

Wolfgang von Schweinitz

Plainsound Lullaby

for piano
with optional amplification

op. 59

2014

for Richard Valitutto

PLAINSOUND MUSIC EDITION

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NOTES

PERFORMANCE TECHNIQUE

The piece features a number of precisely defined multi-phonic sound aggregates, or chords of natural harmonics, generated on the bass strings of the piano by an accentuated touch of the key, while briefly touching the strings at the specified nodes with a finger of the left hand, employing an appropriate amount of pressure to suppress the fundamental frequency and get a rich and freely ringing sound that contains all the partials notated in the score. The sound aggregates featuring harmonic number 16 in measures 5, 13, 21, 25 and 31 are produced with an enhanced sforzato touch by simultaneously stopping two nodes on the string (please see page 3 of the preface for details).

PIANO PREPARATION

To secure the production of the sound aggregates within the musical context, the nodes that need to be touched must be marked on the strings of the piano with thin colored threads of wool or cotton. The specified nodes can be precisely located by ear, always listening to the “upper voice” within the compound sounds (i.e. to the highest pitch notated with a large note in the score).

List of the nodes that need to be marked on the bass strings:

<u>C-2</u>	marked at	<u>F-1</u>	is marked at
3/16	of the string length, as in measure 21 (near the damper)	3/16	see measure 13
3/15 = 1/5	of the string length, as in measure 21 (on the 3 rd beat)	3/15	see measure 13
3/14	of the string length, as in measure 22	3/14	see measure 14
3/13	of the string length, as in measure 23	3/13	see measure 15
3/12 = 1/4	of the string length, as in measure 24	3/12	see measure 16
5/16	of the string length, as in measure 21	3/11	see measure 17
		2/7	see measure 4
<u>B-flat-1</u> is marked at		3/10	see measure 18
3/16 see measure 5	<u>E-flat-1</u> is marked at	5/16	see measure 19
3/15 see measure 5	3/9 = 1/3 see measure 10	3/9	see measure 20
3/14 see measure 6	<u>C-1</u> is marked at	<u>B-flat-0</u> is marked at	
3/13 see measure 7	3/15 = 1/5 see measure 30	1/4 see measure 6	
3/12 see measure 8	3/12 = 1/4 see measure 24	1/3 see measure 14	
3/11 see measure 9	2/7 see measure 26		
3/10 see measure 10	3/9 = 1/3 see measure 25		
5/16 see measure 5			

If the nodes at 3/16 of the string length are located underneath the dampers and cannot be used to generate the sound aggregates featuring harmonic 16, then the strings C-2, B-flat-1 and F-1 must also be marked at 3/8 of the string length, i.e. further back, somewhat behind 1/3 (please see page 3 of the preface for details).

PIANO TUNING

The piece may be performed on a piano tuned in standard Equal Temperament.

PIANO AMPLIFICATION

A subtle amplification of the piano sounds is desirable for performances in large or medium-sized halls, with a microphone positioned close-up above the bass strings, a speaker positioned near the piano in the middle of the stage (if possible), and with the volume turned down so far that the amplification is barely audible.

NOTATION

The nodes that need to be touched on the strings and the generated sounding pitches are notated (in the manner used for strings) with a set of microtonal accidentals called “Extended Helmholtz-Ellis JI Pitch Notation”, using the equal-tempered F as the reference pitch in this score (see legend next page).

PERFORMANCE DURATION *circa 3 minutes*

ACCIDENTALS

for microtonal just intonation

EXTENDED HELMHOLTZ-ELLIS JI PITCH NOTATION

The exact intonation of each pitch is written out by means of the following harmonically defined accidentals:

$\flat\flat$ \flat \natural \sharp \times *Pythagorean series of non-tempered perfect fifths*
(... c g d a e ...)

\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow *lowers / raises the pitch by a syntonic comma*
 $81 : 80 =$ **circa 21.5 cents**

\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow *lowers / raises the pitch by two syntonic commas*
circa 43 cents

\lrcorner \ulcorner *lowers / raises the pitch by a septimal comma*
 $64 : 63 =$ **circa 27.3 cents**

\llcorner \ulcorner *lowers / raises the pitch by two septimal commas*
circa 54.5 cents

\dagger \dagger *raises / lowers the pitch by an 11-limit quarter-tone*
 $33 : 32 =$ **circa 53.3 cents**

$\#$ $\#$ *lowers / raises the pitch by a 13-limit third-tone*
 $27 : 26 =$ **circa 65.3 cents**

\approx \approx *lowers / raises the pitch by the 17-limit schisma*
 $256 : 255 =$ **circa 6.8 cents**

\sphericalangle \sphericalangle *raises / lowers the pitch by the 19-limit schisma*
 $513 : 512 =$ **circa 3.4 cents**

\uparrow \downarrow *raises / lowers the pitch by the 23-limit comma*
 $736 : 729 =$ **circa 16.5 cents**

These 'Helmholtz-Ellis' accidentals for just intonation were designed in collaboration with Marc Sabat.

The attached arrows for pitch alterations by a syntonic comma are transcriptions of the notation used by Hermann von Helmholtz in his book "Die Lehre von den Tonempfindungen als physiologische Grundlage für die Theorie der Musik" (1863). – The annotated English translation "On the Sensations of Tone as a Physiological Basis for the Theory of Music" (published 1875/1885) was made by Alexander J. Ellis, who refined the definition of pitch within the 12-tone system of Equal Temperament by introducing a division of the octave into 1200 cents. – The accidental sign denoting an alteration by a septimal comma was devised by Guiseppe Tartini (1692-1770), the composer, violinist and researcher who investigated the difference tones created by double-stops.

The available sound aggregates
featuring harmonic number 16

Piano

touch nodes: $\frac{5}{16}$ $\frac{3}{8}$ $\frac{5}{16}$ $\frac{5}{16}$ $\frac{3}{8}$ $\frac{5}{16}$ $\frac{5}{16}$ $\frac{5}{16}$ $\frac{3}{8}$ $\frac{5}{16}$
 $\frac{3}{16}$ $\frac{2}{8}$ $\frac{4}{16}$ $\frac{3}{16}$ $\frac{2}{8}$ $\frac{4}{16}$ $\frac{5}{16}$ $\frac{3}{16}$ $\frac{2}{8}$ $\frac{4}{16}$

used only
in measure 19

The sound aggregates featuring harmonic 16 (in measures 5, 13, 21, 25 and 31)

are produced by simultaneously touching two nodes on the string with the thumb and the third or fourth finger of the left hand. - If the nodes at $\frac{3}{16}$ of the string length are not located below the dampers, the sound aggregates can be played by touching the nodes at $\frac{3}{16}$ & $\frac{5}{16}$, as notated in the score. Otherwise they can be replaced by the sound aggregates number 2, 5 and 9 produced by touching the nodes at $\frac{2}{8}$ & $\frac{3}{8}$ further back inside the piano. In case it is impossible to touch the string at these nodes, then the sound aggregates produced at nodes $\frac{4}{16}$ & $\frac{5}{16}$ should be used.

Plainsound Lullaby

for piano with optional amplification

Wolfgang von Schweinitz
op. 59 (2014)

Adagio (♩ ca. 48) *gently rocking with emphasized downbeats and soft attacks on the open strings*

sustain sounding pitches

Piano

L. H. on the strings *piano* *cresc.* *sf* *cresc.*

R. H. on the keyboard *ped.* * *ped.* * *ped.*

touch nodes: 3/12 3/12 3/9 of string length 2/7 5/16* 3/12 3/15 3/14 3/12

*) Two alternative double stops for generating the sound aggregates featuring harmonic 16 are provided in the preface.

ritenuto *a tempo*

cresc. *sf* *cresc.*

* *ped.* * *ped.* * *ped.* * *ped.* *

3/13 3/12 3/12 3/12 3/11 3/12 3/10 3/9 3/10 3/12 3/12 5/16* 3/15 3/16

ritenuto *a tempo*

cresc. *cresc.*

ped. *piano* * *ped.* *

3/14 3/9 3/13 3/12 3/12 3/11 3/10 3/12 5/16 3/9

ritenuto

sf *cresc.* *cresc.*

ped. * *ped.* *

5/16* 3/15 3/14 3/13 3/9 3/12 3/12 5/16* 3/9 3/15 2/7 3/14 3/13 3/16

a tempo *ritardando*

cresc. *sf*

ped. * *ped.* *

5/16 3/12 3/15 3/15 3/12 3/12 3/15 3/9 5/16* 3/14 3/15 ca. 3'

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Score with fingering suggestions

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op. 59 (2014)

Adagio (♩ ca. 48) *gently rocking with emphasized downbeats and soft attacks on the open strings*

sustain *sounding pitches*

Piano

L. H. on the strings *piano* *cresc.*

R. H. on the keyboard *sf* *cresc.*

touch nodes: 3/12 3/12 3/9 of string length 2/7 5/16* 3/12 3/15 3/14 3/12

*) Two alternative double stops for generating the sound aggregates featuring harmonic 16 are provided in the preface.

ritenuto *a tempo*

cresc. *sf* *cresc.*

3/13 3/12 3/12 3/12 3/11 3/12 3/10 3/9 3/10 3/12 3/12 5/16* 3/15

ritenuto *a tempo*

cresc. *cresc.*

3/14 3/9 3/13 3/12 3/12 3/11 3/10 3/12 5/16 3/9

ritenuto

sf *cresc.* *cresc.*

5/16* 3/16 3/15 3/14 3/13 3/9 3/12 3/12 5/16* 3/16 3/9 3/15 2/7 3/14 3/13

a tempo *ritardando*

cresc. *sf*

5/16 3/16 3/12 3/15 3/15 3/12 3/12 3/15 3/9 5/16* 3/16 3/14 3/15 ca. 3'