

to Odile Auboin

prism spectra for viola and electronics

↓ = events

P1
↓

P2
↓

P3
↓
15" - 19"

P4
↓

P5
↓

P6
↓

P7
↓
15" - 19"

P8
↓

P9
↓

Dai Fujikura

♩ = 80

(arco)
Bouncing Bow

Viola

steady repeat

2

3 gradually sul pont.

4

5 more and more staccato

6 WILDLY Bouncing Bow

7 less and less staccato

8

9 heavy, sticky bow

10 MOLTO S.P. (scratchy)

no gap

pp

fff

Electronics

+1600

+700 perf 5th

not completely together with viola-live with a little delay - like a string orchestra

-200

-500

400

1700

700

-1400

-1500

-1500

-1400

-1500

+700 perf 5th

+300

-600

-1500

-2200

1700

2100

+800 perf 5th

-1700

-2800

↑
"friends"
"friends"

"friends" = semi-improvised live electronics

2

P10

P11

12" - 14"

11" - 13"

S.P.
(non staccato)
A = open

gradually towards P.O.

more and more staccato (bouncing bow) P.O.

II

12

13

A, D = open

steady

steady

repeat

repeat

no gap

no gap

Vla.

fff

1700

700

1700

700

700

0

-300

-800

disappears as
viola dim.

disappears as
viola dim.

"friend"

P12

P13

14 ↓

15 ↓

16

3
4
1

3
4
2
1

3
4

12" - 14"

13" - 15"

sounding pitch

staccato Bouncing bow

non - staccato

more and more staccato (bouncing bow)

steady

repeat

staccato Bouncing bow

repeat

mf (action)
p in result

fff

1600

700

-300

+2100

+1400

+900

+700

Vla.

Ele

3
4
4

4
4

----->

P17

Senza misura

6

14" - 20"

Continuously play these double stops in any order, and of unequal length, randomly accenting them to surprise the listener in order to achieve a nervous feeling.

SUBITO P.O.

30

7" - 11"

some of the double stops to be played as harmonics

31

most of the double stops to be played as harmonics

32

20" - 25"

All to be played as harmonics

more and more bow pressure, more and more scratchy

Vla.

molto trem.

overall, gradually more and more harmonics

p

ff

fff

stop: random transposition from the set below

Ele

more and more FRIENDS as viola gets louder.

P18

in Tempo
♩ = 80

heavy, sticky bow
As fast as possible, but STEADY tempo!

P19

SUBITO
Pizz.

P20

(Pizz.)

P21

more and more staccato (bouncing bow)

SUBITO
arco

35 36 37 38 39 40 41 7

Vla. $\frac{4}{4}$ $\frac{7}{8}$ $\frac{3}{4}$ $\frac{5}{4}$ $\frac{4}{4}$

fff *fff* sub. *mp fff* *f*

Violin1 transpose 1700;
Violin2 transpose 700;
Cello transpose -1500;
Cbass transpose -2200

Violin1 transpose 800;
Violin2 transpose 0;
Cello transpose 0;
Cbass transpose -1700

Violin1 transpose 2100;
Violin2 transpose 1400;
Cello transpose 900;
Cbass transpose 700

Violin1 transpose -500;
Violin2 transpose 400;
Cello transpose -1400;
Cbass transpose 0

no gap

no "FRIENDS" ----- MAX ----- OFF

Subito
SUPER VP
NO "FRIENDS"

NO "FRIENDS" ----- MAX ----- OFF

P22

P23

P24

P25

42 *bouncing bow*

less and less staccato

Molto S.P.

heavy, sticky bow

44

45

46

G = open (Pizz.)

ff

Vla.

4/4

3/4

5/4

3/4

p

Violin1 transpose 700;
Violin2 transpose 700;
Cello transpose 0;
Cbass transpose 0

Violin1 transpose 700;
Violin2 transpose 700;
Cello transpose -300;
Cbass transpose -800

Violin1 transpose 1700;
Violin2 transpose 1700;
Cello transpose 700;
Cbass transpose 0

SUBITO Pizz.

Violin1 transpose 1600;
Violin2 transpose 700;
Cello transpose -300;
Cbass transpose 0

Ele

NO "FRIENDS" ----- : MAX -----

P26

P27

P28

P29

P30

P31

P32

9
init

P.O.

more and more staccato (bouncing bow)

bouncing bow

less and less staccato

MOLTO
S.P.

47

SUBITO
arco

48

49

A = open

50

51

heavy,
sticky bow

52

16" - 18"

Vla.

ff

pp

ffff

Violin1 transpose 2100;
Violin2 transpose 1400;
Cello transpose 900;
Cbass transpose 700

Violin1 transpose 0;
Violin2 transpose 0;
Cello transpose 0;
Cbass transpose 0

Violin1 transpose 1700;
Violin2 transpose 1700;
Cello transpose 700;
Cbass transpose 0

Violin1 transpose -500;
Violin2 transpose 400;
Cello transpose -1400;
Cbass transpose 0

Violin1 transpose 700;
Violin2 transpose 700;
Cello transpose -300;
Cbass transpose -800
Violin1 transpose 300;
Violin2 transpose -600;
Cello transpose -400;
Cbass transpose -1400

Soundfile

Ele

SUBITO
arco

NO "FRIENDS"

MAX

===== . OFF



section 2

P33

P34

10

$\text{♩} = 96$

1 *espressivo*
solo but kind of "lazy", "drunk", like playing

3

4

5

↓ 6

7

8

9

Vla. *mp*

The violin part is written in a single staff with a treble clef and a key signature of one flat. It begins with a dynamic marking of *mp* and a hairpin indicating a gradual increase in volume. The music consists of a series of notes with various articulations, including slurs and accents. There are also some performance markings like 'v' and 'p' above notes.

(Soundfile)

Ele

The piano accompaniment is written in a grand staff (treble and bass clefs). The first few measures are marked with a blacked-out soundfile icon. Later in the piece, there are several dashed boxes indicating specific soundfile markers with numerical values: -500, +700, +800, and -1800. The piano part includes chords and melodic lines in both hands.

poco rit.

poco accel.

poco rit.

$\text{♩} = 80$
rit.

P35

P36

P37

10 11 12 13 14 15 16 17 18 19 11

The image shows a musical score for Viola (Vla.) and Electric Piano (Ele.). The Viola part is written in treble clef with a key signature of one flat and a 4/4 time signature. The Electric Piano part consists of three staves: a right-hand treble clef staff, a middle treble clef staff, and a left-hand bass clef staff. The score is divided into measures 10 through 19, with a repeat sign at the end of measure 19. Performance markings include dynamic levels (e.g., -600, -1100, -1200, -300, -2400, +1000, +400, -2000) and a 'REVERSE -2000' marking. The tempo markings 'poco rit.', 'poco accel.', and 'poco rit.' are placed above the score, and a metronome marking of $\text{♩} = 80$ is at the top right. Three specific points are marked with boxes and arrows: P35 at measure 10, P36 at measure 14, and P37 at measure 19.

Più mosso

♩ = 80 rit.

Meno mosso

♩ = 60

12 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

P38 P39 P40 P41

Vla.

3/4 4/4

poco rubato,
very smooth, drunk, lazy playing....

gliss.

+700

+1600

-600

+400

+400

-300

-1000

SOUNDFILE
(CataRT) **STARTS**

create texture with CataRT

slowly more and more "active" (meaning, smaller grains, sharper shaped grains, increase gain std etc.)

Meno mosso

♩ = 52

P42

P43

Section 3

Più mosso

♩ = 100

P44

13

put down the bow

13" - 15"

36

37

38

39

40

41

42

43

44

45

46

47

Vla.

Ele

-400
-1100
-2000
SuperVP (no delay)

adding another SOUNDFILE

CataRT overall harmony 1

more and more MANIC (meaning, smaller grains, sharper shaped grain, increase gain std etc.)

Attack detection triggers sounds + random transposition from the set

0 gliss. +1400

0 gliss. -800

adding another SOUNDFILE

CataRT overall harmony 2

more and more MANIC (meaning, smaller grains, sharper shaped grain, increase gain std etc.)

STOP

2 layers of CataRT sound files "transpose" gradually, one goes up, one goes down AS VIOLA glissando

2 3 4 5 6 7 8 9 10

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

mechanical *espressivo* heavy pizz. norm. just hit the string with flesh of the finger heavy pizz. (with flesh) flick with nails just hit the string with flesh of the finger norm.

P45 P46

Pauses should be lengthy in "section3"

change of "set of sounds"

change of "set of sounds"



11 12 13 14 15 16

p *mf* *p* *pp* *mf* *pp* *sub. mf* *pp* *p* *f* *sfz* *ff*

espressivo *espressivo* quasi-pizz.trem *gliss.* *gliss.* *espressivo* quasi-pizz.trem *gliss.* sub. marcato

P47 P48

change of "set of sounds"

change of "set of sounds"



17 18 19 20 21 22 23

sub. ff *sfz* *mf* *sub. ff* *mf* *p* *mf* *p* *sfz* *sfz* *sfz*

mechanical quasi snap normal pizz.

P49

accel.

24 $\text{♩} = 50$ 25 26 27 28 $\text{♩} = 76$ 29

Vla. $\frac{2}{4}$ *molto espress.* $\frac{5}{4}$ $\frac{2}{4}$ $\frac{4}{4}$ *norm.*

mp *fff* *p* *fff*

change of "set of sounds"



P50

30 31 32

Vla. *norm.* *p* *fff* *p*

change of "set of sounds"



rit.

33 34 35

Vla. *fff* $\frac{3}{4}$ $\frac{2}{4}$

16

36 $\text{♩} = 50$

P51

37

18" - 20"

38 39

P52

(empty)

40 41 42 43 44

$\text{♩} = 76$

P53

slow arpeggio

fff

p

gliss.

fff

sfz *ff*

change of "set of sounds"

Ele

soundfile

change of "set of sounds"

45

Vla.

sfz

sfz *sfz*

48

Vla.

sfz *sfz*

49

50

$\text{♩} = 55$

51

P54

(pizz.)

fast arpeggio

sim.

52

4/8

53

P55

54

55

P56

13"-15"

p

fff

fff *sfz* *sfz*

change of "set of sounds"

change of "set of sounds"

soundfile

STOP

Ele

56 57 58

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

mf



59 60 61 62 63 64

Vla. $\frac{4}{4}$

soundfile P57

init+ stopping soundfile (5sec) P58

$\text{♩} = 90$

(pizz.) *sim.* *gliss.*

28" - 30" arco 5" - 6"

fff *pp*

change of "set of sounds" soundfile

Ele

Section 4

P59

P60

P61

freeze starts (soundfile)

P62

small soundfile

P63

mp *molto espressivo* *poco rubato* *sub. sfz p* *port.*

1 2 3 4 5 6 7

4/4 ♩ = 42 2/4 4/4 3/4 2/4

harmonizer -200, +200, +600, +900

harmonizer +800, -500, -800, -1400

fade out

freeze starts (soundfile)

0 -700

stop the svp
+ start the small soundfile
with 1 sec delay.

The musical score consists of two staves: Viola (Vla.) and Ele. The Viola staff is in bass clef and contains a melodic line with various dynamics and articulations. The Ele staff is in treble clef and contains harmonic accompaniment with specific soundfile triggers.

Viola Staff:

- Bar 8: *sub. sfz p*, time signature $\frac{2}{4}$. Trigger: freeze (soundfile) P64.
- Bar 9: *ff*, time signature $\frac{4}{4}$. Trigger: P65.
- Bar 10: *pp*, time signature $\frac{4}{4}$. Trigger: P66.
- Bar 11: *pp*, time signature $\frac{4}{4}$.
- Bar 12: *pp*, time signature $\frac{2}{4}$.
- Bar 13: *pp*, time signature $\frac{4}{4}$.
- Bar 14: *pp*, time signature $\frac{4}{4}$. Triggers: P67, P68.
- Bar 15: *sub. sfz p*, time signature $\frac{3}{8}$. Trigger: freeze (soundfile) P69.

Ele Staff:

- Bar 8: freeze sim.
- Bar 9: harmonizer +800, -500, -800, -1400.
- Bar 10: from bar 170 - 171 +500.
- Bar 11: from bar 171 -800.
- Bar 12: from bar 174 - 175 -1400.
- Bar 14: harmonizer -200, +200, +600, +900.
- Bar 15: freeze.

small soundfile

P70

P71

P72

small soundfile

Vla.

Ele

time stretch

time stretched

gliss.

sub. sfz p

ff

p

3/8

4/4

2/4

4/4

5/4

15

16

17

18

19

20

21

soundfile

P73 P74 P75

22 23 24 25 26 27 28 29

Vla. $\frac{5}{4}$ $\frac{4}{4}$ ff pp f $\frac{5}{8}$ $\frac{3}{4}$ 9" - 11"²¹

Ele

gliss.

+900, +600, +200, -200

+1000

+400

section 5 "friends" music (semi-impro by computer)

P76



♩ = 52

tempo rubato (exreme accel, rit., by player's choice)

----- more and more bow pressure and scratchy -----> molto S.P.
 ----- poco a poco molto S.P. -----> Scratchy

30 31 32

Vla. *pp* *fp* *fp* *sim.* *fp* *fp* *fp* *fp* *fff* *ff* *espress. arco* *sub. ff* *S.P. sub. p* *P.O. ff* *7* *16* *pizz.*

1 P.O. Norm. arco 2 3

(soundfile)

Ele

STOP

24 19 S.P. pizz. P.O. arco pizz. arco 20 21 4/4 gliss. pizz. 5/16

//

22 5/16 arco 23 3/4 arpeggio pizz. 24 arco S.P. 25 P.O. gliss. gliss. pizz. S.P. arco 2/4

//

26 2/4 sub. f pizz. arco 27 3/16 28 3/8 gliss. gliss. 29 P.O. 30 espress. 31 S.P. sub. p arco ff 32 2/4 p 33 pizz. f 5/16

//

34 35 molto accel. P.O. arpeggio 36 7/16 gliss. gliss. 37 4/4 pizz. arco pizz. arco pizz. 38 7/8 arco gliss. gliss.

section 6

P77

P78

P79

P80

♩ = 80

senza mizura

12" - 14"

10" - 12"

9" - 11"

Viola Part:

- P77:** *more and more staccato*, *more and more S.P.*, *A = open*, *p*, "Friends": minimum
- P78:** *bouncing bow*, *less and less staccato*, *A = open*, *ff*, more "Friends"
- P79:** *less and less staccato*, *molto S.P.*, *ff*, more "Friends"
- P80:** *non-staccato*, *more and more staccato (bouncing bow)*, *steady*, *repeat*, *staccato Bouncing bow*, *"mf (action)" (p in result)*, *fff*

Ensemble (Ele) Part:

- P77:** Violin1 transpose 0; Violin2 transpose 0; Cello transpose 0; Cbass transpose 0
- P78:** Violin1 transpose 1700; Violin2 transpose 1700; Cello transpose 700; Cbass transpose 0
- P79:** Violin1 transpose 2100; Violin2 transpose 1400; Cello transpose 900; Cbass transpose 700; **SUBITO arco**
- P80:** Violin1 transpose 2100; Violin2 transpose 1400; Cello transpose 900; Cbass transpose 700

P81

P82



3
4
2
1

12" - 14"

12" - 14"

less and less staccato

more and more staccato

steady

heavy bow

WILDLY Bouncing Bow

Vla. 5

repeat

6

8

sub. *fffz* sub. *p* sub. *fffz* sub. *p* sub. *fffz* sub. *p* sub. *fffz* sub. *p* sub. *fffz* sub. *p*

sudden dynamics changes....
make it surprising for audience

Attack detection : random transposition from the set below

"Friends": None

Ele

1600

700

-300

Violin1 transpose 1100; Violin1 transpose 1400;
Violin2 transpose 300; Violin2 transpose 800;
Cello transpose -500; Cello transpose 300;
Cbass transpose -1000 Cbass transpose -500

Violin1 transpose 1500; Violin1 transpose 400;
Violin2 transpose 1000; Violin2 transpose 200;
Cello transpose 800; Cello transpose -300;
Cbass transpose 200 Cbass transpose -500

Violin1 transpose 800; Violin1 transpose 1700;
Violin2 transpose 300; Violin2 transpose 700;
Cello transpose -600; Cello transpose -1500;
Cbass transpose -1500 Cbass transpose -2200

Violin1 transpose 1000; Violin1 transpose 10;
Violin2 transpose 800; Violin2 transpose -10;
Cello transpose -600; Cello transpose -20;
Cbass transpose -800 Cbass transpose 15

Violin1 transpose 1700; Violin2 transpose 800;
Violin2 transpose 800; Cello transpose 700;
Cello transpose 700; Cbass transpose 500

some "Friends"

P83 **P84**

13" - 15" 11" - 13"

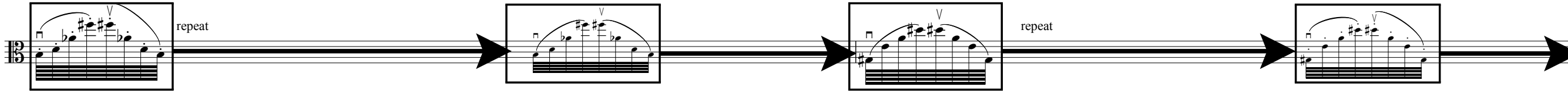
D = open 10 A = open

9 10

less and less staccato heavy bow more and more staccato

steady steady

repeat repeat

Vla. 

sub. sub. *sffz* p sub. sub. *sffz* p sub. sub. *sffz* p sim. sub. sub. *sffz* p sub. sub. *sffz* p sub. sub. *sffz* p sub. sub. *sffz* p sub. sub. *sffz* p sub. sub. *sffz* p sub. sub. *sffz* p sub. sub. *sffz* p sub. sub. *sffz* p sub. sub. *sffz* p sub. sub. *sffz* p sub. sub. *sffz* p sub. sub. *sffz* p sub. sub. *sffz* p sub. sub. *sffz* p

(you can play more *sffz* + p gestures, but avoid these gesture to be predictable, or regular).

Attack detection : random transposition from the set below

- ; Violin1 transpose 900;
- ; Violin2 transpose 400;
- ; Cello transpose -700;
- ; Cbass transpose -1300
- ;
- ; Violin1 transpose 1800;
- ; Violin2 transpose 900;
- ; Cello transpose -1000;
- ; Cbass transpose -2100
- ;
- ; Violin1 transpose -12;
- ; Violin2 transpose -7;
- ; Cello transpose 5;
- ; Cbass transpose 10
- ;
- ; Violin1 transpose 1500;
- ; Violin2 transpose 1000;
- ; Cello transpose 800;
- ; Cbass transpose 200
- ;
- ; Violin1 transpose 500;
- ; Violin2 transpose 300;
- ; Cello transpose 200;
- ; Cbass transpose -400

even more "Friends"

Attack detection : random transposition from the set below

- ; Violin1 transpose 300;
- ; Violin2 transpose -600;
- ; Cello transpose -500;
- ; Cbass transpose -1400
- ;
- ; Violin1 transpose 1700;
- ; Violin2 transpose 700;
- ; Cello transpose -1500;
- ; Cbass transpose -2200
- ;
- ; Violin1 transpose 700;
- ; Violin2 transpose 700;
- ; Cello transpose -300;
- ; Cbass transpose -800
- ;
- ; Violin1 transpose 1500;
- ; Violin2 transpose 1000;
- ; Cello transpose 800;
- ; Cbass transpose 200
- ;
- ; Violin1 transpose -12;
- ; Violin2 transpose -7;
- ; Cello transpose 5;
- ; Cbass transpose 10

even more "Friends"

P85 P86 P87 P88 P89 P90 P91 P92

8" - 9" 5" - 6" 9" - 11" 11" - 13" 24" - 28"

11 *more and more staccato* 12 *more and more staccato* 13 normal bow 14 *more and more staccato* 15 Bouncing Bow 16 *more and more S.P. (scratchy)*
less and less staccato 17 **MOLTO S.P. (scratchy) accel.** 18

Vla. *pp* *(p)* *fff*

no "Friends" some "Friends" even more "Friends" no "Friends" "Friends": Max

2100 +300 -500 1700 1700 +700 perf 5th 1700

+800 perf 5th -600 -400 1700 1700 +700 perf 5th +700 perf 5th

Ele -1700 -500 -1400 700 700 -1500 -1500

-2800 -1400 -1500 -2200

ALL: suddenly CUT

The score is divided into sections corresponding to the time intervals above. The Viola part features a melodic line with various bowing techniques and dynamics. The Electric Bass part provides harmonic support with specific fretting instructions (e.g., +300, -500, 1700) and dynamic markings. The overall performance is characterized by a progression from a soft, staccato beginning to a powerful, scratchy, and accelerated conclusion.