Lauri Kilpiö

Poème de jeux acoustiques

for Clavichord

2009



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Lauri Kilpiö:

Poème de jeux acoustiques

For Clavichord

Commissioned by the Finnish Clavichord Society Dedicated to Pekka Vapaavuori



NOTES FOR THE PERFORMER

1. General Notes

Much of the keyboard music of the late 18th century could be performed either with harpsichord, fortepiano or clavichord. My piece *Poème de jeux acoustiques*, however, is **exclusively clavichord music**, i.e. **it can be played only with clavichord**. In principal, both fretted and unfretted clavichord are acceptable. However, the instrument should be equipped with **covered strings in the bass register**.

For the performance of the piece you also need large **scissors with plastic handles**. The handles should be of the same size. And the two handles together should have a preferable minimum width of about 4-5 cm at the bottom. (E.g. the scissors of Ikea have proven to work well.) In principal, any similar hard plastic implement (as e.g. a mobile phone) can be used instead of the scissors, but the performer has to take care that the sounding result of any substitute is similar to that of the plastic scissors-handles. Even if a substitute were otherwise chosen, it is advisable to use the scissors in the last two bars of the piece.

The composer has been impressed by the rich sound world of the clavichord. In this piece, however, the instrument is not handled in a traditional way, since not a single tone is played from the keyboard. Instead, sounds are produced in about 14 other ways, like rubbing, tapping and wiping the strings, or knocking and rubbing the soundboard of the instrument. These more or less noisy effects are very rich and, in my opinion give greatly inspiring and interesting opportunities for a composer. Due to the completely untraditional playing techniques in the piece, the performer need not necessarily be a professional clavichord player, or even a keyboard instrument musician, at all.

While planning and composing the piece, I had a small fretted clavichord in my use, and it is the sounding images produced by this instrument that I originally had in mind at the time of composing. But while a large, unfretted clavichord may produce somewhat different effects, its use in performance is acceptable as well in principle. However, due to the larger size of its soundboard and the extended length of its strings, a large unfretted clavichord can produce too much reverberation, which might endanger the clarity of the sound and texture of the music. Consequently, if an unfretted clavichord is to be used, the use of damping felt strips (or any other means to reduce the reverberation) should be strongly considered.

The notation of the different playing techniques is primarily based on 11 different clefs, which all have their own meaning and specific order in the score. The different playing techniques is primarily based on 11 different clefs, which all have their own meaning and specific order in the score. The different playing techniques is primarily based on 11 different clefs, which all have their own meaning and specific order in the score. The different playing techniques is primarily based on 11 different clefs, which all have their own meaning and specific order in the score.

concrète instrumental, music of concrete sounds for a traditional ly, is a tribute to the tradition of the French concrete music of the French keyboard music.

pent should be considered, especially if the performance takes place in a

contact the composer: +358 41 4423257.

TOT OTOTOMORIONO!

My piece is dedicated to **Mr. Pekka Vapaavuori**, who was active in commissioning the piece, and who also gave the first performance of the work.

Helsinki, July 7th 2009 **Lauri Kilpiö**

2. Notational guide

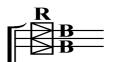
There are 11 different clefs in the piece, which express the playing technique that should be applied to the notes on the corresponding staff. Most of the clefs appear exclusively on their own staff, and are arranged in a definite order in the score (as with the order of staves for separate instruments in an orchestral score.) However, if any technique is not used for some time, the corresponding staff will then be optimized out, i.e. it will not be shown at all. Unconventional staves, like a staff with 1 or 3 lines, are used with some of the clefs.

In addition to the clefs, there are also other graphic symbols in the score, providing additional information about the desired effect and playing technique. Some verbal instructions and verbal abbreviations are used as well.

Systems in the score are always divided in two parts: the staves played by the right hand (R.H.) and the left hand (L.H.). These indicate the composer's suggestions about how the music should be divided between the hands. However, the performer is free to find other solutions, if desirable.

The clefs, graphic symbols, and verbal abbreviations are presented in the following sections. The clefs are presented in the order in which they appear in the score. At the end of the text, the verbal abbreviations are once more collected together and explained in alphabetical order.

Clef 1: Rub lengthwise along a pair of covered strings (not plain strings) behind the bridge, i.e. on the right side of the bridge.



Example 1

ce a high creaking sound with some inaccurate pitch. If a large t, the reverberation will be a problem that must be solved one way y use some other finger if you find it more suitable.

With this clef, a position of a note on the staff does NOT indicate the pitch, but the approximate starting or ending point of the rubbing movement on the string. A note on the bottom line indicates a point at the bridge; a note on the top line indicates a point at the tuning pegs; a note on the middle line indicates a place on the string at the approximate midpoint between the bridge and the tuning pegs.

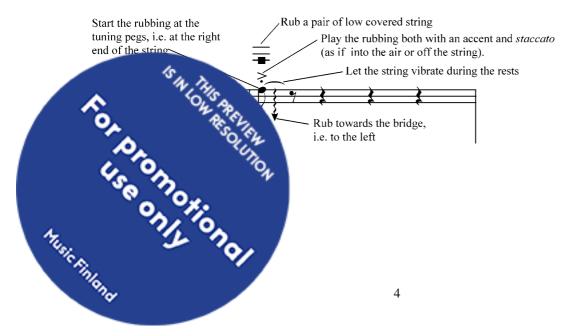
There are two ways in which the rubbing is notated in this clef (the first being much more common):

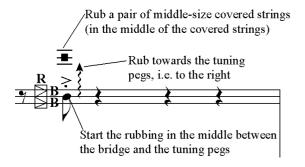
- 1. Only the starting point and the duration of the rub is given. The direction of the rubbing movement is shown by an arrow pointing upwards or downwards. An arrow upwards indicates a rubbing to the right, i.e. towards the tuning pegs; an arrow downwards means a rubbing to the left, i.e. towards the bridge. The exact span (length) of the rubbing on the string is not defined. See examples 2, 3 and 5.
- 2. The rubbing is written as a glissando from a note to note, i.e. from one point on the string to another. The note values express the exact duration of the rub. Both the starting and ending points of the rub are given, i.e. the exact span of the rubbing on the string is defined. See example 4.

A shape of a small black square with three short lines indicates, which pair of strings, approximately, should be rubbed. If the black square is on the top line, you should rub a pair of high covered strings; if the square is on the bottom line, you should rub a pair of low covered strings; if the square is on the middle line, the rubbing should take place on a pair of middle size covered strings. See examples 2–5.

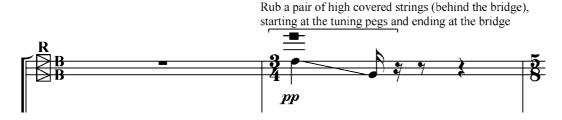
A tie from a notehead to a subsequent rest or rests indicates that you should let the string vibrate, i.e. you should not damp the sound of the string during the rest. In general, all the notes written in this clef are meant to be allowed to ring. But in some cases, when a short note value (and a short rubbing action) is followed by a longer rest, the tie is added as reminder. (Note: The abbreviation L.V. = *let vibrate*, is often used to express the same thing with some of the other clefs.) See ex. 2 and 5.

Notation in this clef may appear as in the following examples: (verbal explanations included here are not in the actual score)





Ex. 3

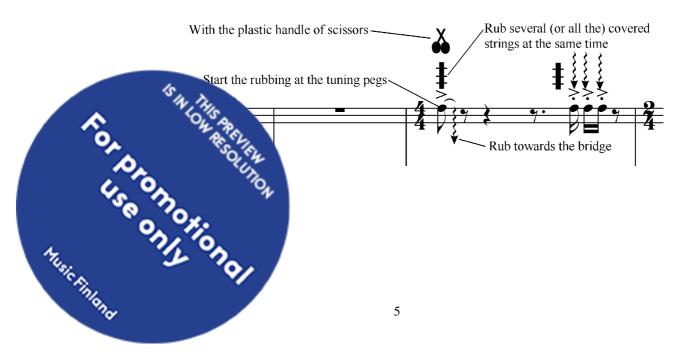


Ex. 4

If any graphic sign for a note is lacking (as in the bars 92–93), the previous sign is still valid, i.e. the note should be played in the same manner as the notes preceding it. Sometimes, when the manner of playing should be the same as before, I have marked *sim*. (as in bar 237) or *as before* (as in bar 47).

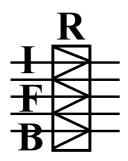
In bars 46–49, the rubbing should be done with the plastic handles of scissors, instead of the fingernail. This is indicated both verbally and with the graphic sign of the scissors (see ex. 5). When rubbing in this way, many covered strings, or even all of them, are rubbed, instead of only one pair of strings. Consequently, the graphic sign indicating which strings are to be rubbed is a black rectangle covering all three short lines. There are no other notational exceptions associated with playing with the scissor handles.

When strings behind the bridge are to be rubbed with the scissors-handles, the notation appears as follows:



An additional observation: When the instrument is played behind the bridge, the relationship between pitch and thickness of string is the opposite of that effected while playing in front of the bridge. Rubbing a low covered string behind the bridge will produce a higher tone than rubbing a higher string, and vice versa. Do not let this to confuse your reading and playing!

Clef 2: Rub lengthwise along a pair of covered strings in front of the bridge, i.e. on the left side of the bridge



Ex. 6

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The letter "R" in the clef indicates "Rub", the letters "IFB" indicate "In Front of the Bridge." This clef is used with a 5-line staff, with ordinary spacing.

This playing technique will produce a somewhat screechy sound with no definite pitch. The height of the indefinite pitch varies according to the string and the intensity (force and rapidity) of the rubbing.

With this clef, the notation and the playing techniques are very much the same as with the previous clef (rubbing a pair of covered strings behind the bridge).

Again, do the rubbing with your fingernail (using your fingertip a bit as well). The thumbnail generally gives the best result, but you may use some other finger if you find it more suitable. Sometimes, as in bars 62–66, you should rub several covered strings (or even all of them) at the same time with the **plastic handle of scissors**. As with the previous clef, this is indicated both verbally and by a graphic sign. In bar 122, you should rub several strings quickly at the same time with your fingers 2–5.

ious clef, the rubbing should normally be done from above. However, in the bars the lowest string not from above, but from the side, with your right FOR DROMORION OF bbing the soundboard with your other right hand fingers at the same he staff does NOT indicate the pitch, but the approximate

rubbing movement on the string. A note on the bottom line il, i.e. at the left end of the string; a note on the top line indicates a middle line indicates a string point at the approximate midway bridge.

As with the previous clef, there are two possible ways in which rubbing is notated, both of them common:

- 1. Only the starting point on the string and the duration of the rub is given. The direction of the rubbing is shown by an arrow pointing upwards or downwards. An arrow upwards indicates a rubbing to the right, i.e. towards the bridge; an arrow downwards means a rubbing to the left, i.e. towards the hitchpin rail. The exact span of the rubbing on the string is not defined (it is usually short, but it will depend on the situation in question). See ex. 7 and 8.
- 2. The rubbing is written as a glissando from a note to note, i.e. from one point **on the string to another.** The note values express the exact duration of the rub. Both the starting and ending points of the rub are given, i.e. the span of the rubbing on the string is defined. See ex. 9 and 10.

A shape of a small black square with three short lines indicates approximately which pair of strings should be rubbed. If the black square is on the top line, you should rub a pair of high covered strings; if the square is on the bottom line, you should rub a pair of low covered strings; if the square is on the middle line, the rubbing should happen on a pair of middle size covered strings. See ex. 7–10.

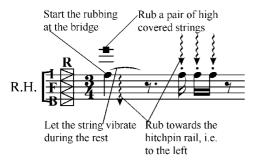
A tie from the notehead with no note but a rest/rests following, e.g. as in bars 16–20, means that you should let the string vibrate, i.e. you should not damp the sound of the string during the rest. In general, all the notes written in this clef are meant to be allowed to ring. But in some cases, the tie is added as reminder. (The abbreviation L.V. = let vibrate, is often used to express the same thing with some of the other clefs.) See the ex. 7–8.

When rubbing in front of the bridge, the available length of the string is much longer than when rubbing behind the bridge. This should be taken into consideration in reading and playing. The interval between two notes, which looks the same on both staff R/BB and R/IFB, is not the same in actual centimeters on the string. In the staff with the IFB clef, the distance between the highest and second highest lines corresponds to about 1/4 of the available length of the string, while in the staff with the **BB** bridge, the distance between the top line and the middle line corresponds to about ½ of the available length of the string. However, the former distance, in actual centimeters, is much longer than the latter one.

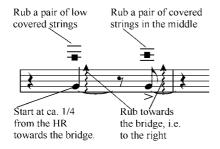
The large available length of the string in front of the bridge makes it possible to play long continuous rubbings along the strings, e.g. as in bars 207–217 with the right hand, or in bars 149– 152 and 217–225 with the left hand.

nnce more, however, that the notes on the staff showing the starting and ags should be understood only as approximate information. E.g. a e would literally mean a point being 3/8 from the hitchpin rail wever, be understood simply as a point being somewhat to the left veen the hitchpin rail and the bridge.

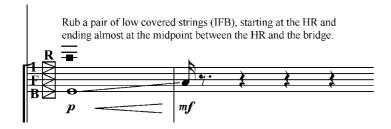
The notation with this clef may appear as follows: (verbal explanations included here are not in the actual score)



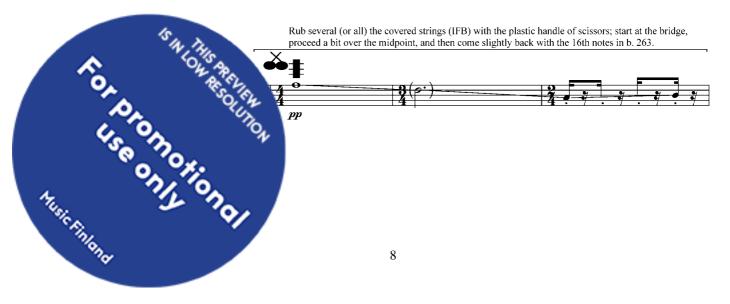
Ex. 7 (HR = hitchpin rail)



Ex. 8



Ex. 9



Clef 3: Rub the soundboard with your fingernails and fingertips



Ex. 11

The letter "**R**" in the clef indicates "**Rub**", the letters "**SB**" indicate "**Soundboard**". With this clef, there is only 1 line in the staff. This clef shares the same staff with the clefs 4 ("Knock the soundboard") and 5 ("Knock the front edge of the instrument"). Consequently, you should pay attention to possible clef changes on the staff.

Rubbing the soundboard is only done with the right hand, with your fingers and fingernails. Whenever possible, the rubbing should be done with all five fingernails and fingertips. The soundboard is rubbed in the piece in the following ways:

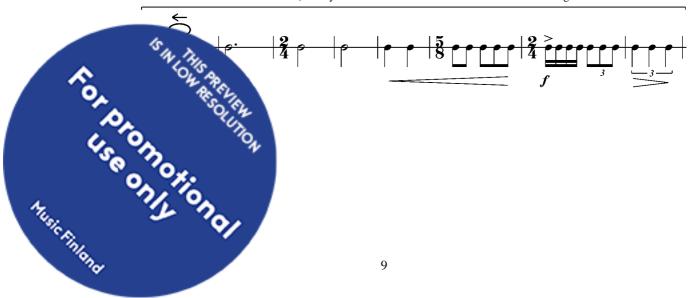
A) Make a counterclockwise rounding rubbing movement on the soundboard. This is indicated by an elliptical figure with an arrow pointing to the left (see example 12). The figure is valid as long as it is not replaced by another sign indicating a different way of rubbing. The exact location of the rubbing movement on the soundboard is not defined; try to rub on an area producing as much sonority as possible.



Ex. 12

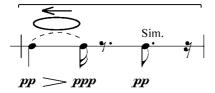
When this symbol appears, successive notes without rests (as in bars 1–9) are played as consecutive elliptical rubbing movements on the soundboard. Do not lift the fingers between the notes, but rub as continuously as possible. The beginning of a new note value indicates the beginning of a new revolution on the soundboard, and the rhythmical values indicate the duration (and the actual speed) of each revolution. See ex.13 (from bars 1–8) below.

Make consecutive rounding rubbing movements counterclockwise on the soundboard. Do not lift the fingers between the notes, but rub as continuously as possible. The beginning of a new note value indicates the beginning of a new "round" on the soundboard; the rhythmical values indicate the duration of each rounding movement.



In the case of one single note, or two successive notes combined by a broken tie (as in b. 220), followed by a rest, play one rounding rubbing movement on the soundboard. The rhythmical value indicates the duration (and the speed) of the rounding movement from the beginning to the end of the circle. Lift your fingers from the soundboard during the rest. See example 14 (from b. 222) below.

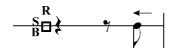
Make two separate rubbing rounding movements counterclockwise on the soundboard. Lift the fingers during the rest.



Ex. 14

B) Make a single rubbing movement on the soundboard leftwards. This is indicated by an arrow pointing to the left. This sign is given for each note separately, i.e. it will not be valid for the subsequent notes. In the case of several consecutive leftwards rubbings (as in b. 182), lift the fingers slightly between the rubbings and start a new rubbing around the same point where you started the previous one. The exact location and the physical length of the rubbings on the soundboard are not defined; try to find an area producing as much sonority as possible. See below ex.15 (from bar 74), 16 (from b. 182) and 17 (from b. 228).

Make a rubbing movement leftwards on the soundboard

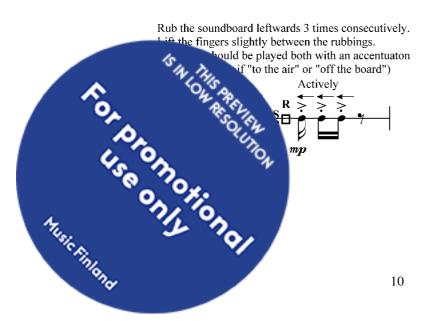


Ex. 15

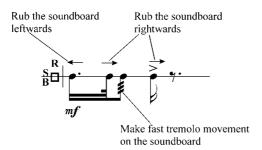
Make 5 successive rubbings leftwards on the soundboard. Lift the fingers slightly between the notes.



Ex. 16

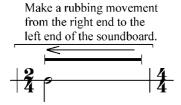


Make a rubbing movement on the soundboard rightwards. This is indicated by an arrow pointing to the right. Otherwise, the notation and the playing technique are exactly the same as when making a rubbing movement on the soundboard leftwards. See below example 18 (from bar 230).



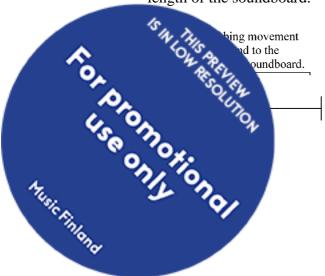
Ex. 18

Make a rubbing movement on the soundboard from the right end to the left end. This is indicated both by a long arrow pointing to the left and, below it, a figure symbolizing the whole length of the soundboard. See the ex. 19 from bar 11. This playing technique is otherwise exactly the same as 2.3 B (rubbing the soundboard leftwards), but the length of the rubbing movement is longer, spanning the whole length of the soundboard.



Ex. 19

Make a rubbing movement on the soundboard from the left end to the right end. This is indicated both by a long arrow pointing to the right and, below it, a figure symbolizing the whole length of the soundboard. See the ex. 20, from bar 10. This playing technique is otherwise exactly the same as 2.3 C (rubbing the soundboard rightwards), but the length of the rubbing movement is longer, spanning the whole length of the soundboard.



F) Make a rapid rubbing tremolo movement on the soundboard by quickly alternating rubs leftwards and rightwards. This is indicated by the normal tremolo sign of three bold oblique lines. The tremolo is not to be measured, but it should always be as fast as possible. See ex. 21 from bar 12 below.

Make rapid rubbing tremolo movement (as fast as possible) on the soundboard by quickly alternating rubs leftwards and rightwards.



Let the fingers fall on the soundboard in order to produce the volume and *sforzando*.

Ex. 21

Clef 4: Knock the soundboard



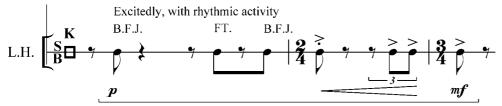
Ex. 22

The letter "K" in the clef indicates "Knock", the letters "SB" indicate "Soundboard". With this clef, there is only 1 line in the staff. The clef shares the same staff with the clefs 3 ("Rub the soundboard") and 5 ("Knock the front edge of the instrument"). Consequently, between these clefs, the clef may change during the system. Consequently, you should pay attention to possible clef changes on this staff.

You will knock the soundboard both with your left and your right hand in the piece. Unless other information is given, knocking the soundboard should always be done with the **front side bone of your finger joint**, often abbreviated as **B.F.J.** in the score. Using the **bone of the uppermost joint of**is often a good solution. Once, in bar 75, you must knock the soundboard viated as **FT.** And in bar 268 (the last bar of the piece), you must knock **tic handle of scissors.**

the soundboard is not defined; try to find locations producing tones

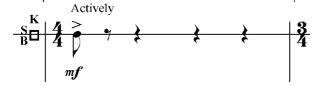
ppear as follows in ex. 23 (from bars 75–77) and 24 (from b. 102)



From bars 75-77: knock the soundboard. One single note in b. 75 is knocked with the fingertip (FT.), the other notes are knocked with the bone of the finger joint (B.F.J.).

Ex. 23

Knock the soundboard. The knocking should be done with the bone of your finger joint (B.F.J.), since any directions concerning this are not given.



Ex. 24

Clef 5: Knock the front edge of the instrument, i.e. knock the upper side of the front edge over the soundboard (on the right side of the instrument)



Ex. 25

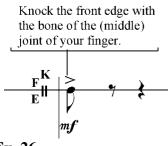
lef indicates "Knock", the letters "FE" indicate "Front Edge". With this the staff. The clef shares the same staff with the clefs "Rub the soundboard." Consequently, you should pay attention to possible clef the front edge will produce a high, woody sound (without pitch, of

ront edge both with your left and your right hand. Except in bar e front edge with the front side bone of your finger joint Using the bone of the middle joint of your middle or index ion, although this may hurt your finger a bit (for which the

composer apologizes.) In bar 268 (the second last bar of the piece), you should knock the front edge with the **plastic handle of scissors.**

The exact points of knocking on the front edge are not defined; try to find points producing tones with good sonority.

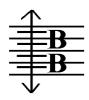
The notation with this clef may appear as follows in ex. 26 (from m. 74) below.



Ex. 26

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Clef 6: Play on the plain strings behind the bridge



Ex. 27

The letters "**BB**" in the clef indicate "**Behind the Bridge**". The four horizontal lines of the clef, placed between the staff lines, are a symbol for the plain strings (i.e. non-covered strings), while the single vertical line and the arrows pointing up and down represent playing across the strings, i.e. playing glissandos up and down. With this clef, there are the usual 5 lines in the staff, with ordinary spacing. [See also the clef 10 (play on the plain and the covered strings behind the bridge).]

With this clef, the highest staff-line indicates the highest plain string, the lowest staff-line indicates the lowest plain string; the other staff-positions, correspondingly, are approximate indications of the other plain strings.

of s BB and IFB (explained below), is always played as glissandos and on the upwards or downwards, played either by the fingertip or ble manners for the notation of the glissandos:

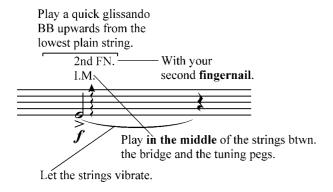
inite manner. Only the (approximate) starting string of the en; the direction of the movement is shown with a wavy arrow down. The glissando should always be played fast (or as fast as kact span and speed of the glissando are not defined. The ues do **not** indicate the duration of the playing action, but give some

idea about the possible duration of the *sound*. Thus, e.g. the duration of a half note on the staff does here not mean that the length of the actual glissando *movement* on the strings should be that of a half note, since this movement can be just a quick wave of a finger. See examples 28–29 below.

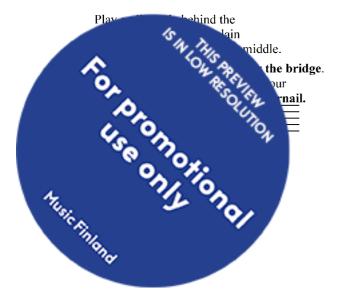
2. The more definite manner. Both the approximate starting and ending strings of the glissando are given. The exact duration of the playing action is written out as well; i.e. the notation is like that of a traditional glissando from a note to note. A glissando written like this can also be slow. See examples 30–31 below.



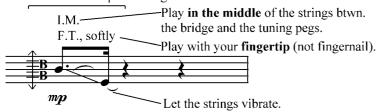
Ex. 28 (from b. 94)



Ex. 29 (from b. 124)



Play a glissando BB from a plain string in the middle to the the lowest plain string.



Ex. 31 (from b. 68)

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With this clef, as seen in ex. 28–31, the string-positions at which the glissandos should be played, are often defined. The following indications and their abbreviations are used:

- Abbr. **Indication and its definition**
- A. B. At the bridge. Play the glissando very close to the bridge, even following the curve of the bridge.
- N.B. **Near the bridge.** Play the glissando **relatively close to the bridge**, but not as close as at the bridge. Following the curve of the bridge is not necessary.
- I.M. In the middle of the strings. Play the glissando in the middle between the bridge and the tuning pegs.
- A. T. P. At the tuning pegs. (Used with clefs 8 and 10, but not with this clef.) Play the glissando very close to the tuning pegs.

A glissando should always be played with one finger. As seen in ex. 28–31, it is always indicated whether you should play the glissando with your **fingertip** (abbreviated **FT.**), or with your **fingernail** (abbreviated **FN.**). Using the former will produce a softer sound, and the latter will produce a sharper sound. In addition, it is often indicated which finger should be used for the glissando. This is done via the standard numbers for the fingers in piano playing: 1^{st} = the thumb, 2^{nd} = the index finger, etc. For example 2^{nd} FN. = the nail of your index finger.

The indications concerning the string-positions and fingers are valid as long as they are not replaced by

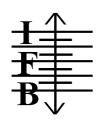
> tie from a notehead to a subsequent rest or rests indicates that you i.e. you should not damp the sound of the string during the rest. In **n this clef are meant to be allowed to ring,** but I have found it on of a tie as a reminder.

dge will produce pitches with some reverberation. Behind the ot produce the same pitches as they do in front of the bridge. In ice pitches in an order opposite to that effected while playing in **front of the bridge.** Thus, behind the bridge, the highest string of the instrument will produce the lowest pitch, and the lowest (covered) string the highest pitch. Do not let this to confuse your reading and playing!

The exact pitches as such and their relations are not an important compositional factor in the piece in any way. Moreover, the pitches produced by the strings behind the bridge may vary according to the clavichord model. Thus, it is not at all necessary to worry about the accuracy of pitches produced on the strings.

The glissandos behind the bridge are often played across the borderline between the plain strings and the covered strings; a glissando may e.g. start on a plain string and end on a covered string. In these cases the clef 10 is used instead of the clef 6. See sections on clefs 8 and 10.

Clef 7: Play on the plain strings in front of the bridge



Ex. 32

The letters "**IFB**" in the clef indicate "**In Front of the Bridge**". As with clef 6, the four horizontal lines of the clef, placed between the staff lines, are a symbol for the plain (i.e. non-covered) strings, while the single vertical line and the arrows pointing up and down indicate that **playing occurs across the strings, with glissandos that sweep up and down perpendicular to the strings**. With this clef, there are 5 lines in the staff, with ordinary spacing. [See also clef 11 (play on the plain and covered strings in front of the bridge).]

With this clef, the notation, in all aspects, is very similar to that of the previous clef (clef 6).

Again, the highest staff-line indicates the highest plain string, the lowest staff-line indicates the lowest plain string; the other staff-positions, correspondingly, are approximate indications referring to the other plain strings.

Glisser I always be played with your fingernail. In front of the bridge, this effect at rustling sound with no pitch and only very little reverberation. There are sandos are notated, listed below. Of these, nos.1 and 3 are very similar previous clef:

inite manner. Only the (approximate) starting string of the en; the direction of the movement is shown by a wavy arrow down. The exact span and speed of the glissando are not defined. In reverberation with this playing technique, the rhythmical values he duration of both the playing action and the sound (in clef 6). However, the note values in this notation are always eighth

notes. A *staccato* dot or a dotted accent attached to a note means, as in classical playing, that the duration of the note (and its producing action) should be somewhat shorter than written. See the ex. 33–36.

- 2. The more definite manner, used only in bars 145, 148–149 and 201. Only the (approximate) starting string of the glissando is shown with a notehead; the direction and the approximate ending string of the glissando is indicated by an oblique line, the endpoint of the line showing the approximate ending string. Again, the rhythmical values here indicate the duration of both the playing action and the sound. The note values in this notation are always dotted eighth notes. See ex. 37.
- 3. The most definite manner. Both the approximate starting and ending strings and the exact duration of the glissando are written out with notes, i.e. the notation is like that of a traditional glissando from note to note. See examples 36–37 below.

Play two consecutive upward glissandos from the lowest plain string.



Ex. 33 (from b. 113)

Play a short and accentuated upward glissando from a relatively low plain string.

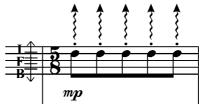


Ex. 34 (from b. 87)

Play an upward glissando from a plain string that is a bit lower than in the middle



Play five short consecutive upward glissandos from a relatively high plain string.



Ex. 36 (from b. 172)

Play upward and downward glissandos between a relatively low and a relatively high plain string.

Sharply

mf

Ex. 37 (from b. 148)

Make two very slow glissandos in the indicated rhythm from the highest plain string to a relatively low plain string.



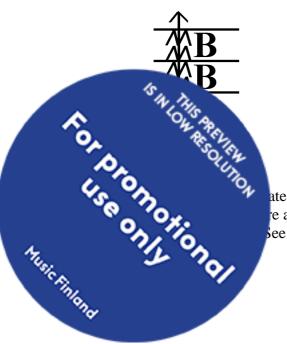
Ex. 38 (from b. 43)

With this clef, the positions on the string at which the glissandos should be played are never defined. As for the fingering, it is usually best to use your thumbnail for the downward glissandos and your index fingernail for the upwards ones; the fingering is only very seldom defined in the score.

Very often the glissandos in front of the bridge are played across the borderline between the plain strings and the covered strings, or short glissandos on both the plain and the covered strings may be played during a short time span, e.g. on the same system of the score.

In these cases the clef 11 is used instead of the clef 7. Clef 11 is a combination of clefs 7 and 9. (See sections on clefs 9 and 11)

Clef 8: Play on the covered strings behind the bridge

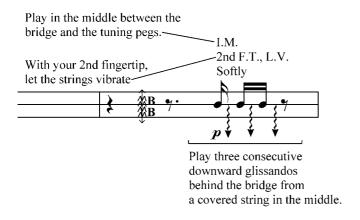


ate "**Behind the Bridge**". The four zigzag lines of the clef, placed re a symbol for the covered strings. With this clef, there are 3 lines see also clef 10 (play on the plain and the covered strings behind

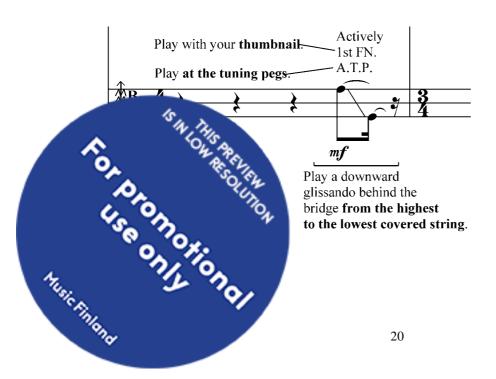
With this clef, the highest staff-line indicates the highest covered string, the lowest staff-line indicates the lowest covered string; the other staff-positions, correspondingly, are approximate indications for the other covered strings.

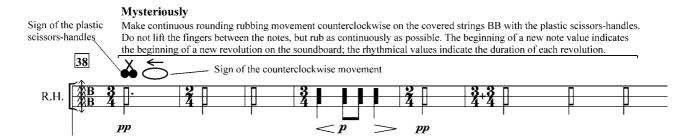
Playing on the covered strings behind the bridge may occur in two ways:

- 1. As glissandos across the strings. Regarding the glissandos, all aspects of notation (except the string-indication, of course) are exactly the same as in clef 6, i.e. when playing the glissandos across the plain strings behind the bridge.
- 2. As counterclockwise rounding rubbing movement on the strings with the plastic scissors-handles. The rounding rubbing movement with scissors-handles is indicated by an elliptical symbol with an arrow to the left (as in clef 3), the graphic sign of the scissors, and cluster noteheads in place of ordinary ones. Except for the noteheads, the notation here is exactly the same as when making counterclockwise rounding rubbing movement on the soundboard with fingers and fingernails (Clef 3). See ex. 40–42 below.



Ex. 40 (from b. 240)





Ex. 42 (from b. 38–43)

As with the plain strings, the covered strings do not produce the same pitches as they do in front of the bridge. When played behind the bridge the covered strings produce pitches in an order opposite to that effected while playing in front of the bridge. Thus, behind the bridge, the lowest string of the instrument will produce the highest pitch. Do not let this to confuse your reading and playing!

Very often, the glissandos behind the bridge are played across the borderline between the plain strings and the covered strings, or short glissandos on both kind of strings may be played during a short time span, e.g. on the same system of the score. In these cases the clef 10 (a clef combining the clefs 6 and 8) is used instead of the clef 6. See the chapters on clefs 8 and 10.

Clef 9: Play on the covered strings in front of the bridge



The letters "**IFB**" in the clef indicate "**In Front of the Bridge**". The four zigzag lines of the clef, placed in pairs between the staff lines, are a symbol for the covered strings. With this clef, there are 3 lines in the staff, with wide spacing. [See also clef 11 (play on the plain and the covered strings behind the bridge).]

As the highest staff-line indicates the highest covered string, the lowest staff-covered string; the other staff-positions, correspondingly, are the other covered strings.

In front of the bridge may occur in two ways:

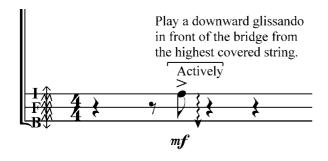
Dess the strings. This produces a dark, rustling sound without pitch, ing considerable volume. Regarding the glissandos, all aspects of ot the string indication, of course) are exactly the same as with a playing the glissandos across the plain strings in front of the

bridge. This means that the string-positions at which the glissandos should be played are never defined.

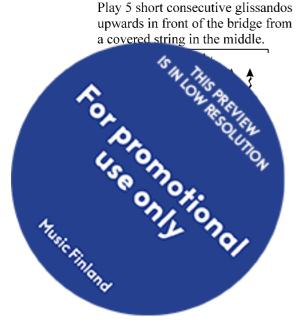
2. Clusters hit on the strings with one or several fingers. This is indicated by the traditional cluster notehead. The size and the placement of the notehead on the staff indicate the approximate span and the location of the cluster on the strings; i.e. the approximate strings that should be hit. If a cluster notehead covers the whole staff, then the cluster should be played on all the covered strings. If the notehead covers the upper half of the staff, the cluster should be played approximately on the higher half of the covered strings. A cluster notehead in the middle of the staff indicates that you should hit the covered strings in the middle. And if the notehead covers only the lowest small part of the staff, the cluster should be played on only a couple of the lowest covered strings.

The fingerings of the clusters are usually not given. In general, it is advisable to play the loud clusters (as in b. 57–58) with several fingers (fingers 2–5) and the quiet clusters with only one finger (probably best with the 2^{nd}).

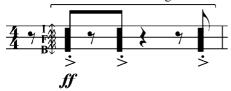
The clusters should be played with a relaxed hand and firm fingers, letting the finger drop on the strings and bounce from them freely, as if it were a some kind of ball or spring. (The idea is comparable to the Russian school approach to piano playing). As for playing the clusters, you should look for a good and sonorous tone with a "core" in the sound. Here are some examples of the notation with this clef in the following:



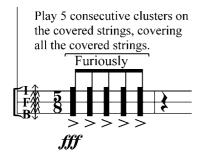
Ex. 44 (from b. 71)



Play bouncing clusters on the covered strings in front of the bridge, spanning almost all the covered strings.



Ex. 46 (from b. 93)

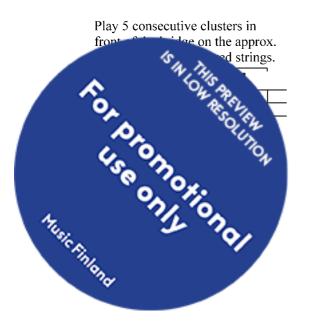


Ex. 47 (from b. 198)

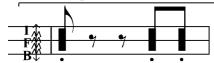
Play 5 consecutive clusters on the covered strings, covering the approximate lower half of the covered strings.



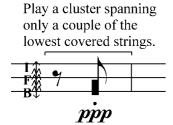
Ex. 48 (from b. 139)



Play clusters in front of the bridge on the covered strings in the middle.



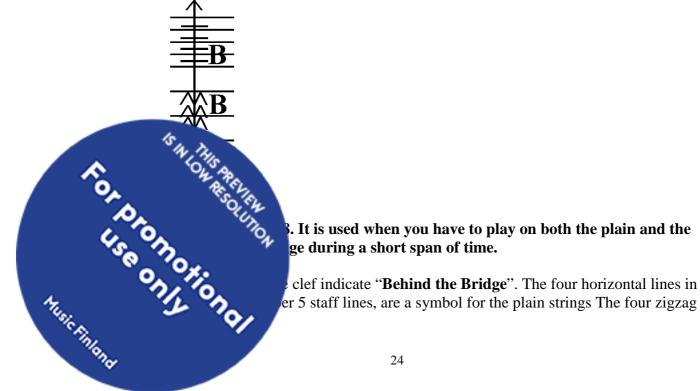
Ex. 50 (from b. 157)



Ex. 51 (from b. 215)

Very often the glissandos in front of the bridge are played across the borderline between the plain strings and the covered strings, or short glissandos on both the plain and the covered strings may be played during a short time span, e.g. on the same system of the score. In these cases the clef 11 is used. Clef 11 is a combination of the clefs 7 and 9. See the sections on clefs 7 and 11.

Clef 10: Play on the plain and the covered strings behind the bridge

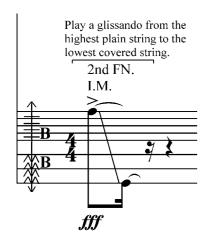


lines of the clef, placed in pairs between the lower 3 staff lines, are a symbol for the covered strings. The clef shares the same staff with the clef 11, i.e. with the clef "Play on the plain and the covered strings in front of the bridge." Consequently, you should pay attention to possible clef changes on the staff.

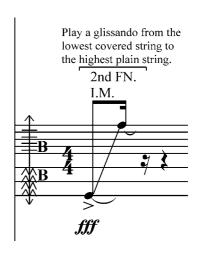
With clef 10, there are 8 lines in the staff altogether, divided in two groups with a small gap between them. The upper group of 5 staff-lines with ordinary spacing represents the plain strings. The lower 3 staff-lines with wide spacing represent the covered strings.

Consequently, the highest line of the whole staff indicates the highest plain string, the lowest line of the upper staff-line-group indicates the lowest plain string; the highest line of the lower staff-line-group indicates the highest covered string, while the lowest line of the whole staff indicates the lowest covered string. The other staff-positions, correspondingly, are approximate indications on the other strings, covered or plain.

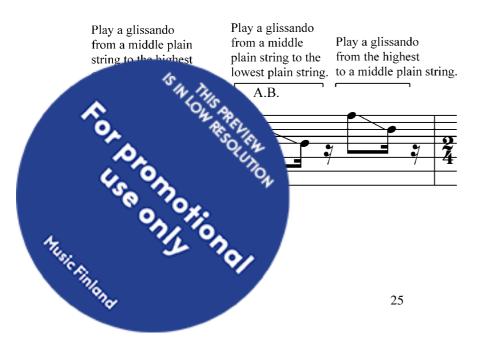
With this clef you will only play glissandos almost always notated with a starting and ending point. Notation and playing in all its aspects is exactly the same in this clef as with clefs 6 and 8 (i.e. the same as when playing only on the plain strings or only on the covered strings behind the bridge), apart from the fact that it uses an 8-lined staff.



Ex. 53 (from b. 129)



Ex. 54 (from b. 129)



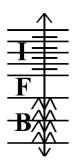


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Play a glissando from a relatively low plain string to a covered string a bit higher than in the middle. Play a glissando from the highest to the lowest covered string.

Ex. 56 (b. 254-255)

Clef 11: Play on the plain and the covered strings in front of the bridge



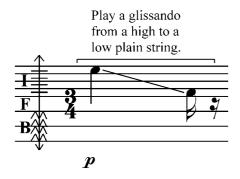
Ex. 57

This clef combines the clefs 7 and 9. It is used when you have to play on both the plain and the covered strings in front of the bridge during a short span of time.

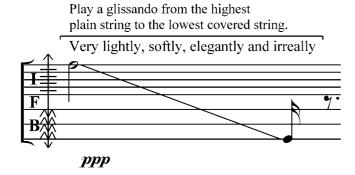
As before, the letters "**IFB**" in the clef indicate "**In front of the Bridge**". The four horizontal lines and the four zigzag lines of the clef are, in accordance with clef 10, symbols for the plain and the covered strings. The clef shares the same staff with clef 10 (i.e. with the clef "Play on the plain and the covered strings behind the bridge"). Consequently, you should pay attention to possible clef changes on the staff.

The sing which strings to play on with this clef is exactly the same as that of clef rether 8 lines in the staff, divided in two groups with a small gap between the plain strings, with 5 ordinarily spaced staff-lines. The the covered strings, with 3 widely-spaced staff-lines.

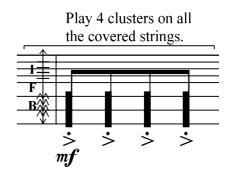
the whole staff refers to the highest plain string, the lowest line of o the lowest plain string; the highest line of the lower staff-lined string, while the lowest line of the whole staff refers to the staff-positions, correspondingly, are approximate indications for or plain. With this clef you will play mostly glissandos, but also some clusters on the covered strings. The notation of the glissandos may be of either kind described with clefs 7 and 9. The notation of the clusters is exactly the same as with clef 9. **Notation and playing in all its aspects is exactly the same in this clef as with clefs 7 and 9** (i.e. when playing only on the plain or the covered strings in front of the bridge), apart from the fact that it uses an 8-lined staff.



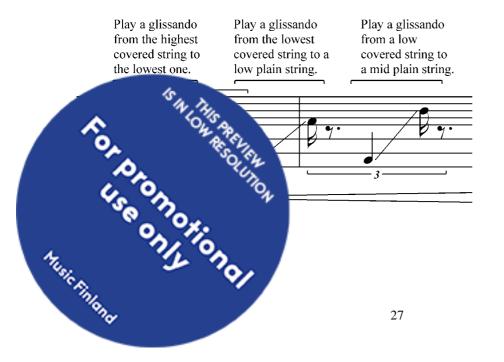
Ex. 58 (b. 49)



Ex. 59 (b. 267)



Ex. 60 (b. 210)



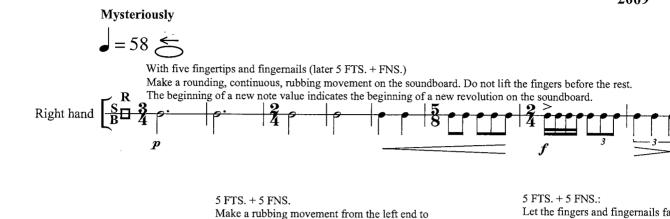
3. Alphabetical list of all the abbreviations used in the piece

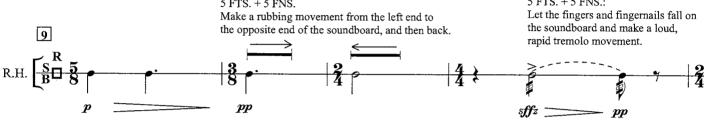
Abbr.	Indication and its definition	With clef
A.B.	At the bridge. Play the glissando very close to the bridge, following the curve of the bridge.	6, 8, 10
A.T.P.	At the tuning pegs. Play the glissando very close to the tuning pegs.	6, 8, 10
BB	Behind the bridge (In the clefs only)	1, 6, 8, 10
B.F.J.	Bone of your finger joint.	4, 5
FE	Front edge of the instrument. (In the clefs only.)	5
FN.	Fingernail. Play with your fingernail.	2, 6, 7, 8, 10
FNS.	Fingernails. Play with your fingernails.	3
FS.	Fingers. E.g. $Fs. 2-5 = Use your fingers 2-5$	9
FT.	Fingertip. Play with your fingertip, not fingernail.	4, 6, 8, 10
FTS.	Fingertips	3
HR	Hitchpin rail (Not in the score, only in the performance instructions)	2
IFB	In front of the bridge (Only in the clefs)	2, 7, 9, 11
I.M.	In the middle of the strings. Play the glissando in the middle between the bridge and the tuning pegs.	6, 8, 10
K	Knock (In the clef only.)	4
L.V.	Let vibrate. Let the strings vibrate freely, even during the possible rest. (As such this is an unnecessary performance marking, since the strings should never ad anyway.) e. Play the glissando relatively close to the close as the at the bridge. Following the	1, 2, 6, 8, 9, 10
D	is not necessary.	6, 8, 10
KOT DISE O	The last of the la	1, 2, 3

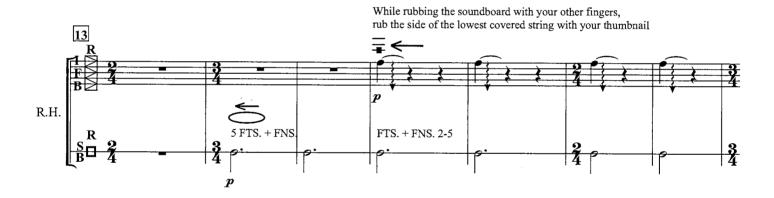
Poème de jeux acoustiques

Commissioned by the Finnish Clavichord Society Dedicated to Pekka Vapaavuori

> Lauri Kilpiö 2009

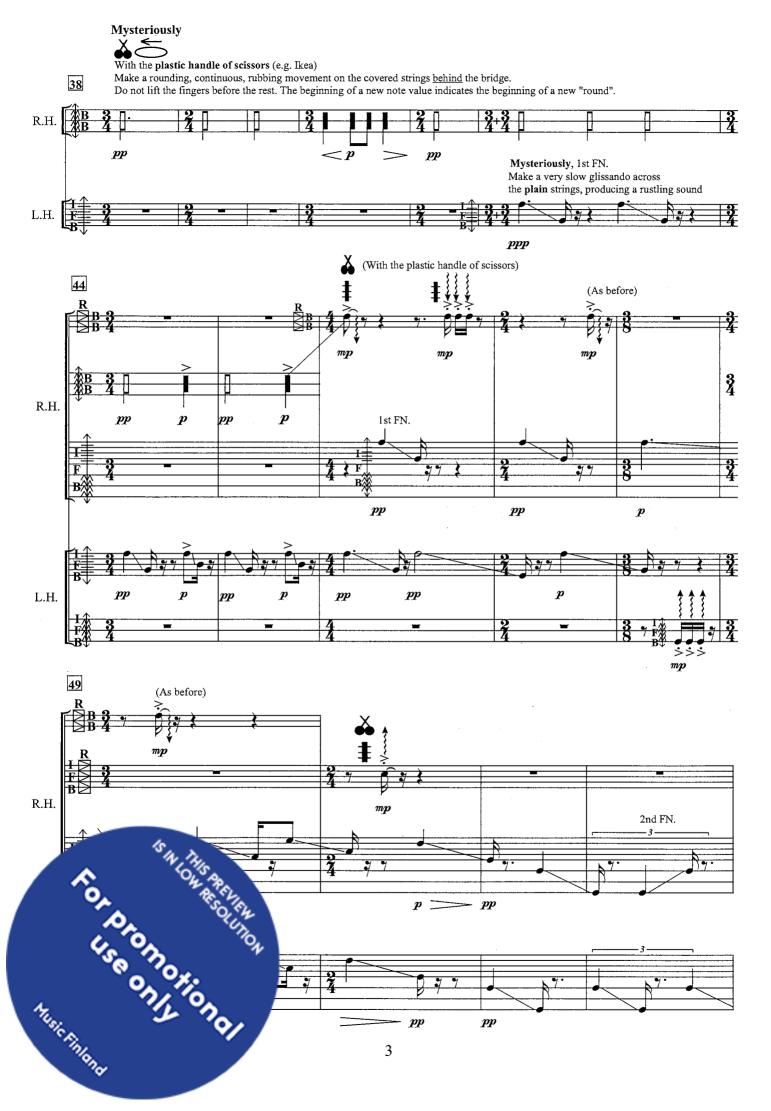






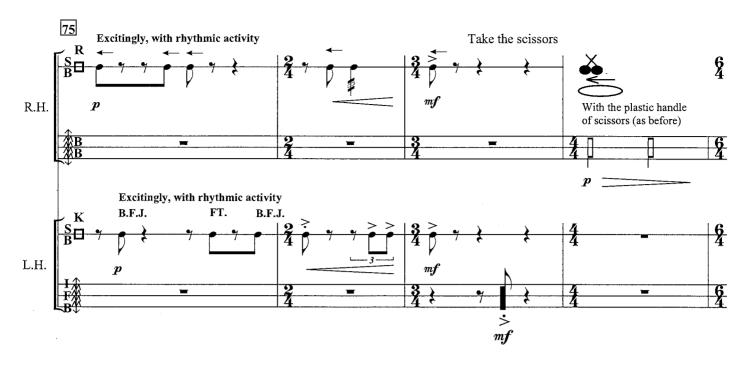


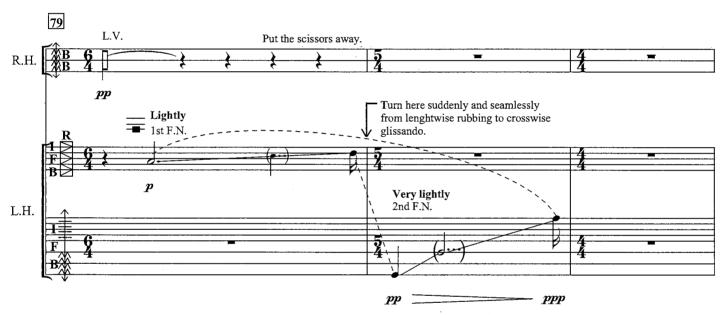














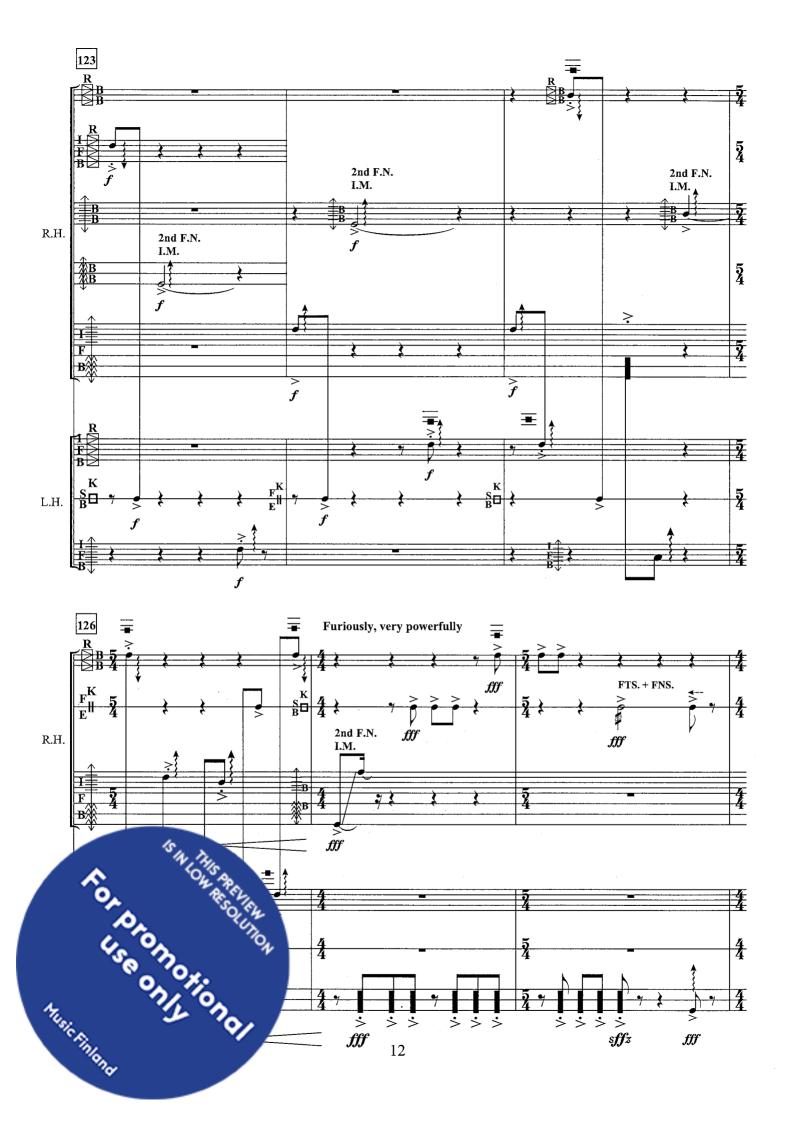








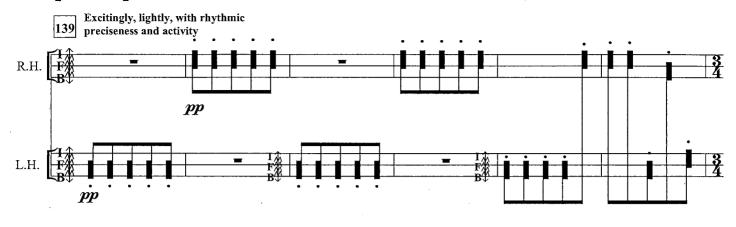


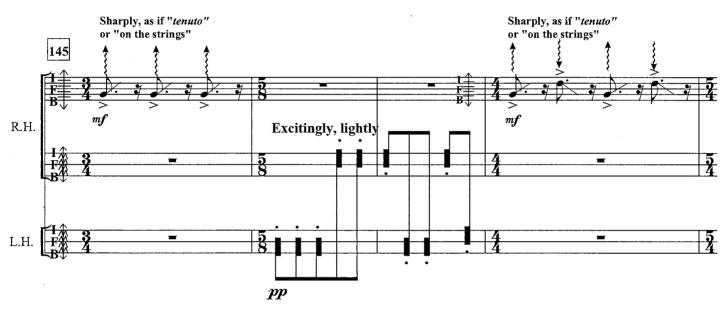




Mysteriously, like an African tribal ritual drumming









Mysteriously, like an African tribal ritual drumming











