS)

311

Picc.
(sempre pp)
Fl. 1
mp p mf p ff
Fl. 2
pp fff ff f
Ob. 1
p mf p mp mf
Ob. 2
mf p f f
C. A.
(sempre p)
mf mf mp p f
Cl. 1
p mf f p f
Cl. 2
mf mp ff f mf f pp
Cl. 3
pp f
B. Cl.
mp pp mp
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
p mp
Bsn. 2
(sempre p, senza crescnedo)
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
mf
C Tpt. 2
mf
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

314

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre pp)
subito ff
subito mp
gliss.
subito f
subito mf
(SANDPAPER BLOCKS)
SMALL TAM-TAM
gradually submerge in water after hitting the gong

LL

317

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre pp)
(sempre ff)
(sempre f)
subito diminuendo
subito f
gradually submerge in water after hitting the gong

320

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre p)
subito ff
subito p
subito f
subito mf
(SANDPAPER BLOCKS)
(SMALL TAM-TAM)
gliss.
gradually submerge in water after hitting the gong

323

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

prepare Water whistle

326

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre pp)
subito ff
subito mf
subito f
(sempre p, senza crescendo)
go to Bass Drum
gliss.
poco f

329

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

C. A.

Cl. 1

Cl. 2

Cl. 3

B. Cl.

Sop. Sax.

Alto Sax.

Ten. Sax.

Bari. Sax.

Bsn. 1

Bsn. 2

Cbsn.

Hn. 1

Hn. 2

Hn. 3

Hn. 4

C Tpt. 1

C Tpt. 2

C Tpt. 3

harmon mute stem in
Close and open very gradually

Tbn. 1

Tbn. 2

Tbn. 3

Euph.

Tba.

Timp.

Perc. 1

Perc. 2

Perc. 3

Hp.

332

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

335

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

NN

338

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

341

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

molto crescendo!
subito
(sempre)
poco
molto

OO

344

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

(sempre pp)
subito mf
subito ff
p, semplice
stopped
cup mute

348

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

352

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

356

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

360

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

RR

364

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

subito **mp**

(sempre **mp***)*

SS

368

Picc.
(sempre pp)
pp
(sempre pp)

Fl. 1
pp, dolce

Fl. 2
p
tr
mp
mf
p

Ob. 1
tr
mp
mf
tr
mp
p

Ob. 2
p
mf

C. A.

Cl. 1
(sempre ppp)
p

Cl. 2
ppp
mp
p
ppp

Cl. 3
mp
p
ppp
tr
p

B. Cl.
mf

Sop. Sax.

Alto Sax.
tr
tr
mf
mf
p

Ten. Sax.

Bari. Sax.

Bsn. 1
pp
p

Bsn. 2
p

Cbsn.
(sempre pp)

Hn. 1

Hn. 2

Hn. 3

Hn. 4

C Tpt. 1
poco f
pp

C Tpt. 2
change harmon mute to cup mute

C Tpt. 3

Tbn. 1

Tbn. 2

Tbn. 3
sfz pp
mp
mp
pp

Euph.

Tba.
tr
mp
poco f
mp

Timp.

Perc. 1

Perc. 2

Perc. 3

Hp.

372

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

change harmon mute to cup mute

376

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

UU

VV

381

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

WW

386

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

392

Picc.
Fl. 1
Fl. 2
Ob. 1
Ob. 2
C. A.
Cl. 1
Cl. 2
Cl. 3
B. Cl.
Sop. Sax.
Alto Sax.
Ten. Sax.
Bari. Sax.
Bsn. 1
Bsn. 2
Cbsn.
Hn. 1
Hn. 2
Hn. 3
Hn. 4
C Tpt. 1
C Tpt. 2
C Tpt. 3
Tbn. 1
Tbn. 2
Tbn. 3
Euph.
Tba.
Timp.
Perc. 1
Perc. 2
Perc. 3
Hp.

ppp
molto ***p***
p
ppp
pp
(sempre ***pp****)*
(sempre ***pp****)*
mp
pp
p

XX

YY

120

poco rit. ♩ = 52-54

398

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

C. A.

Cl. 1

Cl. 2

Cl. 3

B. Cl.

Sop. Sax.

Alto Sax.

Ten. Sax.

Bari. Sax.

Bsn. 1

Bsn. 2

Cbsn.

Hn. 1

Hn. 2

Hn. 3

Hn. 4

C Tpt. 1

C Tpt. 2

C Tpt. 3

Tbn. 1

Tbn. 2

Tbn. 3

Euph.

Tba.

Timp.

Perc. 1

Perc. 2

Perc. 3

Hp.

gliss.

ppp

pp

pppp

(sempre pp)

8vb

BASS DRUM

WATER WHISTLE

WHIP

C♯ B♯

403

Picc.

Fl. 1

Fl. 2

Ob. 1

Ob. 2

C. A.

Cl. 1

Cl. 2

Cl. 3

B. Cl.

Sop. Sax.

Alto Sax.

Ten. Sax.

Bari. Sax.

Bsn. 1

Bsn. 2

Cbsn.

Hn. 1

Hn. 2

Hn. 3

Hn. 4

C Tpt. 1

C Tpt. 2

C Tpt. 3

Tbn. 1

Tbn. 2

Tbn. 3

Euph.

Tba.

(8)

Timp.

Perc. 1

(sempre ***ppp***)

Perc. 2

Perc. 3

(tr)

ffff

Hp.

(sempre ***pp***)

(tr)

mf

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Exhalation / Expiration

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Volume 2

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Abstract:

Exhalation / Expiration, a composition for a wind ensemble of thirty-four players, continues a series of musical homages by the composer honouring her father, Alexander Fol. The composition unites different musical devices to accomplish a metaphorical mapping of the infection of a healthy body with a mortal sickness, followed by the organism's gradual demise. The work's duration is twenty-one-and-a-half minutes.

The design of these materials, which incorporates the form, harmony, rhythm and orchestration, applies an approach to musical semiotics informed by the philosophical doctrine of Thracian Oral Orphism, as well as by medical research on terminally ill cancer patients. The author defines two types of musical signs, the event-type and the process-type, and decides upon a musical realization thereof at the formal and structural levels. In the composition, the signs are organized as musical symbols that portray the gradual transition between the types of music symbolizing health – 'A' – and sickness – 'B' – represented by types of harmonic, rhythmic and orchestrational treatment.

Résumé:

Exhalation / *Expiration* (Expiration / Trépas), œuvre composée pour un ensemble à vent de trente-quatre instrumentistes, poursuit une série d'hommages musicaux par la compositrice à la mémoire de son père, Alexander Fol. La composition réunit différentes techniques musicales afin d'accomplir métaphoriquement un *« mappage »* où l'infection d'un corps en bonne santé subit une grave maladie, suivie progressivement par la mort de l'organisme. La durée de l'œuvre est 21 minutes et demie.

La conception du matériau, notamment la forme, l'harmonie, le rythme et l'orchestration, inclut l'application d'une approche à la sémiotique musicale informée par l'Orphisme, doctrine philosophique et orale de la Thrace, ainsi que la recherche médicale sur des patients ayant le cancer en phase terminale. L'auteur définit deux types de signes musicaux, le type-événement et le type-processus, et décide sur une réalisation musicale de ces deux types aux niveaux formel et structurel. Dans la composition, les signes sont organisés comme symboles musicaux afin de décrire la transition graduelle entre le type de musique qui symbolise la santé – 'A' – et la musique qui symbolise la maladie – 'B', – le tout représenté par une collection d'occurrences et de traitement dominants de l'harmonie, du rythme et de l'orchestration.

List of examples:

Table of contents:

VOLUME 2: Analysis of *Exhalation / Expiration*

Chapter 1: Introduction

1.1. Originality

Exhalation / Expiration for wind ensemble represents metaphorically the changes occurring in the physiology of a terminally ill cancer patient, from a healthy respiratory cycle through the gradual battle with mortal sickness, and then to death. The title was designed to reflect a play on words in my native language, Bulgarian: ***Издишване / Издъхване*** (transliterated into the Latin alphabet as *Izdishane / Izdahvane*). In Bulgarian the word "***издишване***" contains the root of the verb "to exhale" and "***издъхване***" means literally "to exhale one's last breath". The English translation, *Exhalation / Expiration* succeeds partially in reflecting the aforementioned intended wordplay, despite the fact that "exhalation" and "expiration" share but a prefix.

Exhalation / Expiration maps the process of dying metaphorically using a combination of compositional processes at formal and structural levels. To compose a compelling work, I refined certain aspects of my harmonic and rhythmic language and simultaneously drew inspiration from a long tradition of wind music writing and musical homages. In addition, *Exhalation / Expiration* employs multiple layers of historically informed musical symbolism designed to emphasize the extra-musical idea behind its creation.

The instrumentation of *Exhalation / Expiration* continues the deliberate metaphor already suggested in the title. Depending directly on controlled breathing to produce their sound, wind instruments, more than other instruments, naturally evoke the idea or act of exhalation. The instrumentation comprises thirty-four players: two flutes, piccolo, two oboes, English horn, three clarinets in B-flat, bass clarinet in B-flat, soprano, alto, tenor and baritone saxophones, two bassoons and contrabassoon, four French horns in F, three trumpets in C, three trombones, euphonium, tuba, timpani, three percussion parts, and harp.

The duration of the work is 21 minutes and 30 seconds.

1.2. Document overview

1.2.1. Document structure

The analysis that follows presents a topical rather than a time-line approach to the composition. It is influenced by the seven-step method suggested by David Cope in his book *New Directions in Music*, which he calls "vectoral analysis".[1] Cope's procedure emphasizes the importance of placing a work within the appropriate historical and cultural context for acquiring an informed understanding of its importance. For this reason I include in my text an overview of relevant wind ensemble repertoire as well as a brief discussion of my own compositions that are musical homages. After thus establishing the context of *Exhalation / Expiration*, I proceed with instituting a personal framework of musical semiotics that affected my treatment of all material. The latter chapters of the document treat the form, harmony, rhythm and orchestration pertaining specifically to *Exhalation / Expiration.*

1.2.2. Chapter organization

In Chapter 2, I propose a terminology for the description of the widely diverse ensembles employing wind instruments; in addition, I present an overview of three 20th-21st century works, that a) have informed my treatment of harmony, pacing and binary structure among others, and that b) portray to various degrees the idea of decay and metaphorical death.

In Chapter 3, I discuss the primary extra-musical objective behind the creation of *Exhalation / Expiration*: the idea of homage. In this discussion I differentiate between two types of musical references occurring in homages: 1) internal type, where the composer alludes to her/his own music and even to other parts of the work itself, and 2) external type, where the composer alludes to

[1] For more on the method, see Cope, David. *New Directions in Music*. Prospect Heights, IL, USA: Waveland, Inc., 2001. Print.

non-musical concepts or to other composers' works. After addressing the topic of death and homage in my own output, I examine the external and internal references that contribute to the homage of *Exhalation / Expiration*.

In Chapter 4, I introduce the reader to a semiotic approach to analysis and to the musical symbolism that I have installed at different compositional levels throughout the work. I subsequently address the specific instances of musical symbolism in the following chapters containing the detailed analysis.

Chapters 5 discusses several aspects of the form and specifically how the form constitutes a realization of the homage by means of symbolization of proportions and certain specific musical signs. I differentiate between the different sections and sub-sections and address specific treatments of register, which I interpret in the context of the work's musical symbolism.

Chapter 6 centers on the treatment of harmony and on my handling thereof, in view of the symbolization of death. I explain the harmonic structure illustrating the metaphorical representation of health, sickness and death beginning with the creation of simultaneities and the three harmonic progressions, and ending with the calculated gradations of pitch-class density.

In Chapter 7, I analyze the important aspects of rhythm occurring at the background, middleground and foreground levels, and of my usage thereafter as internal references from the perspective of a continuous permutation, which connotes the constant drifting away from the state of health. I clarify the specific procedures used, their meaning and symbolization.

Chapter 8 examines how the orchestration of *Exhalation / Expiration* connects with the structure and formal divisions the work. In addition, I discuss my consistent processes pertaining to register and range, and how they highlight the foreground texture.

In the last chapter, I assess the artistic difficulty posed by the creation of *Exhalation / Expiration,* and propose some possible solutions as they appear in two works composed since – *Principle and Situation – a Clarinet Quintet* for clarinet and four string instruments, and *SICS [Objective] Intermezzi* for a combination of any six players and/or singers. In particular, I focus on the relationships between structural and formal layers, harmonic movement and tempo.

Chapter 2: Wind Ensemble Repertoire

2.1. Issues of terminology

In view of the non-standardized and occasionally contradictory terminology used by musicians and researchers to describe music composed for wind instruments, I propose a differentiation between 'wind ensemble' and 'wind symphony' based on size, instrumentation, and number of players per part.[2]

For ensembles larger than a decet I shall use the terms 'wind ensemble' and 'wind symphony' and will refer to the repertoire in general as band music.

To qualify as Wind Ensemble, a composition should adhere to the following criteria:

1. At least 70% of the parts should call for wind instruments
2. It should require one player per part
3. The number of brass parts should not exceed the number of woodwind parts by more than 25%

In a Wind Symphony, or Symphonic Band

1. At least 70% of the parts should call for wind instruments
2. It requires more than one player per part
3. The number of brass parts can exceed the number of woodwind parts as long as the total number of brass players does not exceed the total number of woodwind players

By conceiving *Exhalation / Expiration* for wind ensemble instead of a wind symphony, I chose to maximize the notion of individual parts in the orchestration of the piece. I shall address my treatment of the ensemble as groups of soloists in Chapter 8.

2.2. Repertoire relevant to my composition of *Exhalation / Expiration*

2.2.1. *Apoteóza planety země* (1970) by Karel Husa

[2] See bibliography for annotated guides and other literature for the inconsistent usage of terms such as "wind ensemble", "wind symphony", "concert band", "symphonic band", etc. Only Stoneham *et al.* discuss the issue of terminology and nomenclature and specify the terms they use.

Commissioned by the Michigan School Band and Orchestra Association,[3] *Apoteóza planety země* by Karel Husa unfolds in such a way that its instrumentation transforms from wind ensemble into a symphonic band of over seventy players.[4] Conceived as "advanced contemporary music of symphonic proportions,"[5] the composition has enjoyed a long performance history.[6] Similarly to my approach to symbolization in *Exhalation / Expiration*, (see 4.3. below), Husa portrays a metaphorical mapping of death in his composition, the violent possible demise of Earth itself. In the composer's own words:

> In the first movement, "Apotheosis", the Earth first appears as a point of light in the universe. […] The second movement, "Tragedy of destruction", deals with the actual brutalities of man against nature, leading to the destruction of our planet, perhaps by radioactive explosion. The Earth dies as a savagely, mortally wounded creature. The last movement is a "Postscript", full of the realization that so little is left to be said: The Earth has been pulverized into the universe, the voices scattered into space. Toward the end, these voices – at first computer-like and mechanical – unite into the words *this beautiful Earth*, simply said, warm and filled with regret… and one of so many questions comes to our minds: "*Why have we let it happen*?"[7]

While I do not employ aleatoricism and quarter-tones in my composition as Husa does, my accomplishing of what Hartzell describes as "things falling apart"[8] recalls the complexity of Husa's treatment of rhythm. Hartzell explains:

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[3] Husa, Karel. *Apotheosis of This Earth*. New York, USA: Associated Music, 1971. Print. Un-numbered page.

[4] Ibid. Husa calls for one player per part until specific measures when the doublings begin. With respect to the contrabasses, he leaves the number of total players open.

[5] Hartzell, Lawrence W. "Karel Husa: The Man and the Music." *The Musical Quarterly* 62.1: 87-104. Print., p. 92

[6] Ibid., p. 91

[7] Husa, Karel. *Apotheosis of This Earth*. New York, USA: Associated Music, 1971. Print. Un-numbered page.

[8] Hartzell, Lawrence W. "Karel Husa: The Man and the Music." *The Musical Quarterly* 62.1: 87-104., p. 101

> This ["things falling apart"] is accomplished by presenting a motive in rhythmic unison in eleven instruments […]. With each subsequent presentation of the motive some instrument, or group of instruments, enters at a later rhythmic position than the others. This process is continued until an elevenfold imitation of the motive is achieved […][9]

Husa opts for a "Postscript", following the two movements of ***Apoteóza planety země***, in order to bring his music to a close. In *Exhalation / Expiration* this closing process appears within the work's special binary structure (more about this below in Chapter 4.3.3).

2.3.2. *Samstag* (1981-84) by Karlheinz Stockhausen

Scored for thirteen musical performers, symphonic band, ballet or mimes / men's chorus with organ, [10] and composed second among the seven instalments of the *Licht opera* cycle, *Samstag* relates to *Exhalation / Expiration* not simply because it addresses the topic of death and uses wind instruments, but even more importantly because of the symbolisation of multiple structural and formal elements. The opera characters themselves derive their mystical and spiritual nature from *The Urantia Book* among other sources.[11]

In his analysis of *Samstag*, Michel Rigoni describes how all aspects of the performance, even the exhalations of the trombone players in Scene Two constitute musical symbols, reflected not only in the music itself, but also in the instrumental set-up, depicting a giant human face in Scene Three:

> Lucifer fait apparaître un orchestre en forme de visage humain géant. Les différentes parties du visage sont formées par des groupes instrumentaux qu'il fait entrer

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[9] Ibid., p. 101

[10] This terminology originates from Stockhausen's catalogue, found at http://www.stockhausen.org/2010_work_list_en.pdf by means of accessing the composer's official website: *Karlheinz Stockhausen Official Website - Stockhausen.org*. Stockhausen Verlag. Web. 26 Jan. 2011. <http://www.stockhausen.org/>.

[11] For Kurtz's justification and Stockhausen's own thoughts on the subject, see p. 288 of Kurtz, Michael. *Stockhausen: a Biography*. Trans. Richard Toop. London: Faber and Faber, 1992. Print.

> en jeu les uns après les autres pour dix danses, chaque danse possédant son mètre et sa période propre […].[12]

The detailed pacing of *Exhalation / Expiration* to be discussed below resembles the exact calculations Stockhausen employs in *Samstag*. Rigoni explains how Stockhausen employs the three formulae of *Licht*'s super-formula with respect to the duration of the scenes themselves, and how the composer later employs a similar process in *Salut de Samedi*.

> Dans le schéma de forme, les 3 formules de la super-formule de *Licht* sont données dans les 3 lignes supérieures; en-dessous la formule de Lucifer est réécrite à l'échelle de l'œuvre *Samedi*, jour de Lucifer oblige. On remarquera ici les calculs de durées des scènes. La première scène correspond à 2 noires de la super-formule; selon le principe de projection dans la grande forme, cela donne une durée de 2 x 16 minutes à 60 à la noire. Le tempo étant ici de 71, il en résulte de calcul suivant : 32 x 60 / 71 = 27,04.[13]

Just as Stockhausen permits himself to bend the exact calculations to suit his music – the scene *Rêve de Lucifer* actually spans thirty-six minutes rather than twenty-seven[14] – the calculations of *Exhalation / Expiration* as they pertain to the formal and harmonic pacing (see Chapters 6 and 7 below) fluctuate depending on the simultaneous unfolding of the various musical strata.

2.3.3. *Urquitaqtuq* (2006-07) by Trevor Grahl

Inspired by Inuit literature, Grahl's *Urquitaqtuq (Sheltered, but with Gusts of Wind)* for Wind Ensemble (36 players) invites a comparison with *Exhalation / Expiration*, since its creation served as direct inspiration for my work. Both compositions explore the process of gradual distortion in various

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[12] Rigoni, Michel. *Karlheinz Stockhausen … Un Vaisseau Lancé Vers Le Ciel*. Millénaire III Editions, 1998. Print., p. 294

[13] Ibid., p. 296

[14] Ibid.

compositional elements, such as textural density and rhythmic foreground, by means of creating a continuum between two types of music.

Metaphorically representing the decline of the Inuit's culture due to its recent disturbing level of acculturation through a process Grahl calls 'musical corruption', this work fulfills the composer's intentions:

> I wanted to create a music which reflected a naïve, yet special and unique beauty, and then break and replace this beauty with something more commonplace and trite, to take its place. I was interested in experimenting with the aleatoric technique, and wanted sound masses which were liquid: fields of densities that were similar throughout performances, but never quite [the same]. (I felt that the aleatoric music also provided a semi-programmatic function of reflecting the paradoxical nature of the shifting, yet stable topography of the tundra, and subsequently, the dynamic nature of Inuit identity within a larger global context.)[15]

In addition to contributing to the work's programmatic aspect, "the alteration of aleatoric and measured scoring help[s] convey the recurring idea of emerging harmonic fields out of layered heterophony." [16] In contrast to *Urquitaqtuq*, where the composer does not want the audience to comprehend the 'corruption', which does occur however,[17] in *Exhalation / Expiration* I aim to underline this process of gradual distortion.

Grahl states: "a corruption (or corruptions, depending on how one hears the piece) takes place in the piece, a denaturing of one music which yields a completely different, yet related music."[18] On the other hand, in a personal

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[15] Grahl, Trevor. "[No title]." Message to the author. 18 Oct. 2009. E-mail.
[16] Fol, Alexandra. "A Brilliant Finish for a Brilliant Composer." *The Phonograph* [Montreal] Apr. 2007: 8-8. Print.
[17] See Ibid.
[18] For the complete programme note, follow the link "Urquitaqtuq" at Grahl, Trevor. *Trevor Grahl - Composer*. Web. 14 Oct. 2009. <http://imusic1.ucsd.edu/~tgrahl/>.

message to me, Grahl provided a different description stating that both musics are distinct and 'intermix' between rehearsal numbers 10 and 23 in particular.[19]

The difference between Grahl's 'intermixing' and what I call 'infiltration' in my music (see Chapter 4.2.1, below) highlights the difference in methodology between Grahl and myself with respect to 'musical corruption'. In Chapters 6, 7 and 8, I address the specific procedures I employ in order to create this process.

[19] Grahl, Trevor. "[No title]." Message to the author. 18 Oct. 2009. E-mail.

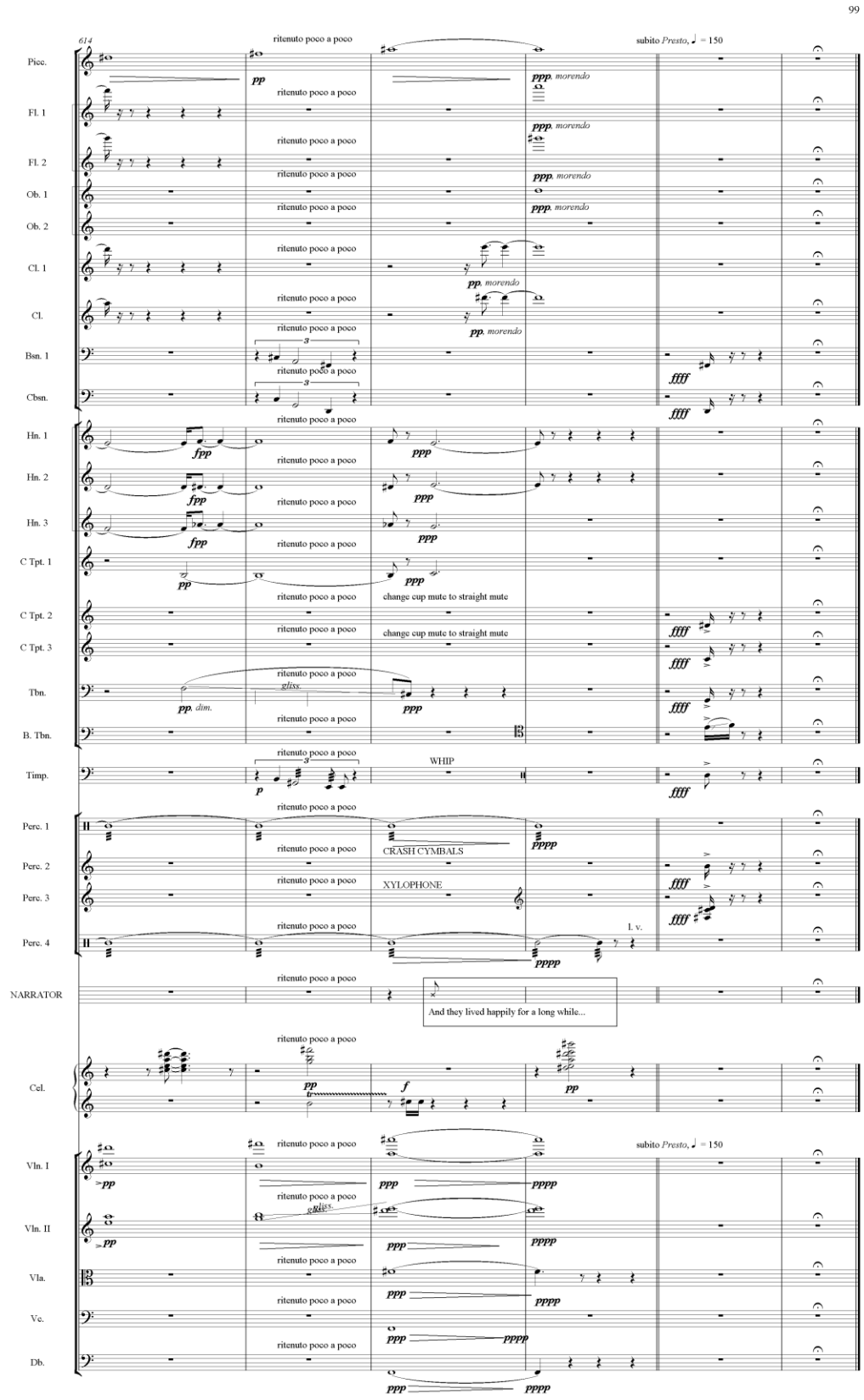
Chapter 3: Musical Homages by the author

3.1. Homages in works preceding *Exhalation / Expiration*

3.1.1. *Cinderella – the fairy tale* (2002-2003)

A thirty-minute monodrama for narrator and symphony orchestra, *Cinderella – the fairy tale* is dedicated "To the death of all illusions". The objective of the composition endeavours to gradually dissociate the underlying musical implications with the connotation of the words it presumably supports to the point where the musical "accompaniment" influences the text only to change at the very end from the traditional "They lived happily ever after" to the more ominous "They lived happily for a long while". With the text more (or less) codified in the traditional versions of the story, my artistic intention necessitates that I plant an essentially fundamental dichotomy between the progressions of the text and the musical development. The metaphorical death mentioned in the dedication and exemplified by the realization of this dichotomy assures the work's appreciation as much as by children as adults.

The gradual dissociation of the music from the words leading to its eventual independence from them passes through differentiated or intermediate stages of doubting, mocking and negating the text. Example 3.1 below illustrates the continuously implied inevitable ending where the words give in to the pressure of the music and change to seal the doom of the beautiful illusions of love, forgiveness and happiness:



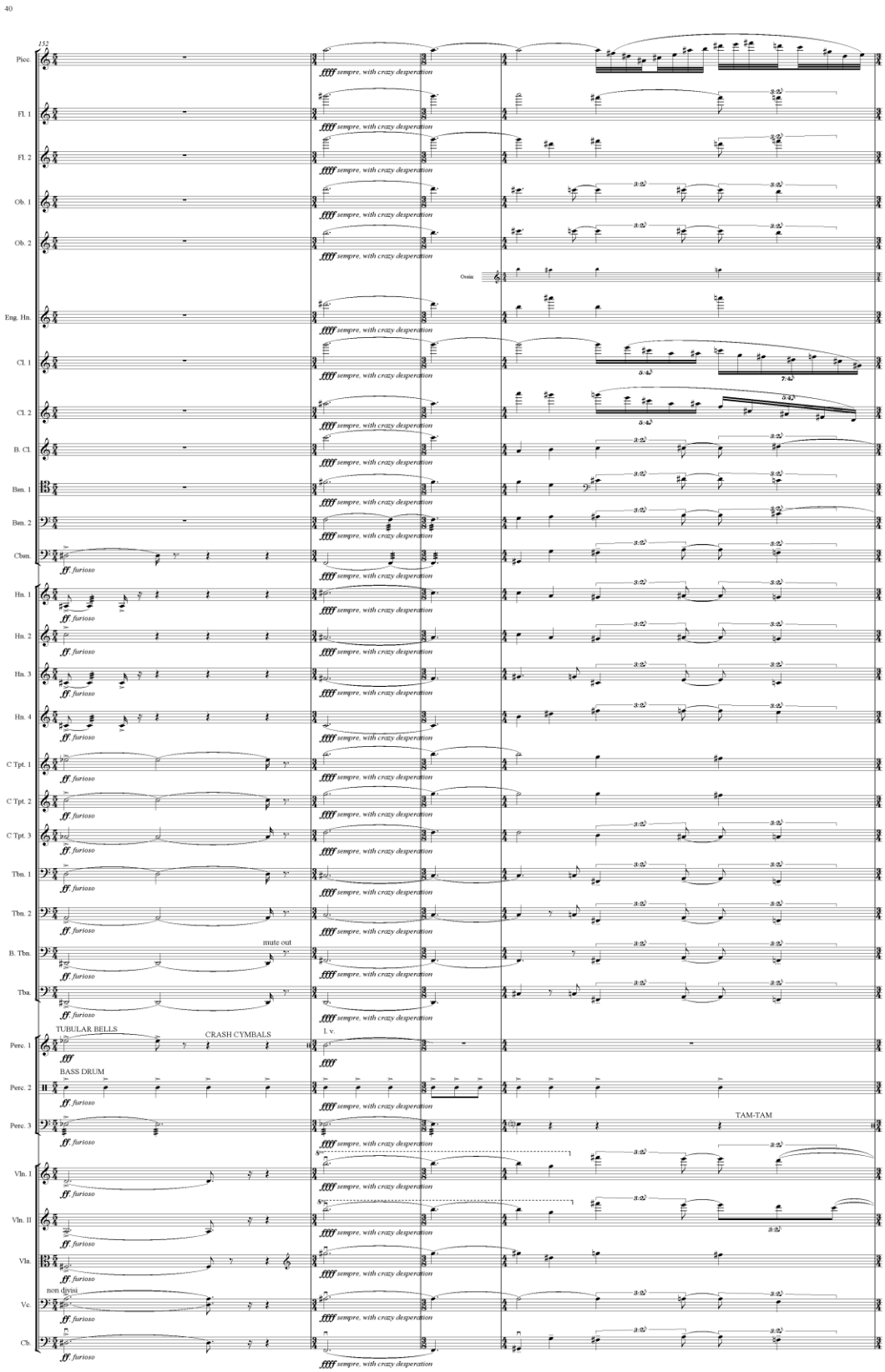
Example 3.1: *Cinderella – the fairy tale* (2002-2003), the ending (mm. 614-619)

Cinderella – the fairy tale stands as my first and only work before *Exhalation / Expiration* where the concept of death permeates the form spanning the entire work's duration. Both compositions contain transformations of motivic elements that continuously refer to their preceding versions, but these continuous internal references change in purpose. While I have used them to design the musical execution of *Cinderella*'s dichotomy in order to reflect a subjective change in perspective through music, *Exhalation / Expiration* metaphorically represents a process.

3.1.2. *Requiem No. 2, op. 40* (2006)

In contrast to my *Requiem No. 1*, this Requiem employs a symphonic orchestra without choir or organ. Composed in memory of my father, it combines the Thracian Orphic ideas of cyclic time and passing on to the World of the Beyond, a topic which will be addressed in detail below, with my preference for cyclic form – the A-A1 type in particular – dating back to my 2001 *Violin Concerto*. Employed as one of the models in my *Exhalation / Expiration*, I initially planned *Requiem No. 2* to feature more than one return and transformation of all musical material in order to illustrate its gradual intended disembodiment. I eventually condensed the planned A-A1-A2 form into the A-A1 type.

When compared to *Requiem No.* 2, *Exhalation / Expiration* exhibits the cyclical treatment of musical material on the foreground and middleground rather than only in the middleground. I shall discuss this musical material further in Chapter 7. The strategic placements and detractions of regular pulsations in *Requiem No.* 2 inspired the rhythmic structure of *Exhalation / Expiration*, also addressed in Chapter 7. Furthermore, in both works the regular pulsations in tempo of 60 beats of per minute make reference to the human heartbeat. Example 3.2 below reveals the alignment of the structural and formal compositional layers in *Requiem No. 2*, highlighted by the "heartbeat" pulsations in the Bass Drum.



Example 3.2: *Requiem No. 2, op. 40* (2006), mm. 132-135

As the first work written to commemorate my father, *Requiem No. 2* served as one of the main models in my incorporation of musical symbolism.

3.2. The homage underlying the compositional process in *Exhalation / Expiration*

3.2.1. Alexander Fol and Georgi Kitov

Exhalation / Expiration constitutes a musical homage with respect to two individuals – my father, historian Alexander Fol, together with a family friend, who was a student of my father – archaeologist Georgi Kitov. Alexander Fol passed away after a long struggle with cancer in 2006. Georgi Kitov followed his teacher in 2008 following a sudden pacemaker failure.[20]

After having already composed two works in memory of my father – *Requiem No. 2, op. 40* (2006) for orchestra and *Happy Memories op. 49* (2008) for solo violin, I decided to integrate the compositional tools I have come to prefer since 2001 with a structure and form drawn from the teachings of my father that Georgi Kitov, among other scholars, made widely known.

3.2.2. The five stages of terminal cancer

According to the article "A prospective study of the dying process in terminally ill cancer patients" by Tatsuya Morita *et. al.,* the five signs that demarcate impending death in cancer patients occur in the following order:

1) Cloudiness of consciousness
2) Death rattle
3) Respiration with mandibular movement (RMM)
4) Cyanotic extremities (bluish discoloration of the skin and mucous membranes due to lack of oxygen in the blood), and
5) Pulselessness of the radial artery.[21]

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[20] *ТЕМП - Траколожка Експедиция за Могилни Проучвания* (Thracology expedition for Sub-Mound Research). International Asset Bank, 2008. Web. 6 Oct. 2009. <http://www.bulgarian-tourism.com/temp/eng/index.htm>.

[21] Morita, Tatsuya, Takihiro Ichiki, Junichi Tsunoda, Satoshi Inuoe, and Satochi Chihara. "A prospective study of the dying process in terminally ill cancer patients." *American Journal of Hospice and Palliative Medicine* 15 (1998): 217-22. Weston, MA, USA.

Exhalation / Expiration incorporates the five stages of imminent death into a musical composition on the doomed struggle of a healthy organism against its demise. Over the duration of *Exhalation / Expiration,* I complete a metaphorical mapping of the healthy organism, its infection, and the five stages of terminal cancer. This mapping is metaphorical, since in reality the process of dying can take hours, if not days.

3.2.3. Death *vs.* Passing in Oral Orphism

As the Moirae would seem to have decided for me, I was destined to have a father whose groundbreaking research in the 1970s laid the foundation for the interdisciplinary science of Thracology.[22] His life and vocation were also irrevocably linked to the Orphic faith and its attention to the immortality of intellectual energy.[23]

In Orphism, death is part of life and, by being a part of the cosmic force; every person can assist with cosmic harmony. Before Orphism experienced a philosophically reworking by Pythagoras, and later by Plato and other ancient Greek intellectuals,[24] it existed as an oral faith organized in ten stages or levels of conception according to the Orphico-Pythagorean rhythmicized model of the Cosmos.[25] The first seven stages or levels correspond to the seven pitches

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[22] See the proceedings for the ten International Congresses of Thracology published by the Organizing committees: Sofia – 1972, Bucharest – 1976, Vienna – 1980, Rotterdam – 1984, Moscow – 1988, Palma de Mallorca – 1992, Constantsa - Mangalia – Tulcha – 1996, Sofia – 2000, Kishineu – 2004, Komotini-Alexandroupouli – 2005. The eleventh International Congress of Thracology is scheduled for 2010 in Istanbul, Turkey; For a biography of Alexander Fol, see *Fol, Alexander*. Leibniz-Sozietät, 14 June 2002. Web. 1 Oct. 2009. (in German) <http://www2.hu-berlin.de/leibniz-sozietaet/vorgestellt/2002/fol.htm>.

[23] Fol, Alexander. "L'Orphisme : les métaphores grecques de la foi doctrinale non-littéraire." *Proceedings of the 10th International Congress of Thracology*. Tenth International Congress of Thracology, Greece, Komotini – Alexandroupolis. Athens: National Hellenic Research Foundation, 2007. 164- 68. Print. See also Fol, Alexander. "Tracio: breve synopsis." Ed. A. Bernabé and Francesc Casadesús. *Orfeo y la tradición órfica: un reencuentro*. Madrid: Akal, 2008. 1035-050. Print.

[24] West, Martin. *The Orphic Poems*. Oxford, UK: Clarendon, 1998. Print. See also Böhme, Robert. *Der Lykomide. Tradition und Wandel zwischen Orpheus und Homer*. Bern–Stuttgart, Paul Haupt., 1991. Print. (in German)

[25] Fol, Alexander. *The Thracian Dionysos. Book Three: Naming and Faith (in Bulgarian with English summary)*. Sofia: New Bulgarian University, 2002. Print. See specifically pages 263-66

of the Thracian mode and the seven-string lyre.[26] The pitch-names, however, do not reveal the tuning used, even though I recently suggested a possible theory for its reconstruction.[27]

According to the Orphic faith, which I will summarize here, the world comes into existence from the absolute quiescence of the Great Goddess-Mother, who trembles, conceives alone, carries her child and gives birth to her Son. This Son is the Sun-God, who also projects an earthly, chthonic image – the sacred fire. These four stages represent a single cosmogonic act that occurs only once and does not repeat, and the stages correspond to the tones "Re", "Mi", "Fa" and "Sol". After the triumphant ascend of the Son-Sun/Fire, sounding at the fifth level on "La", one hears his exploration at the sixth level of the cosmic egg-shaped ellipse on "Si". The faith in the mystery of the sacred marriage between the Son and the Great Goddess-Mother rings on "Do". Although at this seventh level everything would seem complete, three levels remain. Between the eighth and the tenth levels lies the unwritten ethics of the Teaching. Its main nucleus concerns the birth of the son of the Son from the hierogamy (divine marriage), his growing up, preparation and initiation as a priest-king who, after his death, will transform into an *anthropo daimon*[28] and become a new herald of the Faith.[29] In oral Orphism, the Christian idea of linear time does not exist – death does not symbolize an

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[26] Strabo 10.3.17 Meinike. The text comes from the tenth chapter of Strabo's "Geography" (end of 1st c. BC – beginning of 1st c. AD). For more on Strabo's passage, see Beschi, Luigi. "La prospettiva mitica della musica greca." *Religion, mythologie et iconographie. Colloque International de LIMC.* Proc. of Colloque International de LIMC, Rome, Rome. Ed. Lili Kahil and P. Bellefonds. Vol. 103. Rome: École française de Rome (= Mélanges de l'École française de Rome. Antiquité), 1989. 35-50. Print. (in Italian)

[27] Fol, Alexandra. "Thracian architecture. A syncretistic presentation and tangible realization of Musica Universalis?" *Problems and Research of Thracian culture* 4 (2009): 127-34. Kazanlak, Bulgaria

[28] My father's usage of the term is derived from Herodotus' discussion concerning the death of God Zalmoxis, the Supreme God of the Getae. For the complete passage, see Herodotus' *History*, 4:93-6. This usage is not to be confused with the somewhat earlier one of Heraclitus (in fragment 119): *ethos anthropo daimon,* that is, man's character is his destiny/daimon.

[29] Fol, Alexander. *Thracian Culture: Told and Untold*. Sofia: Tangra TanNakRa, 2009. Print. (in Bulgarian, English translation under print). p. 63

ending, but rather an infinity leading to a different state, to a different time-space continuum.[30]

3.2.4. Multiple references in *Exhalation / Expiration*

Exhalation / Expiration comprises internal and external references organized by way of a semiotic approach (see Chapter 4) to symbolize different aspects of the dying process. Consequently, many references in the composition function as signs. The preponderance of internal references pertaining to the piece itself encompass motivic permutations underlined by means of an ostinato, recurring expansions and compressions of register, written out accelerandi and decelerandi, and gradually modified oscillations. The internal references pertaining to other works of my own account for less material – strategic placements of occasional regular pulsations and intervals – naturally links to my musical style and evolution.

The external references in *Exhalation / Expiration* occur with respect to the five stages of terminal cancer and the philosophical doctrine known as Thracian Orphism, summarized above. These references occasionally coincide with the internal ones, thus contributing to the high level of integration of material.

The five stages of terminal cancer are reflected in the form of the composition where each section represents musically a stage of the illness. The correspondence of each formal section with the arrival of a structural harmony characterizes one aspect of the integration mentioned above. I shall discuss the form in detail in Chapter 5.

Opportunities for creating external references with respect to Thracian Orphism include using specific pitches as pitch-names (if not the exact intonation) of the Thracian mode. For example, *Exhalation / Expiration* begins

[30] Fol, Alexander. *The Thracian Dionysos. Book Three: Naming and Faith*. NBU. Sofia, 2002 (in Bulgarian with English summary). pp.203-68

– literally and metaphorically – on the pitch "La", the Son-Sun/Fire. The midpoint is framed registrally by a "Re", the moment of Creation, and "Do", the hierogamy.

The internal and external references assist the listener to perceive the work's unfolding as a small frame of the eternal cyclic time, a concept which is paramount to the Orphic doctrine. The significance of the references will be examined more thoroughly in the following chapter.

Chapter 4: A personal framework of musical symbolism

4.1. Theory *vs.* method

In view of my deliberate usage of internal and external references in *Exhalation / Expiration*, I determine a necessary differentiation between symbolism and semiotics, essential for the establishing of my analytical method. The Merriam-Webster dictionary definition of semiotics as research on the "function [of signs] in both artificially constructed and natural languages"[31] when compared with the same source's explanation of symbolism as "the art [...] of expressing the invisible or intangible by means of visible or sensuous representations" and a "system [...] of representations"[32] invites the consideration of musical semiotics as an analytical method rather than an actual theory. My analytical method, proposed below, focuses primarily on the semantics and syntactics of such a method, as my approach to pragmatics in *Exhalation / Expiration* remains heavily influenced by a highly personal symbolism invested in it.

In my work, I employ different types of signs (see 4.2.1 below) that help me not only to plan and execute a composition, but also to endow it with personal symbolism. Similar to J. S. Bach's approach to musical symbolism, as interpreted by Guy Marchand, I intend for my layered symbolism to remain private.[33] While important for the composition of work, my musical signs, which may or may not be audible and immediately visible on the score, do not constitute a programmatic element.

I argue that a semiotic analysis should help establish – but not immediately interpret – a composer's approach to symbolism. Hence, a successful discussion of semiotics and, by extension symbolism, in any particular

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[31] "Semiotics." *Merriam-Webster Online.* Merriam-Webster Inc., 2009. Web. 17 Oct. 2009. <http://www.merriam-webster.com/dictionary/semiotics>.
[32] "Symbolism." *Merriam-Webster Online.* Merriam-Webster Inc., 2009. Web. 24 Sept. 2009. <http://www.merriam-webster.com/dictionary/symbolism>.
[33] For Bach's approach to symbolism, see Marchand, Guy. *Bach ou la Passion selon Jean-Sébastien. De Luther au nombre d'Or.* Paris, France: L'Harmattan, 2003. Print.

composition represents a level of understanding only possible when the listener possesses an excellent grasp of the musical grammar, syntax and style of a particular composer. This insight, coupled with a successful research of primary sources, cultural history and possible communication with the composer herself, can ultimately assist the analyst in reconstructing the particular composer's symbolism.[34]

With my analysis of *Exhalation / Expiration,* I suggest approaching musical semiotics as a method of analysis rather than as a philosophical theory. Being the composer of *Exhalation / Expiration,* I shall simultaneously reveal and assess the semiotic and symbolic components of the work as they appear. The components of my method and their correlation follow below.

4.2. Constructing a framework of analysis

4.2.1. Sign, two types

With reference to the definition of sign – "a motion or gesture by which a thought is expressed or a command or wish made known"[35] – I distinguish in my work between two types of musical signs that may occur simultaneously: 1) Event-type, and 2) Process-type.

Event designates a singular musical attack denoting a structural or formal focal point. Process indicates a conscious permutation of musical elements including but not limited to pitch, rhythm, and orchestration by means of proliferation, variation, interpolation and, as is the case in *Exhalation / Expiration,* even infiltration of one material into another. The advent of a sign can range from an instantaneously audible foreground appearance to a less

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[34] The provisions I outline do avoid the practical difficulties of the supposedly autonomous neutral level proposed by Jean-Jacques Nattiez, discussed by Dunsby in his article "Music and Semiotics: the Nattiez Phase". For the complete article, see Dunsby, Jonathan. "Music and Semiotics: The Nattiez Phase." *The Musical Quarterly* 69.1 (1983): 27-43. Print.

[35] "Sign." *Merriam-Webster Online.* Merriam-Webster Inc, 2009. Web. 16 Oct. 2009. <http://www.merriam webster.com/dictionary/sign>.

obvious onset. The abundance of easily identifiable examples of both types, however, renders any enumeration superfluous.

Certain signs may appear to fall under the category of Events while in reality pertaining to a Process. The inception of a new harmony occurring in the context of a slowly paced work where the listener or analyst perceives but a snippet of the long-term harmonic background represents such an example.

Exhalation / Expiration incorporates Event- and Process-type signs operating and even overlapping on the background and foreground levels. I shall explain these occurrences as they happen in Chapters 5 through 8.

4.2.2. Meaning

In light of the wealth of literature addressing the topic of meaning, I shall illustrate my argument and try to clear the overwhelming confusion arising from assigning meaning without considering a sign's purpose with respect to musical form and structure. I will do this by commenting on Nicholas Cook's article "Theorizing Musical Meaning", where it is written that:

> […] it is central to my argument that music never is "alone," that it is always received in a discursive context, and that it is through the interaction of music and interpreter, text and context, that meaning is constructed, as a result of which the meaning attributed to any given material trace will vary according to the circumstances of its reception.[36]

The equating of meaning with perception, together with the idea that meaning arises interactively at the time of reception rather than from a composer's intention (whether understood or not), devalues Cook's entire line of reasoning. This is especially surprising considering that, in view of his analysis of Hanslick, Cook claims in the same article that "a more careful reading might have seen [in Hanslick's *Vom Musikalisch-Schönen*] as asserting the

[36] Cook, Nicholas. "Theorizing Musical Meaning." *Music Theory Spectrum* 23.2 (2001): 170-95. Print. p. 12

continuity of structure and meaning, and arguing that any understanding of music's meaning has to be predicated on an understanding of its structure"[37] – an affirmation to which I myself subscribe closely.

I adhere to the argument that a composer can design musical meaning either consciously or unconsciously with regard to a specific piece or set of pieces. This musical meaning can be deduced or speculated upon by an analyst or by an educated listener in view of each person's interpretation of musical signs. Artistic meaning cannot really be understood except on the most superficial level even by enlightened people. In my view, comprehension of musical meaning by uneducated listeners remains unfeasible. This impossibility leads to the formulation of inherently flawed hypotheses where, for example, emotions – a topic of interest within perception – are infused with meaning – a topic associated with creative conception.[38]

The quote below exemplifies such an extraordinary confusion on the part of Cook:

> […] the relationship […] between music and meaning is inherently mysterious. It is mysterious because of the impossibility of defining the "logical form" of human feelings except in terms of such behavioral expressions of them as music or dance, from which it follows, as Roger Scruton has pointed out, that the invocation of the concept is redundant: one cannot coherently argue for a relationship between A and B if the only way to define B is A.[39]

In the discussion further below, I argue for a syntactic relationship in the context of *Exhalation / Expiration* between a binary structure defined by the

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[37] Ibid., p. 6

[38] For a more detailed discussion of mine pertaining to the difference between perception and conception, see Fol, Alexandra. "Music between Ontology and Aesthetics." *Aesthetics and Philosophy of Art* (2010). *Social Science Research Network*. Social Science Electronic Publishing, Inc., 1 Jan. 2010. Web. 9 Jan. 2010. <http://ssrn.com/abstract=1529627>.

[39] Cook, Nicholas. "Theorizing Musical Meaning." *Music Theory Spectrum* 23.2 (2001): 170-95. Print. p. 8

interaction between its components – to be designated 'A' and 'B'. Their individual meaning delineates this relationship as this meaning is also influenced by their relationship. This perpetual reciprocal connection allows for each constituent to be considered with respect to the other.

4.2.3. Attributing meaning

Any analytical method, including musical semiotics, serves as a tool to unearth a particular layer of musical or other association(s). Consequently, when attributing meaning to music, one ought to begin by conducting a thorough theoretical analysis by establishing signs and their types. Once located, the analyst should determine the nature of each sign's allusion or allusions. My interpretation of signs dictates that they can either

1) denote a particular non-musically related entity
2) refer to one another
3) refer to the structure
4) refer to the form
5) constitute an internal reference
6) constitute an external reference.

Signs and their radiating allusions can vary greatly in scope and importance within the framework of a single composition. Some allusions, and even signs themselves, may obviously never become clear to anyone other than the composer, whereas some other allusions and signs remain fairly easy to uncover.

The hierarchy resulting from the emerging network of inter-relationships of signs can reveal the predominance of certain signs over others, and thus facilitate the formulation of meaning and, by extension, a system of symbols.

4.2.4. Formulation

While the dissolution of explicit systems of codified usage of explicit musical components still allows for relatively stable semiotic considerations and contextualizations, such as those associated with references to the Ancient

Greek modes or to the Theory of Affects, the difficulty in formulating meaning increases with the lack of a singular cultural background, among other things. For this reason, style-specific theories such as Candace Brower's cognitive theory of meaning remain inapplicable to music composed before the onset of the Baroque Era and to music composed after the end of the 19th century. Despite her promising vocabulary drawing on cognitive science, and her recognition of what she calls "intra-opus patterns", i.e., idioms specific to the work itself, Brower's application of these notions remains possible only in the realms of Western-European tonal music.[40]

My own view concerns the following issues. I recommend formulating meaning in terms of the exact actions a sign triggers in the music, in order to ensure the least biased interpretation thereof in a system of symbols. By encouraging a necessary knowledge of the composer's language, by labelling a sign with respect to the musical changes it triggers, all of this will adequately follow semiotic principles. For example, in *Exhalation / Expiration,* the Event-type signs referring to structure signify primarily the onset of a new type of harmonic or rhythmic permeation or infusion. This action symbolizes the gradual spreading out of sickness within the healthy organism.

The difficulty in formulating meaning decreases in programme music and in compositions that employ text, and where an analyst can more easily locate a correspondence between musical signs and words. As a consequence of this feature, the predominance of certain signs over others as well as the consistency of their usage by the composer facilitates their eventual classification into a system of symbols.

4.3. *Exhalation – Expiration:* premises of symbolism

4.3.1. Correlation and integration

[40] For Brower's theory, see Brower, Candace. "A Cognitive Theory of Musical Meaning." *Journal of Music Theory* 44.2 (2000): 323-79. Print.

While not sharing J. S. Bach's religious devoutness, my works about death/passing have benefited from the cultural richness of the ancient Thracians' oral Orphic faith. I have incorporated symbolism on marco- and micro-levels throughout *Exhalation / Expiration* by endowing selected temporal, pitch, instrumental and textural musical elements with specific significance, and by relating them to one another. Thus I ensure a continuous presence of symbolic connotations that mirror the development of the music.

While I agree with Juan Eduardo Cirlot, who claims that "the temptation to over-substantiate an argument is one which is difficult to resist,"[41] I dispute the trite axioms such as "Nothing is meaningless or neutral,"[42] which he utilizes to defend his subsequent prolonged discussion concerning the vitality of symbolism. Whereas it is tempting and definitely possible to define every element as a sign and to over-saturate every sign with meaning(s), the symbolism in *Exhalation – Expiration* is founded entirely on the evolving relationship between two notions – health and sickness.

4.3.2. Health and sickness

Exhalation / Expiration does not constitute an attempt to empirically recreate the theory of the hypothetical *persona* in music, as described by Jenefer Robinson,[43] the same *persona* that Stephen Davies successfully rebukes in his book, *Themes in the Philosophy of Music.*[44] Instead, because of their potential for symbolic interpretation, the usage of certain musical processes, pitches, registers and proportions in *Exhalation / Expiration* guarantees the full integration of these metaphysical layers of musical and extra-musical ideas into

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[41] Cirlot, Juan Eduardo. *A Dictionary of Symbols*. Trans. Jack Sage. 2nd ed. London, UK,: Routledge & Kegan Paul, 1962. Print. p. xi

[42] Ibid., p. xxxvi

[43] Robinson, Jenefer. "The Expression and Arousal of Emotion in Music" *Journal of Aesthetics and Art Criticism* 52 (1994): 13-22. Print.

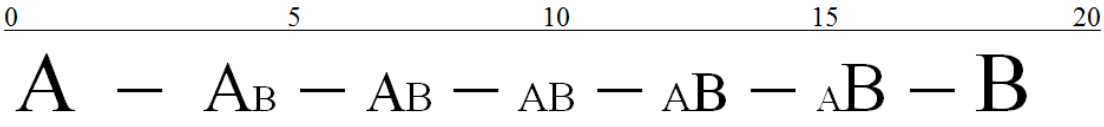
[44] For Davies' reasoning against imagining a hypothetical *persona* in music and following her through the work, see Part Three of Davies, Stephen. *Themes in the Philosophy of Music* Oxford: Oxford UP, 2003. Print.

a single unfolding. The states of "health" and "sickness" are not represented by singular events, but rather by a collection of prevalent occurrences and treatment of musical material.

The music symbolizing health – 'A', consists of regular pulsations, comparable phrase lengths, constant presence of the mid-high and high registers, harmonic movement between harmonies containing different amounts of pitch-classes, and clear separation between adjacent harmonies. In contrast, less perceptible pulsations, elided harmonies and harmonic movement between harmonies containing the same number of pitch-classes typify the music symbolizing the sickness – 'B'. My goal is to elide 'A' and 'B' by means of an interpenetrating harmony and orchestration to create a seamless continuousness from one state to another. The continuous dissolution of the referential harmonies, the regular rhythm, and the sectionalized instrumentation, exhibit the weakening of a person's life-sustaining functions.

4.3.3. Symbolization of death

In *Exhalation / Expiration,* I have designed the relationship between the 'A' music and 'B' music as a symmetrical binary formation. The 'B' material gradually overtakes the 'A' over the course of the work. This binary formation in turn consists of two superimposed structures – harmonic and rhythmic, to be discussed in subsequent chapters. The complete disappearance of 'A' symbolizes the arrival of death. The Event- and Process-type signs denoting the embryonic relationship between 'A' and 'B' refer to the harmonic and rhythmic structures as well as to the form. The diagram shown below, in Example 4.1, exhibits the process of the 'B' engulfing 'A'. Its various stages are separated by dashes with the font size representing the relative amount of 'A' and 'B'. The time line indicates the approximate duration of approximately twenty minutes.



Example 4.1: Relative amount of 'A' and 'B'

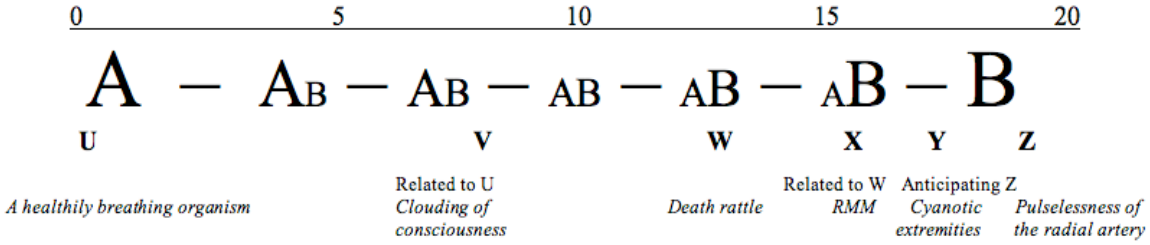
Chapter 5: Analysis – Form

5.1. The six sections

The form superimposed on the symmetrical structure reflects how the five symptoms of terminal cancer, listed above in Chapter 3.2.2, manifest themselves after the sickness has begun to destroy the healthy organism, which appears at the beginning.

The six sections comprising the form are designated with the letters U through Z. Each section lasts shorter than the previous one. The six sections unfold continuously and the clarity of differentiation between adjacent sections and sub-sections diminishes progressively. In contrast to the onset of V and even W, the inception of Z is undistinguishable. This process of gradual blurring between the sections' borders symbolizes the departure of life.[45]

I shall discuss their pacing in more detail in Chapter 7. The next example, Example 5.1, illustrates the relationship between the six sections and the relative amount of 'A' and 'B' material, discussed above, in Chapter 4.3.3.



Example 5.1: The six sections

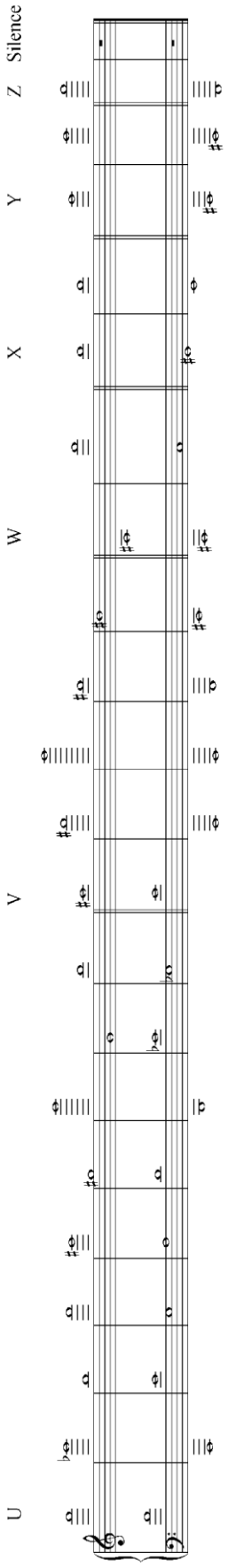
5.2. The shape

I have designed the large-scale shape as a wave. I execute the wave by expanding and compressing the high and low registers. The oscillation periods decelerate throughout the unfolding of *Exhalation / Expiration*. Consequently,

[45] For the fifteen properties of life see Part 1 Chapter 5 of Alexander, Christopher. *The Nature of Order. Book One: The Phenomenon of Life*. Berkeley, CA, USA: Center for Environmental Structure, 2001. Print.

as the changes in register become slower, the wave becomes less perceivable as such. This Process-type sign of deceleration symbolizes the gradual succumbing of the active organism to the power of sickness.

Example 5.2 shows the registral progression or shape throughout *Exhalation / Expiration*. The pitches refer to specific points of registral arrival. The high and low points do not always arrive simultaneously but I treated them as referential in the composition process.



Example 5.2: The shape of *Exhalation / Expiration*

5.3. Section U (measures 1-158)

5.3.1. The seven sub-sections

Section U contains seven sub-sections. The number seven is an Event-type sign that I chose as an external reference to the seventh stage of the doctrine of Thracian Orphism (see above, Chapter 3.2.3). The seven sub-sections symbolize the state of health.

Example 5.3 lists the sub-sections in order of appearance. The sub-sections and their durations are approximated to the nearest bar-line as per the time-code provided by the Sibelius notation software. The titles of the sub-sections specify what the music portrays.

Sub-section:	Measure numbers:	Duration:
Introduction	1-23	45 sec.
A healthy body	24-73	2 min. 40 sec.
A resting body	74-89	54 sec.
First Inhale/Exhale	90-101	38 sec.
Second Inhale/Exhale	102-121	1 min. 2 sec.
Third Inhale/Exhale	122-143	1 min. 14 sec.
Fourth Inhale/Exhale	144-158	47 sec.

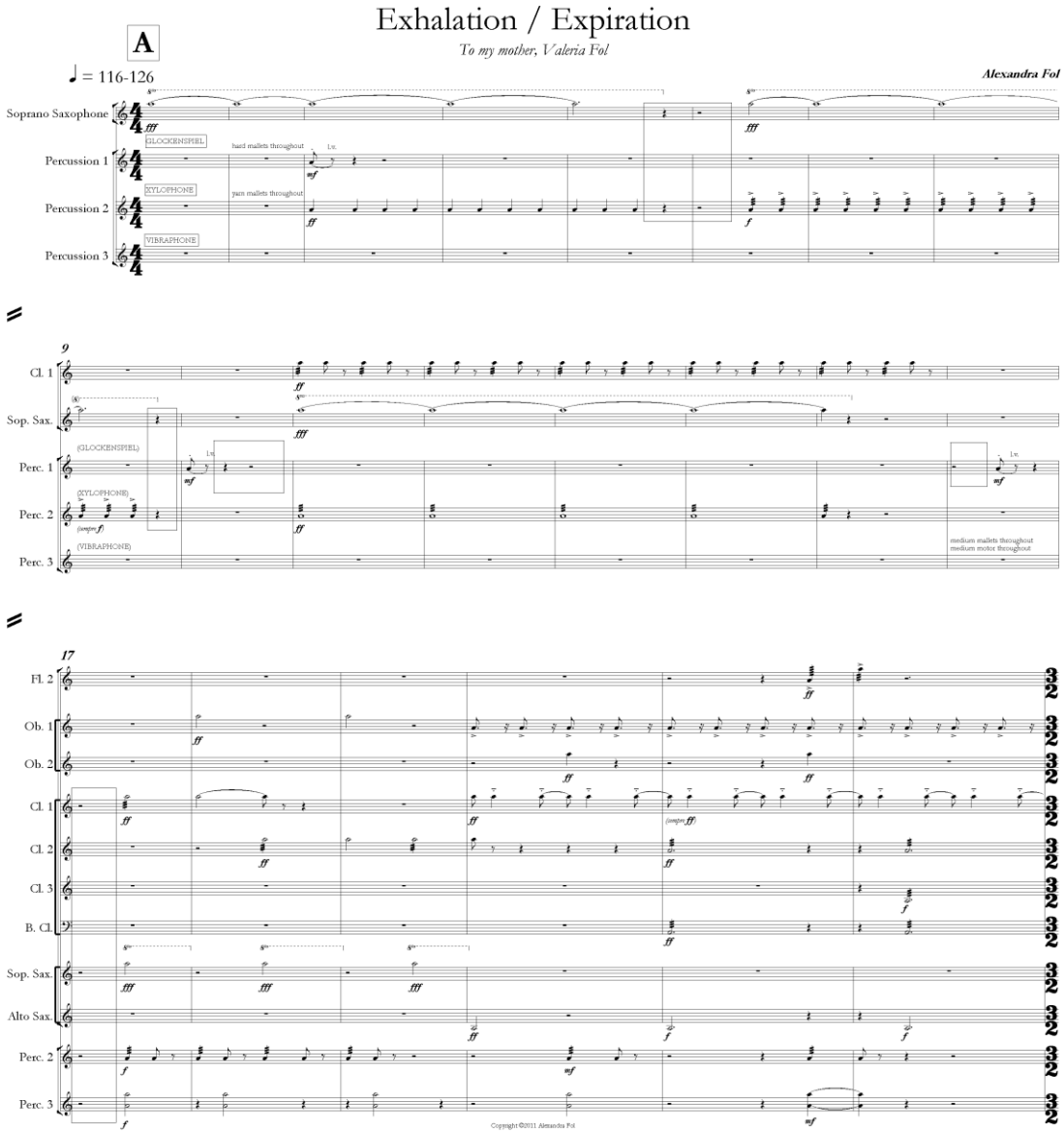
Example 5.3: The seven sub-sections of Section U

5.3.2. Symbolization of the opening

The symbolization of material in the Introduction depends on the single pitch-class "La" it contains. As explains in 3.2.3., "La" delineates the ascent of the Son-Sun born from the Immaculate Conception of the Great Goddess-Mother. This fifth stage occurs after the singular cosmogonic act of the creation of the World. With Fire – one of the primordial forces of nature – symbolizing the chthonic image of the Son-Sun, commencing *Exhalation / Expiration* with "La" emerged as the best decision to symbolise the onset of Alexander Fol's earthly life. The texture thickens with other La's accumulating in more and more instruments throughout the Introduction to suggest the Sun's gradual ascent from behind the horizon until it beams in its full glory at the beginning of the second sub-sections.

The silences interrupting the "La", during the first seventeen measures of the work, symbolize more specifically the twilight before the sun appears and ascends in its full glory. Once beaming, no more silences appear until the organism's ultimate demise at the end of *Exhalation / Expiration*, where life, portrayed by sounds, departs and leaves silence (death) behind.

In Example 5.4, I display the introduction in full. The silences are indicated with rectangles.



Example 5.4: *Exhalation / Expiration,* Introduction, complete (mm. 1-23)

5.3.3. Other symbolization in Section U

While the Introduction relies on a pitch-class to symbolize the music, the predominant method of symbolization of material in five out of the seven sub-sections in Section U is confined to tempo. The second sub-section, "A healthy body", is structured on regular oscillations happening in three simultaneous tempi, and symbolizing different functions of the human body. In addition, sub-sections four through seven (measures 90-158) comprise phrases of different durations, alternating between written out accelerations and decelerations against a steady pulse of quarter-notes. The accelerations and decelerations symbolize a human's inhaling and exhaling. I shall discuss the issue of tempo and phrase pacing further in Chapter 7.

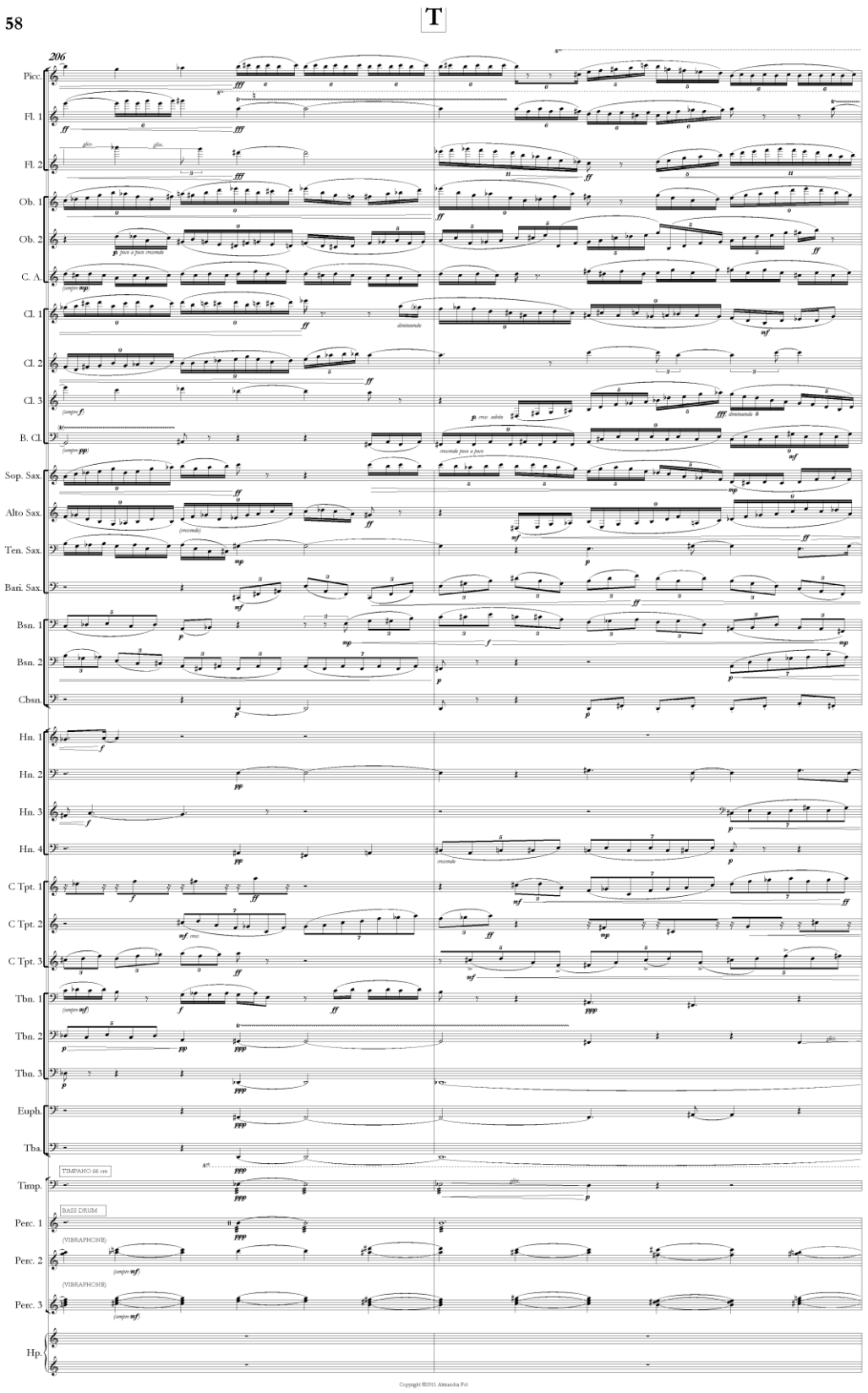
The material in the third sub-section consists of pitches fixed in register and longer in duration compared to the preceding and subsequent sub-sections. The resulting sudden drop of surface activity serves as an Event-type sign symbolizing the decrease of movement experienced by a "resting body".

5.4. Section V (measures 159-261)

Section V spans on both sides of the durational midpoint standing out as one of the pivotal structural and formal focal points. Consequently, I have designed the first sub-section of Section V to prepare for the arrival of the midpoint and the second one to transition into Section W, at measure 262.

I underline the arrival of the midpoint with an Event-type sign and a Process-type sign. The Event-type sign pertains to a sudden drop in register by an octave and a half after a preceding gradual downward expansion. The Process-type sign concerns the structural placement of the aggregate in the midst of a harmonic progression (see Chapter 6.4.3, below) signifying the equalization of the amount of 'A' and 'B' material.

The extremely low long notes, as seen next in Example 5.5, beginning at measure 206 coupled with the presence of all twelve pitch-classes, again at measure 206 symbolize the impending doom.



Example 5.5.: *Exhalation / Expiration*, the midpoint (mm. 206-207)

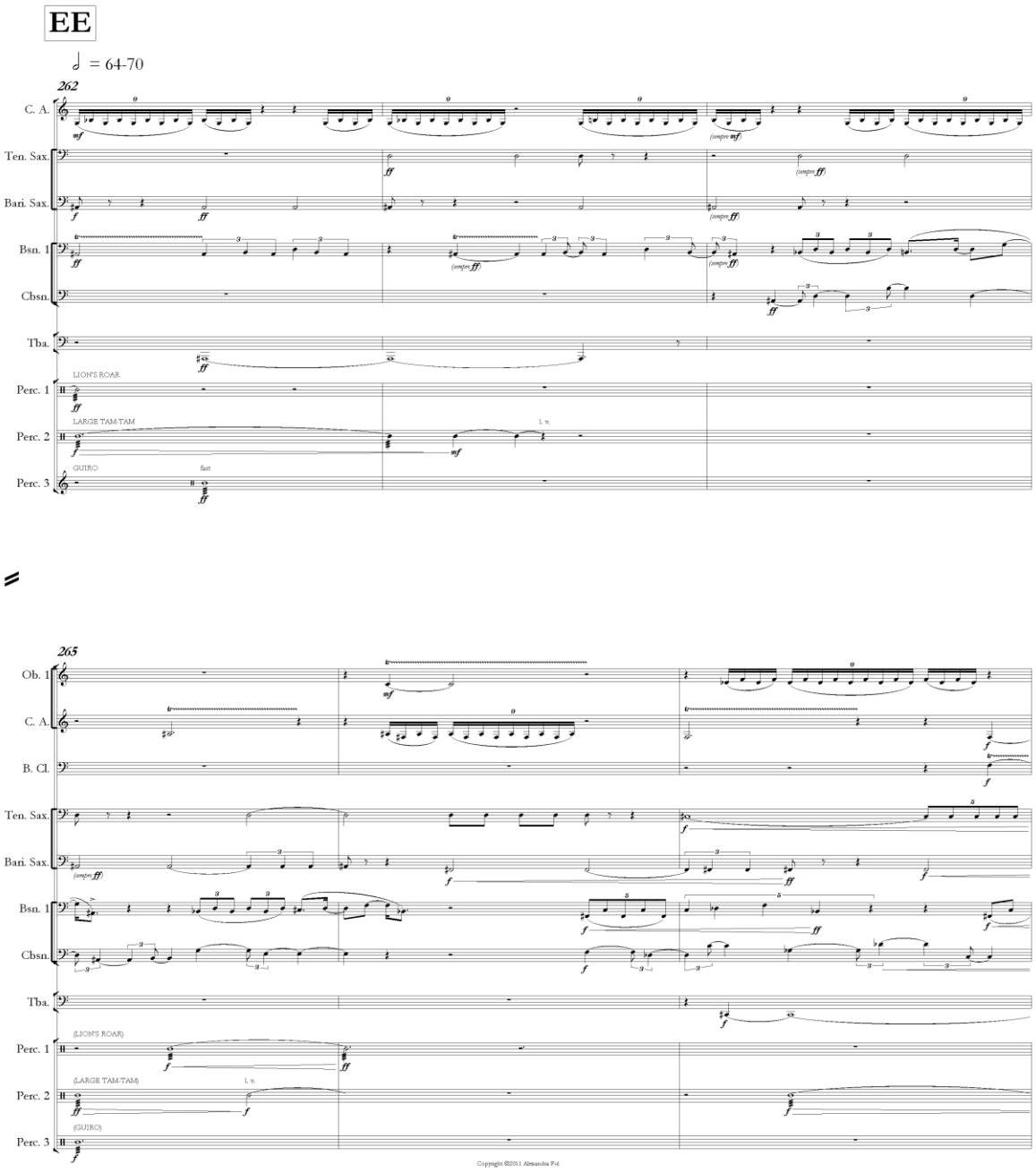
During the second sub-section of Section V, I gradually remove the higher register completely and thin out the texture in order to complete the transition into section W.

5.5. Section W (measures 262-325)

Section W marks the onset of a slow registral ascent that continues throughout Section X (measures 326-361), and which serves as an eventual transition to Section Y (measures 362-384). In addition, in Section W, I have introduced rapid immediate pitch repetitions and unpitched percussion as a metaphor for the "death rattle". Its eventual disappearance by the end of *Exhalation / Expiration* signals the arrival of death.

The inception of Section W at 13 min. 34 sec. corresponds to the last clearly distinguishable commencement of a section or sub-section. During the remainder of the composition, musical components elide in order to underline the obscuring of vital signs.

Example 5.6 below demonstrates the launch of the upwards registral expansion and the onset of the unpitched percussion following the beginning of Section W.



Example 5.6: Onset of Section W – "Death rattle" (mm. 262-267)

5.6. Sections X, Y and Z (measures 326-408)

5.6.1. The shared processes

The unfolding of Sections X through Z is subject to the implementation of shared processes that signify the gradual cessation of activity. The processes include (1) expansion of register both upwards and downwards, (2)

deceleration of harmonic rhythm, (3) simultaneous occurrence of oscillations of different speeds and (4) implementation of sparser textures. The slow pacing and the elision between the elements guarantee the increasingly imperceptible development of material.

5.6.2. Symbolization of the ending

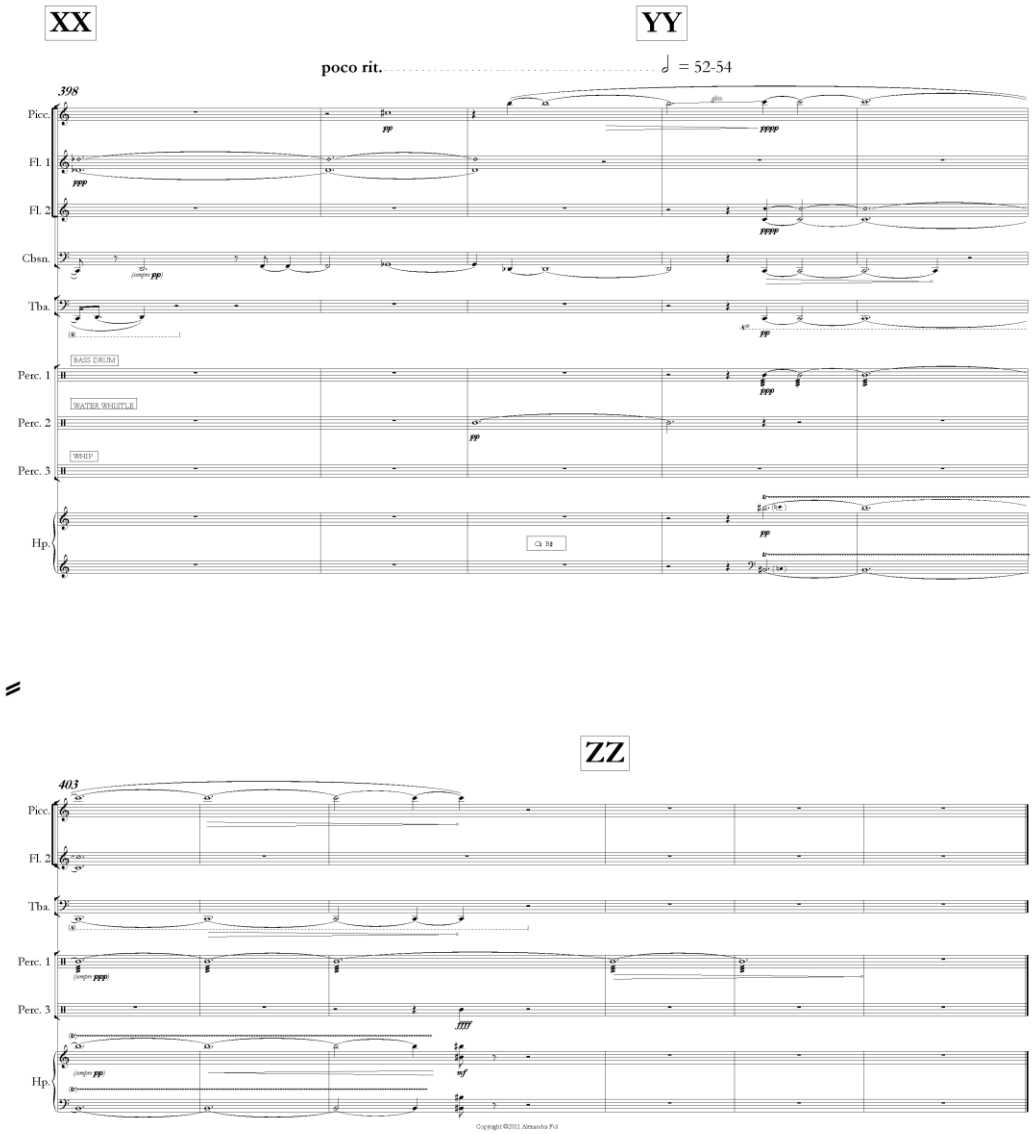
At the very end of *Exhalation / Expiration,* I recall the significance of the opening A-natural and the silences which had interrupted it by finishing the composition with two Event-type signs – an octave of C-naturals and the subsequent silence.

The closing C-natural at measures 401-405 carries two external references – a concept found in Thracian Orphism together with an actual pitch which, according to modern tuning standards is called "Do". This two-fold symbolism serves as a tribute to both Alexander Fol and Georgi Kitov.

As the last defined pitch-class of the Thracian mode, "Do" symbolizes the sacred marriage between the Son-Sun and the Great Goddess-Mother. While the arrival of the "Do" symbolically indicates the end of the pitch-series, and consequently the end of the piece, we Orphists now know that the sacred union will give birth to a new life, the life of a King. In addition, the "Do" also recalls the octave C ringing from the life support machine when the last signal of the human heart fades away. The bass drum following the "Do" symbolically differentiates between the stopping of life and the subsequent unplugging of the life support machine.

The silence which is shown by means of the empty measure 408 signifies the darkness that settles after the departure of the last solar rays and symbolizes death herself. The Sun-God – equal to the Great Goddess-Mother-Cosmos (Mountain, Earth) – forever relives the cycle birth-death-new birth in his solar image.

The ending, as seen in Example 5.7, which I chose for my work about exhalation and expiration implies the philosophical stance of the Orphic faith where, after the ending of a piece, a new birth – a new "La" – will occur in a different time and space and the cycle of life will begin anew.



Example 5.7: *Exhalation / Expiration*, the ending (mm. 398-408)

Chapter 6: Analysis – Harmony

6.1. Creating simultaneities

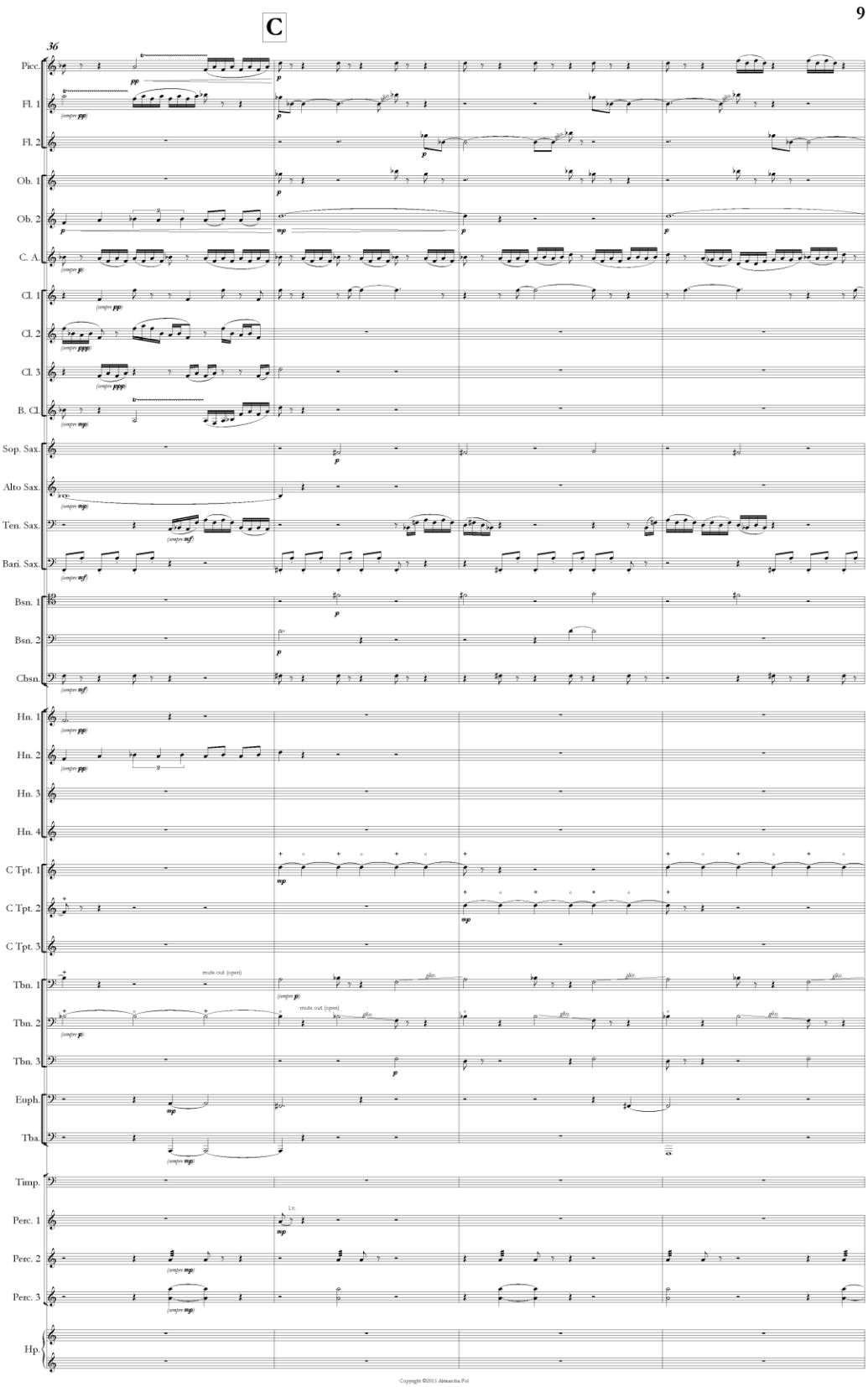
I found the harmonic language of *Exhalation / Expiration* on two referential pitch-class sets, {0,1,4} and {0,1,5}. And I create derivative sets by superimposing transpositions or inversions of these trichords on one another.

A complete harmony consists of at least two trichords superimposed one upon the other resulting in a simultaneity that contains at least 4 pitch-classes and avoids interval-class 2 in its normal order. In addition, for a harmony to be complete, every pitch-class of the harmony should be explainable as a component of a {0,1,4,} or a {0,1,5} trichord.

The possibility of mapping a harmony onto itself under transposition or inversion indicates that each of these harmonic transformations should be treated as a change in function. I conceived each harmony of the composition as being pitch-specific and consequently my treatment of every harmony resembles {0, 3, 7} trichords in tonal syntax, a minor triad. However the re-voicing of the normal order within each simultaneity provides a particular benefit to my system of harmonic construction over the tonal one with regard to the possibilities of reinterpreting every harmony as a sub-set of a different one. While a harmony containing multiple pitch-classes can be constructed in a number of ways, I ensure that my foreground movement underlines the three interval classes essential to my harmonic construction – interval class (i.c.) 1, 3 and 4.

At the beginning of *Exhalation / Expiration* I introduce the pitch-classes of the first complete harmony in three steps, thus offering a clear example of the process of harmonic creation. At the beginning of the sub-section "A healthy body" of Section U (measures 24-73), the three pitch-classes form a {0,1,5} trichord in set I10. The complete first harmony, created by the

superimposition of {0,1,4} in set T2, I10 and I6 arrives on the downbeat of measure 37. Example 6.1 below illustrates this exact moment.

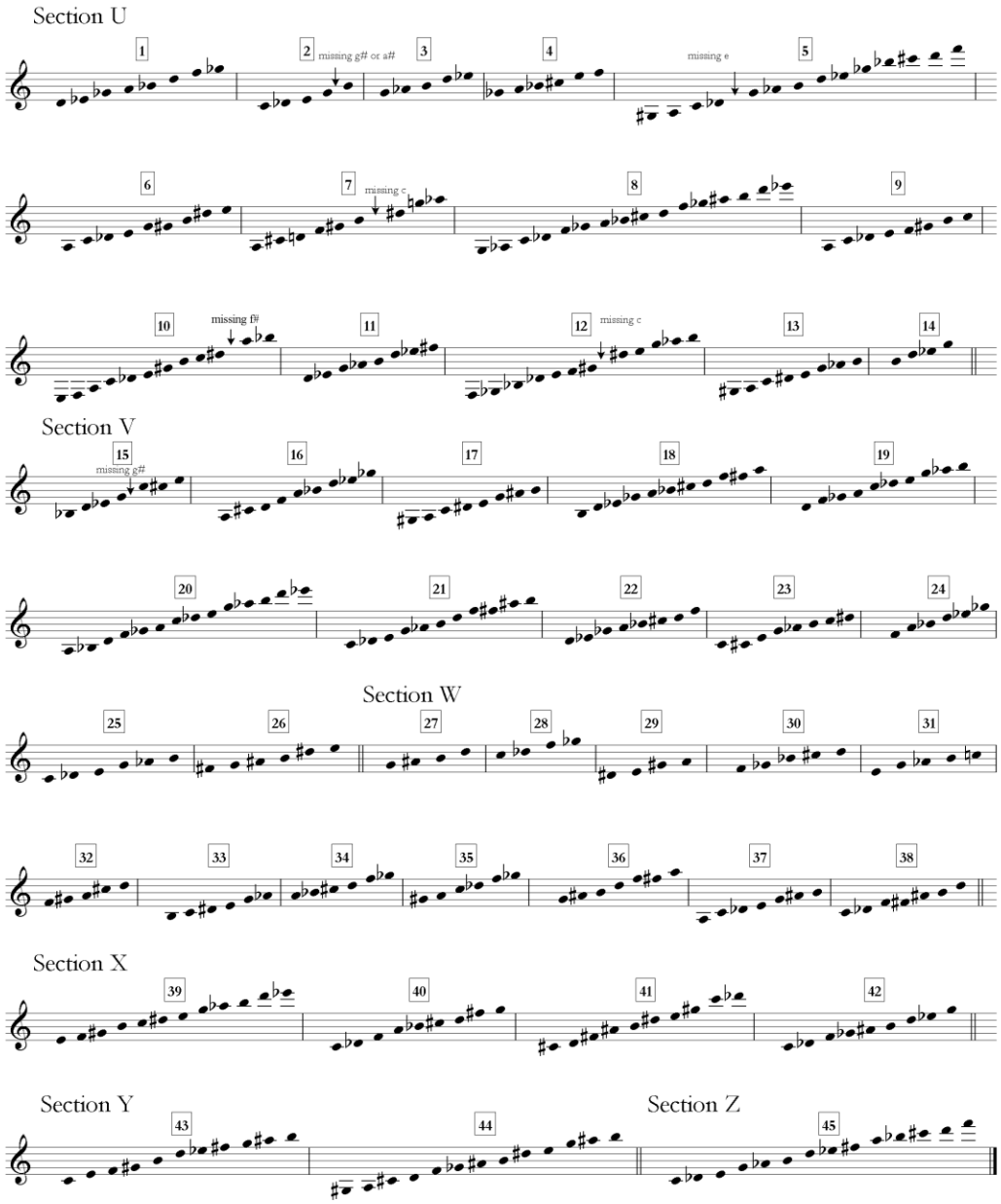


Example 6.1: The onset of the first complete harmony arrives at m. 37

6.2. Chain of harmonies and their realization

My creation of harmonies resembles a construction of modes without octave equivalence and no constant range. Such influence becomes increasingly obvious towards the middle of the work when each part begins to employ a progressively larger harmonic subset. The increasing range, resulting in multiple instruments covering the same range, allows for the implementation of orchestrational processes spanning the entire composition (see Chapter 8.2.1. and 8.2.2. below).

Example 6.2 below cites all forty-five harmonies represented as modes found in *Exhalation / Expiration* as I initially conceived them, stemming from the two referential pitch-class sets, {0,1,4} and {0,1,5}. I created the harmonies independently of the pitch-shape (discussed in 5.2 above) and notated them in treble clef as pitches.



Example 6.2: The harmonies of *Exhalation / Expiration*

6.3. Treatment of octave doublings

My acceptance of the possibility of pitch-class doublings within a harmony is adapted from the pre-compositional procedures of composer Thierry Tidrow, as described in the text called "Method A" of his unpublished paper "The

Wondrous World of Third Stacking."[46] Even though Tidrow's method is designed to serve his binary system for creating simultaneities, I have managed to successfully amend the afore-mentioned technique to accommodate the three different elements present in mine.

According to Tidrow, "the doubled note possesses a new function, that is, as a link to its neighbour-notes. […] The advantage of using such a chord is as follows: one can arrive at a chord of a certain breadth, all the while avoiding its implied density. The equivalence also gives way to emphasis on other intervallic relationships in the chord."[47]

In my harmonic system, the 'doubled notes' (as Tidrow describes a pitch-class repetition) allow for the construction of simultaneities where the interval variety is not directly related to their pitch-class density. I do not employ Tidrow's proposed terminology and classification, but I consider the implications of his research in my treatments of register, voice-leading and orchestration. Consequently, I use octave doublings in my harmonies in addition to employing them as an orchestrational tool aimed at achieving textural density.

When realizing the harmonies, I employ the necessary doublings at the octave to achieve the desired density while avoiding for most of the work interval-class 2 in the individual parts in order to preserve the harmonic profile (see Chapter 8.5, below).

Below, in Example 6.3, I illustrate this method by providing an example of the realization of harmony number 2. It comprises five pitch-classes and also exhibits a cardinality of five (see above, Example 6.2). In this 4-measure excerpt, spanning two-and-a-half octaves, I have used but a single pitch C (C5

[46] For more information, see Tidrow, Thierry. "Method A" from "The Wondrous World of Third Stacking." Unpublished. 2007. Cited with permission.
[47] Ibid. p. 2

in Trumpet 2, m. 79), and a single pitch C-sharp/D-flat (Oboes 1 and 2, Trumpet 2) but both G4 (English Horn, Clarinet 1, Bass Clarinet, Horns 2 and 4) and G5 (Piccolo, Flutes 1 and 2, Clarinets 2 and 3).

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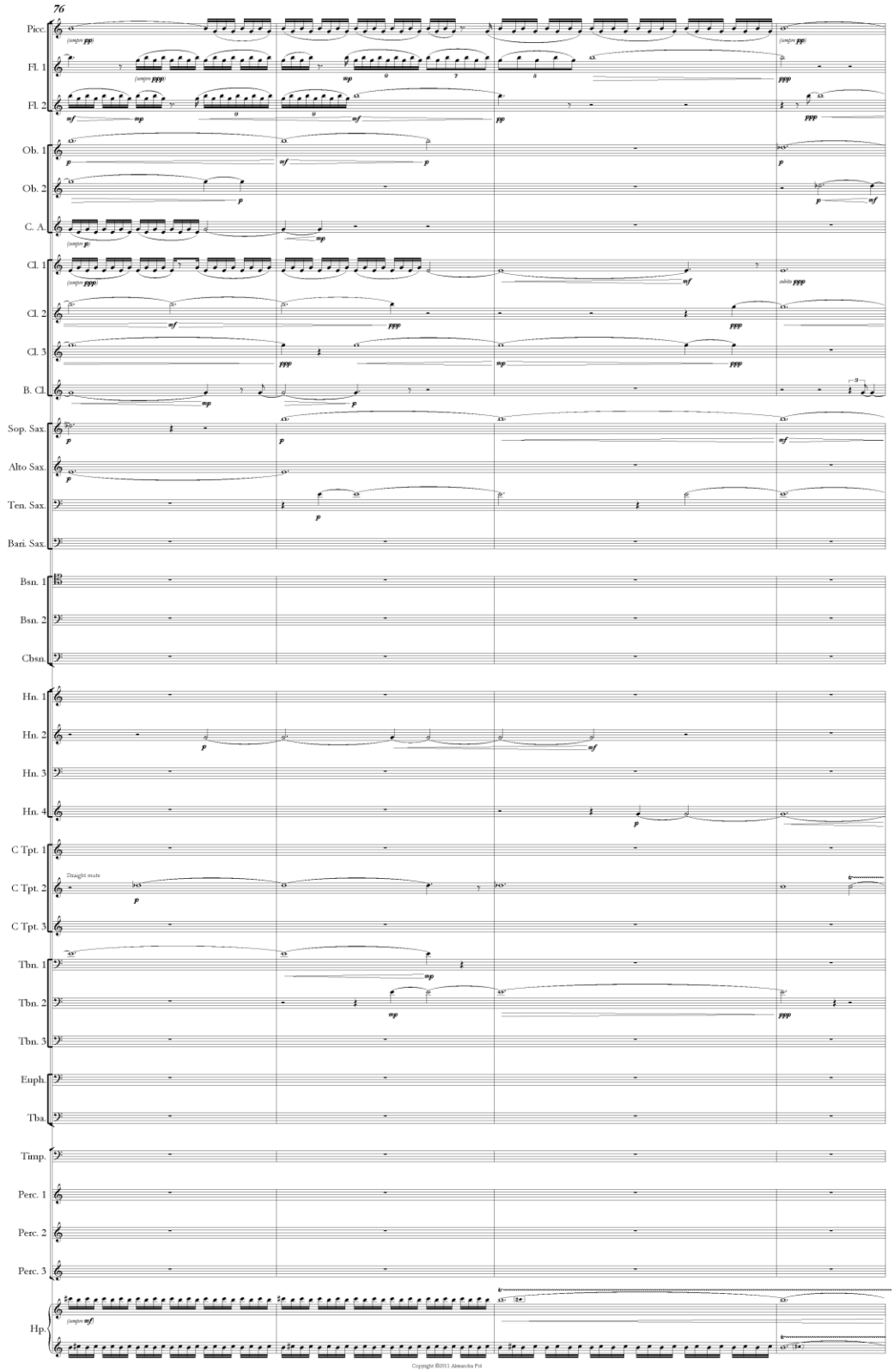


Example 6.3: An excerpt of the realization of the second harmony (mm. 76-79)

I allow for all necessary octave doublings permitting the possibility of a massively tense texture described best as a swelling and evolving sound-mass. This dense sound-mass coupled with the rhythmic structure (see specifically Chapter 7.4.1 and 7.4.2, below) assist in creating a multi-layered sound-world of shimmering and pulsating groups of tones (analyzed as harmonic sub-sets). The sound-mass thins out gradually during the second half of *Exhalation / Expiration* (see Example 8.7, below) while the number of pitch-classes per harmony continuously increases, resulting in diminishing harmonic clarity. I calculated an equal duration of both finite processes, which support the same metaphor of eradication of life as the relentless 'shimmering' decelerates and expires.

6.4. Harmonic progressions

6.4.1. Pitch-class content

A central part of the harmonic succession of *Exhalation/Expiration*, the variations of the pitch-class densities, follows three contiguous developments, harmonic progression types that I name (1) fluctuating, (2) bell curve and (3) semi-parabolic. The first two correspond to the formal sections U and V respectively. The semi-parabolic harmonic progression spans the remaining four formal sections – W, X, Y, Z (measures 215-430). They are related to one another by proportions to be discussed in Chapter 7.

Example 6.4 below lists the number of pitch-classes of each harmony in *Exhalation/Expiration.* To substantiate the metaphor of sickness penetrating into a healthy body and the latter's decreasing functions, I gradually modify the process of moving between adjacent harmonies from an instantaneous change to a gradual substitution of pitches. The measure numbers that I have included in the left column of this example indicate each harmony's planned arrival, approximated to the preceding bar-line. This virtual onset becomes increasingly difficult to perceive, because the harmonies begin to overlap

progressively as the piece continues to unfold. I will address this alteration in the following chapter from the viewpoint of harmonic rhythm.

For easy navigation, I have indicated in the left column the harmony which marks the arrival of every section. The middle column shows the number of pitch-classes in every harmony as well as whether the harmony in question is complete or not. The diminishing number of harmonies per section symbolizes the deceleration of physical activity.

Harmony No:	Number of pitch-classes of harmony present:	
1 Section U (incomplete harmony)	1 (incomplete harmony)	Fluctuating
Still 1 (incomplete harmony) at mm. 24	3 (incomplete harmony, at least 1 pc missing)	
1 at measure 37	6	
2 at measure 74	5 (incomplete harmony, 1 pc missing)	
3 at measure 90	5	
4 at measure 98	6	
5 at measure 102	11 (incomplete harmony, missing e-natural)	
6 at measure 115	8	
7 at measure 122	8 (incomplete, missing c-natural)	
8 at measure 129	11	
9 at measure 138	7	
10 at measure 141	9 (incomplete, missing f#)	
11 at measure 144	6	
12 at measure 151	9 (incomplete, missing c-natural)	
13 at measure 156	7	
14 at measure 156 (sic!)	4	
15 (first harmony of section V) at mm. 159	7 (incomplete, missing g-sharp)	Bell Curve
16 at measure 166	7	
17 at measure 174	8	
18 at measure 183	8	
19 at measure 195	10	
20 at measure 206	12	
21 at measure 223	10	
22 at measure 234	7	
23 at measure 244	7	
24 at measure 252	6	
25 at measure 257	6	
26 at measure 260	6	
27 (first harmony of Section W) at mm. 262	4	Semi-parabolic
28 at measure 266	4	
29 at measure 269	4	
30 at measure 272	5	
31 at measure 276	5	
32 at measure 280	5	
33 at measure 284	6	
34 at measure 290	6	
35 at measure 295	6	
36 at measure 302	7	
37 at measure 310	7	
38 at measure 318	7	
39 (first harmony of Section X) at mm. 326	8	
40 at measure 334	8	
41 at measure 345	9	
42 at measure 354	9	
43 (first harmony of section Y) at mm. 362	10	
44 at measure 373	11	
45 (single harmony of section Z) at mm. 385	12	

Example 6.4: The unfolding of pitch-class density in *Exhalation / Expiration*

Upon analyzing the three harmonic progression types, one can conclude that the first two, U and V highlight a process of harmonic expansion followed by contraction. In section U, this process is obvious on the background level, but irregular on the foreground level whereas in section V, the numeric curve representing the process becomes more consistent (hence the name bell-curve). The semi-parabolic harmonic progression features only a harmonic expansion in terms of number of pitch-classes per harmony, which is both consistent and regular – three tetrachords, three pentachords, three hexachords and three heptachords, two octachords and two nonachords, one decachord, one undecachord and ultimately the dodecachord (aggregate).

6.4.2. The fluctuating harmonic progression

The fluctuating progression (measures 1-156) mirrors approximately the "inhale-exhale" metaphor as the pitch-classes gradually accumulate in one or more consecutive simultaneities and then disperse in others during each "inhale-exhale" cycle. However, the process does not exactly mirror a fixed pattern where either the "inhale" or the "exhale" match correspondingly denser or thinner harmonies or a set numeral ratio. Even so, an underlining connection between them exists, but it concerns the harmonic rhythm rather than the pitch-class content (see Chapter 7).

The fluctuating progression contains thirteen harmonies, among them seven incomplete ones, counting the gradual presentation of number 1 at the onsets of 'Introduction' and 'A healthy body' respectively. After the Introduction, the incomplete harmonies occur every second or third of the progression. The eighth incomplete harmony, which marks the beginning of the bell-curve harmonic progression, also follows this tendency. Example 6.5 below constitutes an expansion of Example 6.4 and provides a detailed overview of the relationship between the "inhale-exhale" cycles and the harmonies while specifying which of the latter ones are complete and which ones are not.

Harmony No.	Sub-section:	Number of pitch-classes of harmony present:
1 (incomplete harmony)	Introduction	1 (incomplete harmony)
Still 1 (incomplete harmony)	A healthy body	3 (incomplete harmony, at least 1 pc missing)
1		6
2	A resting body	5 (incomplete harmony, 1 pc missing)
3	First inhale	5
4	First exhale	6
5	Second inhale	11 (incomplete harmony, missing e-natural)
6	Second exhale	8
7	Third inhale	8 (incomplete, missing c-natural)
8		11
9	Third exhale	7
10		9 (incomplete, missing f#)
11	Fourth inhale	6
12		9 (incomplete, missing c-natural)
13		7
14	Fourth exhale	4

Example 6.5: Representing metaphorically inhaling and exhaling

6.4.3. The bell-curve and semi-parabolic harmonic progressions

The bell-curve and semi-parabolic progressions centre upon the structural placement of the aggregate in each of them. As seen earlier in Example 6.4, the aggregate occurs twice in *Exhalation / Expiration* – during the bell-curve and the semi-parabolic harmonic progressions.

The bell-curve harmonic progression is the shortest of the three types. It features mostly complete harmonies organized in a symmetrical arrangement where the pitch-class cardinalities gradually expand to the temporal midpoint of *Exhalation / Expiration* and then contract down to the onset of the last one-third of the work. The densest harmony, number 20, arrives sixth out of twelve, and it enfolds the first of two appearances of the aggregate. This first appearance symbolizes the theoretical equality between the 'A' and 'B' music, which remains impossible to sustain as the pitch-class density and the rhythmic processes shift the equilibrium more and more in favour of the 'B' music.

The semi-parabolic harmonic progression encompasses twelve harmonies (numbers 27 to 45) just like the bell curve one, but as explained above, spreads over four formal sections. Its expansion to the second and final appearance of the aggregate is more gradual, because it includes simultaneities containing every number of pitch-classes from four to twelve. Whereas the bell curve harmonic progression reaches the aggregate half-way through its unfolding, the semi-parabolic progression requires its entire duration to arrive at it. The second appearance of the aggregate signifies the cessation of harmonic development and symbolizes the eradication of life.

The two manifestations of the aggregate, number 20 and number 45, differ in their purpose and, consequently, treatment. The first aggregate balances techniques used to personify the 'A' music with ones exemplifying the 'B' music. This first aggregate's partitioning into subsets assures that the harmonic profile – or rather the listener's perception thereof – remains but partially blurred. Please recall that Example 5.5 above illustrates the onset of harmony number 20, the first aggregate appearance coinciding with the midpoint of *Exhalation / Expiration*.

The second aggregate, number 45, arrives at the end of an irremediable process of obscuring the harmonic clarity by thickening the harmonies and deceleration of the harmonic rhythm (see Chapter 7). Its complete pitch-class component is never exposed simultaneously. Having completely exhausted the possibility of harmonic development, the music cannot but come to an end.

6.5. Types of harmonic movement

Two types of harmonic movement in *Exhalation / Expiration* are differentiated – Varied-density harmonic movement and Non-expansive harmonic movement. The Varied-density harmonic movement occurs between adjacent harmonies containing a different number of pitch-classes, whereas the Non-

expansive harmonic movement describes a sequence between harmonies containing the same number of pitch-classes.

At the background level, the Varied-density harmonic movement and the Non-expansive harmonic movement prevail during the 'A' and 'B' music respectively. They represent on a structural level the idea of infection and gradual expiration. On the middleground level, the three harmonic progression types, described above, exhibit both types of harmonic movement to various degrees. The structural midpoint as it pertains to the harmonic profiles of the A music and B music coincides with the temporal midpoint, located at harmony number 20, the "top" of the bell-curve harmonic progression.

The Varied-density harmonic movement predominates during the fluctuating harmonic progression with the exception of the change between harmonies number 6 and number 7, each containing eight pitch-classes. The presence of the Non-expansive harmonic movement increases rapidly during the bell-curve harmonic progression, symbolizing the advance of the mortal sickness and the shift from 'A' to 'B' music.

One indication of this alteration is exemplified by the change of ratios between the Varied-density and Non-expansive harmonic movements in the first and the second half of the bell-curve harmonic progression respectively. Whereas earlier the midpoint the ratio was 1:4 in favour of the Varied-density movement, this ratio now evens out to 1:1, and so forth.

The Non-expansive harmonic movement preponderates over the Varied-density movement during the semi-parabolic harmonic progression in a ratio of 5:4. Should the semi-parabolic progression have encompassed a single formal unit like the two preceding ones do, this ratio would have much higher, that is, at 2:1. Nevertheless, during the semi-parabolic progression, the Non-expansive harmonic movement seems to prevail at a much higher rate than 5:4

or even 2:1, due not only to the higher harmonic density but also to the constant deceleration, low register and instrumentation, which will be addressed in detail later on.

6.6. Sharing of pitch-classes

The thicker the harmonies become, the greater the challenge for the human ear to differentiate between their pitch-class content. The increasingly anticipated harmonic development in general, and the pitch-class density in particular, could potentially stultify harmonic variety. To retain maximally the likelihood for aural harmonic differentiation and, consequently, to retain a listener's interest in following the process of exhausting the musical material to the very end, I followed a compositional method of balancing the opportunity of reinterpreting one harmony as a subset of a denser one with the necessity of maximizing the pitch variety, especially in the second half of the piece. I also use common pitch-classes as a way to accomplish efficient voice-leading and simultaneously highlighting a new pitch-class or pitch-classes.

Example 6.6 below lists the number of common pitch-classes between each harmony of *Exhalation / Expiration* and provides a means to visualize the increase and decrease of pitch-class density over the course of the composition. Upon comparison with Example 6.4, one can see that the numbered sequence of shared pitch-classes follows roughly the harmonic density as discussed in 6.4 and 6.5. As in previous examples, I have included in brackets which harmony designates the onset of a section in order to facilitate the navigation.

Adjacent harmonies	Measure numbers encompassing the adjacent harmonies (increasingly approximate as the work progresses)	Adjacent pitch-classes											
1 and 2	1 to 89	0											
2 and 3	74 to 97			2									
3 and 4	90 to 101	0											
4 and 5	98 to 114						5						
5 and 6	102 to 121								7				
6 and 7	115 to 128							6					
7 and 8	122 to 137									8			
8 and 9	129 to 140							6					
9 and 10	138 to 143								7				
10 and 11	141 to 150				3								
11 and 12	144 to 155						5						
12 and 13	151 to 155 (sic!)						5						
13 and 14	156				3								
14 and 15 (first harmony of Section V)	156 to 165				3								
15 and 16	159 to 173					4							
16 and 17	166 to 182				3								
17 and 18	174 to 194					4							
18 and 19	183 to 205							6					
19 and 20	195 to 222											10	
20 and 21	206 to 233											10	
21 and 22	223 to 243						5						
22 and 23	234 to 251			2									
23 and 24	244 to 256		1										
24 and 25	252 to 259	0											
25 and 26	257 to 261				3								
26 and 27 (first harmony of Section W)	260 to 265				3								
27 and 28	262 to 268	0											
28 and 29	266 to 271	0											
29 and 30	269 to 275	0											
30 and 31	272 to 279	0											
31 and 32	276 to 283		1										
32 and 33	280 to 289		1										
33 and 34	284 to 294	0											
34 and 35	290 to 301					4							
35 and 36	295 to 301				3								
36 and 37	302 to 317					4							
37 and 38	310 to 325					4							
38 and 39 (first harmony of Section X)	318 to 333					4							
39 and 40	326 to 344					4							
40 and 41	334 to 353						5						
41 and 42	345 to 361								7				
42 and 43 (first harmony of Section Y)	354 to 372									8			
43 and 44	362 to 384										9		
44 and 45 (single harmony of Section Z)	373 to 408												11

Example 6.6: Shared pitch-classes between adjacent harmonies

A general tendency emerges, partially dependent on the finite number of pitch-classes available in the equal-temperament system. Whereas it is

mathematically possible to completely avoid pitch-class repetition when using any simultaneity no denser than a hexachord, a closer comparison of Example 6.3 with Example 6.5 reveals that there is a general tendency in *Exhalation / Expiration*: the denser the sequence of harmonies, the more pitch-classes they share. This propensity allows for the creation of the steadily swelling texture relevant to the thematic and musical idea of one type of material overtaking another.

To avoid diminishing the harmonic drive and the prospect of harmonic stagnation especially with the advancing of the composition, the gradual rise of shared pitch-classes remains controlled. A clear example of this control can be observed by following the semi-parabolic harmonic progression. The percentage of shared pitch-classes between adjacent harmonies exceeds fifty for the first time at the arrival of harmony number 38; it reaches two thirds at harmony 41; and it only exceeds this ratio with the arrival of section Y (at measures 365-400) when the harmonic density renders a lower ratio unattainable.

The increasing number of pitch-classes per harmony and number of shared pitch classes between adjacent harmonies suggest that the harmonies will become gradually undistinguishable with the progression of the piece. This Process-type sign symbolizes the diminishing strength of the body's life functions.

A logical organization of the harmonic language is but one of the necessary means to sustain *Exhalation / Expiration*. A second layer of structural organization assures the treatment of functional harmonies through time on a macro- and micro-levels. This layer is discussed in the following chapter, Rhythm.

Chapter 7: Analysis – Rhythm

7.1. Pacing of the six sections

I have designed the background pacing of the six sections, U to Z, to quicken over time. Consequently the duration of each subsequent section and the ending silence diminish in comparison to the preceding one. The changing tempi, to be discussed in 7.4 below, result in fluctuations with respect to the running time in performance.

Example 7.1 below lists the sections' absolute durations and the measures they encompass. I have approximated the durations to the subsequent bar-line as per the time-code calculations provided by the Sibelius notation software.

Section:	Measure numbers:	Duration:
U	1-158	8 min. 1 sec.
V	159-261	5 min. 33 sec.
W	262-325	3 min. 19 sec.
X	326-361	2 min.
Y	362-384	1 min. 16 sec.
Z	385-407	1 min. 18 sec. [*sic*]
Silence	408	3 sec.

Example 7.1: The pacing of the six sections

These six gradually shortening sections comprise overlapping Process-type signs and symbolize the increasing acceleration and irreversible spread of the sickness through the human body. The silence represents the absence of life. This symbolism adds to the significance of the diminishing number of harmonies per section, which, as discussed in Chapter 6, represent the slowing down of physical activity.

7.2. 'Inhales' and 'exhales' in Section U

Section U contains eight phrases of varying durations, alternating between written out accelerations and decelerations that symbolize a human's inhaling and exhaling. I underline the relatively usual noise increase towards the end of inhales and the gradual noise decrease at the end of exhales by

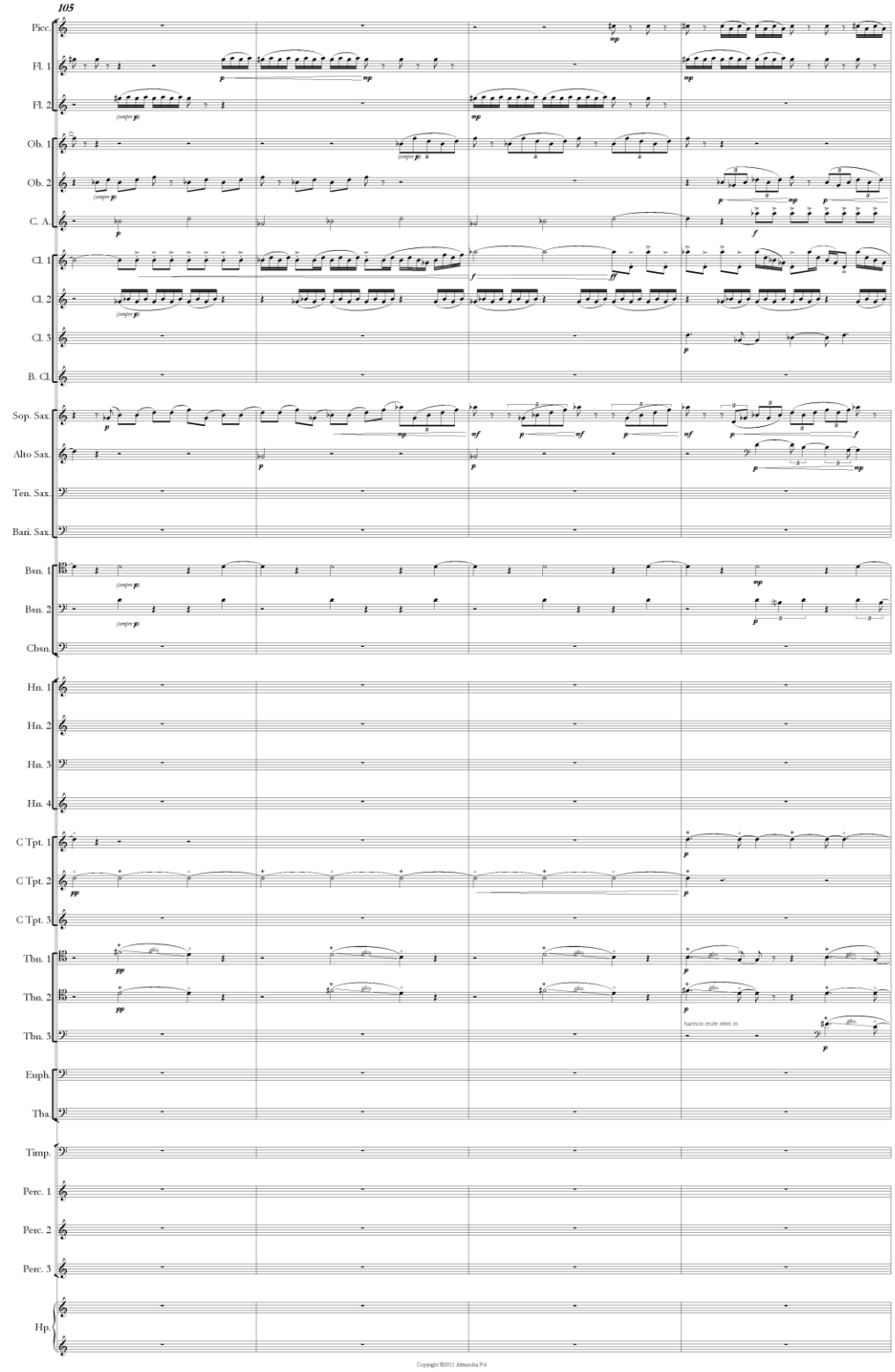
correspondingly adding and subtracting instruments. The gradually changing ratio between the durations of the "inhales" and "exhales" in favour of the inhales symbolizes the first noticeable signs of an illness, when someone who is still physically strong conscientiously takes deep breaths, but fails to control his exhales.

The 'inhales' and 'exhales' begin after "A resting body" and finish with the arrival of Section V. Example 7.2 below lists the proportions of the 'inhales' and 'exhales', their length and duration approximated to the nearest bar-line.

'Inhales' and 'Exhales':	Measure numbers:	Duration:
First inhale	90-97	25 sec.
First exhale	98-101	12 sec.
Second inhale	102-114	41 sec.
Second exhale	115-121	21 sec.
Third inhale	122-137	55 sec.
Third exhale	138-143	19 sec.
Fourth inhale	144-156	42 sec.
Fourth exhale	157-158	7 sec.

Example 7.2: Pacing of the 'inhales' and 'exhales'

I execute the accelerations and decelerations mentioned above by writing rhythmic accelerations against steady pulsations. Example 7.3 below shows an excerpt from the second "inhale" and illustrates a through-composed acceleration against a constant pulsation of 16th notes.



Example 7.3: *Exhalation / Expiration,* part of the "Second Inhale" (mm. 105-108)

7.3. From pulsation to pulselessness

7.3.1. Omnipresence of the process

Exhalation / *Expiration* accomplishes a gradual suppression of regular pulsation over the course of the composition. I achieve this containment by incorporating processes on the background, middleground and foreground levels. The background procedure is reflected in the pacing of the harmonies. The middleground process centres on the duration and superimposition of rhythmic cycles of different length. The foreground level displays repeated and proliferating patterns and oscillations. The three levels approach one another as the composition nears its completion until they align on the last interval.

7.3.2. The background – harmonic rhythm

The harmonic rhythm follows loosely the pitch-class density contour of the three harmonic progression types. In general, the denser the harmonies become, the longer they last. While this relationship remains less evident during the fluctuating harmonic progression, it crystallizes during the bell-curve and the parabolic harmonic progressions. In order to destabilize the clarity of harmonic rhythm and to consequently portray the weakening of the human organism, I modify my method of presenting the harmonies.

Before the midpoint, I underline the arrival of the harmonies by emphasizing the new pitch-classes, but after the midpoint the harmonies begin to mix more gradually with new pitch-classes increasingly present.

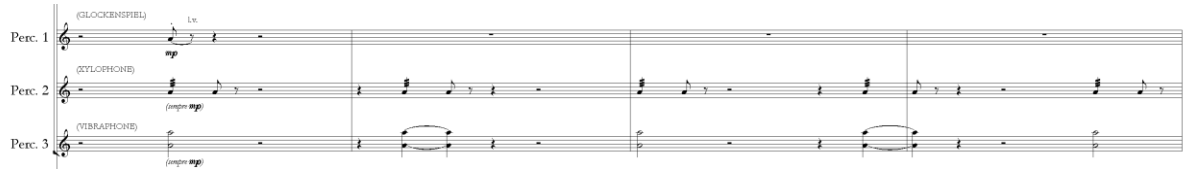
Example 7.4 below illustrates the harmonic rhythm. The measure number refers to the measure where I originally planned the change of harmony, even though pitch-classes are consistently filtered in and out by means of gradually increasing elisions. This progressively overlapping process results in a purely conceptual change of harmony at the onset of Section Z as the 12th pitch-class, C-natural, does not arrive until m. 401. The listed durations account for the changes of tempo.

Harmony #:	Arrival Measure # :	Approximate duration:
1 (incomplete harmony)	1	48 sec.
Still 1 (incomplete harmony)	24	41 sec.
1 (complete)	37	1 min. 56 sec.
2	74	55 sec.
3	90	25 sec.
4	98	12 sec.
5	102	43 sec.
6	115	21 sec.
7	122	25 sec.
8	129	30 sec.
9	138	10 sec.
10	141	9 sec.
11	144	23 sec.
12	151	16 sec.
13	156	3 sec.
14	156 [*sic*]	8 sec.
15 (first harmony of section V)	159	24 sec.
16	166	27 sec.
17	174	28 sec.
18	183	39 sec.
19	195	35 sec.
20	206	55 sec.
21	223	36 sec.
22	234	32 sec.
23	244	25 sec.
24	252	16 sec.
25	257	10 sec.
26	260	7 sec.
27 (first harmony of Section W)	262	11 sec.
28	266	8 sec.
29	269	9 sec.
30	272	11 sec.
31	276	11 sec.
32	280	11 sec.
33	284	17 sec.
34	290	15 sec.
35	295	24 sec.
36	302	26 sec.
37	310	27 sec.
38	318	27 sec.
39 (first harmony of Section X)	326	~27 sec.
40	334	~37 sec.
41	345	~30 sec.
42	354	~27 sec.
43 (first harmony of section Y)	362	~47 sec.
44	373	~40 sec.
45 (single harmony of section Z)	385	~1 min. 17 sec.

Example 7.4 Harmonic rhythm of *Exhalation / Expiration*

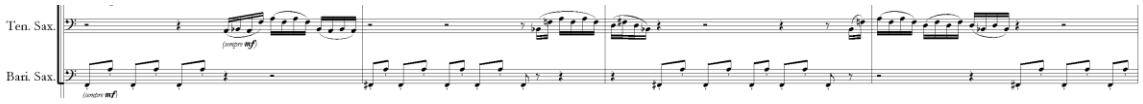
7.3.3. The middleground – rhythmic cycles

The rhythmic cycles in *Exhalation / Expiration* contain a specific type of foreground material presented in a particular number of quarter-note beats. These cycles are particular to different instruments and elongate throughout the course of the composition to accomplish the desired deceleration. By superimposing these different rhythmic streams, I symbolize the simultaneous bodily functions of a healthy organism. The cycles stay shorter and regular at the beginning of the composition and grow longer and irregular as it unfolds. Example 7.5 shows three of the percussion parts at the onset of "A healthy body". Percussion 1 plays an A-natural every 15th half-note, while Percussion 2 and Percussion 3 perform recurring material in a cycle spanning five quarter-note beats at tempo half-note equals 116-126:



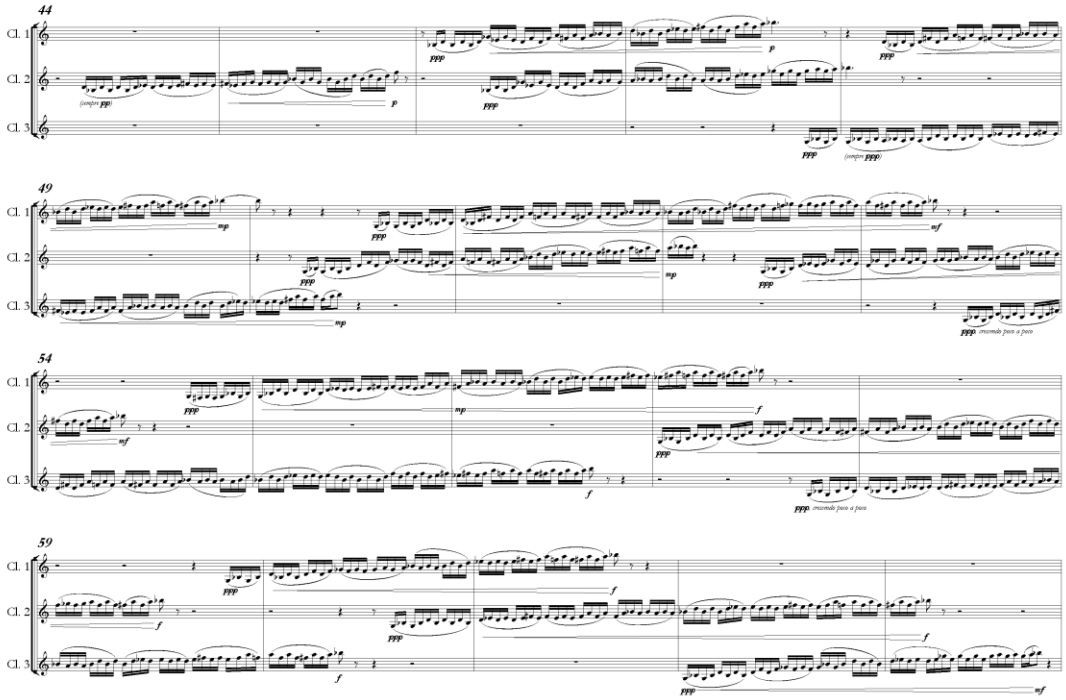
Example 7.5: Superimposed regular rhythmic cycles in three of the percussion parts (mm. 32-35)

Cycles are immediately recognizable in the first half of *Exhalation / Expiration* where the comparative shortness of the cycles permits a relatively easy overview of their expansion. I occasionally share cycles between instruments, as seen in Example 7.6, to ensure sufficient breathing space for the players:



Example 7.6: A rhythmic cycle elongated by one quarter-note beat in the Tenor and Baritone Saxophone parts (mm. 36-39)

Example 7.7 originates from Section U where the gradually elongating and overlapping ascending passages in the clarinet parts create the effect of constant ascent. Here each cycle pertains to one instrument alone:



Example 7.7: Realization of varying rhythmic cycles in the clarinets (mm. 44-63)

The importance of cycles for registral expansion both upwards and downwards increases with the unfolding of *Exhalation / Expiration*. Examples of cycles proliferate during the second half of the composition – more notably the elongating passages in the Bassoon 1 and Bassoon 2 parts around the midpoint, and the decreasing rate of Tuba attacks starting at the midpoint, which propel the music into section W (at measures 262-325).

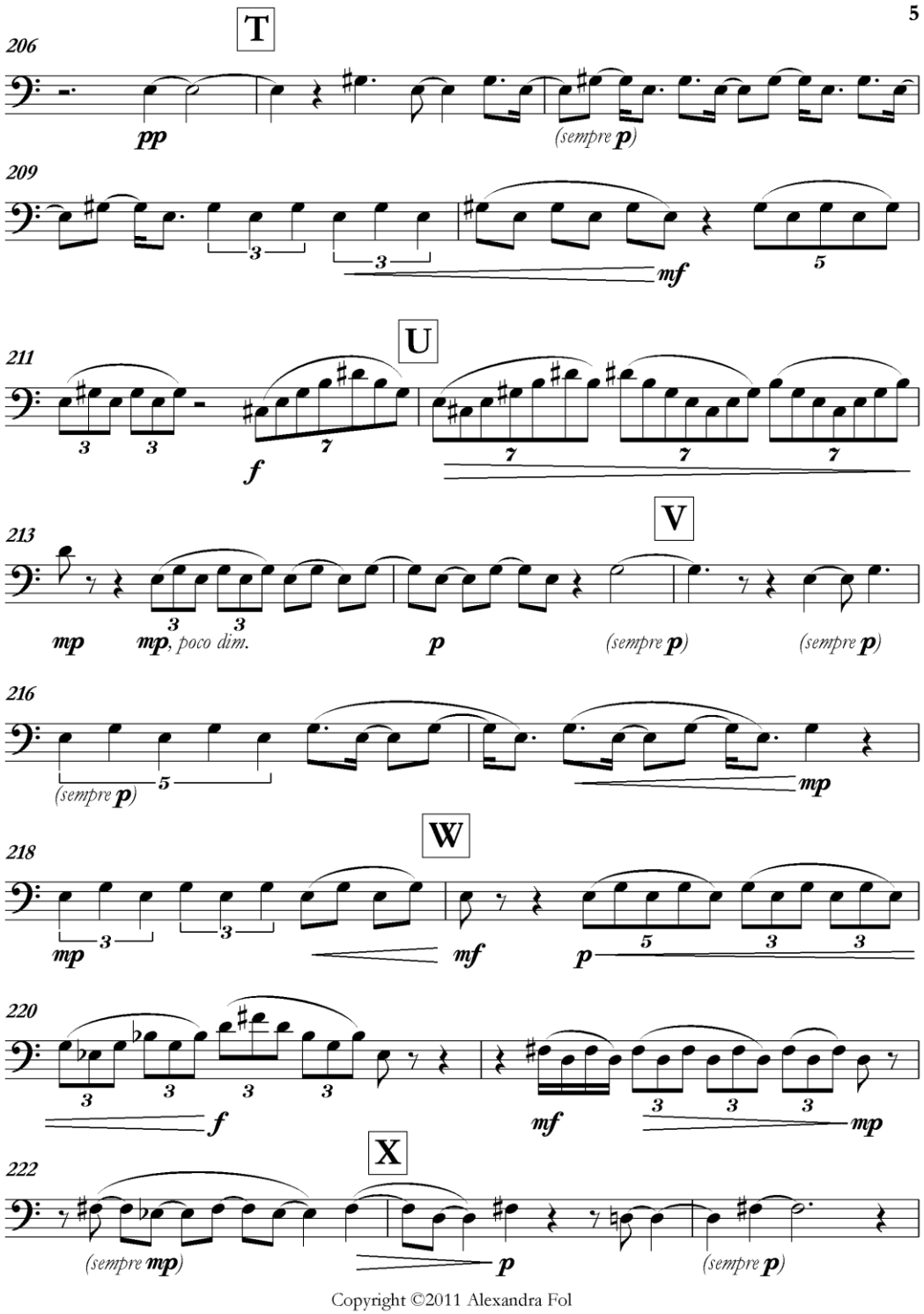
The two Bassoon parts also provide an excellent example of both cycle elongation and registral expansion in the latter part of *Exhalation / Expiration,* when the rhythmic cycles all but dissolved in the higher instruments. The bassoons begin a continuously elongating series of rhythmic cycles at measure 267 lasting until the end of *Exhalation / Expiration*. The span of the rhythmic cycle starting at m. 300 lasts for ten quarter-note beats. The expansion of its duration necessitates that the rhythmic cycle be interrupted occasionally for the purpose of breathing. At measure 346, the two bassoon parts split the one

line of a thirty-beat long version of this rhythmic cycle began by the bass clarinet the measure before. While the deceleration of the foreground material renders the remaining cycles in the lower instruments nearly unrecognizable after measure 360, the bassoon rhythmic cycles continue with the last one starting at m. 386 and continuing until the first beat of m. 398 for a total duration of 68 quarter-note beats. Simultaneously the downward expansion of the register necessitates the inclusion of the contrabassoon in the realization of the bassoon rhythmic cycles in m. 359.

7.3.4. The foreground – repeated patterns

The foreground material abounds in recurring rhythmic patterns containing repeated pitches and tremolos of various speeds. These patterns outline harmonic subsets. I superimpose patterns of various speeds and pace the presence of repetition to accomplish not only the implied polymeter discussed above, but also the aural result of a continuously shifting shimmering sound mass which gradually diminishes in vitality and energy as its constituent elements slow down until ceasing.

The repeated patterns in the lower brass instruments tend to use longer note values and slower tremolos. The speed of the patterns functions as a Process-type sign symbolizing the level of physical activity in a human body. Example 7.8 below illustrates the increasing and decreasing rate of oscillation in one instrument.



Example 7.8: Changing speed of a tremolo in Horn 2 (mm. 206-224)

7.4. The metronomic markings

In *Exhalation / Expiration* I occasionally request slight fluctuations in tempo to create agogic accents and assist the shaping of the phrases in performance. In offering a bracket of possible metronomic tempi, I leave the extent thereof to the discretion of the conductor. These tempo variations, achieved by means of *ritenuti* and *accelerandi*, occur in the foreground, as I accomplish the larger-scale processes by means of the harmonic rhythm and the rhythmic cycles discussed above.

Example 7.9 below lists all metronomic markings and their appearance in the score in the context of the formal divisions they emphasize.

Measure #	Metronome marking	Location with respect to the form
1	Quarter-note = 116-126	Section U, Introduction
23	Rewritten as Half-note = 58-63	End of the Introduction
74	Half-note = 52-54	Section U, A resting body
90	Half-note = 58-63	Section U, First Inhale
122	Half-note = 52-54	Section U, Third Inhale
135	Half-note = 58-63	Approaching the end of Section U, Third Inhale
160	Half-note = 52-54	Second measure of Section V
171	Half-note = 58-63	Following the harp excerpt in Section V
262	Half-note = 64-70	Beginning of section W
291	Half-note = 58-63	End of the repeated pitches in the lower register
401	Half-note = 52-54	The arrival of the "Do" octave at the end of Section Z

Example 7.9: The metronomic markings

Chapter 8: Analysis – Orchestration

8.1. Signification of the instrumentation

As mentioned in Chapter 1.1, my choice of performing forces facilitates the execution of my artistic vision implied by the title, because the players' need to breathe naturally implies exhalation and expiration. In addition, the instrumentation refers to the mixture of wind and percussion instruments known to have been used by the Thracian non-aristocrats and women in the mass rituals associated with the Orphic doctrine.[48] The instrumentation serves as an Event-type sign signifying the relationship of both my father and of Georgi Kitov to Thracology.

8.2. Processes lasting the entire composition

I employ two orchestrational procedures in *Exhalation / Expiration* that span the entire duration of the composition – gradual dissociation of material from timbre, and gradual expansion of the employed instrumental range, followed by its compression. These aspects, which I will address in turn below, serve as Process-type signs signifying obliteration of order. This allusion symbolizes the mental and physical bewilderment accompanying the approaching death.

8.2.1. Dissociation of material from timbre

In the first half of *Exhalation / Expiration,* I assign specific pitch and/or rhythmic units to various instrumental groups in order to underline their regularity and to symbolize them as functions of a healthy organism. While in Section U, particular motivic material remains almost exclusively assigned to a specific group of instruments, such as flutes or trombones; and from the onset of section V, this relationship between motif and instrumental group becomes less defined until is disappears in section X.

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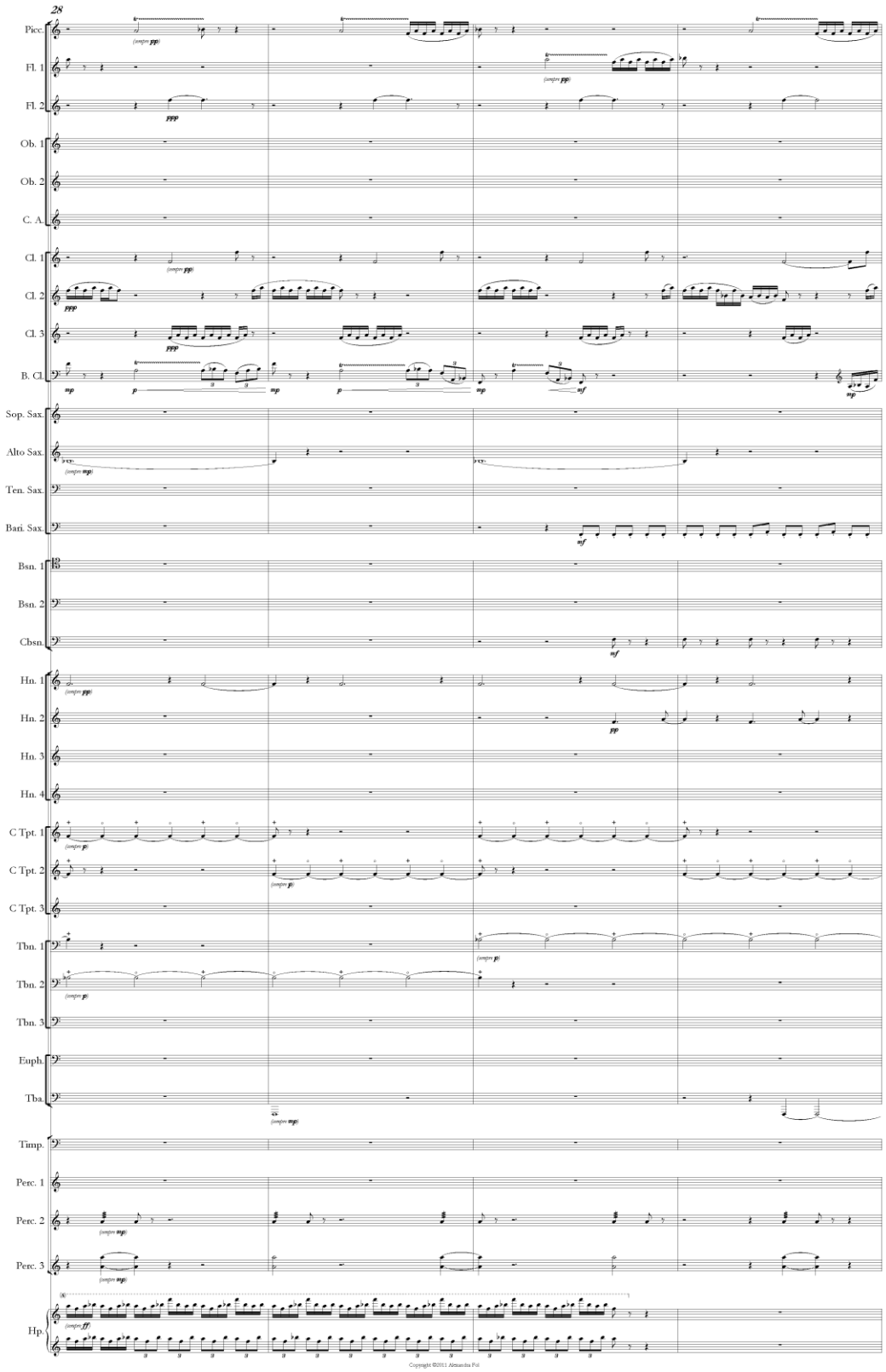
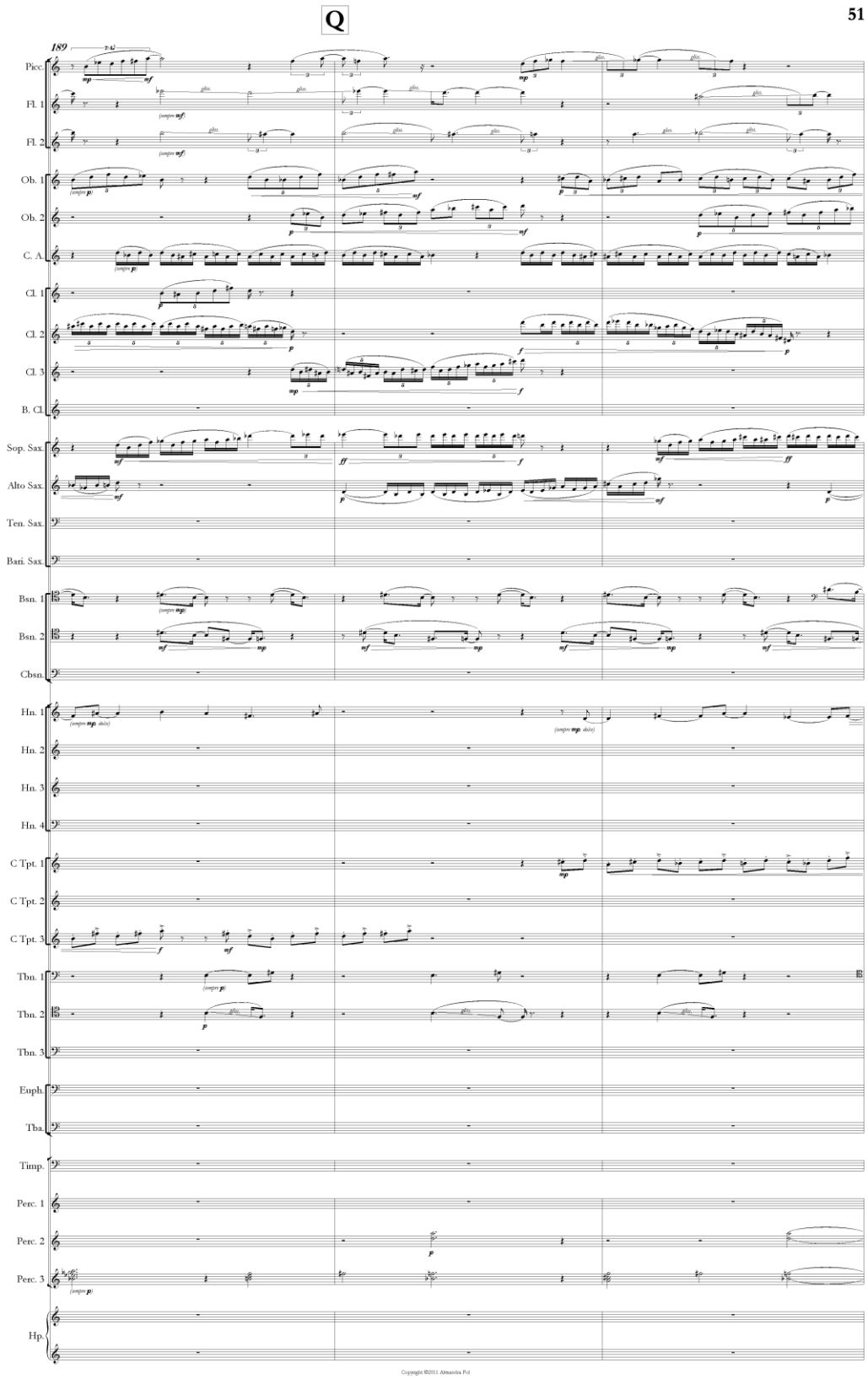
[48] For more on the Thracian mass rituals, see Strab. 10 3 16-18 Meineke and Beschi, Luigi. "La prospettiva mitica della musica greca." *Religion, mythologie et iconographie. Colloque International de LIMC.* Proc. of Colloque International de LIMC, Rome, Rome. Ed. Lili Kahil and P. Bellefonds. Vol. 103. Rome: École française de Rome (= Mélanges de l'École française de Rome. Antiquité), 1989. 35-50. Print.

Example 8.1 illustrates the tendency of material separation in Section U. Each instrument or group of instruments partakes in a different rhythmic cycle containing different pitches. Piccolo and Flute 1 perform a trill followed by major third oscillations, Clarinet 1 – a repeated octave jump, the brass players – long sustained pitches and Percussion 1 and 2 repeat a rhythmic cycle lasting five quarter-note beats.



Example 8.1: Material separation in Section U (mm. 28-31)

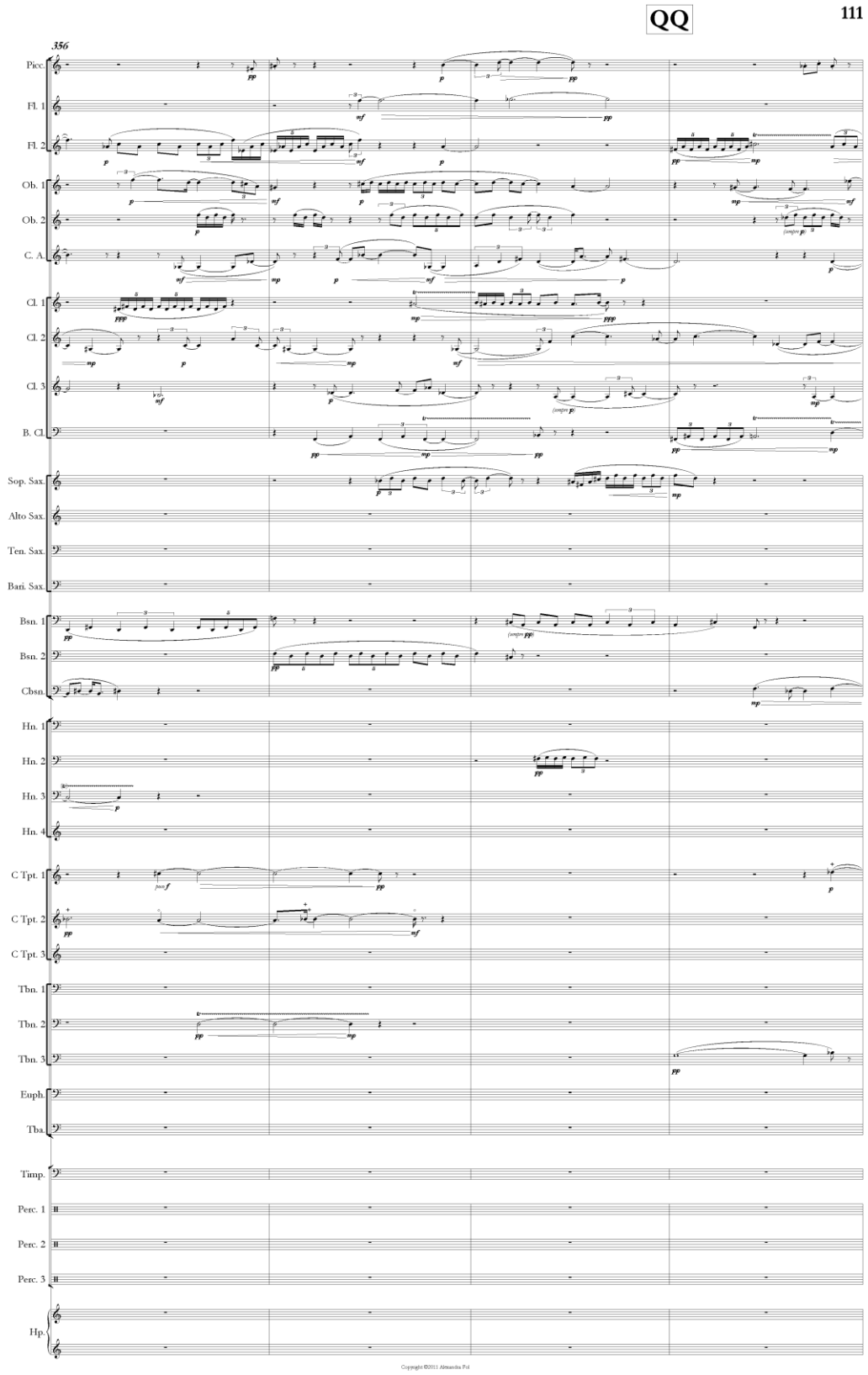
In contrast, Example 8.2 shows an excerpt from Section V, approaching the midpoint. The clarinets and saxophones overlap similar arpeggiations, Clarinet 1 and the two oboes share a similar rhythmic profile, while the first French horn emphasizes the accents in the Trumpet 1 part, and the Trombone 1 glissandi shadow the flute ones.



Example 8.2: Partial dissociation of material from timbre (mm. 189-191)

The decelerating patterns, discussed above in Chapter 7.4.4, result in steadily diminishing foreground activity. This process aids to accomplishing the dissociation of material from timbre, as different instruments alternate in presenting and proliferating similar motifs.

Example 8.3, taken from Section X, illustrates the diminished foreground activity and the accompanying separation of material from timbre.



Example 8.3: Independence of material from timbre (mm. 356-359)

8.2.2. Expanding followed by fixed register

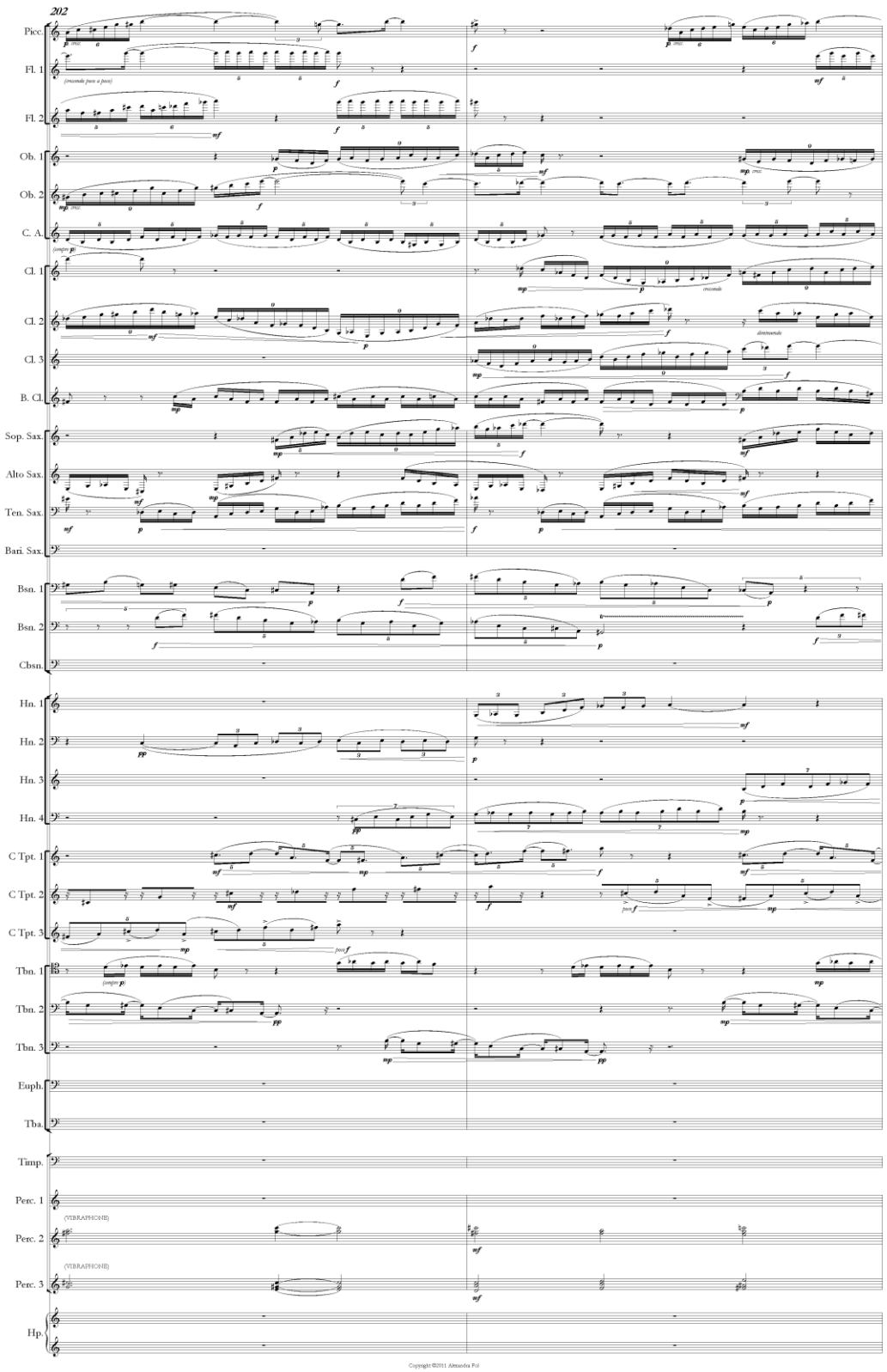
The instruments in *Exhalation / Expiration* gradually expand their registral spectrum from restricted at the beginning of the composition to covering the larger part of their range between the midpoint and the beginning of Section W. In order to control the paradoxical sound-world from the onset of Section W which balances ever-increasing harmonic density with a thinning texture, I employ a limited number of pitches per instrument per phrase that reach a two-octave range. This fixed register that I have already accounted for in my compositional process allowed me to keep all necessary registers of all instruments open while simultaneously avoiding undesired doublings, thus maintaining the effect of a moving sound-mass even with the thinner texture.

I accomplish the registral expansion in section U and the first half of Section V by employing what resembles very much a fixed register but what I conceived as a simply limited range for each instrument that changes slightly from sub-section to sub-section. This relatively fixed range permitted me to forge a clear correlation between instrument density and the sub-sections. The sub-section "A resting body" serves as a case in point – each instrument's participation is limited to a specific pitch or two pitches of the harmony. This invariance, serving as an events-type sign, symbolizes the human body in a state of relaxation.

The instrument density increases during the 'inhales' and decreases during the 'exhales'. This clarity of registral treatment begins to disappear in the first half of Section V (at measures 159-206), where the consistently larger registral span of the woodwind instruments, results in increasing overlapping of lines.

Example 8.4 below, taken from the first half of Section V, shows the increased register used by all instruments compared to the most of section U. Most of the upper woodwinds span about two octaves. The Tenor, Alto and Soprano Saxophones split a rhythmic cycle covering two octaves in m. 198 and more in

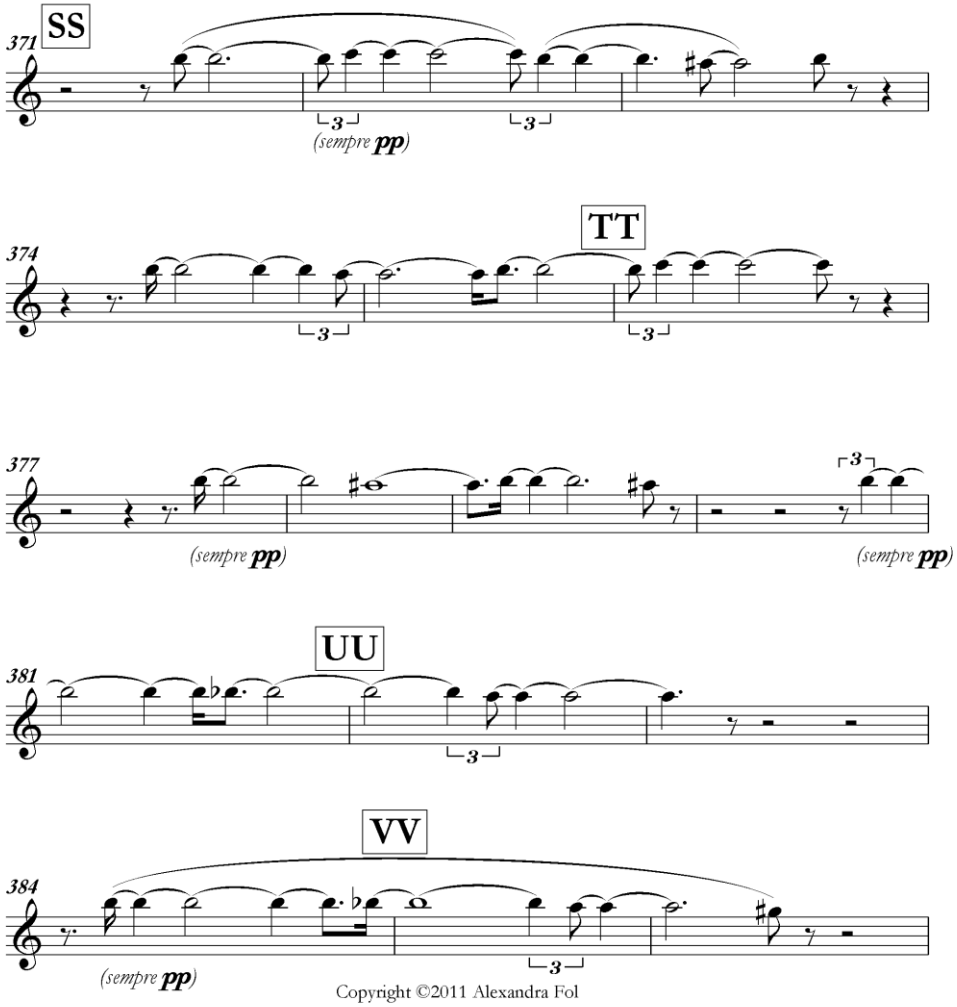
mm. 199-200. The Horn 4 part is shown at beginning of a rhythmic cycle spanning also an octave and a minor sixth.



Example 8.4: Increasing register usage in all instruments in approaching the midpoint

While the short phrases in the woodwind instruments that predominate after the onset of section W conceal the use of fixed register as a compositional process, the latter clarifies when the texture thins out and individual instrumental phrases continue for more than a couple of measures.

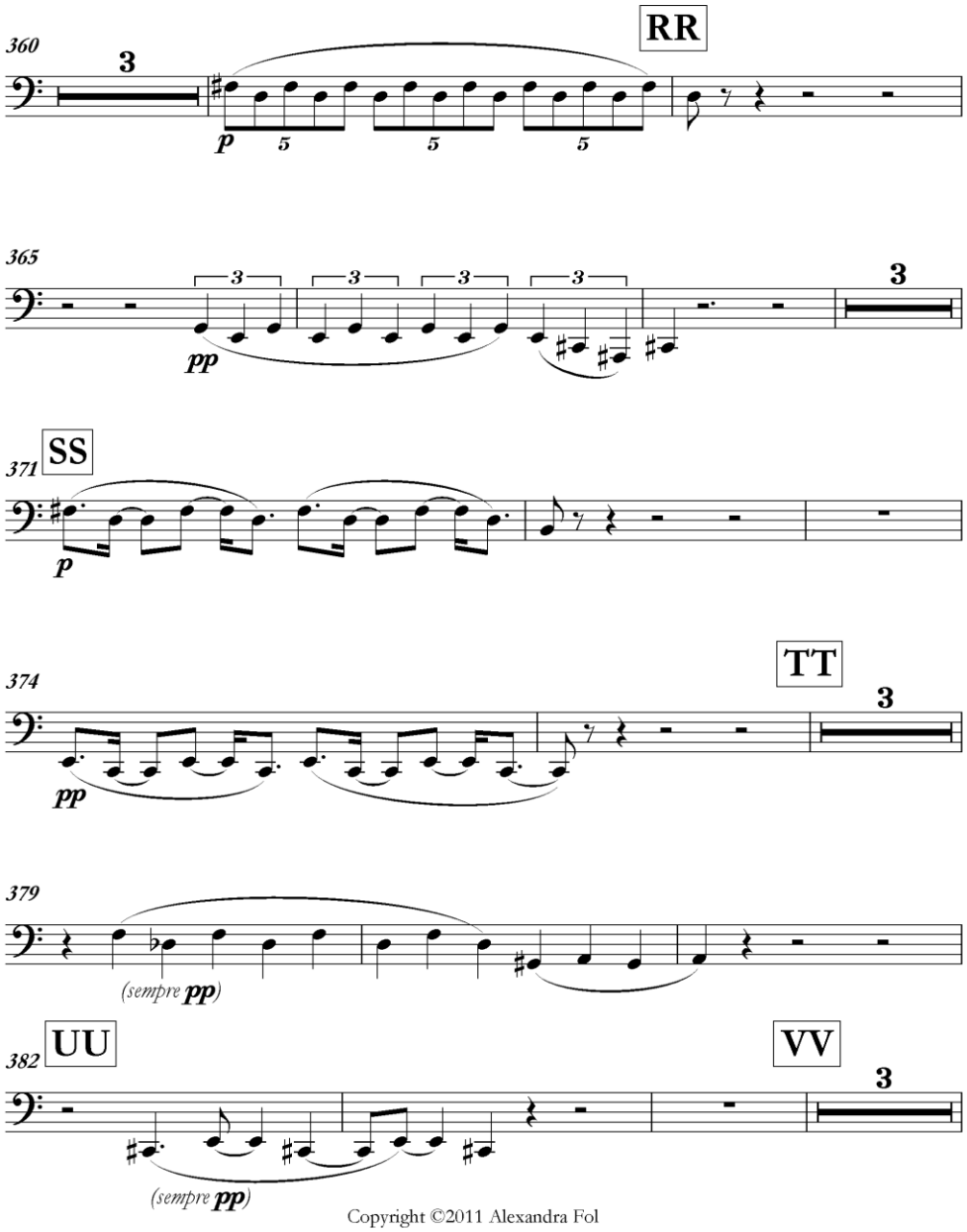
Example 8.5 below illustrates the usage of fixed register for a long phrase in the first flute part.



Example 8.5: A long phrase composed with fixed register in mind

In the view of the overall deceleration of harmonic as well as surface rhythm, the compositional processes of employing a fixed register and long rhythmic cycle become aurally indistinguishable with respect to register treatment. The

next example, Example 8.6, illustrates the second Bassoon part near the end of *Exhalation / Expiration*. The seemingly fixed register over a comparatively longer period of time results simply from the elongated rhythmic cycles.



Example 8.6: The register of Bassoon 2 appears fixed (mm. 357-391)

8.3. Timbral reinforcement

In order to create a thicker sound mass when needed, I reinforce different streams of distinct material by conjoining similar timbres. This tendency decreases naturally as I dissociate material from timbre (see above, Chapter 8.2.1). Consequently my treatment of the Wind Ensemble towards the beginning of the piece invites a comparison to the treatment of instrumental groups in a classical orchestra, while my handling of them towards the end of the composition, when instruments cease playing one by one (see above, Chapter 8.3), resembles that of a chamber ensemble.

Instances of timbral reinforcement abound in Section U (measure 1-158). For example, in measures 27 and 28, the flutes perform trills and tremolos while the brass instruments remain limited to longer held tones. The tendency of emphasizing material with instruments of similar timbre remains, even as I redistribute material between instrumental groups.

With the separation of the very long rhythmic cycle between the bass clarinet and two bassoons starting at measure 344, as well as with the elided distribution of a single line between the trumpets in m. 344 and between the trombones in m. 346, the last remnants of an 'orchestral' treatment of the Wind Ensemble disappears as *Exhalation / Expiration* draws to a close.

8.4. Reinterpreting pitches as pitch-classes

As discussed above in Chapter 6.1, I devise the harmonies of *Exhalation / Expiration* as pitch-specific while reflecting the importance of interval-classes 1, 3 and 4 in the foreground. To allow for complete control over the textural density independent from the harmonic density, I allow for octave doublings while ensuring that the foreground material of each instrument features mainly interval-classes 1, 3 and 4. The timbral differentiation between varying instruments permits for the lines to cross and to occasionally form interval-class 2 between them without compromising the harmonic profile.

Occasionally I include linear motion of interval class 2 in the outer registers to emphasize the increasing weakening of the harmonic profile, such as in mm. 194 and 195 in the Piccolo, m. 202 in Flutes 1 and 2, in mm. 232 and 233 in Trombone 1, etc.

8.5. Role of dynamics

I planned the dynamics of *Exhalation – Expiration* to underline the registral unfolding described in 8.2.2. The dynamic fluctuations increase and decrease with the foreground rhythmic complexity, as well as following the registral expansion and subsequent fixation. My design benefits from the acoustic properties of the instruments and results in a continuous fade-in and fade-out of different timbres.

In my treatment of woodwind instruments, the dynamics tend to increase when the register expands upwards and decrease as the register becomes fixed. With respect to the brass instruments, the increase of dynamics follows the rhythmic accelerations rather than the register. Measures 202-218 provide an illustration of both predispositions.

8.6. Usage of the harp

The Harp plays in Sections U, V and Z, more specifically in measures 24-30, 61-72, 74-82, 88-90, 99-102, 121-122, 144-146, 159-168 and 401-405. While my usage of the harp does not relate directly to a specific section, the instrument's strategic placement fulfills three distinct purposes in *Exhalation / Expiration*, relating to my underlining of transitions between the 'inhales' and 'exhales', my preferences in orchestrational doubling and my approach to symbolism.

In mm. 88-90, 99-102, 121-122 and 144-146, the harp acts as an Event-type sign the onset of the first, second, third and fourth inhales respectively, while in measures 74-78 it contributes to the scoring of the sub-section I characterize as 'A resting body'.

The excerpts encompassing mm. 24-30 and 61-72 illustrate harp doubling with flute and percussion. After the Harp's modest registral expansion in the first group of measures and subsequent contraction in the second, consistent with the tendency described above in Chapter 8.2.2, it realigns with the Piccolo on the same "La" where it began.

In mm. 159-168, nine measures long, I compose Harp arpeggiations on the tones of the Vibraphone chords. I cease when the texture thickens and I estimate that its presence will cease making a difference in perception.

On a symbolic level, the existence of the harp in *Exhalation / Expiration* "represents life" similar to Aristotle's mimetic interpretation offered in his *Poetics*.[49] The onset of the first span (mm. 24-30) coincides with the beginning of the sub-section "A healthy body" (mm. 24-73) while the second (61-72) marks its end. At m. 159, the arrival of the harp corresponds with the beginning of Section V, depicting the first of the five stages of terminal cancer and the cloudiness of consciousness (see above, Chapter 3.2.2). The harp's last contribution, interrupted by the whip, enhances the symbolization of the stopping of life.

[49] Aristotle writes: "Epic poetry, then, and the poetry of tragic drama, and, moreover, comedy and dithyrambic poetry, and most flute-playing and harp-playing, these, speaking generally, may all be said to be 'representations of life.'" For more on Aristotle's views on representations of life, see section 1447a of his *Poetics*. Ed. Gregory R. Crane. Medford, MA, USA: Tufts University. *Perseus Digital Library*. Annenberg CPB/Project. Web. 14 Jan. 2010. <http://www.perseus.tufts.edu/hopper/text?doc=Perseus%253Atext%253A1999.01.0056%253Asection%253D1447a>.

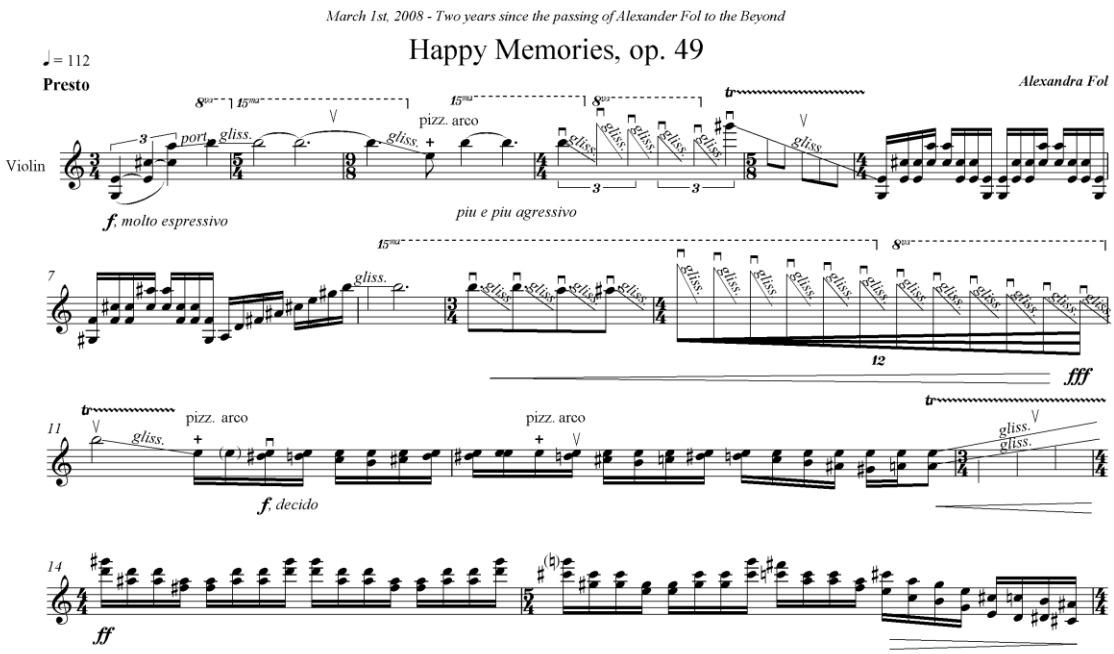
Chapter 9: Conclusion

9.1. Structure(s) and form

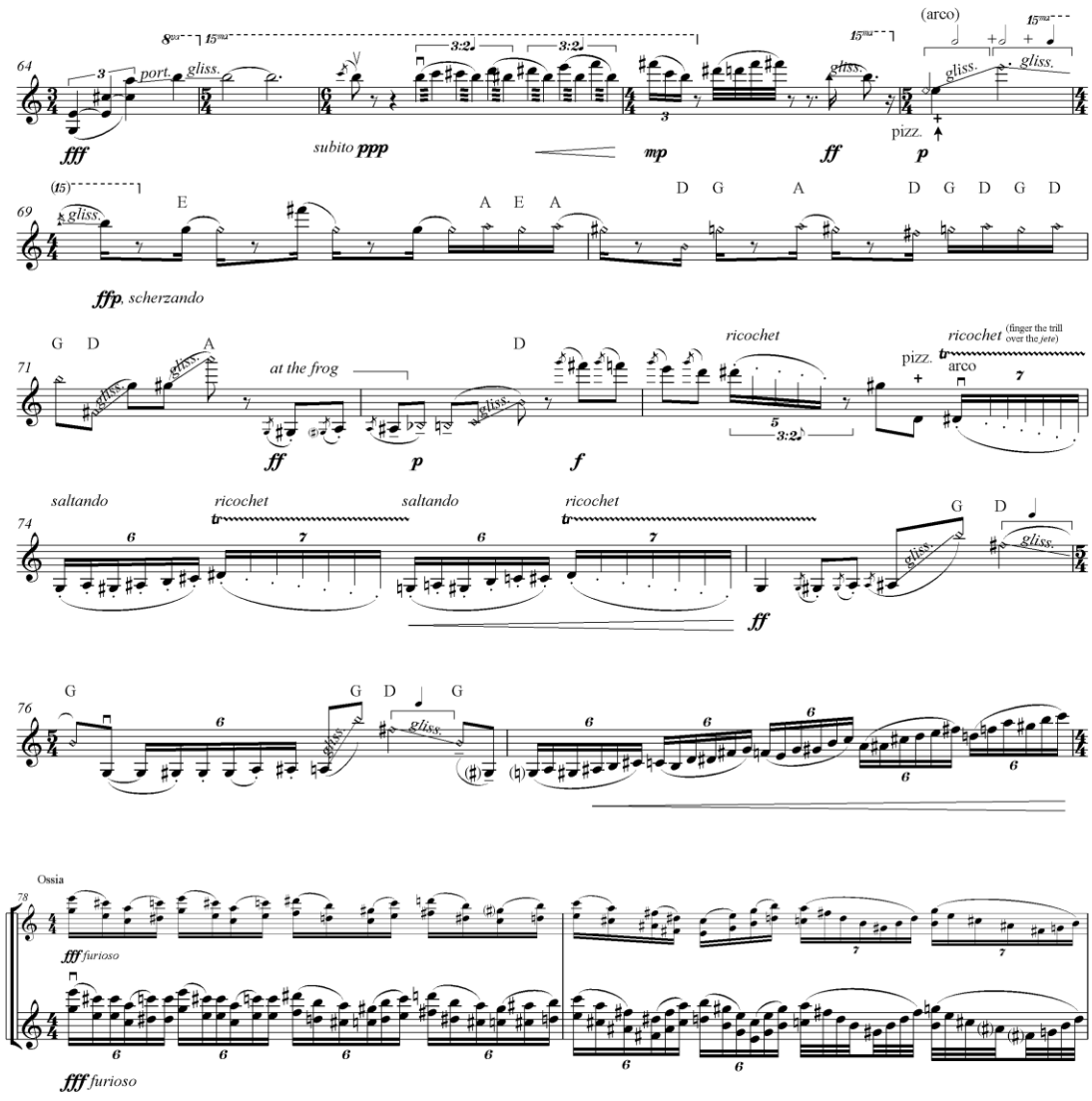
In my compositional experience prior to *Exhalation / Expiration,* I consistently employed sets of small and medium scale structures, which I modified so as to ensure that they align with important formal focal points. I accomplished this alignment differently every time depending on the principal formal types that I utilized, for example, the A-A1 (-A2-A3, etc.) and through-composed forms.

With the first type of form in compositions such as *Concerto for Piano and Orchestra, Concerto for Violin and Orchestra, Requiem No. 2 op. 40, One Day God Will Return* (for chamber orchestra) and *Happy Memories* (for solo violin), sets of materials that are present in A return in full or in modified versions in A1 (and subsequently in A2, etc.).

Examples 9.1 and 9.2 show the opening of *Happy Memories*, followed by the onset of A1. The motivic and harmonic material in A undergoes a lot of rhythmic, and some harmonic permutations within A1.



Example 9.1: *Happy memories* (mm. 1-15)



Example 9.2: *Happy memories*, beginning of A1 (mm. 64-79)

Alternatively, when writing programmatic music, I would derive the use the pacing suggested by the text or play, and consider separate harmonic and rhythmic structures for each section which I would occasionally link with similar foreground material. *Fairies and Spirits – a Ballet in Four Scenes* and *Cinderella – the fairy tale* (monodrama for narrator and orchestra) both exemplify this type of connection between form and medium-scale modifiable structures.

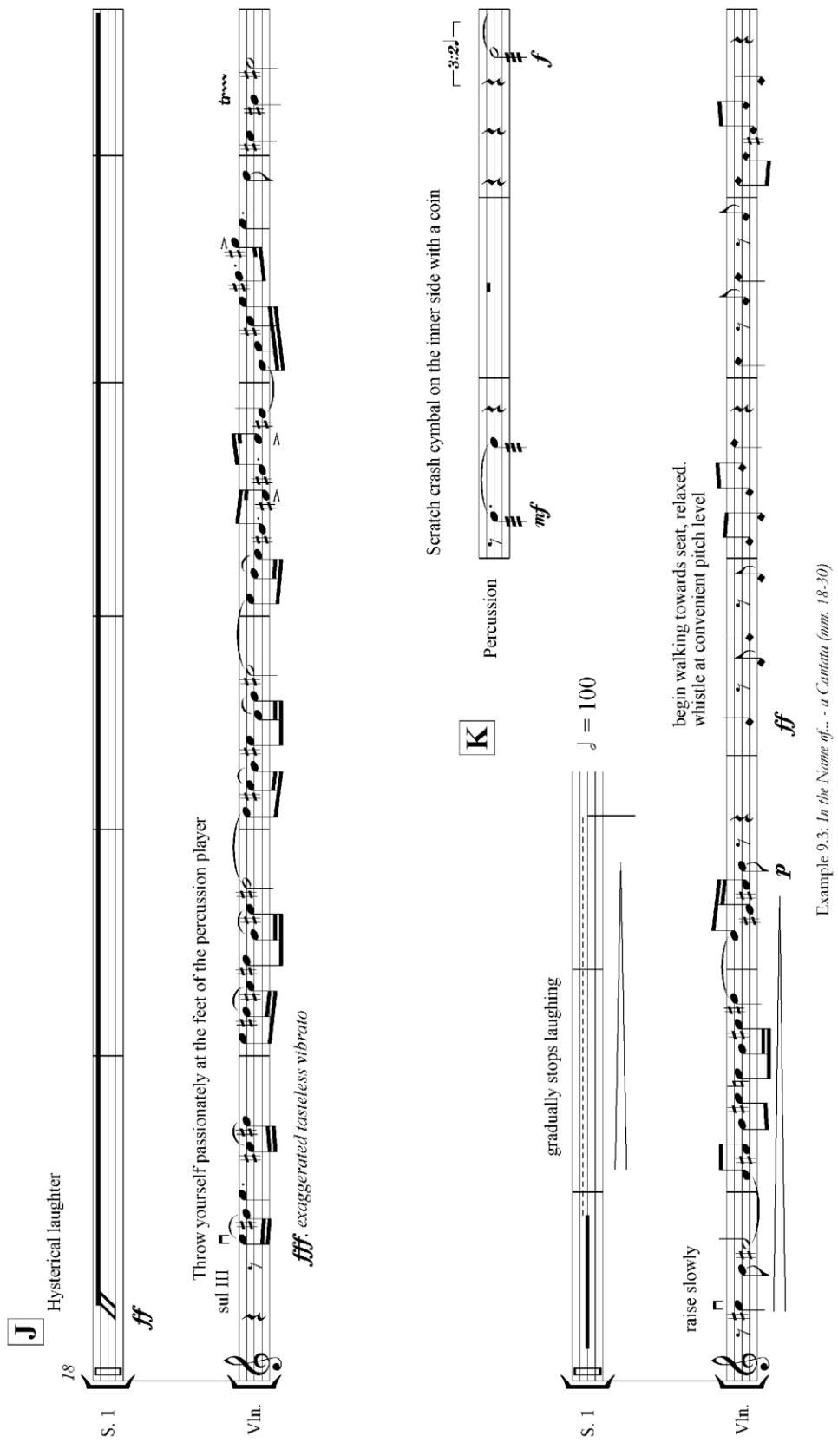
In *Exhalation / Expiration,* however, I have explored a different approach to structure and form. I built on my experience in aligning certain structural with formal focal points in order to create harmonic and rhythmic structures and a form that span for the entire duration of the piece. In contrast to most of my previous music, *Exhalation / Expiration* contains a much larger amount of coinciding points between the structure – in particular the harmonic structure – and the form. A harmonic change demarcates each formal section and sub-section from the next, and this consistency allows for a relative independence of the process employed for the creation of the rhythmic structure.

While in *Exhalation / Expiration* I opted to have at least one of the structures always linked to the form, I will experiment in a future project with designing (a) structure(s) and a form of equal durations where their pacing does not coincide but at the end of a composition. The continuously accumulating tension originating from this dichotomy would pose an enticing artistic challenge.

9.2. Signs and symbols

Exhalation / Expiration stands as my first composition where I symbolize every important aspect of the structure and form with reference to a specific non-musical idea. The constant presence of symbolic connotations becomes almost a programmatic element. I derived ideas from the symbolized material of one of my other instrumental compositions inspired by the doctrine of Thracian Orphism, *Requiem No. 2 op. 40*, where I had cautiously experimented with codifying programmatic significance in musical symbols. I have always used more symbolism in my works with text than in my instrumental works, more recently *Cinderella* and *In the name of… – a Cantata*. In both of them, I employ signs as symbols, but these signs remain overwhelmingly Event-type signs and their usage as symbols permeates the foreground and the form, but not the structure, unless coincidentally (see above, Chapter 3.1.1.).

In the *Cantata*, for example, I use a wealth of theatrical elements and musical quotations, all symbolizing the hypocrisy of organized religion. Example 9.3 below occurs in the first movement, after the percussionist smashes two crystal dining sets on the stage:



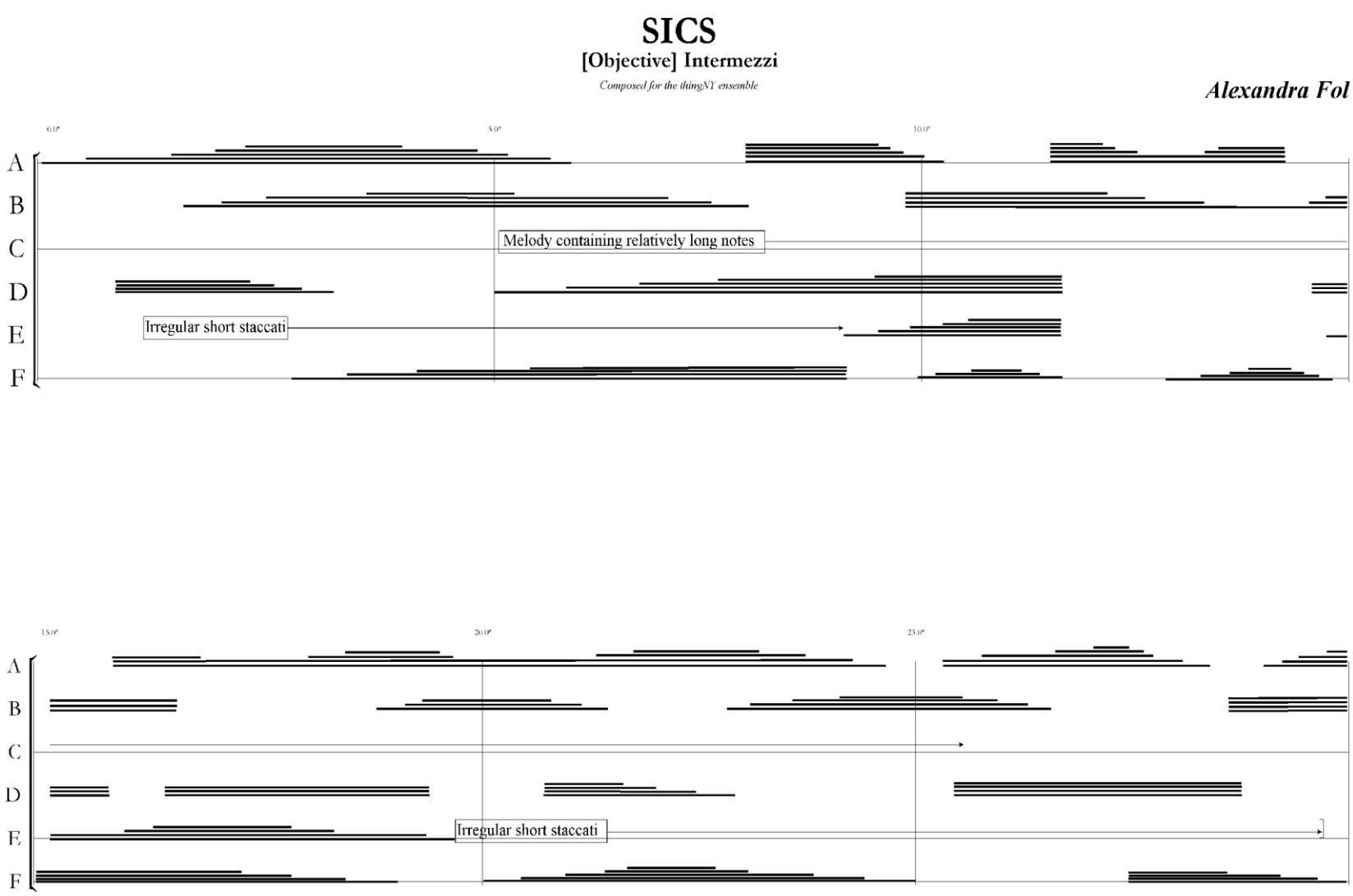
Example 9.3: *In the Name of... - a Cantata (mm. 18-30)*

In the future, I would be interested in investigating the possibility of incorporating in a music theatre composition what it is that I accomplished in *Exhalation /Expiration* with respect to symbolism integrated at the structural level. I could, for example, create a programmatic layer in the music that unfolds independently from the action on the theatrical stage.

9.3. Non-harmonic tones

My treatment of harmony in *Exhalation / Expiration* invites the question of the usage, or rather, the lack of usage of non-harmonic tones. Every note in the composition can be explained either as a member of a harmony or as an octave doubling. To accomplish the 'infiltration' required for its artistic goal, *Exhalation / Expiration* necessitates a relatively slow harmonic movement in order to ensure that each newly introduced pitch-class asserts itself as referential. Thus as a matter of principle, any newly introduced pitch-class emerges as an actual member of the current harmony.

While *Exhalation / Expiration* requires an increasing harmonic vagueness to symbolize the advancement of mortal sickness, I could conceivably segregate harmonic from non-harmonic tones in a subsequent composition by emphasizing their distinct importance on the foreground and the middleground. In *SICS [Objective] Intermezzi*, which was composed after *Exhalation / Expiration*, I distil the background harmonies to my preferred intervallic components of minor seconds, minor thirds and major thirds while allowing the performers to improvise in the foreground. The constant referential intervals help differentiate between degrees of importance and highlight elements of the improvised melody and accompaniment as non-harmonic tones. Example 9.4 below depicts the opening of *SICS*.

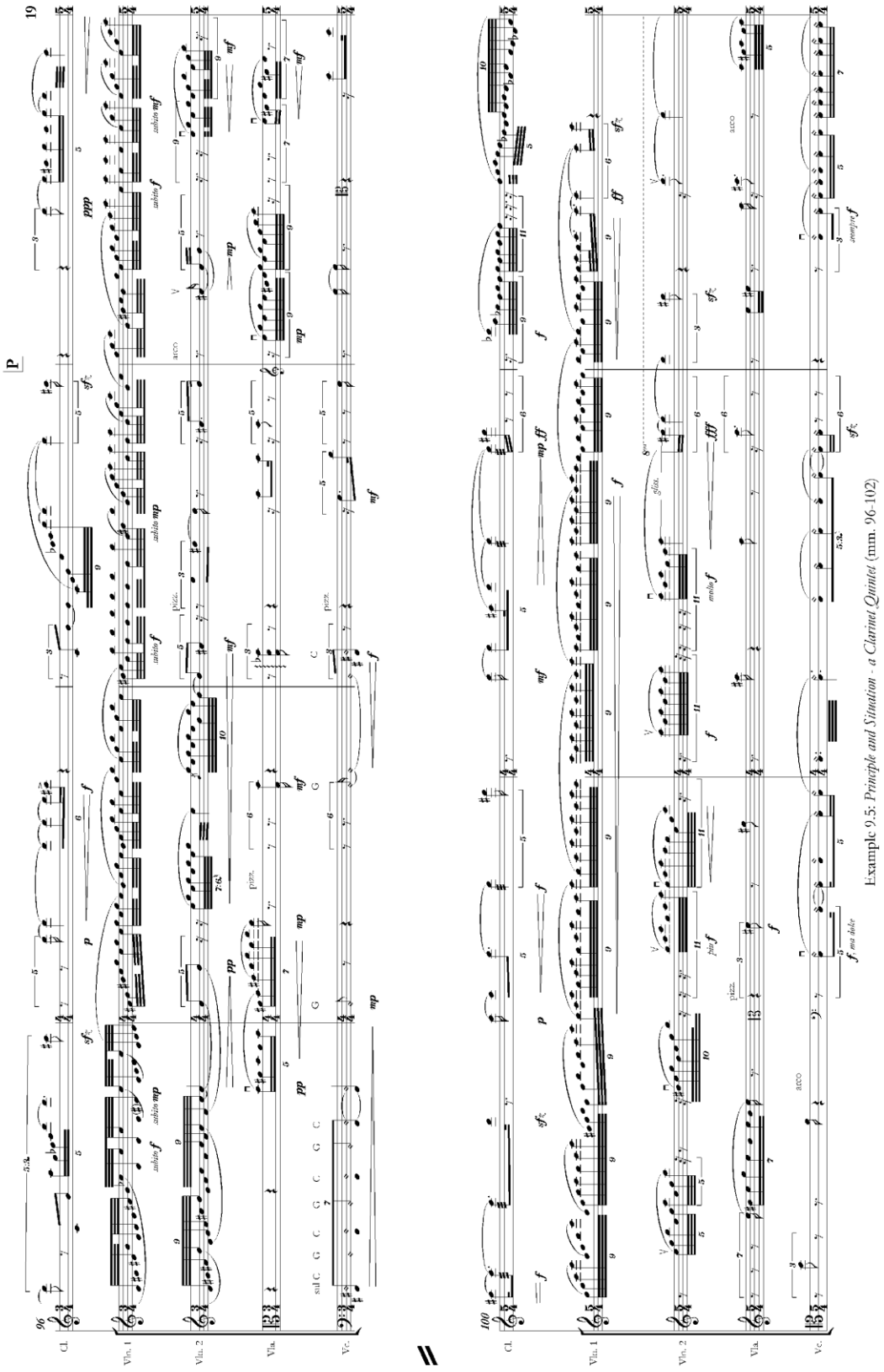


Example 9.4: *SICS [Objective Intermezzi]*, opening

9.4. Tempo

The slow harmonic and rhythmic pacing of *Exhalation / Expiration* ensured that, despite fast surface rhythms, the composition is actually perceived as developing rather slowly. While the extra-musical idea necessitates this tempo, I wished to explore the possibility of introducing notions of multiple changing tempi while simultaneously employing slowly unfolding harmonic and rhythmic structures.

In my composition *Principle and Situation – a Clarinet Quintet,* I occasionally realize this idea. The excerpt below, in Example 9.5, occurs in the middle of a long acceleration spanning two harmonies where I employ a gradual rhythmic acceleration in the first violin emphasized by repetition of short and varying rhythmic units in the other instruments. The tempo of the musical material found in the clarinet emerges as slower in comparison.



Example 9.5: *Principle and Situation - a Clarinet Quintet* (mm. 96-102)

9.5. Ontology and aesthetics

In the above document I have attempted to offer an ontological discussion of *Exhalation / Expiration* within the framework of what the Stanford Encyclopaedia of Philosophy calls "higher-level ontological issues".[50] My explanations – describing both 'what there is' and 'what the most general features and relations of these things are' – hopefully illuminated my creative process and clarified my aesthetic preferences.

[50] For ontological theories, see Kania, Andrew. "The Philosophy of Music." *Stanford Encyclopedia of Philosophy*. Metaphysics Research Lab, CSLI, Stanford University, 2009. Web. 25 Nov. 2009. <http://http://plato.stanford.edu/entries/music/#2>.

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