Aria

for high soprano and electronics

Ruben Sverre Gjertsen 2009-2010

Commissioned by Stillscape for
Silje Marie Aker Johnsen

DURATION
18'

NOTATION

PITCH
MICROTONES

= 1/4 tone sharp = 3/4 tones sharp

= 1/4 tone flat = 3/4 tones flat

Microtones to produce beatings or modified octaves:
↑ = slightly sharp
↓ = slightly flat

Intonation of woodwinds depend on available fingerings.

VIBRATO

The piece follows a non vibrato ideal on all instruments and voices, where various forms of vibrato becomes ornamentation, often exaggerated. The speed can be too slow or too fast, the range can vary between a quartertone and a fifth.

NV= non vibrato
Oscil. lento = slow gliss, one quartertone.
Espr. = almost a normal vibrato.
Vibrato estremo = rapid, major second to third.
Vibrato grottesco / Vibrato grande = rapid, third to fifth around the centerpitch.
Vibrato irregolare = irregular speed and range.

GLISSANDO

All glissandi are continous, and should never dwell on start or end notes in parenthesis. No new attacks should be made on passages without articulation signs. The same graphic notation is used for vibrato.

DYNAMICS

p– *mf*– *f*– = static tone. Start subito and end subito. Rigid like bricks.

ff / *pp* = rapid, irregular, unstable dynamic fluctuations within the written range.

SOPRANO

MODES OF TONE PRODUCTION

= normal voice

= 1/2 breath, 1/2 voice

= pitched breath

= whisper

= unvoiced plosive, percussive, no breath

= spoken, relative pitches.

= "head tone", may be used in the whole register. In deep register simulated by .

= fluctuation between head tone and normal sound.

= half-lunged multiphonic, or granular texture. May be pitched (distorted chord) or unfocused (noise).

= indrawn air (may be used on most other sonorities).

=water-effect, inhaled air stream with water along sides of tongue (inhaled "ŝ").

SUBHARMONICS

STABLE UNSTABLE

= split voice. Stable or unstable as an irregular noise or distortion. Sounds, when stable, about an octave lower than the sung pitch.

PULSES

= low frequency sounds, with relative pitch. When deepest only a few pulses per second (easiest with indrawn air).

Transitions are possible:

AMPLITUDE VIBRATO

amp. vibr. = natural oscillation. Almost like laugh, and similar to vibrato used in performance of Monteverdi.

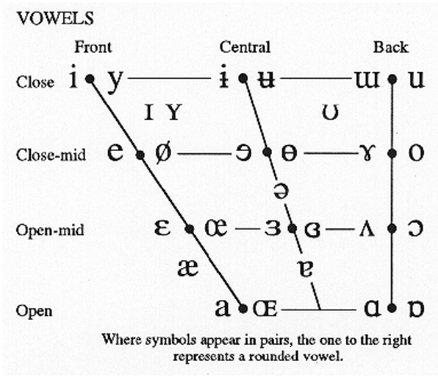
PHONETIC SYMBOLS

From the international phonetic alphabet (IPA), with exceptions marked *

VOWELS

ɑ = f<u>a</u>ther
ɒ = h<u>o</u>t (rounded "a")
e = t<u>e</u>lephone
ə = (Ger.) bitt<u>e</u>
i = f<u>ee</u>d
u = (Ger.) d<u>u</u>
ʉ = between "u" and "y"
y = (Ger.) füllen
ɛ̃ = (Fr.) f<u>i</u>n
æ = c<u>a</u>t
ʌ = c<u>u</u>t
ø = (Ger.) schön (Fr.) bl<u>eu</u>
* o = b<u>o</u>ring

Chart from the International Phonetic Association:

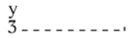


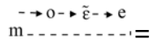
CONSONANTS

b = but
ç = (Ger.) ich
d = desk
ð = then
f = feet
g = go
ɢ = click between "g" and " l" at the back of the throat
h = hair
j = yet
k = cat
*q = "k" at back of the mouth
l = (Ger.) lied
ʟ = thick "l"
m = mother
n = name
ɲ = (Eng. / Fr.) cognac
ɴ = (Eng.) "ng"
p = lap (no breath sound)
ɻ = rabbit
r = rolled "r" of Spanish, Italian, Russian
ʀ = (Fr.) arracher (drøvel-r)
ʁ = (Fr.) peur (skarre-r)
x = (Ger.) ach (Spanish) Juan
s = send
ŝ = (see water-effect)
ʃ = shoe
ʒ = (Fr.) journal
t = aunt
v = avoid
w = well
z = zebra
’ = ejective, exaggerated consonant (p’ t’ k’ s’)
! = (Post)alveolar click (click with tongue)
⊙ = Bilabial click (smattelyd)

Listen to sound examples here:
http://web.uvic.ca/ling/resources/ipa/charts/IPAlab/IPAlab.htm

COMBINATIONS


= both performed simultanously.

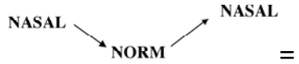

= lower performed continously, upper is transition.

The symbols are proportionally placed. In a word ending on consonant, the consonant will sound through most of the note, unless placed separately or at the end of the note.

OVERTONES

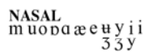
NASAL = Swallow fundamental and emphasize overtones like a throat singer. Listen to overtones rather than the precise phonetic symbols. Phonetic combinations may be useful.

TRANSITION TO NASAL



= transition between extremely emphasized overtones and more balanced timbres.

TRANSITIONS


may be performed 
to give a linear rise or fall of overtones. The focus is on smooth timbre change throughout the whole piece. NASAL means even more shimmering overtones.

ELECTRONICS

EQUIPMENT
Mac with MaxMsp 5 with sound card
4 speakers and subwoofer.

LOUDSPEAKER LAYOUT
Four loudspeakers are placed in corners of the room.

1 Soprano 2

Audience

4 Sub 3

VOLUME
Adjust the volume to make the electronics equal with the soprano. The sound should be full, give a clear perception of the movements around in the space, but never be violently loud.

SYNCRONIZATION
Cues are marked in the score and should be triggered with the space bar in the MaxMsp patch. This triggers four-channel sound tracks and live processing of the voice.

LIVE ELECTRONICS
The live processing of the voice includes pitchshifting, delay, spatialization and reverbs. The pitches are usually based on overtones and spectral analysis, and are only notated at the most transparent places in the piece.

ELECTRONICS NOTATION
Many cues start playback of prepared 4-channel tracks.
The score contains only approximate information for syncronization with the voice. Black clusters are not even cromatic pitches but based on various manipulated spectral analyses of noise; tam-tams and airplanes, usually not equal tempered and too complex to give intonation help for the voice. Pitches are only given where the electronics directly double the voice.

Aria

for high soprano and electronics

Ruben Sverre Gjertsen 2009-2010

I ♩= 50

Soprano

NV vibr. estremo — oscil. lento — gliss. — gliss. lentissimo — half breath sound

mf f p pp mf pp p pppp

Electronics

SYNCHRONIZE CUES WITH VOICE — Transformations between flute and voice

1 2 3

BUBBLES

Sopr.

Electronics

CRISP GLASS SOUNDS

4

DEEP BUBBLES

Sopr.

espr. — sub. tacet

mf pp ff

Electronics

5 HARMONIZERS OF THE VOICE
both live and recorded

KRISP GLASS SOUNDS AND ELECTRONIC BUBBLES

6

WAIT FOR THE BELLS TO FADE TO PP!

DEEP BELL CHORD
transforming to voice sound

WOODWIND MULTIPHONICS
transforming to voice sound (sound like rumbling bells)

f

Sopr.

mp mf mf

Electronics

7 CONCRETE WATER BUBBLES

GLASS gliss.

SHORT PERCUSSIVE SOUNDS

8 GRASSHOPPER

CRISP GLASS SOUNDS

10

Sopr.

a ~ ε

f

LONG VOICE RESONANCE

WAIT FOR TONE TO FINISH!

NV

5:4

Na

p

CRISP GLASS SOUNDS

Electronics

WINGS

9

LYNX

RUNNING WATER
MORPHED AGAINST
VIBRATO VOICE

DEEP PERCUSSIVE SOUND

TAM-TAM

TAM-TAMS

TAKE OVER WHEN
ELECTRONICS REACH PP

12

Sopr.

7:4

e ~ ε

mp

WOODBLOCK

HIGH FREQUENCY SOUNDS

RECORDED
VOICE

Electronics

SOCCER CELEBRATION

ff

10

CROW
+GLASS

THUNDER
ff

15

Sopr.

VOICE

SMALL PIECES OF GLASS

PHEASANT FLYING

ELECTRIC BUBBLES
AND GLASS SOUNDS

Electronics

FIREWORKS

BEAR
GLISSANDO

VARIOUS BIRDS
AND ANIMALS

STRING CRUSH

BREAKING GLASS

DEEP BEAR
with overtone arpeggio

CONTINOUS FIREWORKS

TAM-TAM

19

Sopr.

ELECTRIC BUBBLES AND GLASS SOUNDS

HIGH CHORD OF WOODWIND MULTIPHONICS

HIGH CHORD OF WOODWIND MULTIPHONICS

Electronics

STRING CRUSH MORPHING AGAINST GLASS SCRAPING

DEEP BEAR

CONTINOUS FIREWORKS

21

Sopr.

vibr.

6:4 5:4 5:4 7:4 7:4

p

NV

p

HIGH GRASSHOPPERS

HIGH STRINGS

Electronics

HICCUP

11

DEEP CHORD OF WOODWIND MULTIPHONICS

12 LIVE HARMONIZERS

VOICE TO FLUTE

DEEP GRASSHOPPERS

DEEP GRASSHOPPERS

23

attacca

Sopr.

VOICE TRANSFORMING TO FLUTE WITH HIGHPASS FILTER

Electronics

DEEP ELECTRIC BUBBLES

II

25

Sopr.

mf

5:4 7:4

Track in this part frequently overlap. Follow the approximate register developments.

Electronics

13

MANIPULATED VOCAL PHRASES

BELLS GLISSANDO l.v.

BASS WOODBLOCK

27

Sopr.

6:4 7:4 5:4

1st time: Type in 13 for repeat

Electronics

14

MANIPULATED VOCAL PHRASES

BELLS GLISSANDO l.v.

BASS WOODBLOCK

29

Sopr.

6:4 5:4 6:4

SHORT GLASS SOUNDS

Electronics

MANIPULATED VOCAL PHRASES

15

MANIPULATED VOCAL PHRASES

31

Sopr.

Electronics

SHORT GLASS SOUNDS

MANIPULATED VOCAL PHRASES

16

ELECTRIC BUBBLES AND GRASSHOPPERS

MANIPULATED VOCAL PHRASES

33

Sopr.

Electronics

ELECTRIC BUBBLES AND GRASSHOPPERS

MANIPULATED VOCAL PHRASES

17

BIRDS

ELECTRIC BUBBLES

MANIPULATED VOCAL PHRASES

SHORT GLASS SOUNDS

BELLS GLISSANDO l.v.

SHORT GLASS SOUNDS

BASS WOODBLOCK

35

Sopr.

Electronics

BIRDS

ELECTRIC BUBBLES

MANIPULATED VOCAL PHRASES

18

GRASSHOPPERS

1st time: Type in 15 for repeat

ELECTRIC BUBBLES

36

Sopr.

Electronics

GRASSHOPPERS

ELECTRIC BUBBLES

19

39

Sopr.

GRASSHOPPERS

ELECTRIC BUBBLES

20

21

MORPHING TAM-TAM SCRAPING

THAI GONGS CHORD l.v.

BELLS GLISSANDO MORPHED AGAINST VOICE

BASS WOODBLOCK

41

Sopr.

NV senza espr.

sub. tacet

GRASSHOPPERS

HIGH MORPHING BIRDS

22

Electronics

43

Sopr.

3:2

oscil. lentissimo

7:4

sub. tacet

ON

D

N

pp

HIGH MORPHING BIRDS

Electronics

23

44

Sopr.

HIGH MORPHING BIRDS

Electronics

24

Start CUE 24 when high birds start to calm down.

DEEP BIRDS MORPHED AGAINST WATER

NASAL

vibr. rapido

46

Sopr.

5:4

NV

5:4

N o u

ɲ N æ ɹ

p

pp

ppppp

CONCRETE BIRDS

LIVE HARMONIZER

Electronics

25

WATER BUBBLES

48

Sopr.

n
ppppp –
lontano

5:4

N
o

ɑ

mp

f

CONCRETE BIRDS

Electronics

50

Sopr.

7"

NV

3:2

ɑ

fp

ɒ

vibr. estremo

7:4

ø

mf

NV

ɛ̃

p

7"

amp. vibr.

3:2

ɑ

mf

5:4

WOODWIND MULTIPHONICS

Electronics

26

LIVE HARMONIZER GLISSANDO (29")

CONTRABASS GLISSANDI

52

Sopr.

5:4

ɛ̃

pp

o

5:4

ɒ

N

7:4

u

End note before 29" after Cue 26,
before the harmonizer glissando stops.

Transformations
between flute and voice

Electronics

27

LIVE HARMONIZER GLISSANDO

53

Sopr.

Electronics

VOICE CHORD

55

Sopr.

Electronics

VOICE CHORD

57

Sopr.

Electronics

VOICE CHORD

TAM-TAMS AND STRINGS

VOICES

fluente
energico

sempre NV

59

Sopr.

mf

FLUTES
doubling vocal
line

29

31

31

32

Electronics

28

Sustained chords which will not be syncronized with the voice. Trigger slightly early because of delay.

TROMBONE PHRASES

CONTRABASSES GLISSANDO and woodwind multiphonies

61

Sopr.

33

FLUTES

34

35

36

mf

Electronics

CROW

Woodpecker

Mooses walking

TROMBONE PHRASES (in cue 28, syncronize with crow in cue 34)

CONTRABASSES GLISSANDO

poco a poco più cantabile

63

Sopr.

mp

FLUTES

37

ELECTRIC BUBBLES

BREAKING
GLASS

Electronics

GOOSE
+DUCK

CONTRABASSES GLISSANDO

65

Sopr.

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

ELECTRIC BUBBLES

mf p pp

Electronics

FLUTES

38

39

ELECTRIC BUBBLES AND BREAKING GLASS

DEEPER ELECTRIC BUBBLES

BREAKING GLASS with vibrato

BACKGROUND NOISE

CONTRABASSES GLISSANDO

MANIPULATED TAM-TAM

68

Sopr.

MASSIVE FLOCK OF BIRDS

BREAKING GLASS (irregular attacks)

ELECTRIC BUBBLES

Electronics

WINGS

BREAKING GLASS with vibrato

GLASS SCRAPE

DEEP DESCENDING FROGS

CROW

70

15"

attacca

Sopr.

Wait for glass scraping to stop.

HIGH GLASS SCRAPING

Electronics

FULL REGISTER ELECTRIC BUBBLES

DEEP DESCENDING FROGS

III

rigid and abrupt
dry and percussive through III

Always place a small breath between cues to allow smooth change of harmonizers.

73

Sopr.

NV

5:4

ɛ̃ ɒ ʌ o

vibr.

5:4

Electronics

mf VOICE

CHORDS
live and
recorded

40 41 42 43

ELECTRIC BUBBLES FALLING

74

Sopr.

vibr.

vibr.

5:4 3:2 5:4

i y ɑ ə æ ʌ

mp ff pp

Electronics

44 45

HIGH STRINGS HIGHPASS CHORD

75

Sopr.

NV

n N

p

Electronics

46

STRING CHORD

pp

77

Sopr.

NV

5:4

5:4

6:4

5:4

mf

pp

f

sub.

mf

p

Electronics

47

48

HARMONIZER

49

ORCHESTRA CHORD

ff

50

ELECTRIC BUBBLES

TAM-TAMS
+ CELLI

pp

Tam-tams
l.v.

79

Sopr.

NV

7:4

poco vibr.

5:4

mp

fp

ff

mf

GRASSHOPPERS

HIGH STRINGS

HARMONIZERS

STRINGS

pp

Electronics

51

52

MANIPULATED TAM-TAMS

53

ff

81

Sopr.

ELECTRIC BUBBLES

STRINGS

Electronics

83

Sopr.

NV

5:4

5:4

3:2

7:4

mf

f

p

pp—

Electronics

54

55

56

57

STRING CHORD

pp

G.P.

G.P.

85

Sopr.

BIRDS

STRINGS

Electronics

88

Sopr.

NV

3:2

7:4

5:4

mf

mp

f—

sub.

GRASSHOPPERS

STRINGS

Electronics

58

59

TAM-TAMS
TO DEEP ELECTRIC BUBBLES

90

Sopr.

7:4

n

ʌ

N

7:4

ɛ̃

pppp —

ff —

sub.

Electronics

60

61

MANIPULATED TAM-TAMS

91

Sopr.

NV

5:4

y

ɒ

mf

9:8

e

ɘ

7:4

ɑ

fp

STRINGS

Electronics

62

pp

63

MASSES OF ELECTRIC BUBBLES AND GRASSHOPPERS

93

Sopr.

7:4

o

ɒ

5:4

ɑ

ɑ

æ

ɛ̃

ɒ

ff

fp

ff

fp

ff

fp

ff

Electronics

ELECTRIC BUBBLES AND GRASSHOPPERS

64

65

66

95

Sopr.

5:4

5:4

MASSIVE STRING CHORDS

67

Electronics

ff

ff

pppp

LIVE HARMONIZER

68

CHORD OF STRINGS AND WINDS

69

98

Sopr.

ELECTRIC BUBBLES

PHEASANT

Electronics

BACKGROUND NOISE

100

Sopr.

ELECTRIC BUBBLES

HIGH STRINGS

Electronics

BACKGROUND NOISE

103

Sopr.

vibr.

5:4

mp

ə ɑ æ

11"

HIGH STRINGS

ELECTRIC BUBBLES

Electronics

70

MASSIVE STRING CHORDS

f

p

105

Sopr.

NV

ɛ̃

5:4

Λ

attacca

5:4 5:4 5:4

N N

pp

f static

LIVE HARMONIZER

72 73

Electronics

71

CHORD OF STRINGS AND WINDS

SOPRANO AND TROMBONE

IV

gliss.

107

Sopr.

7:4 3:2 5:4

e ə y

mp

HIGH GRASSHOPPERS

Electronics

74

WOODWIND MULTIPHONICS WITH VIBRATO

ELECTRIC BUBBLES

GRASSHOPPERS IN
THE MIDDLE REGISTER

AIRPLANE CABIN

AIRPLANE CABIN

109

Sopr.

CROTALES

DESCENDING GLASS SOUNDS
AND ELECTRIC BUBBLES

ASCENDING BIRDS

FLUTE

Electronics

ELECTRIC BUBBLES

FLUTE PHRASE

ELECTRIC BUBBLES

WINGS

CROW

AIRPLANE CABIN

GLASS SCRAPING

BREAKING GLASS WITH VIBRATO

111

Sopr.

FLUTE

Electronics

ELECTRIC BUBBLES

BACKGROUND NOISE

BACKGROUND NOISE

113

Sopr.

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

Na Na l ɒ N ɹ N o u

pp p p

Electronics

FLUTE ELECTRIC SOUND STRETCHED TAM_TAM

ELECTRIC BUBBLES 75 76 ELECTRIC BUBBLES

BACKGROUND NOISE

115

Sopr.

7:4 3:2 6:4 5:4 5:4

o L N ʌ ɑ æ ɒ o æ

mf mp mf ppp

vibr. estremo sub. tacet gliss. lento

Electronics

77 ELECTRIC SOUNDS 78 VOICE MORPHED AGAINST TAM-TAM 79 STRETCHED TAM-TAM

PHEASANT

SCRAPED TAM-TAM l.v.

117

Sopr.

Electronics

STRETCHED TAM-TAM

DEEP ELECTRIC BUBBLES DEEP ELECTRIC BUBBLES

119

Sopr.

vibr. rapido

5:4

pp mf pp mf

VOCAL PHRASES WITH TOO MUCH VIBRATO

Electronics

CRISP GLASS SOUNDS

80

BREAKING GLASS

BACKGROUND NOISE

CRISP GLASS SOUNDS

81

PHEASANT AND WOODPECKER

BACKGROUND NOISE

121

Sopr.

7:4

vibr. grande

piccolo

grande

5:4

vibr. rapido estremo

5:4

3:2

p mf pp mf mf

Electronics

82

BIRDS (overlap with soprano)

ELECTRIC BUBBLES

WOODPECKER

83

VOICE MORPHED AGAINST FROGS, WOODPECKER AND PHEASANT

MOOSES WALKING

BACKGROUND NOISE

BACKGROUND NOISE

123

Sopr.

VOICE MORPHED AGAINST FROGS, WOODPECKER AND PHEASANT

HIGH MORPHING BIRDS

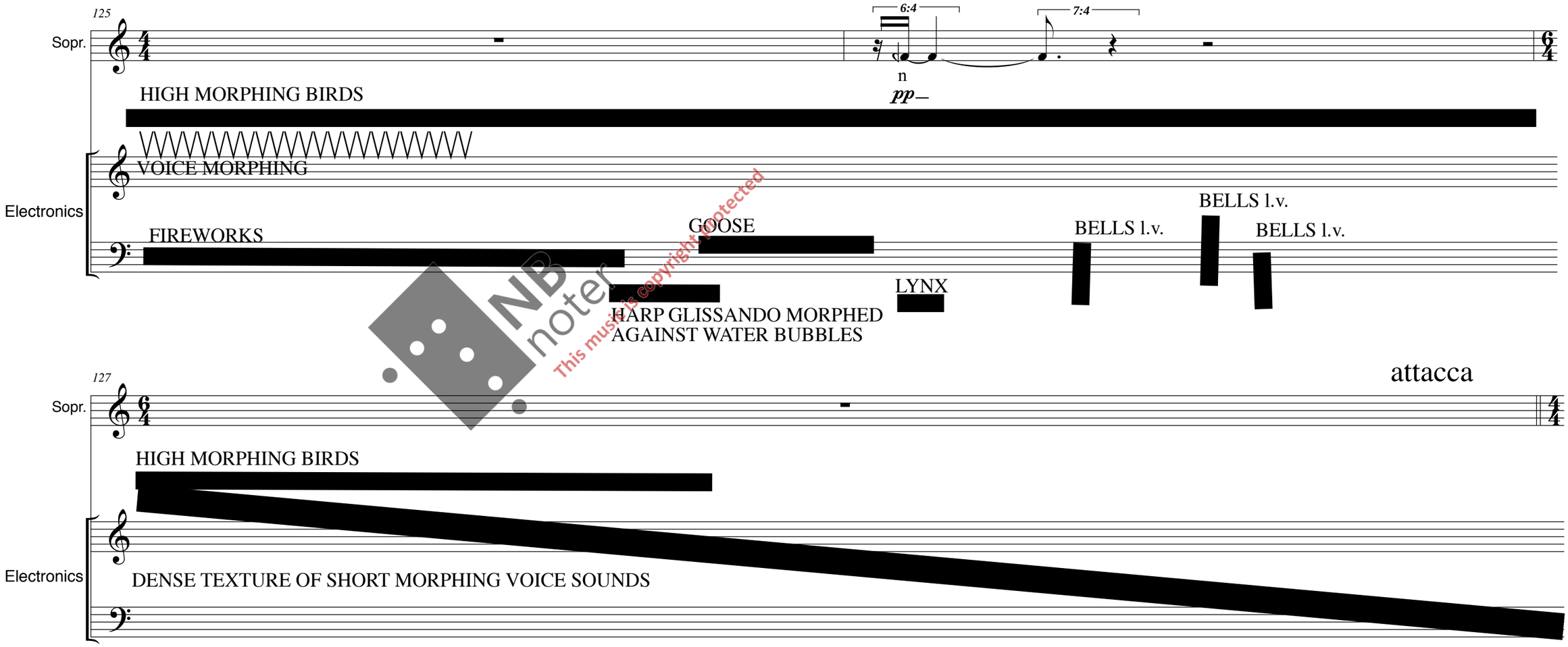
Electronics

FIREWORKS

BACKGROUND NOISE

HARP GLISSANDO MORPHED AGAINST WATER BUBBLES

HARP GLISSANDO MORPHED AGAINST WATER BUBBLES



V static
sempre NV
senza espr. al fine

128

Sopr.

pp

5:4

5:4

Start 84 at the water splash in cue 83.

HIGH WOODWIND MULTIPHONICS

Electronics

84

WATER SPLASH

DEEP WATER SOUNDS

MOTOR SOUNDS (barely audible)

diaphragma vibrato

130

Sopr.

7:4

5:4

ppp

sub. tacet

Electronics

BELLS

BELLS

DEEP ELECTRIC BUBBLES

DEEP WATER SOUNDS

MOTOR SOUNDS

132

Sopr.

5:4

5:4

pp

sub. tacet

3:2

Electronics

WATER DROPS

BELLS

DEEP ELECTRIC BUBBLES

DEEP WATER SOUNDS

134

Sopr.

5:4

5:4

pp

ppp

ppppp

5:4

3:2

pp

Electronics

85

DEEP WATER SOUNDS

86

RUNNING WATER

BATHTUB

DEEP WOODWIND MULTIPHONICS

DEEP ELECTRIC BUBBLES

136

Sopr.

Keep dynamics down to avoid feedback!

vibr.

oscil. lento

3:2

ppppp—

p—

pp—

Electronics

BATHTUB

RUNNING WATER

DEEP WOODWIND MULTIPHONICS

BACKGROUND NOISE

DEEP ELECTRIC BUBBLES

138

Sopr.

5:4

3:2

3:2

mf

mp—

pp—

mp

Electronics

87

STRINGS AND TAM-TAM

MANIPULATED VOCAL PHRASE

BELLS l.v.

BACKGROUND NOISE

LIVE HARMONIZER

Begin when bells are faded out.

vibr.

140

Sopr.

Electronics

VOICES

VOICES

WATER DROPS

STRING CHORD

88

89

90

91

DEEP ELECTRIC BUBBLES

HARBOUR SOUNDS

DEEP WATER SOUNDS

142

Sopr.

HIGH WATER BUBBLES

lontano

Electronics

STRING CHORD

DEEP WATER SOUNDS

BELLS l.v.

BAC KGROUND NOISE

144

Sopr.

NV

Electronics

RECORDED VOICE

92

BACKGROUND NOISE

146

Sopr.

7:4

sub. tacet

vibr. rapido

sub. tacet

G.P.

Electronics

93

DEEP BATHTUB SOUND

NV

148

Sopr.

11:8

3:2

3:2

5:4

5:4

Electronics

DEEP BATHTUB SOUND

water effect

150

Sopr.

7:4

6:4

11:8

3:2

WATER DROPS

RUNNING WATER

94

Electronics

BELLS l.v.

152

Sopr.

7:4

ɑ

mp

5:4

e

pp

sub. tacet

3:2

æ

5:4

o

Electronics

WATER DROPS

RUNNING WATER

95

DEEP BATHTUB

154

Sopr.

3:2

ɑ oN e

mp > *pp*

pp

ø

sub.
tacet

subito energico
vibr. accel. + gliss.

3:2

ʌ

mp

N

5:4

ɒ o

ɑ N o

ff > *p*

Electronics

WATER DROPS

96

TAM-TAMS

DEEP BATHTUB

156

Sopr.

k ' p '
ə ɑ

mp *mf*

o ɑ ʌ

mp *mf* *pp*

sub. tacet

echo
inhaled

3:2

ɑ

5:4

ɒ ə

ppp
lontano

5:4

Electronics

97

STRING CHORD

WATER DROPS

TAM-TAMS l.v.

TAM-TAM l.v.

HARBOUR SOUNDS AND BACKGROUND NOISES

158

Sopr.

vibr. rapido accel.

vibr. estremo

n

ppp

ɛ̃

y

ʉ

u

mp

Electronics

WATER DROPS

STRING CHORD

HARBOUR SOUNDS AND BACKGROUND NOISES

160

Sopr.

oscil. lento

3:2

7:4

N

ɑ

o

u

pp

p'

o

mfz

ɛ̃

o

pp

e

y

ʉ

ɒ

5:4

mf

p

inhaled

o

mp

sub.

Electronics

WATER DROPS

HARBOUR SOUNDS AND BACKGROUND NOISES

162

Sopr.

sub. tacet

7:4

mf

3:2

ʌ

pp

5:4

ɒ

sub. tacet

Electronics

WATER DROPS

LIVE HARMONIZERS WITH DELAY AND REVERB

WATER DROPS

98

HARBOUR SOUNDS AND BACKGROUND NOISES

164

Sopr.

Electronics

HARMONIZERS
Delays should fill the rests

Long fermatas only at the notes

amp. vibr.

vibr.

pp

fp

166

sub. tacet

ppp

5:4

7:4

p

f

99

RUNNING WATER

TAM-TAMS

BATHTUB SOUND

168

5:4

mfz

STRETCHED VOCAL PHRASE

RUNNING WATER

TAM-TAMS

l.v.

BATHTUB SOUND

DEEP WATER SOUNDS

170

Sopr.

p

ppp

5:4

sub. tacet

STRETCHED VOCAL PHRASE

Electronics

100

101

DEEP WATER SOUNDS

DEEP WATER SOUNDS

172

Sopr.

5:4

3:2

7:4

ppp

mp

pp

3:2

p

Electronics

102

103

sub. tacet

174

Sopr.

5:4

6:4

5:4

mf

mp

pp

mfpp

p–

Electronics

104

BELLS CHORD l.v.

WATER BUBBLES

TAM-TAMS l.v.

176

Sopr.

NV

vibr. grande subito

NV

7:4

5:4

sub. tacet

i y e

p

5:4

ɑ o

mf p

ɛ̃ æ

mf

Electronics

WATER BUBBLES

WATER SOUNDS

105

TAM-TAMS morphed against WATER

l.v.

179

Sopr.

7:4

3:2

vibr. lento

3:2

7:4

9:8

h e æ

mfpp

mp

n

pp

o ɒ

pp

Λ o

mp

WATER SOUNDS

Electronics

TAM-TAMS morphed against WATER

181

Sopr.

vibr. accel. sub.

3:2

sub. tacet

3:2

5:4

q, o

5:4

ʉ y

m ɛ̃

pppp

mf

ɡ, o

ɑ Λ

p mp

AIRPLANE CABIN

WATER SOUNDS

Electronics

106

WATER BUBBLES (overlapping with CUE 107)

107

TAM-TAMS morphed against WATER

l.v.

STRING CHORD

184

Sopr.

inhaled

5:4

5:4

ε̃

pp

AIRPLANE CABIN

Electronics

STRING CHORD

WATER SOUNDS

186

Sopr.

5:4

D

pp

5:4

O

AIRPLANE CABIN

Electronics

WATER SOUNDS

STRING CHORD

188

Sopr.

AIRPLANE CABIN

Electronics

WATER SOUNDS

STRING CHORD

191

Sopr.

AIRPLANE CABIN

Electronics

STRING CHORD

GRADUAL HIGHPASS FILTERING OF THE STRING CHORD

194

Sopr.

HIGHPASS FILTERED STRING CHORD

Electronics

40"

197

Sopr.

BACKGROUND NOISE

WATER DROPS

Electronics

WATER BUBBLES