

*Dedicated to Anssi Karttunen*

**Kaija Saariaho**

**Petals**

for cello solo  
with optional electronics

Duration: approx. 9 min.


*Premiered by Anssi Karttunen  
at the Musica Nova Festival, Bremen  
on May 19th 1988*


**Edition Wilhelm Hansen Helsinki AB**


# Petals

When vibrato markings are not specified, players can use their usual vibrato. *Molto vibrato* always means a rapid and narrow vibrato, unless otherwise specified. Tremolo should always be as dense as possible.

## General marks

 change very gradually from one sound or one way of playing (etc) to another

 diminuendo al niente

 crescendo da niente

S.V. senza vibrato

▲ highest note possible



## Microintervals



↑ note raised a 1/4 tone (between  $\flat$  and  $\sharp$  upwards)


↓ note lowered a 1/4 tone (between  $\flat$  and  $\flat$  downwards)

## Glissandi

For glissandi there are three different notations:

 or  this glissando should always be played very evenly, without vibrato and accentuations

 or  glissando with much vibrato


 glissando with artificial harmonics, in which the upper finger is constantly moving and thus creating a rich sound with vividly varying pitches, instead of one gliding pitch


All the glissandi should be started immediately at the beginning of the note value.


S.P. *always* estremamente sul ponticello


S.T. sul tasto


N normal (used with S.P. and S.T., otherwise ord.)


 move gradually from normal to harmonic sound (less and less pressure with the left hand)

 add bow pressure to produce a scratching sound, in which the audible pitch is totally replaced by the noise

 as above but move back from noise to tone again

 (E.F.) decrease bow pressure to produce a soft, noise, windlike murmur

 E.F. ... decrease bow pressure to produce a soft, noisy, winds-like murmur for as long as E.F. (estramamente flautando) continues, and move then gradually back to normal bow pressure

 E.F. add bow pressure to produce a scratching sound, and decrease it gradually to produce the E.F. sound described above.

When playing long sustained tones the bow changes should always be made imperceptible.

# Petals

Kaija Saariaho  
(1988)

Lento (very slowly; the duration of every stave in this tempo should always be at least 20"!)

1

Vlc. *tr* *gliss.* *tr*

Etr. **R** *mp* 40% *tr*

rev. time ca. 2,5"

2

Vlc. *tr* *tr*

Etr. **R** *mp* *mf* 40% *tr*

**H**  $\emptyset$   $\emptyset$  50%

3

Vlc. *tr* *tr*

Etr. **R** *mf* *ff* *f* 40% *tr*

**H** (50%)  $\emptyset$

4

*100*  $\text{♩} = \text{ca. } 60$  *energico*

Vlc. *ff* 10 *ff* 10 *ff* 10 *mf* 10

Etr. **R** (40%) *tr*

5

Vlc. *mf* 10 *mf* 10 *p* *mf* 10 *mp* 10

Etr. **R** (40%) *tr*

6

Vlc. *mp* 10 *p* *mf* 10 *pp* 10 *f* 10 *mf* 10

Etr. **R** (40%) *tr*

7

Vlc. *mf* *gliss.* 10 *gliss.* *rit.* *ppp*

Etr. **R** (40%) *tr*

8

*Lento*

Vlc. *tr* *tr* *gliss.* *tr*

Etr. **R** *ppp* *pp* *ppp* 40% *tr*

**H**  $\emptyset$  50% 30%

9

Vlc. *tr* *tr* *tr* *tr*

Etr. **R** *ppp* *tr* *tr* 40% *tr*

**H** 30%  $\emptyset$

♩ = ca. 54 *accel.* ♩ = ca. 66

R 30%

*poco agitato* *rit.* *a tempo*

R (30%)

H ∅ 50% ∅

*rit.* *a tempo* *rit.* *a tempo* *a tempo*

R (30%)

*rit.* ♩ = ca. 40 *Lento*

R 30% 50%

14

R (50%)

H ∅ ∅ 20% ∅

15

R (50%) 40%

H ∅ 20% ∅

16

R 40%

H ∅ 50% ∅

17 ♩ = ca. 60

R (40%) 20%



18 *rit.* ..... *a tempo* ..... *poco rubato*

*mf* *p* *f* *p* *f* *pp* *f* *ppp*

*gliss.* *gliss.* *gliss.*

5

at least 10"

R 20% 40% 20% 40% > 20%

H 30%

540

19 *poco rit.*

*f* *pp*

*gliss.*

R 20% 40% 20%

H 20%

20 *a tempo* *rit.* *a tempo* *rit.*

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

5 6

R 20% 40% 20% 50% 20%

H 20%

21 *a tempo* *poco rubato*

*ppp* *mp* *p*

3

R 20% 50% 30%

H 20%

change gradually the rev. time -> ca. 15"

22 *gliss libero* *gliss libero*

*p* *ppp* *f*

R 30% 40% 20%

H 20%

(rev. time ca. 15")

23

*ff* *pp* *ff* *ff* *mp*

R 20%

H 50%

24

*pp* *ff* *pp* *ff*

R (20%)

H 50%

25

ff ppp ffff ppp

gliss. tr.

R (20%) 40% 20% 40%

H ∅ 50%

26

ffff pppp f

gliss. tr.

R 40% 20% 30%

H ∅

27

f ppp mp

gliss. tr.

Lento

R 30% 20% 30%

H ∅

28

mp

gliss. tr.

R (30%)

H ∅ 30%

29

mp sempre

gliss. tr.

R (30%)

H ∅ 30% 30%

30

(mp)

gliss. tr.

ca. 10" at least 20" at least 25"

R 30% 50%

H ∅ 50%

change gradually rev. time 15" → ca. 30"

### **Electronic version**

For the electronic version the following are needed:

- at least one microphone for the amplification
- digital reverb with a variable reverb time
- harmonizer (Yamaha SPX90 or REV5: pitch change program, or possibly Publison, Eventide)
- at least two loudspeakers (possibly a monitor for the cellist)
- mixer (suggested set-up see p. 8)

The amplified sound is sent to both loudspeakers. The amount of amplification depends, naturally, on the concert space, but should not totally cover the acoustic sound of the instrument. The general level should not grow enormously when the degree of effects is added; here the straight amplified sound can be set slightly down. Nevertheless, no abrupt changes in the sound image should be made.

The sound ideal is a clear and rich 'close sound'. The microphone(s) should be placed as close to the instrument as possible.

The general level should be set to be rather loud, nevertheless not painfully so!

### **Harmonizer**

The harmonizer should be set to produce microtonal pitch shifting, the transposition being about 50 cents (= 1/4 tone) on both sides of the input signal. If only one channel is available, the transposition is set one 1/4 tone higher.

If the SPX90 is used as harmonizer, select programme 22 (pitch change B) and set the parameters as follows:

pitch1 +0/fine1 +45/delay1 20ms

pitch2 +0/fine2 -50/delay2 15ms

If some other devices are used, a slight reverb can be added so soften the effect.

### **Reverb**

If several reverb programs are available a bright reverberation should be selected without any other effects. At the beginning the reverb time should be set to about 2.5 seconds (depending on the hall), and possible filterings and other manipulations made to obtain a clear and bright sound. If the concert space is very dry, the instrumental sound can be slightly reverberated throughout the piece.

If the changing of reverberation time causes any clicks, it is better to choose a stable reverberation and accentuate the changes of reverb time by changing the amount of reverb. Generally: rather too little than too much reverb!

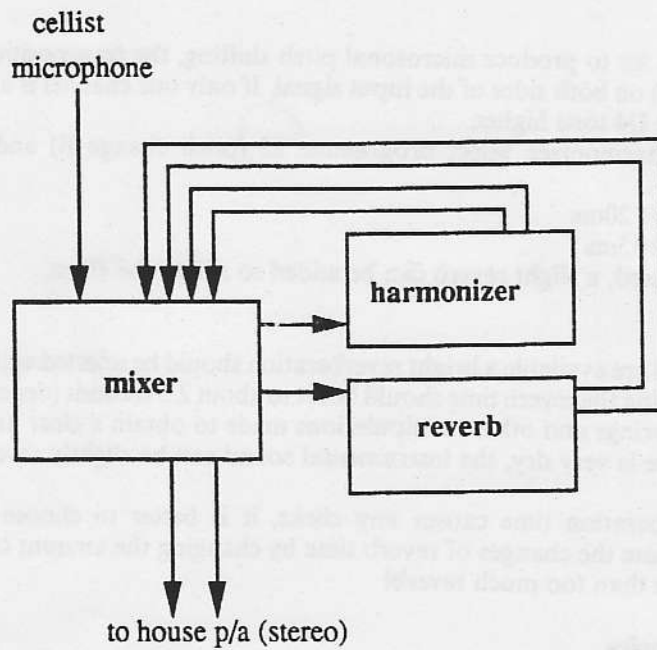
### **The notation of the electronics**

The two effects are marked with R (reverb) and H (harmonizer). The changes in the degrees of the effects are marked approximately with crescendos or diminuendos from a previous level to a new level, or with dotted lines, which means that the current level is to be maintained.

The percentages marked are guidelines only, and will have to be adjusted every time depending on the performance space.

*Kaija Saariaho*

### Proposition for the set-up of the electronics



if SPX90 is used as harmonizer,  
select programme 22 (pitch change B)  
and set the parameters as follows:  
-pitch1 +0/ fine1 +45/ delay1 20ms  
-pitch2 +0/ fine2 -50/ delay2 15ms