Glycyrrhizin

for guitar and computer

Kristof Lauwers

Performance notes

Setup

This is a piece for guitar (classical or electric) and computer. The computer part (see zip file included with the score) is written in and should be run in Pure Data, 1(version 0.40-2 or hihger). It needs the zexy2 external and the compressor~ external (which is included in the zip file with the patches). You can download the most recent version of this score
and the Pure Data patches at
http://kristoflauwers.domainepublic.net/index.php?p=scores&l=eng

Note: the following instructions are rather technical in nature, and probably won't make sense if you don't know the program Pure Data. Therefore **the patches should be installed and operated by an experienced PD user**. Further down this notes, there are some purely musical instructions for the guitar player also.

The main patch (and the only one that has to be opened manually) is Im_harms.pd. Pd should be started with 1 or 2 input and 2 output channels. The guitar sound should be sent to the input(s), the output of the patch should be amplified so that level of electronics and acoustic sounds are equal in level. In case a classical guitar is used, it is recommended to use both a contact microphone and a condensator microphone, and send the combined output of the two microphones to both the computer and the amplifier.

In the score, some of the notes are indicated with T1, T2, ... Those are triggers that cause the electronics part to proceed to a next section.
Each time a trigger is recognized by the PD patch, it plays back a sinetone, either at the same pitch as the trigger or anticipating a pitch that is comming, and the current section nr. is displayed on screen (under the title 'sections'). It is possible that a trigger gets missed. If this happens the guitar player should repeat the note with a strong accent.
If the trigger still stays unrecognised, the operator of the PD patch can force the computer to proceed to a next section by pushing the yellow button (indicated '>>') under the heading 'sections', but normally this shouldn't be necessary.
(The button '<<' is there only for debugging purposes and does not work in all circumstances.)
Each trigger changes the behaviour of the patch. Sometimes this will be clear immediately, sometimes the results are more subtle, or the trigger starts a gradual

1 Pure Data is an open source programfor audio analysis, synthesis and processing, It can be downloaded for free from http://crca.ucsd.edu/~msp/software.html
2 Zexy can be downloaded from ftp://ftp.iem.at/pd/Externals/ZEXY/

change.
If the same note that triggered a change in the patch is played again afterwards, it may cause another sine tone to sound, but it won't change the behaviour of the patch anymore.

To make the triggers work well, the trigger levels need to be adjusted for each performance situation. You can do this through the green button indicated 'set levels'.
If you click this button, a new window will open in which you will find two number boxes for each trigger. The lower of the two shows the current trigger level for each trigger. The upper number box shows the level the triggering mechanism is detecting for the trigger it's currently waiting for.
To start setting the levels, first set all 'level' number boxes to 95 (= the highest allowed), then switch the audio on and click on the 'monitor' checkbox. You will see the incoming level for trigger 1. Now play a couple of notes, avoiding the actual trigger note/chord, and watch the incomming level. After that, do play the trigger note, with an accent. This should show a much higer level. Now put the trigger level to a value slightly below the incoming level you get when the trigger note is played. If you now play that note again, the patch should trigger (if it does not, adjust the trigger level until it works) and you can go on setting the level for trigger 2 etc.
After setting all the levels, don't forget to click the 'save settings' button.

In the 'control room' part of the patch, the computer operator can set input/output levels and the levels of the different effects. Note that, if the default input level (1) seems not ok, it is better to adapt the level before it's sent to the computer then adapting it in the patch. For the different effects, the default levels should be ok in general. (The effects are listed in the order they appear.)
This controls are mainly meant to be able to react in unexpected performance conditions. Most of the time they should not be touched.
The save_levels button stores the levels currently set as defaults.

Instructions for the guitar player

1. Accidentals apply for the duration of a bar, but only in the octave they appear in.
2. Harmonics are notated the way they sound. Sometimes fingerings are given as an aid, but the performer is free to use alternate fingerings.
3. Except for the first system, the piece is written in timeproportional notation. Each bar lasts between 8 and 10 seconds. White notes should sound out or last till the next note played on the same string, black notes are short but not staccato, unless indicated otherwise. The performer can take some freedom in interpreting the rhythms, so it's not necessary to measure exact distances between notes or to use a stopwatch. Still it is required to let the accelerando's and ritardando's of single notes in the middle part come out clearly.
4. Tremolo's and trillers stand loose from the time proportional notation. They can take longer then what the place they are given in the score suggests.
5. Notes indicated with T1, T2, ... are triggers that cause the electronics part to proceed to the next section.
   Each time a trigger is recognized by the PD patch, it plays back a sinetone, either at the same pitch as the trigger or anticipating a pitch that is comming. If you don't hear this sinetone shortly after playing the triggering note, it means the trigger was not recognized. In this case, repeat the note with an accent.

Each trigger changes the behaviour of the computer part. Sometimes this will be clear immediately, sometimes the results are more subtle, or the trigger starts a gradual change.

6. There are only few interpretative indications. This does not mean dynamics should stay static. The performer is encouraged to make a wide variation in dynamics and sound colour throughout the piece..

If you have further questions about this piece, don't hesitate to contact the author: info@kristoflauwers.domainepublic.net .

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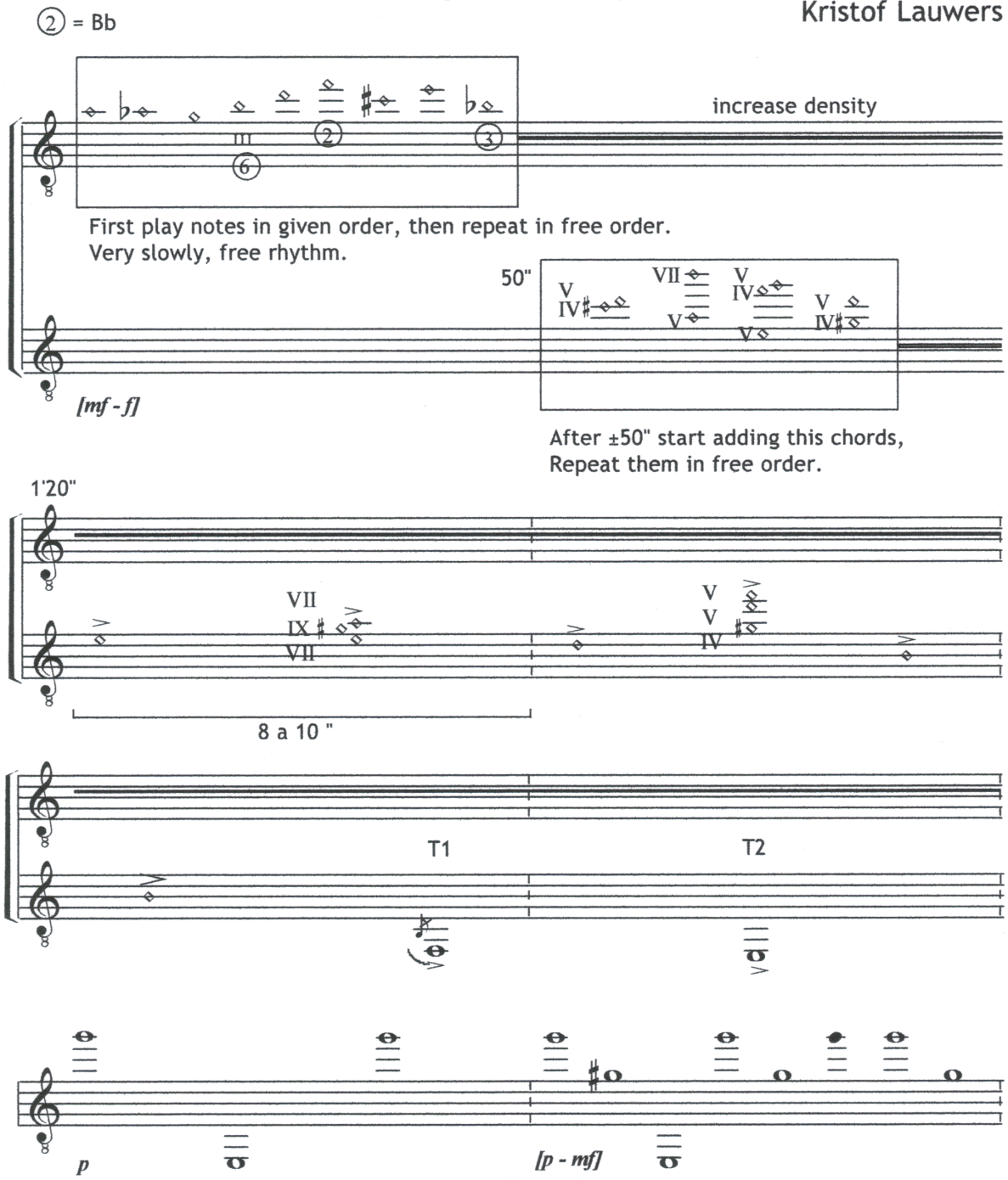


[pp - ff]
T3
III
(tremolo on
group of notes)
T4


T5
Tremolo with one finger.
vary dynamics and color freely, with occasional accents
T6
pont.
Gradual transition from clear harmonics to muted sounds, by gradually increasing finger pressure while staying right above the frets.
Transition to normal sound.