



michael
gancz

*

the
nature
of
intelligent
life
is
to
destroy
itself

*

for
orchestra

the nature of intelligent life is to destroy itself

a senior thesis in music composition

by michael gancz

instrumentation:

3 flutes

2 oboes

2 clarinets

2 bassoons

4 horns in F, each with a crystal glass tuned to C

3 trumpets in Bb, each with a crystal glass tuned to C

2 tenor trombones

1 bass trombone

1 tuba

3 timpani

bass drum

water gong or submersible tam-tam (32" or larger)

taiko drum or floor tom

crotales

tubular bells

glockenspiel

marimba

vibraphone

harp

piano

celesta

strings

performance notes:

x noteheads indicate special playing techniques with indeterminate pitch

triangle noteheads indicate the highest pitch available on one's instrument

box notation indicates cells to be repeated

lines with arrowheads indicate continuous transformations in technique

horns and trumpets are provided with crystal glasses to play with their fingers; in certain sections of the piece, these players are also asked to buzz their mouthpieces with one end submerged in the glass; if needed, this technique can be demonstrated by the composer

crystal glasses should be set on stools in between each french horn and trumpet player

mm. 117 allows players to improvise; it is encouraged that the instructions for that section be read and understood in advance of rehearsal and recording

flute whistle tones should be played as flitting harmonics of the written fundamental

woodwind key clicks should sound with hints of pitch

string glissandi should be smooth and even unless otherwise specified

tongue stops are produced by bringing the tongue in between the teeth in order to stop one's airflow with an audible semi-pitched pop

program notes

we live alone in an infinite universe

enrico

i smell fire & both my socks are wet & all my friends are dead
and there is age and lung rot and abandon bubbling up around

and fuck

if i was raised to think there's any other way to solve this paradox

the nature of intelligent life is to destroy itself

michael gancz

12-11-21

new haven, connecticut

4 **3/2** 5 **4/2** 6 **3/2** 7

Crot. *soft mallets*
p

Tub. B. *espr.*
p

Glock. *soft rubber mallets*
p

Vib. *secco*
p

Hp. *mp*

Pno. *ppp*



8 9 10 11 12 13 14

Hn. 1 *crystal glass*

Hn. 2 *crystal glass*

Hn. 3 *crystal glass*

Hn. 4 *crystal glass*

Tpt. 1, 2, 3 *crystal glass*

Timp. *soft mallets con sord*
pp

Crot. *soft mallets*
fppp

Tub. B. *v.c.*

Glock. *soft rubber mallets*
fppp

Vib. *soft mallets*
fppp

Hp.

Vln. Ia *flaut.*

Vc.a. *RH: drum index and middle fingers sul IV*
LH: gliss
p
(sul IV)

Vc.b. *pizz con sord - allow sound to fade out naturally*
pp
(sul IV)

16

15 *air* *f* *tongue stop* 17 18

Hn. 1

Hn. 2

Hn. 3

Hn. 4

Tpt. 1, 2, 3

Tbn. 1

Tbn. 2

B. Tbn.

16

LV *p*

Crot.

LV *p* *with vibr.* *f*

Glock.

p *with glock* *f*

Vib.

p

Cel.

16

p *msp*

Vln. Ia

flaut. *msp* *p*

Vln. Ib

flaut. *msp* *p*

Vln. Ila

flaut. *msp* *p*

Vln. Ilb

19 20 21 (a2) 22 23 24 25 26

Fl. 1

Fl. 2

Crot.

Tub. B.

Glock.

Vib.

Hp.

Pno.

Cel.

Vln. Ia

Vln. Ib

Vln. IIa

Vln. IIb

ppp *p*

ppp *p*

ppp *p*

ppp *p*

fppp *p* *mp* *6* *with celesta*

p *mp*

p

p *mp* *6* *with vibr.*

flaut. *mp* *p*

flaut. *mp* *p*

flaut. *mp* *p*

flaut. *mp* *p*

4/2 **3/2** **4/2** **3/2**

23 **23** **23** **23**

29

Fl. 1, 2, Ob. 1, 2, Cl. 1, 2, Hn. 1-4, Tpt. 1, 2, 3, Tbn. 1, 2, B. Tbn.

Tempo: $\frac{3}{2}$, $\frac{7}{4}$ (2+2+3), $\frac{4}{2}$, $\frac{3}{2}$, 30, 31, $\frac{4}{2}$, $\frac{3}{2}$

Fl. 1: *ppp*, *f*, *pp*, *mp*

Fl. 2: *ppp*, *f*, *pp*, *mp*

Ob. 1: *ppp*, *f*, *pp*, *tr*

Ob. 2: *ppp*, *f*, *pp*, *tr*

Cl. 1: *ppp*, *f*, *pp*, *tr*

Cl. 2: *ppp*, *f*, *pp*, *tr*

Hn. 1-4: *air*, *f*, *tongue stop*, *ppp*, *a 1 blend into texture*, *stay under woodwinds*

Tpt. 1, 2, 3: *air*, *f*, *tongue stop*, *ppp*, *a 1 con sord blend into texture*, *tutti (open) air*

Tbn. 1, 2, B. Tbn.: *air*, *f*, *tongue stop*, *air*

29

Timp., Croc., Tub. B., Glock., Mar., Vib., Hp., Pno., Cel.

Tempo: $\frac{3}{2}$, $\frac{7}{4}$, $\frac{4}{2}$, $\frac{3}{2}$, $\frac{4}{2}$, $\frac{3}{2}$ (soft mallets con sord)

Timp.: *hard mallets*, *ppp*, *pp*

Croc.: *ppp*

Tub. B.: *ppp*

Glock.: *ppp*

Mar.: *soft mallet*, *pp*

Vib.: *hard mallets*, *p*

Hp.: *bisb.*, *ppp*

Pno.: *ppp*, *mp*, *3 3*

Cel.: *p*

29

Vln. Ia, Vln. Ib, Vln. Ila, Vln. Ilb, Via., Vc.a., Cb.

Tempo: $\frac{3}{2}$, $\frac{7}{4}$, $\frac{4}{2}$, $\frac{3}{2}$, $\frac{4}{2}$, $\frac{3}{2}$

Vln. Ia-Ilb: *flaut.*, *pp*, *msp*

Via.: *flaut.*, *ppp*, *ord. flaut.*, *msp*

Vc.a.: *pizz (strum)*, *ppp*

Cb.: *p*

34 35 36 37

Fl. 1 *f* *pp* whistle tones

Fl. 2 *f* *pp* whistle tones

Ob. 1 *f* *ppp* whistle tones

Ob. 2 *f*

Cl. 1 *f*

Cl. 2 *f*

Hn. 2 *f* *tongue stop*

Hn. 3 *f* *tongue stop*

Hn. 4 *f* *tongue stop*

Tpt. 1, 2, 3 *f* *tongue stop*

Tbn. 1 *f* *tongue stop*

Tbn. 2 *f* *tongue stop*

B. Tbn. *f* *tongue stop*

Timp. (approx. pitch)

Crot. *ppp* *soft mallets* *p* *arco*

Tub. B. *p*

Glock. *p* *ppp* *soft mallets* *p* *ppp*

Vib. *ppp* *soft mallets* *p* *ppp*

Cel.

Vln. Ia *p* *flaut.* *msp*

Vln. Ib *p* *flaut.* *msp*

Vln. IIa *p* *flaut.* *msp*

Vln. IIb *p* *flaut.* *msp*

Vla. *pp*

Vc.a *p* RH: drum index and middle fingers sul IV
LH: gliss

Vc.b *p* RH: drum index and middle fingers sul IV
LH: gliss

Cb. *p* (pizz)

40 41 42 43 44

Fl. 1
Fl. 2
Ob. 1
Ob. 2
Cl. 1
Cl. 2
Bsn. 1
Hn. 1
Hn. 2
Hn. 3
Hn. 4
Tpt. 1, 2, 3
Tbn. 1
Tbn. 2
B. Tbn.
Tba.
Timp.
T.-t.
Glock.
Mar.
Vib.
Hp.
Cel.
Vln. Ia
Vln. Ib
Vln. IIa
Vln. IIb
Vla.
Vc.a
Vc.b
Cb.

key clicks with air
7
key clicks with air
6

sotto voce
tr
ppp
p

sotto voce
tr
ppp
p

ppp
p

tutti
p
ppp
p
ppp
p
ppp
p

mouthpiece submerged in water
soft bubbling effect
ppp
p

air
air
air
air

with fingers
ppp

(sus cym also ok)
arco
ppp
p

with celesta
mp
6

bisb.
ppp

with vibr.
mp
6

flaut.
pp
p

ppp
pp
ppp

45 46 47 48 49

Fl. 1 *mp* *ppp*

Fl. 2 *mp* *ppp*

Cl. 1 *pp*

Cl. 2 *pp*

Bsn. 1 *pp*

Bsn. 2 *pp*

Tbn. 1 *f*

Tbn. 2 *f*

B. Tbn. *f*

Tba. *f* *pp*

Timp. *p* *sim.*

T.-t. *secco*

Crot. *ord.* *p*

Tub. B.

Glock. *with harp* *mp*

Mar. *p*

Vib. *p*

Hp. *with glock* *p* *mp*

Pno. *p*

Cel. *p*

Vln. Ia *pp* *m* *msp*

Vln. Ib *pp* *m* *msp*

Vln. IIa *pp* *m* *msp*

Vln. IIb *pp* *m* *msp*

Vla. *pp* *p*

Vc.a *pp* *p*

Vc.b *pp* *p*

Cb. *(pizz)* *sotto voce* *mp*

4/2 3/2 4/2

49 **4/2** 50 **3/3** 51 52 **3/3**

Fl. 1 *pp* *f*

Fl. 2 *pp* *f*

Ob. 1 *pp* *f*

Ob. 2 *pp* *f*

Cl. 1 (a 2) *mp* *f*

Cl. 2 *mp* *f*

Bsn. 1 *pp* *f*

Bsn. 2 *pp* *f*

Hn. 1 crystal glass

Hn. 2 crystal glass

Hn. 3 crystal glass

Hn. 4 crystal glass

Tpt. 1, 2, 3 crystal glass

Timp. **4/2** **3/3**

T-t. arco *ppp* *p*

Taiko D.

Crot. arco

Tub. B. *3*

Glock. arco

Mar.

Vib. arco

Hp. *espr.*

Pno. *pp* inside the piano – scrape with thumb flesh, very subtle

Cel.

Vln. Ia **4/2** *sudden molto cresc.* *f* **3/3** *harm. glisses sul G out of time, shimmery* *ppp*

Vln. Ib *sudden molto cresc.* *f* **3/3** *harm. glisses sul G out of time, shimmery* *ppp*

Vln. Ila *sudden molto cresc.* *f*

Vln. Ilb *sudden molto cresc.* *f*

Vla. *pizz* *f* fingernail scrape *pp*

Vc.a RH: drum index and middle fingers sul IV LH: gliss

Vc.b RH: drum index and middle fingers sul IV LH: gliss

Cb. (pizz) *p*

53 54 55 56

Hn. 1
Hn. 2
Hn. 3
Hn. 4
Tpt. 1, 2, 3
Tbn. 1
Tbn. 2
B. Tbn.
Tba.

mouthpiece submerged in water
soft bubbling effect - ind. pitch

ppp

fp

53

Temp.
T-t.
Cro.
Tub. B.
Glock.

soft mallet
1/2 submerged in water tank

p

f

secco

53

Hp.
Vln. Ila
Vln. Iib
Vla.
Vc.a
Vc.b
Cb.

bisb.
ppp

arco
fp

f

p

RH: drum index and middle fingers sul IV
LH: gliss

p

f

f

57 58 59 60 61

Hn. 1 *p*

Hn. 2 *p*

Hn. 3 *p*

Hn. 4 *p*

Tpt. 1, 2, 3 *p*

T.t. $\frac{4}{2}$ *ord.* 59 $\frac{3}{2}$

Crot.

Glock.

Mar. *with harp espr.* *mp* *sim.*

Hp. *with marimba espr.* *mp* *sim.*

Pno. *inside the piano – scrape with thumb flesh, very subtle* *pp*

Vla. 59 $\frac{4}{2}$ $\frac{3}{2}$

Vc.a

Vc.b

64 2+2+3

7/4

key clicks out of time

65 3/3

listen for clarinet countermelody 67

This musical score page covers measures 62 through 67. It features a variety of instruments including woodwinds (Flutes, Oboes, Clarinets, Bassoons, Horns, Trumpets, Trombones, Tuba), percussion (Cymbals, Glockenspiel, Maracas, Vibraphone, Harp, Celesta), and strings (Violins, Viola, Violoncellos, Contrabass). The score includes dynamic markings such as *p*, *mp*, *fpp*, *mf*, *f*, and *pp*. Performance instructions include "key clicks out of time" for the woodwinds, "con sord" for the trumpets, "with celesta" for the harp, and "with vibr." for the celesta. A specific instruction for the clarinets is "listen for clarinet countermelody 67". The time signature changes from 7/4 to 3/3 at measure 65. The page number 13 is located in the top right corner.

68 *ord.* 69 **70** 71 72 **7/4** 2+2+3 73 **3/2** 74 75

Fl. 1 *mf* *ord.* *mf* *mp*

Fl. 2 *mf* *mf*

Ob. 1 *mf*

Ob. 2 *mf*

Cl. 1 *mf*

Cl. 2 *mf*

Bsn. 1 *mp*

Bsn. 2 *mp*

Hn. 1 *crystal glass*

Hn. 2 *crystal glass*

Hn. 3 *crystal glass*

Hn. 4 *crystal glass*

Tpt. 1, 2, 3 *crystal glass*

Tbn. 1

Tbn. 2

B. Tbn.

70 **7/4** **3/2**

Timp.

Crot. *f*

Tub. B. *f* *p*

Glock. *f* *p*

Vib. *f* *p*

Hp. *mp*

Pno. *f* *p*

Cel. *f*

Vln. Ia **70** **7/4** **3/2** *f* *flaut.*

Vln. Ib *f* *flaut.*

Vln. Ila *f* *flaut.*

Vln. Ilb *f* *flaut.*

Vla. *arco* *fp* *f*

Vc. a *fp* *f*

Vc. b *fp* *f*

Cb. *fp* *f*

76 77 78 79 80 81 82 83

Fl. 1 *p* *f*

Fl. 2 *mp* *p* *f*

Ob. 1 *mp* *p* *f*

Ob. 2 *mp* *p* *f*

Cl. 1 *p* *f*

Cl. 2 *p* *f*

Bsn. 1 *f*

Bsn. 2 *f*

Hn. 1 *air*

Hn. 2 *air*

Hn. 3 *air*

Hn. 4 *air*

Tpt. 1, 2, 3 *air*

Tbn. 1 *air*

Tbn. 2 *air*

B. Tbn. *air*

Timp. *soft mallets con sord* *p* **82**

T-t. triangle beater scrape

Crot. *p* *ppp*

Tub. B. *mp*

Glock. *mp*

Mar. *p*

Vib. *p*

Hp. *bisb* *ppp*

Pno. *mp*

Cel. *mp*

Vln. Ia *pp* *f* *msp* **82**

Vln. Ib *pp* *f* *msp*

Vln. Ila *pp* *f* *msp*

Vln. Ilb *pp* *f*

Vla. *pp* *p*

Vc.a *pp* *p* (ord.) *p*

Vc.b *pp* *p* (ord.) *p*

Cb. (pizz) *p*

84 hum a rising gliss at indeterminate pitch 85 86 87 88

Fl. 1 hum a rising gliss at indeterminate pitch

Fl. 2 hum a rising gliss at indeterminate pitch

Ob. 1 hum a rising gliss at indeterminate pitch

Ob. 2 hum a rising gliss at indeterminate pitch

Hn. 1 tongue stop *f*

Hn. 2 tongue stop *f*

Hn. 3 tongue stop *f*

Hn. 4 tongue stop *f*

Tpt. 1, 2, 3 tongue stop *f*

Tbn. 1 tongue stop *f*

Tbn. 2 tongue stop *f*

B. Tbn. tongue stop *f*

Timp.

T-t. soft mallet
1/2 submerged in water tank → ord.

Pno.

Vln. Ia hum a rising gliss at indeterminate pitch

Vln. Ib hum a rising gliss at indeterminate pitch

Vln. IIa hum a rising gliss at indeterminate pitch

Vln. IIb hum a rising gliss at indeterminate pitch

Vla. hum a rising gliss at indeterminate pitch

Vc.a *f*

Vc.b *f*

Cb.

key clicks out of time

Fl. 1

Fl. 2

Ob. 1

Ob. 2

Cl. 1

Cl. 2

Bsn. 1

Bsn. 2

mouthpiece submerged in water
angry hornet effect - ind. pitch

Hn. 1

Hn. 2

Hn. 3

Hn. 4

Tpt. 1, 2, 3

Tbn. 1

Tbn. 2

B. Tbn.

Tba.

Timp.

B. D.

T. t.

Taiko D.

Tub. B.

Mar.

Hp.

Pno.

scrape

triangle beater scrape

espr.

mf

ped. buzz

RH: drum index and middle fingers sul IV
LH: gliss

Vln. Ia

Vln. Ib

Vln. IIa

Vln. IIb

Vla.

Vc.a

Vc.b

Cb.

ped. buzz

pizz

(pizz)

93 **4/2** **94** **3/2** 95

Fl. 1 *mp* *f*

Fl. 2 *mp* *f*

Ob. 1 *mp* *f*

Ob. 2 *mp* *f*

Cl. 1 *mp* *f*

Cl. 2 *mp* *f*

94 **3/2**

T-t. *arco mp*

Crot. *soft mallets mp*

Tub. B. LV

Glock. *soft rubber mallets mp*

Vib. *mp*

Hp. *mp*

Pno. *mp*

94 **3/2**

Vln. Ia *mf* *f*

Vln. Ib *mf* *f*

Vln. IIa *mf* *f*

Vln. IIb *mf* *f*

99

7
4

3+2+2

3
3

97 98 100 101 102 103 104 105

Fl. 1 *f* *mp*

Fl. 2 *f* *mp*

Ob. 1 *f* *mp*

Ob. 2 *f* *mp*

Cl. 1 *f* *mp*

Cl. 2 *f* *mp*

Hn. 1 *f* *air* *tongue stop*

Hn. 2 *f* *air* *tongue stop*

Hn. 3 *f* *air* *tongue stop*

Hn. 4 *f* *air* *tongue stop*

Tpt. 1, 2, 3 *f* *air* *tongue stop*

Tbn. 1 *f* *air* *tongue stop*

Tbn. 2 *f* *air* *tongue stop*

B. Tbn. *f* *air* *tongue stop*

Timp. *pp* *soft mallets con sord* *f* *7/4* *3/3*

Crot. *fppp* *soft mallets* *p*

Tub. B. *fppp* *soft rubber mallets* *p*

Glock. *fppp* *soft mallets* *secco* *f*

Vib. *fppp* *soft mallets* *f*

Hp. *p*

Pno. *p*

Cel. *p*

Vln. Ia *p* *flaut.* *msp* *7/4* *3/3*

Vln. Ib *p* *flaut.* *msp*

Vln. IIa *p* *flaut.* *msp*

Vln. IIb *p* *flaut.* *msp*

Vc.a *p* *RH: drum index and middle fingers sul IV* *LH: gliss*

Vc.b *pp* *pizz con sord - allow sound to fade out naturally*

106

107

108

109

Fl. 1

Fl. 2

Cl. 1

Hn. 1

Hn. 2

Hn. 3

Hn. 4

Tpt. 1, 2, 3

espr.

p

p

crystal glass

106

Tub. B.

Vib.

Hp.

Pno.

Cel.

mp

mp

f

106

Vln. Ia

Vln. Ib

Vln. IIa

Vln. IIb

flaut.

flaut.

flaut.

flaut.

msp

msp

msp

msp

f

f

f

f

110 111 112

Fl. 1 key clicks out of time
key clicks out of time

Fl. 2 key clicks out of time
key clicks out of time

Ob. 1 key clicks out of time
key clicks out of time

Ob. 2 key clicks out of time
key clicks out of time

Cl. 1 key clicks out of time
key clicks out of time

Cl. 2 key clicks out of time
key clicks out of time

Bsn. 1 key clicks out of time
key clicks out of time

Bsn. 2 key clicks out of time
key clicks out of time

Hn. 1 to mouthpiece
mouthpiece submerged in water
angry hornet effect - ind. pitch

Hn. 2 to mouthpiece
ff mouthpiece submerged in water
angry hornet effect - ind. pitch

Hn. 3 to mouthpiece
ff mouthpiece submerged in water
angry hornet effect - ind. pitch

Hn. 4 to mouthpiece
ff mouthpiece submerged in water
angry hornet effect - ind. pitch

Tpt. 1, 2, 3 to mouthpiece
ff mouthpiece submerged in water
angry hornet effect - ind. pitch

Tbn. 1 out of time, brash approx. pitch
slowly introduce more and more flz
f

Tbn. 2 out of time, brash approx. pitch
slowly introduce more and more flz
f

B. Tbn. out of time, brash approx. pitch
slowly introduce more and more flz
f

Tba. *f*

Timp. *f*

B. D. partially submerged
f

T-t. *mp*

Taiko D. *f*

Crot. *fp*

Tub. B. *fp*

Glock. *fp*

Mar. *fp*

Vib. *fp*

Hp. *mf*

Pno. *mf*

Cel. *mf*

Vln. Ia hum a rising gliss at indeterminate pitch
continue while playing until mm. 115

Vln. Ib hum a rising gliss at indeterminate pitch
continue while playing until mm. 115

Vln. IIa hum a rising gliss at indeterminate pitch
continue while playing until mm. 115

Vln. IIb hum a rising gliss at indeterminate pitch
continue while playing until mm. 115

Vla. *mf*

Vc.a hum a rising gliss at indeterminate pitch
continue while playing until mm. 115
mf
arco

Vc.b hum a rising gliss at indeterminate pitch
continue while playing until mm. 115
mf
arco

Cb. *mf*

113 hum a rising gliss at indeterminate pitch 114 115scream! 116

Fl. 1 hum a rising gliss at indeterminate pitch

Fl. 2 hum a rising gliss at indeterminate pitch

Ob. 1 hum a rising gliss at indeterminate pitch

Ob. 2 hum a rising gliss at indeterminate pitch

Cl. 1 hum a rising gliss at indeterminate pitch

Cl. 2 hum a rising gliss at indeterminate pitch

Bsn. 1 hum a rising gliss at indeterminate pitch

Bsn. 2 hum a rising gliss at indeterminate pitch

Hn. 1

Hn. 2

Hn. 3

Hn. 4

Tpt. 1, 2, 3

Tbn. 1 *ff*

Tbn. 2 *ff*

B. Tbn. *ff*

Tba. *ff*

Timp.

B. D. *ff*

T. t. *ff* not submerged! bloom over everything LV

Taiko D. *ff*

Crot.

Glock. *ff*

Mar. *ff*

Vib. *ff*

Hp. *ff* fake this bit if you need to

Pno. *ff*

Cel. *ff*

Vln. Ia scream! *ff*

Vln. Ib scream! *ff*

Vln. Ila scream! *ff*

Vln. Ilb scream! *ff*

Vla. scream! *ff*

Vc.a scream! *ff*

Vc.b scream! *ff*

Cb. scream! *ff*

Semi-improvisatory section:
 Repeat cells violently and quite loud for about 2 minutes total between mms. 117 and the end of 119.
 Alter material as you see fit; use the notated material only as a guide, think of the orchestra collapsing under its own weight, yourself collapsing into your own human complexity.
 Be noisy, furious, amelodic.
 without getting softer, start resting more and more between cells.
 By the cue at 118, play about once every 5 seconds, by the cue at 119, every 10 seconds.
 The conductor will cue at 120 once the energy naturally dies down.

117

118

119

The score is divided into three measures: 117, 118, and 119. Measure 117 contains the main melodic and rhythmic material for most instruments. Measure 118 is marked with a *flz.* (ritardando) and features a *honk* instruction for the oboes. Measure 119 is a continuation of the material. The score includes various performance instructions such as *overpressure* for the strings and *submerge gradually to lower pitch* for the triangle. The notation includes notes, rests, and dynamic markings across all instrument parts.

117

117

