

ostinato and interrupt

for guitar, unpitched noises, and sustained pitched tones

michael winter (mexico city, mx; 2017)
para fatima

general remarks

The piece consists of a relatively slow, floating ostinato comprised of the following three note cells within which there is a descending bassline (given by the bottom note in each column):

| | | | | | |
|---------------------|---------------------|---------------------|---|---|---|
| f [#] -14¢ | f [#] -14¢ | f [#] -14¢ | d | d | d |
| d | d | d | a | a | a |
| c | b | a [#] | f | e | d |

*Note that the f[#] is flat 14 cents, or hundredths of a tempered semitone, from the tempered f[#] in twelve-tone equal temperament as it is a 5/4 major third above the d.

The ostinato is occasionally interrupted by a strictly metered, more rapid sequence of sounds derived from and accompanying open and muted strings as well as natural harmonics played on the guitar.

The interruptions are at a tempo of precisely 75 beats per minute with four 16th notes to the beat (such that the 16th note is always 0.2 seconds). The piece is designed such that the interruptions always start at a second marking to enable coordination and the ability to set the correct tempo by, for example, counting 60 beats per minute (one beat per second) with five 16ths to the beat and then making the metric modulation to 75 beats per minute by simply changing the beat from five 16ths to four 16ths; i.e. changing the tempo while keeping the atomic unit of a 16th note the same at 0.2 seconds. A number below a stem indicates a change in the duration of the following notes: 1 equals 0.2 seconds, 2 equals 0.4 seconds (or two times the atomic duration), or 3 equals 0.6 seconds (or three times the atomic duration).

guitar

The piece is essentially a guitar piece that can be accompanied by computer (with custom software written in SuperCollider) and / or live performers. In the following sections, each accompanying element is detailed with an explanation of what is occurring in the computer program and how it can be substituted or complemented by live performers.

The notation is given in tablature-form where each line represents one of the strings of the guitar from high to low. A filled-notehead indicates an open string. A number indicates a stopped string at the fret of the given number. A diamond-notehead indicates a natural harmonic (chosen arbitrarily / randomly). And an x-notehead indicates a muted string.

The guitar is tuned in an open d tuning as follows: VI) e down to d, V) a, IV) d, III) g down to f[#] -14¢, II) b up to c -31¢, and I) e down to d. Strings IV and III can be tuned from the 5th and 7th harmonic of string VI, respectively.

The ostinato sections should be interpreted freely. The guitar enters 12 seconds into the piece. The given notes, written proportionally with 12 seconds per system, should serve more as a general guideline. The guitarist is free to embellish ad lib such that initially, embellishments are rather infrequent resulting in a relatively sparse texture, and as time progresses, the general density of the ostinato increases by the aid of more and more embellishments. The embellishments should remain within the harmonic world of the ostinato.

The computer program allows the guitarist to use sampled recordings of a guitar which will accurately produce what is written. The guitarist may choose to play with a sample-based realization and / or with other guitarists; e.g. by dividing the ostinato and interrupt sections among multiple performers and / or the computer realization. Note that the electronic accompaniment makes decisions at every point indicated by a notehead in the ostinato sections (explained in detail below).

The interruption sections are clearly delimited from the ostinato by double bar lines and because they are strictly metered. For both the ostinato and interrupt sections, tones should be allowed to decay as long as possible.

unpitched noises (noise fields and percussion)

The ostinato and interrupt sections are further distinguished by noise fields. The computer program simply oscillates between brown noise for the ostinato sections and white noise for the interruptions. These sounds can be replaced and / or complemented by live performers choosing two distinct noises for the ostinato and interrupt sections, respectively. The level of the noise fields should be relatively unobtrusive and situated at a level well below the guitar. The noise fields fade out over 10 seconds after the final note of the guitar.

In the interrupt sections, unpitched short percussion sounds double the muted strings of the guitar (indicated by x-noteheads) using a distinct instrument for every line of the staff. While a live performer is highly preferred, the computer program allows this part to be realized using sampled recordings. The score includes a percussion part with all non x-noteheads grayed out.

sustained tones (harmonic flickering, sine beating, and interrupt highlights)

The bassline of the ostinato can be optionally highlighted by what can be described as a ‘harmonic flickering’ where harmonics of the bassline flit in and out with various degrees of pitch definition. This is produced in the computer program by a simple waveshaping technique where a buffer is intermittently filled with bursts of noise and played back such that position of the player resets to the beginning of the buffer at a rate equivalent to the frequency of the current bass note in the ostinato. These sounds can be replaced and / or complemented by live performers playing swelled tones and occasionally mimicking the synthesis process on harmonics (including the fundamental) of the current bass note. Note that at each ostinato note, the computer can either turn on or off the flickering. The flickering nature of the sound itself is created by randomly gating the buffer player at very short intervals and the random intervals in which the buffer is refilled. If the flickering is realized by live performers, a similar decision making process should be coordinated. In the notation, brackets around the notes indicate when the bassline progresses. The harmonic flickering should be relatively unobtrusive and situated at a level well below the guitar.

The ostinato and interrupt sections are also distinguished by the beating of two low tones between 0.5 and 3 hertz apart centered around d for the ostinato sections and a fourth below, a, for the interrupt sections. This is achieved using sine tones in the computer program, but may be replaced by live performers playing low instruments. Note that the sine tones, and thus preferably any instruments that replace the sine tones, are actually centered an octave below the VI string of the guitar in the ostinato sections and 2 octaves below the V string of the guitar in the interrupt sections. In the ostinato sections, the computer determines whether or not to change the rate of beating on the onset of every note. This can easily be reproduced by two players such that one remains constant while the other changes occasionally. The rate of beating remains constant throughout each interrupt section. The beating should be at a level such that it provides a clear and present foundation while not overwhelming any of the other sounds.

In the interrupt sections, every open string and natural harmonic played on guitar is accompanied / highlighted by sustained tones that are octave equivalents of the fundamental or harmonics above the fundamental, respectively. For the latter, any harmonic greater than 2 can be chosen randomly / arbitrarily. The computer uses sine tones with amplitudes equivalent to 1 divided by the harmonic number. It is encouraged that live performers complement instead of replace the computer generated tones such that each player interprets one line of the score realizing filled-noteheads as octave equivalents of the given open string of the guitar and diamond-noteheads as octave equivalents of natural harmonics of the given string. If possible, as with the synthesized tones, performers should try to play these tones at a level indirectly proportional to the harmonic number. If a filled-notehead is repeated, the tone may be rearticulated or played in a different octave. A different harmonic can be chosen every time a diamond-notehead occurs. An x-notehead indicates to stop the currently sounding tone. If a sound has not been stopped before a transition back into the ostinato section, the tone fades out over a few seconds slightly overlapping into the following ostinato section. The score includes 6 ensemble parts where all but the relevant stafflines and noteheads are grayed out. The same performers can realize both the harmonic flickering of the ostinato and the interrupt highlights. To facilitate performances with less than 6 performers realizing the highlights, the parts may be divided among performers and the computer program (which allows muting individual parts).

Note that where octave equivalents of harmonics are played (such as in the harmonic flickering and the interrupt highlights), several pitches deviate from the nearest pitch in twelve tone equal-temperament. Below, the first 6 unique pitch classes (based on primes) of the harmonic series on d are listed with a cents deviation from the nearest pitch in twelve-tone equal-temperament. These pitches can be transposed accordingly for all other cases.

| | | | | | |
|---|-------|---------------------|--------|---------------------|---------------------|
| d | a +2¢ | f [♯] -14¢ | c -31¢ | g [♯] -49¢ | a [♯] +40¢ |
| 2 | 3 | 5 | 7 | 11 | 13 |

SuperCollider program structure

The structure of the application is hopefully straightforward and does not warrant much explanation. The application launches a graphical user interface (gui) that controls each element explained in an environment similar to a digital audio workstation (daw). Each element is played back from a multichannel soundfile. A timer in minutes:seconds and a visual metronome at 75 beats per minute (for the interrupt sections) is provided for coordination. Images of each tab of the gui and the directory structure of the application resources are provided below. The channels of the soundfile (24 in total) correspond to the faders from left to right.

To launch the application, execute `ostinato_and_interrupt_main.scd` in SuperCollider after booting the server (on linux, this is achieved by pressing `cmd+enter` with the cursor anywhere within the code block).

The “generate” button regenerates the piece. By default it will generate the original version included with this score, however the random seed can be changed if someone is so bold as to try to create a new version. Note that the application was written to create the given version, but should hopefully function properly when generating new version even though it has not been extensively tested. Regenerating the piece creates / replaces several files: most importantly `ostinato_and_interrupt.wav` which is needed for playback and should open in most daws (tested with Audacity). It also regenerates the Lilypond files which can be rendered and engraved using Lilypond.

For the generation function to work properly, the application requires that single samples be placed in the `samples/` folder within the directory tree given on the following page. Ideally, there should be several samples for each sound. While the application does not adhere to any naming conventions for the sample files, changing the names of the folders will break the application. The number prefix of each folder applies to the string / part number. With exception of the `strings_harmonics/` folder, the samples within a folder should be different versions of the same sound.

`ostinato_bass/`: each folder contains samples of the given bass note of the ostinato from highest (1) to lowest (6) (the descending bassline is described in the beginning of the instructions).

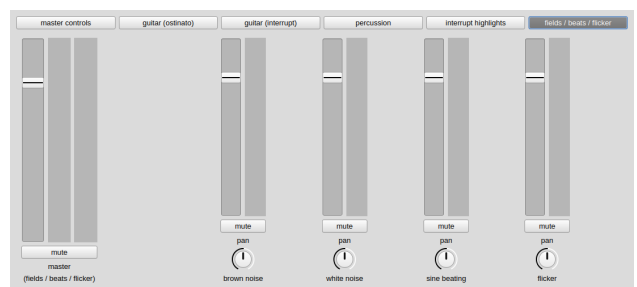
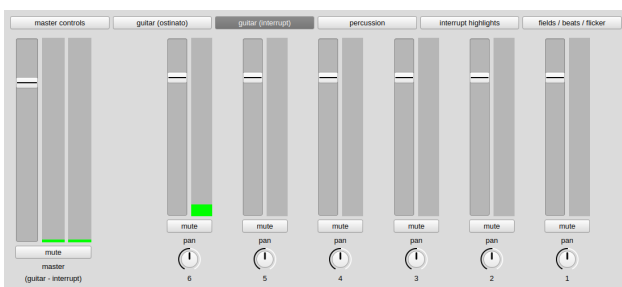
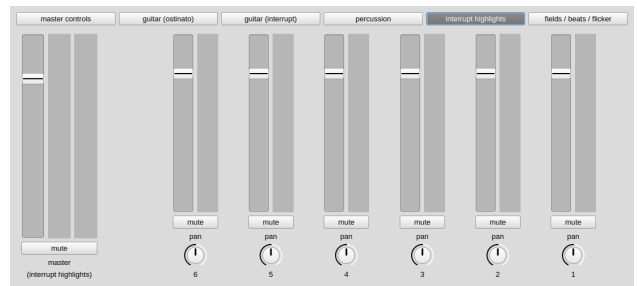
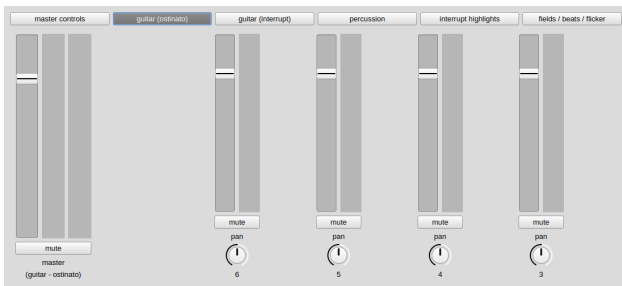
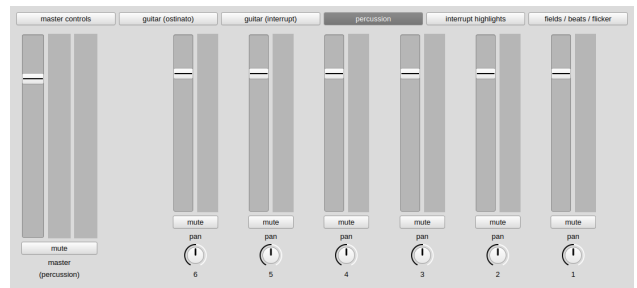
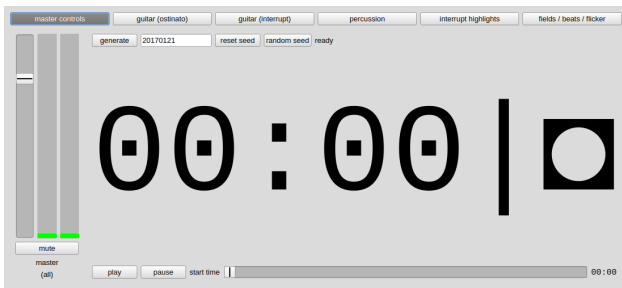
`strings_open/`: each folder contains samples of the given open string from highest (1) to lowest (6).

`strings_open/`: each folder contains samples of different natural harmonics of the given string from highest (1) to lowest (6). These are the only folders of the guitar samples that will contain sounds of different pitches. Note that if several samples of each harmonic are recorded, then there must be the same number of each harmonic in each folder; e.g. two samples of the 2nd harmonic, two samples of the 3rd harmonic, etc.

`strings_muted/`: each folder contains samples of the given string muted from highest (1) to lowest (6).

`percussion/`: each folder contains samples of one of the six different percussion instruments.

The primary source code for the application is appended at the end of this score and can be can be downloaded from a git repository at https://gitea.unboundedpress.org/mwinter/ostinato_and_interrupt. The whole package including all audio file resources is available upon request or can be downloaded from https://gitea.unboundedpress.org/mwinter/ostinato_and_interrupt/releases. Note that the package comes with a pregenerated version of the piece (the multichannel soundfile and all the Lilypond files) using an included sample set. This original sample set (recorded in August of 2017) was not recorded in ideal conditions and was used simply to audition the piece. The generation of this document (using LaTeX) and the musical parts (in Lilypond) contain version dates in order to help track changes and the git repository will also detail commit changes. The piece was written using SuperCollider version 3.8.0 and Lilypond version 2.18.2.



```

ostinato_and_interrupt_source/
├── supercollider/
│   ├── ostinato_and_interrupt_main.scd
│   ├── ostinato_and_interrupt_generator_synthdef.scd
│   ├── ostinato_and_interrupt_nrt_generator_function.scd
│   ├── ostinato_and_interrupt_lilypond_generator_function.scd
│   ├── ostinato_and_interrupt_player_synthdef.scd
│   ├── ostinato_and_interrupt_gui_generator_function.scd
│   └── gen_data_resources/
│       ├── ostinato_and_interrupt_osc
│       └── ostinato_and_interrupt_data.wav
├── audio/
│   └── ostinato_and_interrupt.wav
├── lilypond/
│   ├── ostinato_and_interrupt_lilypond_score_template.ly
│   ├── ostinato_and_interrupt_lilypond_guitar_part.ly
│   ├── ostinato_and_interrupt_lilypond_percussion_part.ly
│   ├── ostinato_and_interrupt_lilypond_ensemble_part_1.ly
│   ├── ostinato_and_interrupt_lilypond_ensemble_part_2.ly
│   ├── ostinato_and_interrupt_lilypond_ensemble_part_3.ly
│   ├── ostinato_and_interrupt_lilypond_ensemble_part_4.ly
│   ├── ostinato_and_interrupt_lilypond_ensemble_part_5.ly
│   └── ostinato_and_interrupt_lilypond_ensemble_part_6.ly
├── score_pdfs/
│   ├── ostinato_and_interrupt_lilypond_guitar_part.pdf
│   ├── ostinato_and_interrupt_lilypond_percussion_part.pdf
│   ├── ostinato_and_interrupt_lilypond_ensemble_part_1.pdf
│   ├── ostinato_and_interrupt_lilypond_ensemble_part_2.pdf
│   ├── ostinato_and_interrupt_lilypond_ensemble_part_3.pdf
│   ├── ostinato_and_interrupt_lilypond_ensemble_part_5.pdf
│   ├── ostinato_and_interrupt_lilypond_ensemble_part_4.pdf
│   └── ostinato_and_interrupt_lilypond_ensemble_part_6.pdf
└── samples/

```

```

ostinato_and_interrupt_source/
├── samples/
│   ├── ostinato_bass/
│   │   ├── 1_bass/
│   │   ├── 2_bass/
│   │   ├── 3_bass/
│   │   ├── 4_bass/
│   │   ├── 5_bass/
│   │   └── 6_bass/
│   ├── strings_open/
│   │   ├── 1_open/
│   │   ├── 2_open/
│   │   ├── 3_open/
│   │   ├── 4_open/
│   │   ├── 5_open/
│   │   └── 6_open/
│   ├── strings_harmonics/
│   │   ├── 1_harmonic/
│   │   ├── 2_harmonic/
│   │   ├── 3_harmonic/
│   │   ├── 4_harmonic/
│   │   ├── 5_harmonic/
│   │   └── 6_harmonic/
│   ├── strings_muted/
│   │   ├── 1_muted/
│   │   ├── 2_muted/
│   │   ├── 3_muted/
│   │   ├── 4_muted/
│   │   ├── 5_muted/
│   │   └── 6_muted/
│   └── percussion/
│       ├── 1_percussion/
│       ├── 2_percussion/
│       ├── 3_percussion/
│       ├── 4_percussion/
│       ├── 5_percussion/
│       └── 6_percussion/

```

I would like to extend a special thanks to Jose Manuel Alcantara and Alex Bruck for their help during this piece: Jose Manuel for his encouragement and for lending me a guitar; and Alex for his generosity in answering many, many questions and his patience when I just needed to someone to listen as I talked through ideas... this piece was very much shaped by our friendship...

version generated: 2020.11.20

ostinato and interrupt

guitar/all

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0'12"

Musical staff for 0'12". The staff contains four notes: a quarter note on the 3rd line (F3), a quarter note on the 2nd line (D3), a quarter note on the 3rd space (A3), and a quarter note on the 4th line (C4). Fingering is indicated by {3}, 3, {2}, and {1} respectively.

0'24"

Musical staff for 0'24". The staff contains six notes: a quarter note on the 3rd line (F3), a quarter note on the 2nd line (D3), a quarter note on the 3rd space (A3), a quarter note on the 4th line (C4), a quarter note on the 3rd space (A3), and a quarter note on the 2nd line (D3). Fingering is indicated by {3}, {3}, and {2}.

0'36"

Musical staff for 0'36". The staff contains five notes: a quarter note on the 2nd line (D3), a quarter note on the 3rd space (A3), a quarter note on the 4th line (C4), a quarter note on the 3rd space (A3), and a quarter note on the 2nd line (D3). Fingering is indicated by 2, 2, and [0].

0'48"

Musical staff for 0'48". The staff contains six notes: a quarter note on the 3rd line (F3), a quarter note on the 2nd line (D3), a quarter note on the 3rd space (A3), a quarter note on the 4th line (C4), a quarter note on the 3rd space (A3), and a quarter note on the 2nd line (D3). Fingering is indicated by {3}, {2}, and {1}.

1'00"

Musical staff for 1'00". The staff contains seven notes: a quarter note on the 3rd line (F3), a quarter note on the 2nd line (D3), a quarter note on the 3rd space (A3), a quarter note on the 4th line (C4), a quarter note on the 3rd space (A3), a quarter note on the 2nd line (D3), and a quarter note on the 3rd line (F3). Fingering is indicated by {3}, 3, {2}, and [0].

1'12"

Musical staff for 1'12". The staff contains six notes: a quarter note on the 3rd line (F3), a quarter note on the 2nd line (D3), a quarter note on the 3rd space (A3), a quarter note on the 4th line (C4), a quarter note on the 3rd space (A3), and a quarter note on the 2nd line (D3).

1'24"

1'28"

Musical staff for 1'24". The staff contains seven notes: a quarter note on the 3rd line (F3), a quarter note on the 2nd line (D3), a quarter note on the 3rd space (A3), a quarter note on the 4th line (C4), a quarter note on the 3rd space (A3), a quarter note on the 2nd line (D3), and a quarter note on the 3rd line (F3). Fingering is indicated by {3}, {2}, and {2}. A double bar line is placed after the 4th note. Below the staff, there are three groups of notes: a triplet of quarter notes (F3, D3, A3) with a '3' below, a quarter note (C4) with a '1' below, and a triplet of quarter notes (F3, D3, A3) with a '3' below.

1'36"

Musical staff for 1'36". The staff contains three notes: a quarter note on the 3rd line (F3), a quarter note on the 2nd line (D3), and a quarter note on the 3rd space (A3). Fingering is indicated by {1}, 1, and 1.

1'48"

Musical staff for 1'48" showing notes and fingerings: {3}, 3, 3-3, {2}, 2.

2'00"

2'04"

Musical staff for 2'00" showing notes, fingerings (2, 2), a double bar line, notes with diamond accents, and fingerings (1, 2). Includes a piano accompaniment sketch below.

2'12"

Musical staff for 2'12" showing notes and fingerings: {3}, 3.

2'24"

Musical staff for 2'24" showing notes and fingerings: {2}, {1}.

2'36"

2'44"

Musical staff for 2'36" showing notes, fingerings (1, {3}), a double bar line, notes with diamond accents, and fingerings (2, 3, 2). Includes a piano accompaniment sketch below.

2'48"

Musical staff for 2'48" showing notes and fingerings: {2}, 2, 2.

3'00"

Musical staff for 3'00" showing notes and fingerings: {3}, 3.

3'12"

3'20"

Musical staff for 3'12" showing notes, fingerings (3, {2}), a double bar line, notes with diamond accents, and fingering (1). Includes a piano accompaniment sketch below.

3'24"

Musical staff for 3'24" showing notes and fingerings: 2, {1}, 1, 1.

3'36"

Musical staff for 3'36" showing notes and fingerings: {3}, 3, 3.

3'48"

Musical staff for 3'48" showing notes and fingerings: {2}, {3}.

4'00"

Musical staff for 4'00" showing notes, fingerings, and a double bar line. After the bar line, there are notes with 'x' marks and diamond symbols, with fingerings 3, 1, 3, 1 below.

4'08"

4'12"

Musical staff for 4'12" showing notes and fingerings: 3, {2}.

4'24"

Musical staff for 4'24" showing notes and fingerings: {1}, 1, 1, 1.

4'36"

Musical staff for 4'36" showing notes and fingerings: {3}, {2}, 2.

4'48"

Musical staff for 4'48" showing notes, fingerings, and a double bar line. After the bar line, there are notes with 'x' marks and diamond symbols, with fingerings 1, {3} below.

5'00" 5'04"

5'12"

5'24"

5'36" 5'44"

5'48"

6'00"

6'12" 6'16"

6'24"

8'12"

Musical notation for 8'12" showing a sequence of notes with diamond and 'x' markers, and a triplet of notes on the right.

8'24"

Musical notation for 8'24" showing a sequence of notes with a bracketed '2' and a '2' below.

8'36"

8'40"

Musical notation for 8'36" and 8'40" showing a sequence of notes with diamond and 'x' markers, and a bracketed '1'.

8'48"

Musical notation for 8'48" showing a sequence of notes with a bracketed '3' and a '3' below.

9'00"

9'04"

Musical notation for 9'00" and 9'04" showing a sequence of notes with diamond and 'x' markers, and a bracketed '2'.

9'12"

Musical notation for 9'12" showing a sequence of notes.

9'24"

Musical notation for 9'24" showing a sequence of notes.

9'36"

9'44"

Musical notation for 9'36" and 9'44" showing a sequence of notes with diamond and 'x' markers, and a bracketed '3'.

9'48"

Musical notation for 9'48" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth and sixteenth notes. Below the staff, there are fingerings: 2 1 2 3 2 1 3 2 1 2 1 2 1 2 3 2.

10'00"

Musical notation for 10'00" showing a sequence of notes and rests on a five-line staff. Below the staff, there are fingerings: 1 2 1 3 1 3 1 2 1 3 3 1.

10'12"

Musical notation for 10'12" showing a sequence of notes and rests on a five-line staff. Below the staff, there are fingerings: 2 3 1 3 1 3 1 2 1 3 2.

10'24"

Musical notation for 10'24" showing a sequence of notes and rests on a five-line staff. Below the staff, there are fingerings: 3 {2} 2 1 2.

10'32"

10'36"

Musical notation for 10'36" showing a sequence of notes and rests on a five-line staff. Below the staff, there are fingerings: {1} 2 1 2 3 2 3 1.

10'40"

10'48"

Musical notation for 10'48" showing a sequence of notes and rests on a five-line staff. Below the staff, there are fingerings: 3 1 2 3 1 1 1.

11'00"

Musical notation for 11'00" showing a sequence of notes and rests on a five-line staff. Below the staff, there are fingerings: {3} 1 3 1 {2} {3}.

11'04"

11'12"

Musical notation for 11'12" showing a sequence of notes and rests on a five-line staff. Below the staff, there are fingerings: 1 {3}.

13'00"

Musical notation for 13'00" showing a sequence of notes and rests on a five-line staff. The notes are primarily eighth and sixteenth notes. Below the staff, there are rhythmic markings: 2 1 3, 1 3 1 3, 1 2 1, 3, 1, 1 2 1, 3, 1, 1 2 3, 2 3. Some notes have 'x' marks above them, and some have diamond shapes.

13'12"

Musical notation for 13'12" showing a sequence of notes and rests. The notation includes a double bar line. Below the staff, there are rhythmic markings: 1, 3, 1 2, 1, and a measure with a long horizontal line and markings {3}-3.

13'24"

Musical notation for 13'24" showing a sequence of notes and rests. Below the staff, there are rhythmic markings: 1, 3, 1, 3, 1 2 1, 3, 2, 1 2, 1 2, 1, 3, 2.

13'36"

Musical notation for 13'36" showing a sequence of notes and rests. Below the staff, there are rhythmic markings: 3, 2, 1, 2, 1, 3, 2, 1, 2.

13'48"

Musical notation for 13'48" showing a sequence of notes and rests. The notation includes a double bar line. Below the staff, there are rhythmic markings: 1, 2, 1, and a measure with a long horizontal line and markings 3-3.

14'00"

Musical notation for 14'00" showing a sequence of notes and rests. Below the staff, there are rhythmic markings: 3, 3, and a measure with a long horizontal line and markings {2}.

14'12"

Musical notation for 14'12" showing a sequence of notes and rests. The notation includes a double bar line. Below the staff, there are rhythmic markings: 2 1, 3, 2, 3, 1, 2. A measure with a long horizontal line and markings {3} is also present.

14'20"

14'24"

Musical notation for 14'24" showing a sequence of notes and rests. The notation includes a double bar line. Below the staff, there are rhythmic markings: 1 3, and a measure with a long horizontal line and markings 3-3.

14'36" 14'44"

3 { 2 }

3 1 2 3 1 2

14'48"

1 2 1 2 3 2 3 1 2 1 2 3 2 1

15'00"

3 2 1 2 1 2 3 1 3 2 1 3 2

15'12"

3 1 2 1 3 2 3 2 { 1 } 1

15'24"

2 1 2 1 2 1 3 1 2 1 { 3 }

15'36"

{ 2 } 2

ostinato and interrupt

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version generated: 2017.08.23

percussion

0'12"

Musical staff for 0'12". It features a five-line staff with a treble clef. The notation includes a {3} bracket under the first line, a dot on the second line, a {3} bracket under the third line, a dot on the fourth line, a {2} bracket under the fifth line, a dot on the first line, and a {1} bracket under the second line.

0'24"

Musical staff for 0'24". It features a five-line staff with a treble clef. The notation includes a dot on the first line, a dot on the second line, a dot on the third line, a dot on the fourth line, a {3} bracket under the fifth line, a dot on the first line, a dot on the second line, and a {2} bracket under the third line.

0'36"

Musical staff for 0'36". It features a five-line staff with a treble clef. The notation includes a {2} bracket under the first line, a {2} bracket under the second line, a dot on the third line, a dot on the fourth line, a {1} bracket under the fifth line, and a dot on the first line.

0'48"

Musical staff for 0'48". It features a five-line staff with a treble clef. The notation includes a {3} bracket under the first line, a dot on the second line, a {2} bracket under the third line, a dot on the fourth line, a {1} bracket under the fifth line, a dot on the first line, and a dot on the second line.

1'00"

Musical staff for 1'00". It features a five-line staff with a treble clef. The notation includes a {3} bracket under the first line, a dot on the second line, a dot on the third line, a {3} bracket under the fourth line, a {2} bracket under the fifth line, a dot on the first line, and a {1} bracket under the second line.

1'12"

Musical staff for 1'12". It features a five-line staff with a treble clef. The notation includes a dot on the first line, a dot on the second line, a dot on the third line, a dot on the fourth line, and a dot on the fifth line.

1'24"

1'28"

Musical staff for 1'24". It features a five-line staff with a treble clef. The notation includes a {3} bracket under the first line, a dot on the second line, a double bar line, a complex rhythmic figure with stems and flags, a double bar line, a dot on the first line, and a {2} bracket under the second line. Below the staff, there are three groups of rhythmic notation: a group of three notes with a '3' below, a group of one note with a '1' below, and a group of three notes with a '3' below.

1'36"

Musical staff for 1'36". It features a five-line staff with a treble clef. The notation includes a dot on the first line, a {1} bracket under the second line, a dot on the third line, a {1} bracket under the fourth line, and a dot on the fifth line.

1'48"

Musical staff for 1'48" showing notes and fingerings: {3}, 3, 3-3, {2}, 2.

2'00"

Musical staff for 2'00" showing notes, fingerings (2, 2), a double bar line, notes with fingerings (1, 2), and a final note.

2'12"

Musical staff for 2'12" showing notes and fingerings: {3}, 3, 3, 3, 3.

2'24"

Musical staff for 2'24" showing notes and fingerings: {2}, {1}.

2'36"

Musical staff for 2'36" showing notes, fingerings (1, {3}), a double bar line, notes with fingerings (2, 3, 2), and a final note.

2'48"

Musical staff for 2'48" showing notes and fingerings: {2}, 2, 2, 2, 2.

3'00"

Musical staff for 3'00" showing notes and fingerings: {1}, {3}, 3.

3'12"

Musical staff for 3'12" showing notes, fingerings (3, {2}), a double bar line, notes with fingerings (1), and a final note.

3'24"

Musical staff for 3'24" showing notes and fingerings: 2, {1}, 1, 1.

3'36"

Musical staff for 3'36" showing notes and fingerings: {3}, 3, 3.

3'48"

Musical staff for 3'48" showing notes and fingerings: {2}, {3}.

4'00"

Musical staff for 4'00" showing notes, fingerings, and a double bar line. Includes a complex rhythmic pattern with notes marked with 'x' and fingerings 3, 1, 3, 1.

4'08"

4'12"

Musical staff for 4'12" showing notes and fingerings: 3, {2}.

4'24"

Musical staff for 4'24" showing notes and fingerings: {1}, 1, 1, 1.

4'36"

Musical staff for 4'36" showing notes and fingerings: {3}, {2}, 2.

4'48"

Musical staff for 4'48" showing notes, fingerings, and a double bar line. Includes a complex rhythmic pattern with notes marked with 'x' and fingerings 1, {3}.

5'00" 5'04"

5'12"

5'24"

5'36" 5'44"

5'48"

6'00"

6'12" 6'16"

6'24"

6'36"

Musical staff for 6'36" showing a sequence of notes and rests. The notes are on the second line, second space, and third line. Fingerings are indicated by numbers 1, 2, and 3. There are two trills marked with curly braces and numbers 2 and 3.

6'48"

Musical staff for 6'48" featuring a complex melodic line with many notes and rests. It includes numerous trills marked with 'x' and fingerings 1, 2, and 3. The notes are primarily on the second line, second space, and third line.

7'00"

Musical staff for 7'00" showing a melodic line with notes and rests. It includes trills marked with 'x' and fingerings 1, 2, and 3. The notes are on the second line, second space, and third line.

7'12"

Musical staff for 7'12" showing a sequence of notes and rests. The notes are on the second line, second space, and third line. A trill is marked with curly braces and the number 3.

7'24"

Musical staff for 7'24" showing a sequence of notes and rests. The notes are on the second line, second space, and third line. There is a trill marked with curly braces and the number 3, and another trill marked with curly braces and the number 2.

7'36"

Musical staff for 7'36" showing a melodic line with notes and rests. It includes trills marked with curly braces and the number 1. The notes are on the second line, second space, and third line.

7'48"

Musical staff for 7'48" showing a sequence of notes and rests. The notes are on the second line, second space, and third line. There are trills marked with curly braces and numbers 3 and 2. A double bar line is present at 7'56".

8'00"

Musical staff for 8'00" showing a sequence of notes and rests. The notes are on the second line, second space, and third line. A trill is marked with curly braces and the number 3.

8'12"

Musical notation for 8'12" showing a sequence of notes with fingerings (3, 1, 3, 1, 3, 1) and a double bar line. The notation includes a treble clef, a key signature of one flat, and a 3/4 time signature. The notes are G4, A4, Bb4, C5, Bb4, A4, G4. There are 'x' marks above the first, third, and fifth notes. Below the staff, there are six groups of three horizontal lines representing fretted notes, with fingerings 3, 1, 3, 1, 3, 1 written below them. A double bar line is placed after the sixth group. To the right of the double bar line, there are two groups of three horizontal lines representing fretted notes, with a '3' written below each group. The notes are G4, A4, Bb4.

8'24"

Musical notation for 8'24" showing a sequence of notes with fingerings (2, 2). The notation includes a treble clef, a key signature of one flat, and a 3/4 time signature. The notes are G4, A4, Bb4, C5, Bb4, A4, G4. There are 'x' marks above the first, third, and fifth notes. Below the staff, there are two groups of three horizontal lines representing fretted notes, with a '2' written below each group. The notes are G4, A4, Bb4.

8'36"

8'40"

Musical notation for 8'36" and 8'40". The notation includes a treble clef, a key signature of one flat, and a 3/4 time signature. The notes are G4, A4, Bb4, C5, Bb4, A4, G4. There are 'x' marks above the first, third, and fifth notes. Below the staff, there are six groups of three horizontal lines representing fretted notes, with fingerings 1 2, 1 3, 1, 1, 2, 1 2, 1 3 written below them. A double bar line is placed after the sixth group. To the right of the double bar line, there are two groups of three horizontal lines representing fretted notes, with a '3' written below each group. The notes are G4, A4, Bb4.

8'48"

Musical notation for 8'48" showing a sequence of notes with fingerings (3, 3). The notation includes a treble clef, a key signature of one flat, and a 3/4 time signature. The notes are G4, A4, Bb4, C5, Bb4, A4, G4. There are 'x' marks above the first, third, and fifth notes. Below the staff, there are two groups of three horizontal lines representing fretted notes, with a '3' written below each group. The notes are G4, A4, Bb4.

9'00"

9'04"

Musical notation for 9'00" and 9'04". The notation includes a treble clef, a key signature of one flat, and a 3/4 time signature. The notes are G4, A4, Bb4, C5, Bb4, A4, G4. There are 'x' marks above the first, third, and fifth notes. Below the staff, there are six groups of three horizontal lines representing fretted notes, with fingerings 1, 3, 1, 2, 2 written below them. A double bar line is placed after the sixth group. To the right of the double bar line, there are two groups of three horizontal lines representing fretted notes, with a '2' written below each group. The notes are G4, A4, Bb4.

9'12"

Musical notation for 9'12" showing a sequence of notes. The notation includes a treble clef, a key signature of one flat, and a 3/4 time signature. The notes are G4, A4, Bb4, C5, Bb4, A4, G4. There are 'x' marks above the first, third, and fifth notes. Below the staff, there are two groups of three horizontal lines representing fretted notes. The notes are G4, A4, Bb4.

9'24"

Musical notation for 9'24" showing a sequence of notes. The notation includes a treble clef, a key signature of one flat, and a 3/4 time signature. The notes are G4, A4, Bb4, C5, Bb4, A4, G4. There are 'x' marks above the first, third, and fifth notes. Below the staff, there are two groups of three horizontal lines representing fretted notes. The notes are G4, A4, Bb4.

9'36"

9'44"

Musical notation for 9'36" and 9'44". The notation includes a treble clef, a key signature of one flat, and a 3/4 time signature. The notes are G4, A4, Bb4, C5, Bb4, A4, G4. There are 'x' marks above the first, third, and fifth notes. Below the staff, there are six groups of three horizontal lines representing fretted notes, with fingerings 3, 1, 2, 1 written below them. A double bar line is placed after the sixth group. To the right of the double bar line, there are two groups of three horizontal lines representing fretted notes, with a '3' written below each group. The notes are G4, A4, Bb4.

9'48"

Musical notation for 9'48" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes, indicating specific techniques or accents. Below the staff, there are rhythmic patterns represented by groups of vertical lines. Fingerings are indicated by numbers 1, 2, and 3.

2 1 2 3 2 1 3 2 1 2 1 2 1 2 3 2

10'00"

Musical notation for 10'00" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes. Below the staff, there are rhythmic patterns represented by groups of vertical lines. Fingerings are indicated by numbers 1, 2, and 3.

1 2 1 3 1 3 1 2 1 3 1 2 3 1

10'12"

Musical notation for 10'12" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes. Below the staff, there are rhythmic patterns represented by groups of vertical lines. Fingerings are indicated by numbers 1, 2, and 3.

2 3 1 3 1 3 1 2 1 3 2

10'24"

Musical notation for 10'24" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes. Below the staff, there are rhythmic patterns represented by groups of vertical lines. Fingerings are indicated by numbers 1, 2, and 3.

3 {2} 2 1 2

10'32"

10'36"

Musical notation for 10'36" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes. Below the staff, there are rhythmic patterns represented by groups of vertical lines. Fingerings are indicated by numbers 1, 2, and 3.

{1} 2 1 2 3 2 3 1

10'40"

10'48"

Musical notation for 10'48" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes. Below the staff, there are rhythmic patterns represented by groups of vertical lines. Fingerings are indicated by numbers 1, 2, and 3.

3 1 2 3 1 1 1

11'00"

Musical notation for 11'00" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes. Below the staff, there are rhythmic patterns represented by groups of vertical lines. Fingerings are indicated by numbers 1, 2, and 3.

{3} 1 3 1 {2} {3}

11'04"

11'12"

Musical notation for 11'12" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes. Below the staff, there are rhythmic patterns represented by groups of vertical lines. Fingerings are indicated by numbers 1, 2, and 3.

1 {3}

11'24"

Musical notation for 11'24". The staff shows a sequence of notes with fingerings: 2, 1 3, 2 3, 2 1 3, 1 2, 1. There are several 'x' marks above notes. The piece concludes with a double bar line, followed by a whole note on the second line and a whole note on the first line, both with a {1} fingering.

11'36"

Musical notation for 11'36". The staff shows notes with fingerings: 1 2, 1. There are 'x' marks above notes. The piece concludes with a double bar line, followed by a whole note on the second line with a {3} fingering. A second system for 11'44" begins with notes and fingerings: 1 3, 3, 1.

11'44"

11'48"

Musical notation for 11'48". The staff shows a whole note on the second line with a 3-2 fingering, followed by a whole note on the first line with a {1} fingering.

12'00"

Musical notation for 12'00". The staff shows a sequence of notes with fingerings: 1 2 1, 2, 1 2, 1, 2, 1 2, 1 2, 1 2, 1 2. There are 'x' marks above notes. The piece concludes with a double bar line, followed by a whole note on the second line and a whole note on the first line.

12'12"

Musical notation for 12'12". The staff shows a whole note on the second line with a {3} fingering, followed by a whole note on the first line.

12'24"

Musical notation for 12'24". The staff shows notes with fingerings: 2, 1. The piece concludes with a double bar line, followed by a whole note on the second line and a whole note on the first line, both with a {2} fingering.

12'36"

Musical notation for 12'36". The staff shows notes with fingerings: 3, 1. There are 'x' marks above notes. The piece concludes with a double bar line, followed by a whole note on the second line with a 2 fingering, a whole note on the first line with a {1} fingering, and a final whole note on the first line with a 1 fingering.

12'48"

Musical notation for 12'48". The staff shows a sequence of notes with fingerings: 2, 3, 1 2 1, 3, 1 3, 1 3, 1 3. There are 'x' marks above notes. The piece concludes with a double bar line, followed by a whole note on the second line and a whole note on the first line.

13'00"

Musical notation for 13'00" showing a sequence of notes and rests on a five-line staff. The notes are primarily eighth and sixteenth notes. Below the staff, there are rhythmic markings: 2 1 3, 1 3 1 3, 1 2 1, 3, 1, 1 2 1, 3, 1, 3, 1, 2 3.

13'12"

Musical notation for 13'12" showing a sequence of notes and rests on a five-line staff. The notes are primarily eighth and sixteenth notes. Below the staff, there are rhythmic markings: 1, 3, 1 2, 1. The notation ends with a double bar line and a measure containing a whole note with a '1' below it and a triplet of eighth notes marked with a brace and '3' below it.

13'24"

Musical notation for 13'24" showing a sequence of notes and rests on a five-line staff. The notes are primarily eighth and sixteenth notes. Below the staff, there are rhythmic markings: 1, 3, 1, 3, 1 2, 1, 3, 2, 1 2, 1 2, 1, 3, 2.

13'36"

Musical notation for 13'36" showing a sequence of notes and rests on a five-line staff. The notes are primarily eighth and sixteenth notes. Below the staff, there are rhythmic markings: 3, 2, 1, 2, 1 3, 2, 1, 2.

13'48"

Musical notation for 13'48" showing a sequence of notes and rests on a five-line staff. The notes are primarily eighth and sixteenth notes. Below the staff, there are rhythmic markings: 1, 2, 1. The notation ends with a double bar line and a measure containing a whole note with a '3' below it and a triplet of eighth notes marked with a brace and '3' below it.

14'00"

Musical notation for 14'00" showing a sequence of notes and rests on a five-line staff. The notes are primarily eighth and sixteenth notes. Below the staff, there are rhythmic markings: 3, 3, {2}.

14'12"

Musical notation for 14'12" showing a sequence of notes and rests on a five-line staff. The notes are primarily eighth and sixteenth notes. Below the staff, there are rhythmic markings: 2, 1, 3, 2, 3, 1, 2. The notation is split into two measures by a double bar line, with the second measure starting at 14'20".

14'24"

Musical notation for 14'24" showing a sequence of notes and rests on a five-line staff. The notes are primarily eighth and sixteenth notes. Below the staff, there are rhythmic markings: 1, 3. The notation is split into two measures by a double bar line, with the second measure containing a whole note with a '3' below it and a triplet of eighth notes marked with a brace and '3' below it.

14'36" 14'44"

3 { 2 }

3 1 2 3 1 2

14'48"

1 2 1 2 3 2 3 1 2 1 2 3 2 1 1 2 3 2 1 1 2 3 2 1

15'00"

3 2 1 2 1 2 3 1 3 2 1 3 2

15'12"

3 1 2 1 3 2 3 2 { 1 } 1

15'24"

2 1 2 1 2 1 3 1 2 1 2 1 2 1 2 { 3 } 3

15'36"

{ 2 } 2 { 2 }

ostinato and interrupt

michael winter (mexico city, mx; 2017)
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ensemble part 1

0'12"

Musical staff for 0'12" showing notes on a five-line staff. The notes are on the first, second, and third lines. Fingerings are indicated by numbers in brackets: [3] for the first note, [2] for the second, and [1] for the third. A '3' is written below the staff between the first and second notes.

0'24"

Musical staff for 0'24" showing notes on a five-line staff. The notes are on the first, second, and third lines. Fingerings are indicated by numbers in brackets: [3] for the first note, [2] for the second, and [2] for the third. A '3' is written below the staff between the first and second notes.

0'36"

Musical staff for 0'36" showing notes on a five-line staff. The notes are on the first, second, and third lines. Fingerings are indicated by numbers in brackets: [2] for the first note, [2] for the second, and [2] for the third. A '2' is written below the staff between the first and second notes.

0'48"

Musical staff for 0'48" showing notes on a five-line staff. The notes are on the first, second, and third lines. Fingerings are indicated by numbers in brackets: [3] for the first note, [2] for the second, and [1] for the third. A '3' is written below the staff between the first and second notes.

1'00"

Musical staff for 1'00" showing notes on a five-line staff. The notes are on the first, second, and third lines. Fingerings are indicated by numbers in brackets: [3] for the first note, [2] for the second, and [2] for the third. A '3' is written below the staff between the first and second notes.

1'12"

Musical staff for 1'12" showing notes on a five-line staff. The notes are on the first, second, and third lines. Fingerings are indicated by numbers in brackets: [3] for the first note, [2] for the second, and [2] for the third. A '3' is written below the staff between the first and second notes.

1'24"

1'28"

Musical staff for 1'24" showing notes on a five-line staff. The notes are on the first, second, and third lines. Fingerings are indicated by numbers in brackets: [3] for the first note, [2] for the second, and [2] for the third. A '3' is written below the staff between the first and second notes. A double bar line is present at 1'28". Below the staff, there are three groups of notes with stems pointing up, labeled with '3' and '1' below them.

1'36"

Musical staff for 1'36" showing notes on a five-line staff. The notes are on the first, second, and third lines. Fingerings are indicated by numbers in brackets: [1] for the first note, [1] for the second, and [1] for the third. A '1' is written below the staff between the first and second notes.

1'48"

Musical staff for 1'48" showing notes and fingerings: [3], 3, 3, 3, [2], 2.

2'00"

2'04"

Musical staff for 2'00" showing notes, fingerings (2, 2), a double bar line, a diamond-shaped fingering symbol, notes, another double bar line, notes, and fingerings (1, 2). Includes a chord diagram below the staff.

2'12"

Musical staff for 2'12" showing notes and fingerings: [3], 3, 3, 3, 3.

2'24"

Musical staff for 2'24" showing notes and fingerings: [2], [1].

2'36"

2'44"

Musical staff for 2'36" showing notes, fingerings (1, [3]), a double bar line, diamond-shaped fingering symbols, notes, another double bar line, notes, and fingerings (2, 3, 2). Includes a chord diagram below the staff.

2'48"

Musical staff for 2'48" showing notes and fingerings: [2], 2, 2, 2, 2.

3'00"

Musical staff for 3'00" showing notes and fingerings: [2], [3], 3.

3'12"

3'20"

Musical staff for 3'12" showing notes, fingerings (3, [2]), a double bar line, diamond-shaped fingering symbols, notes, another double bar line, notes, and fingering (1). Includes a chord diagram below the staff.

3'24"

A musical staff with five lines. The notes are placed on the second, third, and fourth lines. Fingerings are indicated as 2, [1], 1, and 1.

3'36"

A musical staff with five lines. The notes are placed on the second, third, and fourth lines. Fingerings are indicated as [3], 3, and 3.

3'48"

A musical staff with five lines. The notes are placed on the second, third, and fourth lines. Fingerings are indicated as [2], [1], and [2].

4'00"

4'08"

A musical staff with five lines. The first part (4'00") has notes on the second, third, and fourth lines with fingering [3]. The second part (4'08") is a complex rhythmic exercise with notes on the second, third, and fourth lines, marked with 'x' and diamond symbols. Below the staff are five groups of rhythmic notation: 3, 1, 3, 1, and 3.

4'12"

A musical staff with five lines. The notes are placed on the second, third, and fourth lines. Fingerings are indicated as 3 and [2].

4'24"

A musical staff with five lines. The notes are placed on the second, third, and fourth lines. Fingerings are indicated as [1], 1, 1, and 1.

4'36"

A musical staff with five lines. The notes are placed on the second, third, and fourth lines. Fingerings are indicated as [3], [2], and 2.

4'48"

A musical staff with five lines. The first part has notes on the second, third, and fourth lines with 'x' and diamond symbols, and a '1' below. The second part has notes on the second, third, and fourth lines with fingering [3].

5'00" 5'04"

5'12"

5'24"

5'36" 5'44"

5'48"

6'00"

6'12" 6'16"

6'24"

6'36"

Musical staff for 6'36" showing notes and fingerings: [2], 2, 2, [2].

6'48"

Musical staff for 6'48" showing notes, fingerings (3, 2, 1, 3, 1, 2, 3, 1, 2, 3, 2, 1, 2, 1, 3, 1), and articulation marks (x, diamond).

7'00"

Musical staff for 7'00" showing notes, fingerings (2, 1, 2, 1, 3, 1, 3, 2), and articulation marks (x, diamond).

7'12"

Musical staff for 7'12" showing notes and a fingering mark [3].

7'24"

Musical staff for 7'24" showing notes and fingerings 3 and [2].

7'36"

Musical staff for 7'36" showing notes, fingerings (2, 3, 2, 3), and a fingering mark [1].

7'48"

7'56"

Musical staff for 7'48" showing notes, fingerings (1, 1, [3]), and a fingering mark [2].

8'00"

Musical staff for 8'00" showing notes and a fingering mark [3].

8'12"

Musical notation for 8'12" showing a sequence of notes with diamond and 'x' markers, and a triplet of notes. Below the staff are fingerings: 3, 1, 3, 1, 3, 1.

8'24"

Musical notation for 8'24" showing a sequence of notes with a bracketed '2' and a '2' below the staff.

8'36"

8'40"

Musical notation for 8'36" and 8'40" showing a sequence of notes with diamond and 'x' markers, and a bracketed '1'. Below the staff are fingerings: 1 2, 1 3, 1, 1, 2, 1 2, 1 3.

8'48"

Musical notation for 8'48" showing a sequence of notes with a bracketed '3' and a '3' below the staff.

9'00"

9'04"

Musical notation for 9'00" and 9'04" showing a sequence of notes with diamond and 'x' markers, and a bracketed '2'. Below the staff are fingerings: 1, 3, 1, 2.

9'12"

Musical notation for 9'12" showing a sequence of notes.

9'24"

Musical notation for 9'24" showing a sequence of notes.

9'36"

9'44"

Musical notation for 9'36" and 9'44" showing a sequence of notes with diamond and 'x' markers, and a bracketed '3'. Below the staff are fingerings: 3, 1, 2, 1.

9'48"

Musical notation for 9'48" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes, likely indicating fingerings or specific articulations. Below the staff, there are several groups of numbers: 2 1, 2 3, 2 1 3, 2, 1 2, 1, 2, 3 2.

10'00"

Musical notation for 10'00" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes. Below the staff, there are several groups of numbers: 1 2, 1 3, 1 3, 1 2, 1, 3, 1.

10'12"

Musical notation for 10'12" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes. Below the staff, there are several groups of numbers: 2 3, 1 3, 1 3, 1 2, 1 3, 2.

10'24"

Musical notation for 10'24" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes. Below the staff, there are several groups of numbers: 3, [2], 2 1, 2.

10'32"

10'36"

Musical notation for 10'36" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes. Below the staff, there are several groups of numbers: [1], 2, 1 2, 3, 2, 3, 1.

10'40"

10'48"

Musical notation for 10'48" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes. Below the staff, there are several groups of numbers: 3, 1 2, 3, 1, 1, 1.

11'00"

Musical notation for 11'00" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes. Below the staff, there are several groups of numbers: [3], 1 3, 1, [2], [3].

11'04"

11'12"

Musical notation for 11'12" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. There are several 'x' marks above notes. Below the staff, there are several groups of numbers: 1, [3].

11'24"

2 1 3 2 3 2 1 3 1 2 1

[2] [1]

11'36"

11'44"

1 2 1

[3]

1 3 1

11'48"

3 [2]

12'00"

1 2 1 2 1 2 1 2 1 2 1 2 1 2

12'12"

[3]

12'24"

2 1

[2]

12'36"

3 1

2 [1] 1

12'48"

2 3 1 2 1 3 1 3 1 3 1 3

13'00"

Musical notation for 13'00" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. Below the staff are fingerings: 2 1 3, 1 3, 1 3, 1 2 1, 1 3, 1, 1 2 1, 1 3, 1, 1 3, 1, 2 3.

13'12"

Musical notation for 13'12" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. Below the staff are fingerings: 1, 3, 1 2, 1. A double bar line is followed by a rest marked with a '1' and a triplet bracket containing '3' and '3'.

13'24"

Musical notation for 13'24" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. Below the staff are fingerings: 1, 3, 1, 3, 1 2, 1, 3, 2, 1 2, 1 2, 1, 3, 2.

13'36"

Musical notation for 13'36" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. Below the staff are fingerings: 3, 2, 1, 2, 1, 3, 2, 1, 2, 2.

13'48"

Musical notation for 13'48" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. Below the staff are fingerings: 1, 2, 1. A double bar line is followed by a rest marked with a '3' and another rest marked with a '3'.

14'00"

Musical notation for 14'00" showing a sequence of notes and rests on a staff. Below the staff are fingerings: 3, 3, [2].

14'12"

Musical notation for 14'12" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. Below the staff are fingerings: 2, 1, 3, 2, 3, 1, 2. A double bar line is followed by a rest marked with a '3' and a triplet bracket containing '3'.

14'20"

14'24"

Musical notation for 14'24" showing a sequence of notes and rests on a staff. Below the staff are fingerings: 1, 3. A double bar line is followed by a rest marked with a '3' and another rest marked with a '3'.

ostinato and interrupt

michael winter (mexico city, mx; 2017)
version generated: 2017.12.06

ensemble part 2

0'12"

Musical staff for 0'12". It contains four notes on a five-line staff. The first note is on the second line, the second on the second space, the third on the second line, and the fourth on the second space. Below the staff are fingerings: [3] under the first note, 3 under the second note, [2] under the third note, and [1] under the fourth note.

0'24"

Musical staff for 0'24". It contains six notes on a five-line staff. The first note is on the second line, the second on the second space, the third on the second line, the fourth on the second space, the fifth on the second line, and the sixth on the second space. Below the staff are fingerings: [3] under the fifth note and [2] under the sixth note.

0'36"

Musical staff for 0'36". It contains six notes on a five-line staff. The first note is on the second line, the second on the second space, the third on the second line, the fourth on the second space, the fifth on the second line, and the sixth on the second space. Below the staff are fingerings: 2 under the first note, 2 under the second note, and [0] under the fifth note.

0'48"

Musical staff for 0'48". It contains seven notes on a five-line staff. The first note is on the second line, the second on the second space, the third on the second line, the fourth on the second space, the fifth on the second line, the sixth on the second space, and the seventh on the second line. Below the staff are fingerings: [3] under the first note, [2] under the third note, and [1] under the sixth note.

1'00"

Musical staff for 1'00". It contains seven notes on a five-line staff. The first note is on the second line, the second on the second space, the third on the second line, the fourth on the second space, the fifth on the second line, the sixth on the second space, and the seventh on the second line. Below the staff are fingerings: [3] under the first note, 3 under the fourth note, [2] under the fifth note, and [0] under the seventh note.

1'12"

Musical staff for 1'12". It contains six notes on a five-line staff. The first note is on the second line, the second on the second space, the third on the second line, the fourth on the second space, the fifth on the second line, and the sixth on the second space.

1'24" 1'28"

Musical staff for 1'24". It contains seven notes on a five-line staff. The first note is on the second line, the second on the second space, the third on the second line, the fourth on the second space, the fifth on the second line, the sixth on the second space, and the seventh on the second line. Below the staff are fingerings: [3] under the first note and [2] under the sixth note. A double bar line is placed after the fourth note. From 1'28", there is a sequence of notes with stems pointing up and down, with fingerings 3 and 1 below them. This is followed by a double bar line and then the sixth and seventh notes of the staff.

1'36"

Musical staff for 1'36". It contains three notes on a five-line staff. The first note is on the second line, the second on the second space, and the third on the second line. Below the staff are fingerings: [1] under the first note, 1 under the second note, and 1 under the third note.

1'48"

[3] 3 3 3 [2] 2

2'00" 2'04"

2 2 [1] [2]

2'12"

[3] 3

2'24"

[2] [1]

2'36" 2'44"

1 [3] 2 3 2

2'48"

[2] 2 2

3'00"

[1] [3] 3

3'12" 3'20"

3 [2] 1

3'24"

Musical staff for 3'24" showing notes and fingerings: 2, [1], 1, 1.

3'36"

Musical staff for 3'36" showing notes and fingerings: [3], 3, 3.

3'48"

Musical staff for 3'48" showing notes and fingerings: [2], [2], [2].

4'00"

Musical staff for 4'00" showing notes and fingerings: [3], [3]. Includes a double bar line and a complex rhythmic pattern with 'x' and '1' markings.

4'08"

4'12"

Musical staff for 4'12" showing notes and fingerings: 3, [2].

4'24"

Musical staff for 4'24" showing notes and fingerings: [1], 1, 1, 1.

4'36"

Musical staff for 4'36" showing notes and fingerings: [3], [2], 2.

4'48"

Musical staff for 4'48" showing notes and fingerings: [3], [2]. Includes a double bar line and a complex rhythmic pattern with 'x' and '1' markings.

5'00" 5'04"

5'12"

5'24"

5'36" 5'44"

5'48"

6'00"

6'12" 6'16"

6'24"

8'12"

Musical notation for 8'12" showing a sequence of chords and notes. The first part consists of five chords with fingerings 3, 1, 3, 1, 3, 1. The second part is a single note with a triplet '3' and a third note with a triplet '3'.

8'24"

Musical notation for 8'24" showing a single note with a bracketed '2' and a second note with a '2'.

8'36"

8'40"

Musical notation for 8'36" and 8'40". The 8'36" section has a bracketed '1'. The 8'40" section has a sequence of chords with fingerings 1 2, 1 3, 1, 2, 1 2, 1 3.

8'48"

Musical notation for 8'48" showing a sequence of chords and notes. The first part has a bracketed '3' and a '3'. The second part has a '3' and a note with a '3'.

9'00"

9'04"

Musical notation for 9'00" and 9'04". The 9'00" section has a bracketed '2'. The 9'04" section has a sequence of chords with fingerings 1, 3, 1, 2.

9'12"

Musical notation for 9'12" showing a sequence of notes.

9'24"

Musical notation for 9'24" showing a sequence of notes.

9'36"

9'44"

Musical notation for 9'36" and 9'44". The 9'36" section has a bracketed '3' and a '3'. The 9'44" section has a sequence of chords with fingerings 3, 1, 2, 1.

9'48"

Musical notation for 9'48" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 2 1 2 3 2 1 3 2 1 2 1 2 1 2 3 2.

10'00"

Musical notation for 10'00" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 1 2 1 3 1 3 1 2 1 3 3 1 1.

10'12"

Musical notation for 10'12" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 2 3 1 3 1 3 1 2 1 3 2.

10'24"

Musical notation for 10'24" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 3 [2] 2 1 2.

10'32"

10'36"

Musical notation for 10'36" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: [1] 2 1 2 3 2 3 1.

10'40"

10'48"

Musical notation for 10'48" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 3 1 2 3 1 1 1.

11'00"

Musical notation for 11'00" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: [3] 1 3 1 [2] [2].

11'04"

11'12"

Musical notation for 11'12" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 1 [3].

11'24"

Musical notation for 11'24" showing a sequence of notes with fingerings (2, 1, 3, 2, 3, 2, 1, 3, 1, 2, 1) and accents (x) on the upper staff. The lower staff shows a sequence of chords. The notation ends with a double bar line and a [2] bracket.

11'36"

Musical notation for 11'36" showing notes with fingerings (1, 2, 1) and accents (x). The lower staff shows chords. The notation ends with a double bar line and a [3] bracket.

11'44"

Musical notation for 11'44" showing notes with fingerings (1, 3, 1) and accents (x). The lower staff shows chords. The notation ends with a double bar line.

11'48"

Musical notation for 11'48" showing notes with a [2] bracket and a [3] bracket. The lower staff shows chords. The notation ends with a double bar line.

12'00"

Musical notation for 12'00" showing a sequence of notes with fingerings (1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2) and accents (x). The lower staff shows chords. The notation ends with a double bar line.

12'12"

Musical notation for 12'12" showing notes with a [3] bracket. The lower staff shows chords. The notation ends with a double bar line.

12'24"

Musical notation for 12'24" showing notes with fingerings (2, 1) and accents (x). The lower staff shows chords. The notation ends with a double bar line and a [2] bracket.

12'36"

Musical notation for 12'36" showing notes with fingerings (3, 1) and accents (x). The lower staff shows chords. The notation ends with a double bar line and a [1] bracket.

12'48"

Musical notation for 12'48" showing a sequence of notes with fingerings (2, 3, 1, 2, 1, 3, 1, 3, 1, 3) and accents (x). The lower staff shows chords. The notation ends with a double bar line.

13'00"

Musical notation for 13'00" showing a sequence of notes with various articulations (diamonds, crosses) and fingerings (2 1 3, 1 3 1 3, 1 2 1, 3, 1, 1 2 1, 3, 1, 2 3).

13'12"

Musical notation for 13'12" showing a sequence of notes with articulations and fingerings (1, 3, 1 2, 1). The notation ends with a double bar line and a fermata over a note, with a '3' below it and '[3]-3' further right.

13'24"

Musical notation for 13'24" showing a sequence of notes with articulations and fingerings (1, 3, 1, 3, 1 2 1, 3, 2, 1 2, 1 2, 1, 3, 2).

13'36"

Musical notation for 13'36" showing a sequence of notes with articulations and fingerings (3, 2 1, 2 1 3, 2 1, 2).

13'48"

Musical notation for 13'48" showing a sequence of notes with articulations and fingerings (1, 2, 1). The notation ends with a double bar line and a fermata over a note, with a '3' below it and another '3' further right.

14'00"

Musical notation for 14'00" showing a sequence of notes with articulations and fingerings (3, 3, [2]).

14'12" 14'20"

Musical notation for 14'12" and 14'20" showing a sequence of notes with articulations and fingerings (2 1, 3, 2 3, 1, 2). The notation includes a double bar line and a fermata over a note with a '3' below it.

14'24"

Musical notation for 14'24" showing a sequence of notes with articulations and fingerings (1 3). The notation ends with a double bar line and a fermata over a note, with a '3' below it.

14'36" 14'44"

3 [2]

3 1 2 3 1 2

14'48"

1 2 1 2 3 2 3 1 2 1 2 3 2 1

15'00"

3 2 1 2 1 2 3 1 3 2 1 3 3 2

15'12"

3 1 2 1 3 2 3 2 [1] 1

15'24"

2 1 2 1 2 1 3 1 2 1 [3]

15'36"

[2] 2 [3]

ostinato and interrupt

michael winter (mexico city, mx; 2017)
version generated: 2017.12.06

ensemble part 3

0'12"

A musical staff with five lines. It contains four black dots on the first line. Below the staff, there are bracketed numbers: [3] under the first dot, 3 under the second dot, [2] under the third dot, and [1] under the fourth dot.

0'24"

A musical staff with five lines. It contains six black dots. The first four dots are on the first line, and the last two are on the second line. Below the staff, there are bracketed numbers: [3] under the fifth dot and [2] under the sixth dot.

0'36"

A musical staff with five lines. It contains five black dots. The first two are on the first line, and the last three are on the second line. Below the staff, there are the number 2 under the first dot and 2 under the second dot. A bracketed number [2] is under the fifth dot.

0'48"

A musical staff with five lines. It contains six black dots. The first three are on the first line, and the last three are on the second line. Below the staff, there are bracketed numbers: [3] under the first dot, [2] under the second dot, and [1] under the third dot.

1'00"

A musical staff with five lines. It contains six black dots. The first three are on the first line, and the last three are on the second line. Below the staff, there are bracketed numbers: [3] under the first dot, 3 under the second dot, [2] under the third dot, and [2] under the fourth dot. A bracketed number [2] is under the sixth dot.

1'12"

A musical staff with five lines. It contains six black dots. The first three are on the first line, and the last three are on the second line.

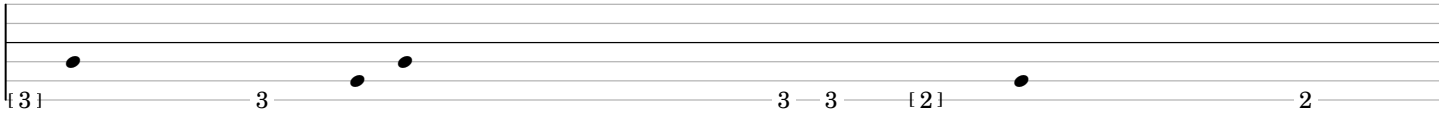
1'24" 1'28"

A musical staff with five lines. It contains six black dots. The first three are on the first line, and the last three are on the second line. Below the staff, there are bracketed numbers: [3] under the first dot and [2] under the fourth dot. A double bar line is placed after the second dot. Between the double bar lines, there is a complex rhythmic notation with stems and flags, and the numbers 3 and 1 below it. Another double bar line is placed after the fourth dot.

1'36"

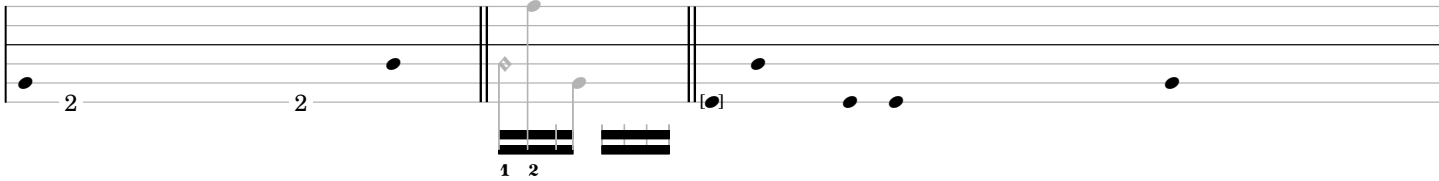
A musical staff with five lines. It contains three black dots. The first is on the first line, and the last two are on the second line. Below the staff, there are bracketed numbers: [1] under the first dot, 1 under the second dot, and 1 under the third dot.

1'48"



[3] 3 3 3 [2] 2

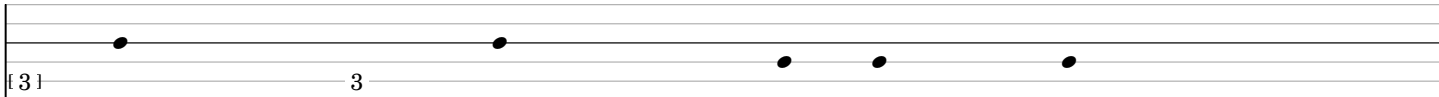
2'00" 2'04"



2 2

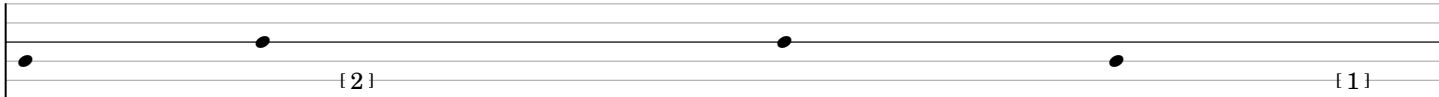
1 2

2'12"



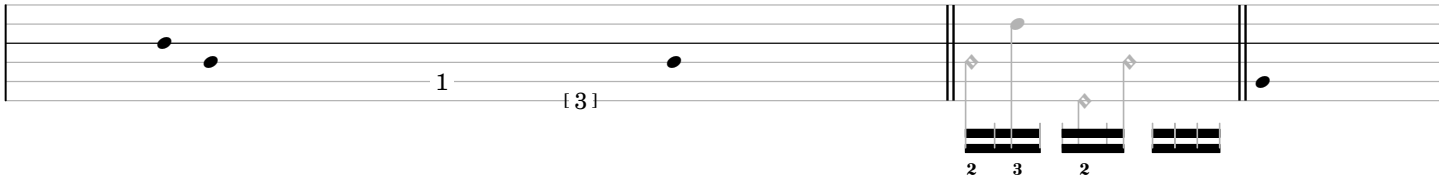
[3] 3

2'24"



[2] [1]

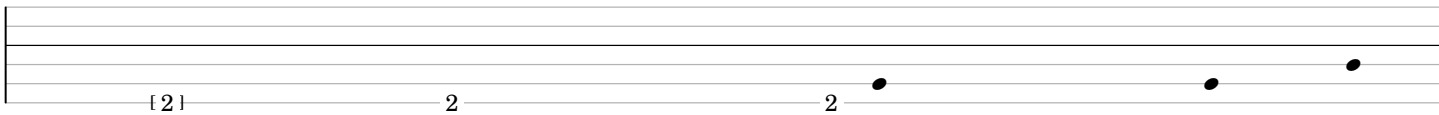
2'36" 2'44"



1 [3]

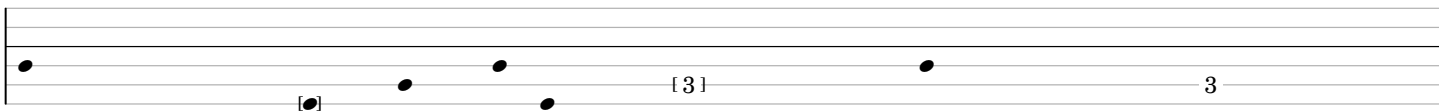
2 3 2

2'48"



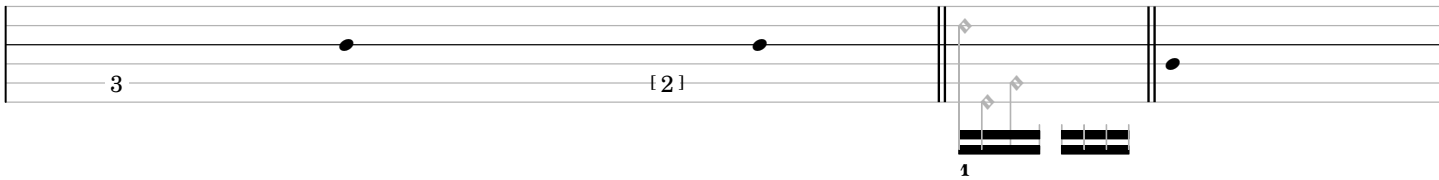
[2] 2 2

3'00"



[3] 3

3'12" 3'20"



3 [2]

1

3'24"

Musical staff for 3'24" showing notes and fingerings: 2, [1], 1, 1.

3'36"

Musical staff for 3'36" showing notes and fingerings: [3], 3, 3.

3'48"

Musical staff for 3'48" showing notes and fingerings: [2], [0].

4'00"

Musical staff for 4'00" showing notes, fingerings, and a double bar line. After the bar line, there are notes with 'x' marks and fingerings: [3], 3, 1, 3, 1.

4'08"

4'12"

Musical staff for 4'12" showing notes and fingerings: 3, [2].

4'24"

Musical staff for 4'24" showing notes and fingerings: [1], 1, 1, 1.

4'36"

Musical staff for 4'36" showing notes and fingerings: [3], [2], 2.

4'48"

Musical staff for 4'48" showing notes, fingerings, and a double bar line. After the bar line, there are notes with 'x' marks and fingerings: [3], [0].

5'00" 5'04"

5'12"

5'24"

5'36" 5'44"

5'48"

6'00"

6'12" 6'16"

6'24"

6'36"

Musical staff for 6'36" showing a sequence of notes with fingerings: [2], 2, 2, [2], and a final note.

6'48"

Musical staff for 6'48" featuring a complex sequence of notes with various fingerings (1, 2, 3) and articulation marks (x, diamond) above the notes.

7'00"

Musical staff for 7'00" showing a sequence of notes with fingerings (1, 2, 3) and articulation marks (x, diamond) above the notes.

7'12"

Musical staff for 7'12" showing a sequence of notes with a [3] fingering at the end.

7'24"

Musical staff for 7'24" showing a sequence of notes with fingerings 3 and [2].

7'36"

Musical staff for 7'36" showing a sequence of notes with fingerings (2, 3, 2, 3) and a [1] fingering at the end.

7'48"

7'56"

Musical staff for 7'48" showing a sequence of notes with fingerings 1, 1, [3], and [2].

8'00"

Musical staff for 8'00" showing a sequence of notes with a [3] fingering at the end.

8'12"

Musical notation for 8'12" showing a sequence of chords and notes. The first part consists of five chords, each with a diamond symbol above it and an 'x' to its right. Below the chords are the fingerings: 3, 1, 3, 1, 3, 1. A double bar line follows. The second part shows a single note on a staff with a '3' below it, followed by a longer note with a '3' below it.

8'24"

Musical notation for 8'24" showing a single note on a staff with a '[2]' below it, followed by a longer note with a '2' below it, and a final note on a staff.

8'36"

8'40"

Musical notation for 8'36" and 8'40". The 8'36" section shows a single note on a staff with a '[1]' below it. The 8'40" section shows a sequence of chords and notes with diamond symbols and 'x' marks above them. Below the chords are the fingerings: 1 2, 1 3, 1, 2, 1 2, 1 3.

8'48"

Musical notation for 8'48" showing a sequence of chords and notes. The first part consists of two chords with diamond symbols above them. A double bar line follows. The second part shows a single note on a staff with a '[3]' below it, followed by a longer note with a '3' below it, and a final note on a staff.

9'00"

9'04"

Musical notation for 9'00" and 9'04". The 9'00" section shows a single note on a staff with a '[2]' below it. The 9'04" section shows a sequence of chords and notes with diamond symbols and 'x' marks above them. Below the chords are the fingerings: 1, 3, 1, 2. A double bar line follows. The final part shows a single note on a staff with a '2' below it and a final note on a staff with a '[●]' below it.

9'12"

Musical notation for 9'12" showing a single note on a staff, followed by a longer note on a staff, and a final note on a staff.

9'24"

Musical notation for 9'24" showing a single note on a staff, followed by a longer note on a staff, and a final note on a staff.

9'36"

9'44"

Musical notation for 9'36" and 9'44". The 9'36" section shows a single note on a staff with a '[3]' below it, followed by a longer note with a '3' below it. The 9'44" section shows a sequence of chords and notes with diamond symbols and 'x' marks above them. Below the chords are the fingerings: 3, 1, 2, 1.

9'48"

Musical notation for 9'48" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 2 1 2 3 2 1 3 2 1 2 1 2 1 2 3 2.

10'00"

Musical notation for 10'00" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 1 2 1 3 1 3 1 2 1 3 3 1 1.

10'12"

Musical notation for 10'12" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 2 3 1 3 1 3 1 2 1 3 2.

10'24"

Musical notation for 10'24" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 3 [2] 2 1 2.

10'32"

10'36"

Musical notation for 10'36" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: [1] 2 1 2 3 2 3 1.

10'40"

10'48"

Musical notation for 10'48" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 3 1 2 3 1 1 1.

11'00"

Musical notation for 11'00" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: [3] 1 3 1 [2] [2].

11'04"

11'12"

Musical notation for 11'12" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 1 [3].

13'00"

Musical notation for 13'00" showing a sequence of notes with diamond and cross markers. The bass line consists of triplets of eighth notes. Fingerings are indicated below the notes: 2 1 3, 1 3 1, 3 1 3, 1 2 1, 3 1 3, 1 2 1, 3 1 3, 1 2 1, 3 1 3, 1 2 1, 3 1 3, 2 3.

13'12"

Musical notation for 13'12" showing a sequence of notes with diamond and cross markers. The bass line consists of triplets of eighth notes. Fingerings are indicated below the notes: 1, 3, 1 2, 1. The notation ends with a double bar line and a whole note chord with fingering 1 [3] 3.

13'24"

Musical notation for 13'24" showing a sequence of notes with diamond and cross markers. The bass line consists of triplets of eighth notes. Fingerings are indicated below the notes: 1, 3, 1, 3, 1 2, 1, 3, 2, 1 2, 1 2, 1, 3, 2.

13'36"

Musical notation for 13'36" showing a sequence of notes with diamond and cross markers. The bass line consists of triplets of eighth notes. Fingerings are indicated below the notes: 3, 2, 1, 2, 1, 3, 2, 1, 2, 2.

13'48"

Musical notation for 13'48" showing a sequence of notes with diamond and cross markers. The bass line consists of triplets of eighth notes. Fingerings are indicated below the notes: 1, 2, 1. The notation ends with a double bar line and a whole note chord with fingering 3 3.

14'00"

Musical notation for 14'00" showing a whole note chord with fingering 3 3 [2].

14'12" 14'20"

Musical notation for 14'12" and 14'20". The 14'12" section shows a sequence of notes with diamond and cross markers and a bass line of triplets of eighth notes with fingerings 2 1. The 14'20" section shows a sequence of notes with diamond and cross markers and a bass line of triplets of eighth notes with fingerings 3 2 3, 1, 2. The notation ends with a double bar line and a whole note chord with fingering [3].

14'24"

Musical notation for 14'24" showing a sequence of notes with diamond and cross markers. The bass line consists of triplets of eighth notes with fingerings 1 3. The notation ends with a double bar line and a whole note chord with fingering 3 3.

ostinato and interrupt

michael winter (mexico city, mx; 2017)
version generated: 2017.12.06

ensemble part 4

0'12"

Musical staff for 0'12". The staff contains four notes on the second line. The first note has a bracketed '3' below it. The second note has a '3' below it. The third note has a bracketed '2' below it. The fourth note has a bracketed '1' below it.

0'24"

Musical staff for 0'24". The staff contains six notes on the second line. The fifth note has a bracketed '3' below it. The sixth note has a bracketed '2' below it.

0'36"

Musical staff for 0'36". The staff contains five notes on the second line. The first note has a '2' below it. The second note has a '2' below it. The fourth note has a bracketed '2' below it. The fifth note has a bracketed '1' below it.

0'48"

Musical staff for 0'48". The staff contains six notes on the second line. The first note has a bracketed '3' below it. The second note has a bracketed '2' below it. The fifth note has a bracketed '1' below it.

1'00"

Musical staff for 1'00". The staff contains six notes on the second line. The first note has a bracketed '3' below it. The third note has a '3' below it. The fourth note has a bracketed '2' below it. The sixth note has a bracketed '1' below it.

1'12"

Musical staff for 1'12". The staff contains six notes on the second line.

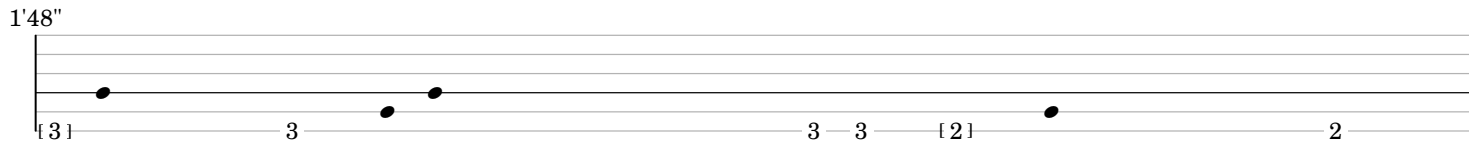
1'24" 1'28"

Musical staff for 1'24". The staff contains six notes on the second line. The first note has a bracketed '3' below it. The fifth note has a bracketed '2' below it. Between the fourth and fifth notes, there is a double bar line. After the double bar line, there is a triplet of notes on the second line, with a '3' below it. This is followed by a single note on the second line with a '1' below it. After this, there is another double bar line. The sixth note on the staff has a bracketed '2' below it.

1'36"

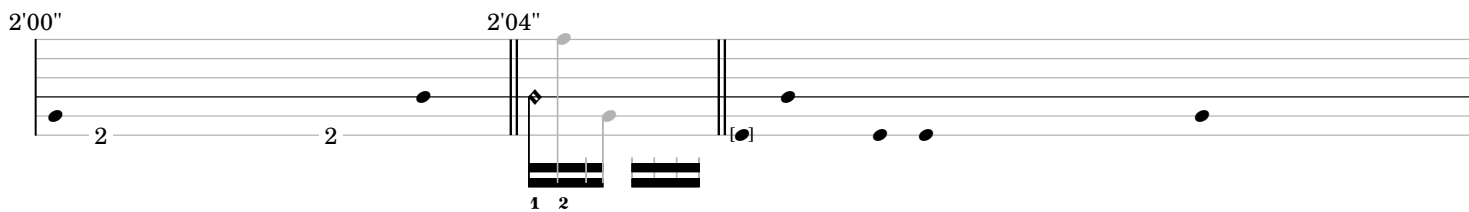
Musical staff for 1'36". The staff contains three notes on the second line. The first note has a bracketed '1' below it. The second note has a '1' below it. The third note has a '1' below it.

1'48"



[3] 3 3 3 [2] 2

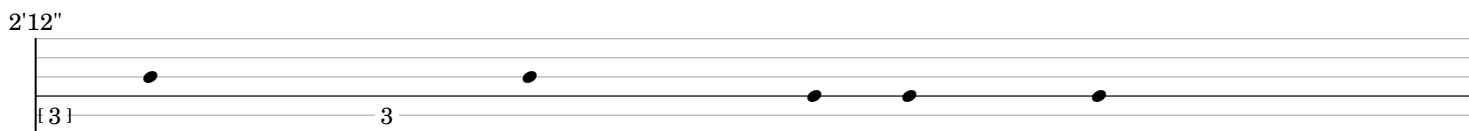
2'00" 2'04"



2 2 [1] [2]

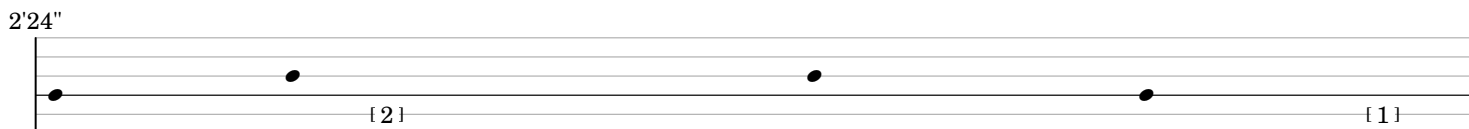
1 2

2'12"



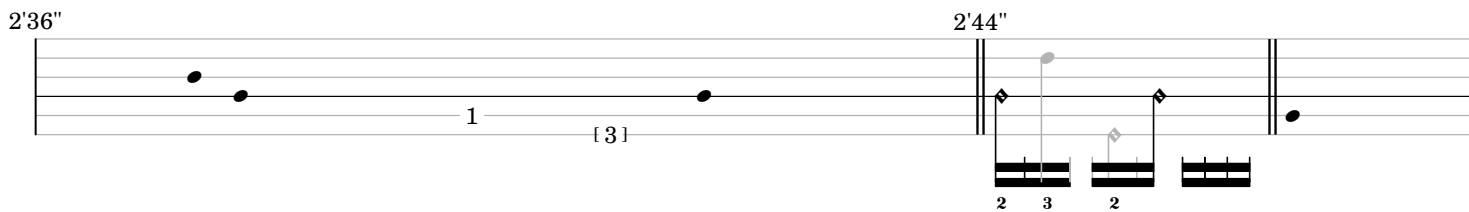
[3] 3

2'24"



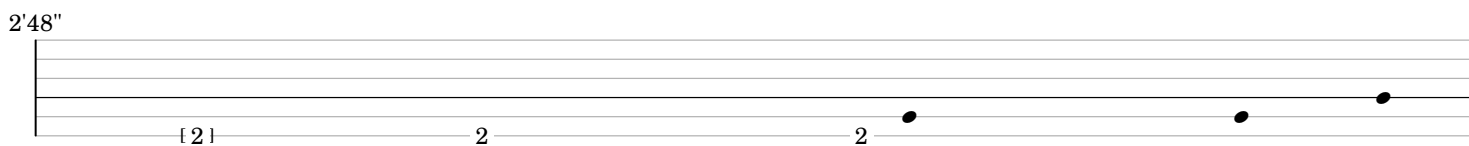
[2] [1]

2'36" 2'44"



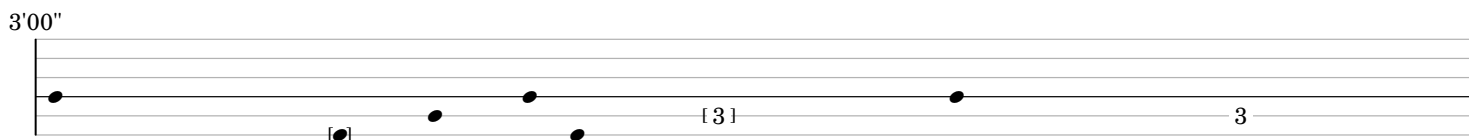
1 [3] [2] [3] [2]

2'48"



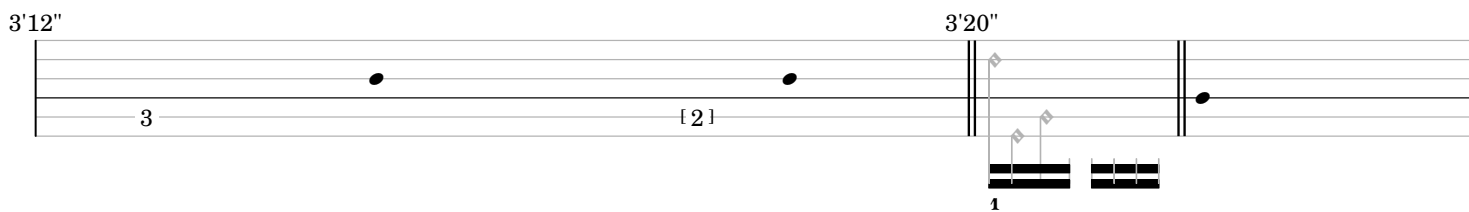
[2] 2 2

3'00"



[2] [3] 3

3'12" 3'20"



3 [2] [1]

1

3'24"

Musical staff for 3'24" showing notes and fingerings: 2, [1], 1, 1.

3'36"

Musical staff for 3'36" showing notes and fingerings: [3], 3, 3.

3'48"

Musical staff for 3'48" showing notes and fingerings: [2], [1].

4'00"

4'08"

Musical staff for 4'00" and 4'08" showing notes, fingerings, and a complex rhythmic pattern with 'x' and diamond symbols.

4'12"

Musical staff for 4'12" showing notes and fingerings: 3, [2].

4'24"

Musical staff for 4'24" showing notes and fingerings: [1], 1, 1, 1.

4'36"

Musical staff for 4'36" showing notes and fingerings: [3], [2], 2.

4'48"

Musical staff for 4'48" showing notes, fingerings, and a complex rhythmic pattern with 'x' and diamond symbols.

5'00" 5'04"

5'12"

5'24"

5'36" 5'44"

5'48"

6'00"

6'12" 6'16"

6'24"

6'36"

Musical staff for 6'36" showing a sequence of notes with fingerings: [2], 2, 2, [2], and a final note.

6'48"

Musical staff for 6'48" featuring a complex sequence of notes with various fingerings (3, 2, 1, 3, 1, 2, 3, 1, 2, 3, 2, 1, 2, 1, 3, 1) and some notes marked with 'x'.

7'00"

Musical staff for 7'00" with notes and fingerings (2, 1, 2, 1, 3, 1, 3, 2) and a double bar line.

7'12"

Musical staff for 7'12" showing a sequence of notes with a [3] fingering at the end.

7'24"

Musical staff for 7'24" with notes and fingerings 3 and [2].

7'36"

Musical staff for 7'36" with notes, fingerings (2, 3, 2, 3), a double bar line, and a [1] fingering.

7'48"

7'56"

Musical staff for 7'48" and 7'56" with notes, fingerings (1, 1, [3], [2]), and a triplets (3) section.

8'00"

Musical staff for 8'00" showing a sequence of notes with a [3] fingering at the end.

8'12"

Musical notation for 8'12" showing a sequence of notes with diamond and 'x' markers, and a triplet of notes. Below the staff are fingerings: 3, 1, 3, 1, 3, 1.

8'24"

Musical notation for 8'24" showing a sequence of notes with a bracketed '2' and a '2' below the staff.

8'36"

8'40"

Musical notation for 8'36" and 8'40" showing a sequence of notes with diamond and 'x' markers, and a bracketed '1'. Below the staff are fingerings: 1, 2, 1, 3, 1, 1, 2, 1, 2, 1, 3.

8'48"

Musical notation for 8'48" showing a sequence of notes with a bracketed '3' and a '3' below the staff.

9'00"

9'04"

Musical notation for 9'00" and 9'04" showing a sequence of notes with diamond and 'x' markers, and a bracketed '2'. Below the staff are fingerings: 1, 3, 1, 2.

9'12"

Musical notation for 9'12" showing a sequence of notes.

9'24"

Musical notation for 9'24" showing a sequence of notes.

9'36"

9'44"

Musical notation for 9'36" and 9'44" showing a sequence of notes with diamond and 'x' markers, and a bracketed '3'. Below the staff are fingerings: 3, 1, 2, 1.

9'48"

Musical notation for 9'48" showing a sequence of notes with various articulations (diamonds, crosses) and fingerings (2, 1, 2, 3, 2, 1, 3, 2, 1, 2, 1, 2, 1, 2, 3, 2).

10'00"

Musical notation for 10'00" showing a sequence of notes with various articulations and fingerings (1 2, 1 3, 1 3, 1 2, 1, 3, 1).

10'12"

Musical notation for 10'12" showing a sequence of notes with various articulations and fingerings (2 3, 1 3, 1 3, 1 2, 1 3, 2).

10'24"

Musical notation for 10'24" showing a sequence of notes with various articulations and fingerings (3, [2], 2, 1, 2).

10'32"

10'36"

Musical notation for 10'36" showing a sequence of notes with various articulations and fingerings ([1], 2, 1, 2, 3, 2, 3, 1).

10'40"

10'48"

Musical notation for 10'48" showing a sequence of notes with various articulations and fingerings (3, 1 2, 3, 1, 1, 1).

11'00"

Musical notation for 11'00" showing a sequence of notes with various articulations and fingerings ([3], 1 3, 1, [2], [3]).

11'04"

11'12"

Musical notation for 11'12" showing a sequence of notes with various articulations and fingerings (1, [3]).

14'36" 14'44"

3 [2] 3 1 2 3 1 2

14'48"

1 2 1 2 3 2 3 1 2 1 2 3 2 1

15'00"

3 2 1 2 1 2 3 1 3 2 1 3 2 1

15'12"

3 1 2 1 3 2 3 2 [1] 1

15'24"

2 1 2 1 2 1 3 1 2 1 [3]

15'36"

[2] 2 [2]

ostinato and interrupt

michael winter (mexico city, mx; 2017)
version generated: 2017.12.06

ensemble part 5

0'12"

A musical staff with five lines. The first line contains a treble clef and a brace labeled {3}. Three dots are placed on the staff: one on the first line, one on the second line, and one on the third line. A brace labeled 3 spans from the first dot to the second. A brace labeled {2} spans from the second dot to the third. A brace labeled {1} spans from the third dot to the end of the staff.

0'24"

A musical staff with five lines. The first line contains a treble clef. Four dots are placed on the staff: one on the first line, one on the second line, one on the third line, and one on the fourth line. A brace labeled {3} spans from the second dot to the third. A brace labeled {2} spans from the third dot to the fourth. A brace labeled {1} spans from the fourth dot to the end of the staff.

0'36"

A musical staff with five lines. The first line contains a treble clef. Two dots are placed on the staff: one on the second line and one on the third line. A brace labeled 2 spans from the first dot to the second. A brace labeled 2 spans from the second dot to the third. A brace labeled {1} spans from the third dot to the end of the staff.

0'48"

A musical staff with five lines. The first line contains a treble clef. Five dots are placed on the staff: one on the first line, one on the second line, one on the third line, one on the fourth line, and one on the fifth line. A brace labeled {3} spans from the first dot to the second. A brace labeled {2} spans from the second dot to the third. A brace labeled {1} spans from the third dot to the end of the staff.

1'00"

A musical staff with five lines. The first line contains a treble clef. Five dots are placed on the staff: one on the first line, one on the second line, one on the third line, one on the fourth line, and one on the fifth line. A brace labeled {3} spans from the first dot to the second. A brace labeled 3 spans from the second dot to the third. A brace labeled {2} spans from the third dot to the fourth. A brace labeled {1} spans from the fourth dot to the end of the staff.

1'12"

A musical staff with five lines. The first line contains a treble clef. Six dots are placed on the staff: one on the first line, one on the second line, one on the third line, one on the fourth line, one on the fifth line, and one on the first line of the next measure.

1'24"

1'28"

A musical staff with five lines. The first line contains a treble clef. A brace labeled {3} spans from the first dot to the second. A double bar line is followed by a section with a treble clef and a diamond-shaped note on the first line. Below this section are three groups of notes: a triplet of notes on the first line, a single note on the first line, and a triplet of notes on the first line. A brace labeled 3 is under the first triplet, and a brace labeled 1 is under the single note. A double bar line follows, and a brace labeled {2} spans from the third dot to the fourth. A brace labeled {1} spans from the fourth dot to the end of the staff.

1'36"

A musical staff with five lines. The first line contains a treble clef. Three dots are placed on the staff: one on the first line, one on the second line, and one on the third line. A brace labeled {1} spans from the first dot to the second. A brace labeled 1 spans from the second dot to the third. A brace labeled 1 spans from the third dot to the end of the staff.

1'48"

{3} 3 3 3 {2} 2

2'00"

2'04"

2 2

1 2

2'12"

{3} 3

2'24"

{2} {1}

2'36"

2'44"

1 {3}

2 3 2

2'48"

{2} 2 2

3'00"

{2} {3} 3

3'12"

3'20"

3 {2}

1 2

3'24"

Musical staff for 3'24" showing notes and fingerings: 2, {1}, 1, 1.

3'36"

Musical staff for 3'36" showing notes and fingerings: {3}, 3, 3.

3'48"

Musical staff for 3'48" showing notes and fingerings: {2}, {3}.

4'00"

4'08"

Musical staff for 4'00" and 4'08" showing notes, fingerings, and complex rhythmic patterns with 'x' and diamond symbols.

4'12"

Musical staff for 4'12" showing notes and fingerings: 3, {2}.

4'24"

Musical staff for 4'24" showing notes and fingerings: {1}, 1, 1, 1.

4'36"

Musical staff for 4'36" showing notes and fingerings: {3}, {2}, 2.

4'48"

Musical staff for 4'48" showing notes, fingerings, and complex rhythmic patterns with 'x' and diamond symbols.

5'00" 5'04"

5'12"

5'24"

5'36" 5'44"

5'48"

6'00"

6'12" 6'16"

6'24"

6'36"

Musical staff for 6'36" showing a sequence of notes and rests. The notes are on the second line, with a half rest on the first line. The sequence is: [2], 2, 2, [2], 2.

6'48"

Musical staff for 6'48" showing a complex sequence of notes, rests, and triplets. The notes are on the second line, with a half rest on the first line. The sequence is: 3, 2, 1, 3, 1, 2, 3, 1, 2, 3, 2, 1, 2, 1, 3, 1.

7'00"

Musical staff for 7'00" showing a complex sequence of notes, rests, and triplets. The notes are on the second line, with a half rest on the first line. The sequence is: 2, 1, 2, 1, 3, 1, 3, 2.

7'12"

Musical staff for 7'12" showing a sequence of notes and rests. The notes are on the second line, with a half rest on the first line. The sequence is: [3].

7'24"

Musical staff for 7'24" showing a sequence of notes and rests. The notes are on the second line, with a half rest on the first line. The sequence is: 3, [2].

7'36"

Musical staff for 7'36" showing a complex sequence of notes, rests, and triplets. The notes are on the second line, with a half rest on the first line. The sequence is: 2, 3, 2, 3, [1].

7'48"

Musical staff for 7'48" showing a complex sequence of notes, rests, and triplets. The notes are on the second line, with a half rest on the first line. The sequence is: 1, 1, [3], 7'56" 3, [2].

8'00"

Musical staff for 8'00" showing a sequence of notes and rests. The notes are on the second line, with a half rest on the first line. The sequence is: [3].

8'12"

Musical notation for 8'12" showing a sequence of notes with diamond and 'x' markers, and a triplet of notes. Below the staff are fingerings: 3, 1, 3, 1, 3, 1.

8'24"

Musical notation for 8'24" showing a sequence of notes with a bracketed '2' and a '2' below the staff.

8'36"

8'40"

Musical notation for 8'36" and 8'40" showing a sequence of notes with diamond and 'x' markers, and a bracketed '1'. Below the staff are fingerings: 1 2, 1 3, 1, 1, 2, 1 2, 1 3.

8'48"

Musical notation for 8'48" showing a sequence of notes with a bracketed '3' and a '3' below the staff.

9'00"

9'04"

Musical notation for 9'00" and 9'04" showing a sequence of notes with diamond and 'x' markers, and a bracketed '2'. Below the staff are fingerings: 1, 3, 1, 2.

9'12"

Musical notation for 9'12" showing a sequence of notes.

9'24"

Musical notation for 9'24" showing a sequence of notes.

9'36"

9'44"

Musical notation for 9'36" and 9'44" showing a sequence of notes with diamond and 'x' markers, and a bracketed '3'. Below the staff are fingerings: 3, 1, 2, 1.

9'48"

Musical notation for 9'48" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. Below the staff, there are rhythmic markings: 2 1 2 3 2 1 3 2 1 2 1 2 1 2 3 2.

10'00"

Musical notation for 10'00" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. Below the staff, there are rhythmic markings: 1 2 1 3 1 3 1 2 1 3 1 2 1 3 1.

10'12"

Musical notation for 10'12" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. Below the staff, there are rhythmic markings: 2 3 1 3 1 3 1 2 1 3 2.

10'24"

Musical notation for 10'24" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. Below the staff, there are rhythmic markings: 3 {2} 2 1 2.

10'32"

Musical notation for 10'32" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. Below the staff, there are rhythmic markings: 2 1 2.

10'36"

Musical notation for 10'36" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. Below the staff, there are rhythmic markings: {1} 2 1 2 3 2 3 1.

10'40"

Musical notation for 10'40" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. Below the staff, there are rhythmic markings: 2 1 2 3 2 3 1.

10'48"

Musical notation for 10'48" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. Below the staff, there are rhythmic markings: 3 1 2 3 1 1 1.

11'00"

Musical notation for 11'00" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. Below the staff, there are rhythmic markings: {3} 1 3 1 {2} [2].

11'04"

Musical notation for 11'04" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. Below the staff, there are rhythmic markings: 1 3 1 {2} [2].

11'12"

Musical notation for 11'12" showing a sequence of notes and rests on a five-line staff. The notes are mostly eighth notes with stems pointing up. Below the staff, there are rhythmic markings: 1 {3}.

13'00"

Musical notation for 13'00" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. Below the staff, there are rhythmic markings: 2 1 3, 1 3 1 3, 1 2 1, 3, 1, 1 2 1, 3, 1, 1 2 1, 3, 2 3.

13'12"

Musical notation for 13'12" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. Below the staff, there are rhythmic markings: 1, 3, 1 2, 1. The notation ends with a double bar line and a measure containing a whole note with a '1' below it and a triplet of eighth notes marked with '[3]' and '3' below.

13'24"

Musical notation for 13'24" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. Below the staff, there are rhythmic markings: 1, 3, 1, 3, 1 2 1, 3, 2, 1 2, 1 2, 1, 3, 2.

13'36"

Musical notation for 13'36" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. Below the staff, there are rhythmic markings: 3, 2 1, 2 1 3, 2 1, 2.

13'48"

Musical notation for 13'48" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. Below the staff, there are rhythmic markings: 1, 2, 1. The notation ends with a double bar line and a measure containing a whole note with a '3' below it and another measure containing a whole note with a '3' below it.

14'00"

Musical notation for 14'00" showing a sequence of notes and rests on a staff. Below the staff, there are rhythmic markings: 3, 3, [2].

14'12" 14'20"

Musical notation for 14'12" and 14'20" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. Below the staff, there are rhythmic markings: 2 1, 3, 2 3, 1, 2. The notation ends with a double bar line and a measure containing a whole note with a '3' below it.

14'24"

Musical notation for 14'24" showing a sequence of notes and rests on a staff. Below the staff, there are rhythmic markings: 1 3. The notation ends with a double bar line and a measure containing a whole note with a '3' below it.

14'36" 14'44"

14'48"

15'00"

15'12"

15'24"

15'36"

ostinato and interrupt

michael winter (mexico city, mx; 2017)
version generated: 2017.12.05

ensemble part 6

0'12"

A musical staff with five lines. It contains four black dots on the first line. Below the staff, there are four bracketed numbers: {3}, 3, {2}, and {1}.

0'24"

A musical staff with five lines. It contains five black dots: one on the first line, one on the second line, one on the third line, one on the fourth line, and one on the fifth line. Below the staff, there are two bracketed numbers: {3} and {2}.

0'36"

A musical staff with five lines. It contains four black dots: one on the second line, one on the third line, one on the fourth line, and one on the fifth line. Below the staff, there are two numbers: 2 and 2.

0'48"

A musical staff with five lines. It contains six black dots: one on the first line, one on the second line, one on the third line, one on the fourth line, one on the fifth line, and one on the first line. Below the staff, there are three bracketed numbers: {3}, {2}, and {1}.

1'00"

A musical staff with five lines. It contains five black dots: one on the second line, one on the third line, one on the fourth line, one on the fifth line, and one on the first line. Below the staff, there are four numbers: {3}, 3, {2}, and {1}.

1'12"

A musical staff with five lines. It contains six black dots: one on the first line, one on the second line, one on the third line, one on the fourth line, one on the fifth line, and one on the first line.

1'24" 1'28"

A musical staff with five lines. It contains two black dots: one on the second line and one on the fourth line. Below the staff, there are two bracketed numbers: {3} and {2}. A double bar line is placed between the two dots. Below the double bar line, there is a complex rhythmic notation consisting of three groups of notes on a five-line staff. The first group has a '3' below it, and the second group has a '1' below it.

1'36"

A musical staff with five lines. It contains three black dots: one on the second line, one on the fourth line, and one on the fifth line. Below the staff, there are three numbers: {1}, 1, and 1.

1'48"

[3] 3 3-3 [2] 2

2'00" 2'04"

2 2 [1] [2]

1 2

2'12"

[3] 3

2'24"

[2] [1]

2'36" 2'44"

1 [3] [2] [3] [2]

2'48"

[2] 2 2

3'00"

[1] [3] 3

3'12" 3'20"

3 [2] [1]

3'24"

Musical staff for 3'24" showing notes and fingerings: 2, [1], 1, 1.

3'36"

Musical staff for 3'36" showing notes and fingerings: [3], 3, 3.

3'48"

Musical staff for 3'48" showing notes and fingerings: [2], [3].

4'00"

4'08"

Musical staff for 4'00" and 4'08" showing notes, fingerings ([3]), and complex rhythmic patterns with 'x' and diamond symbols.

4'12"

Musical staff for 4'12" showing notes and fingerings: 3, [2].

4'24"

Musical staff for 4'24" showing notes and fingerings: [1], 1, 1, 1.

4'36"

Musical staff for 4'36" showing notes and fingerings: [3], [2], 2.

4'48"

Musical staff for 4'48" showing notes, fingerings ([3]), and complex rhythmic patterns with 'x' and diamond symbols.

5'00" 5'04"

[2] 2

1

5'12"

2 2 [1]

5'24"

1 1 [3] 3 3

5'36" 5'44"

3 [2]

1 2 1 3 1 3

5'48"

2 1 2

6'00"

[3] 3 3 [2]

6'12" 6'16"

[1]

1 2 1 2 1

6'24"

[3] 3

6'36"

Musical staff for 6'36" showing notes and fingerings: {2}, 2, 2, [2].

6'48"

Musical staff for 6'48" showing notes, fingerings (3, 2, 1, 3, 1, 2, 3, 1, 2, 3, 2, 1, 2, 1, 3, 1), and articulation marks (x, diamond).

7'00"

Musical staff for 7'00" showing notes, fingerings (2, 1, 2, 1, 3, 1, 3, 2), and articulation marks (x, diamond).

7'12"

Musical staff for 7'12" showing notes and a triplet marking [3].

7'24"

Musical staff for 7'24" showing notes, a triplet marking 3, and a bracketed marking [2].

7'36"

Musical staff for 7'36" showing notes, fingerings (2, 3, 2, 3), and a bracketed marking [1].

7'48"

7'56"

Musical staff for 7'48" and 7'56" showing notes, fingerings (1, 1), triplet markings [3], and a bracketed marking [2].

8'00"

Musical staff for 8'00" showing notes and a bracketed marking [3].

8'12"

3 1 3 1 3 1

3 3

8'24"

[2] 2

8'36"

[1]

8'40"

1 2 1 3 1 1 2 1 2 1 3

8'48"

[3] 3

9'00"

[2]

9'04"

1 3 1 2

2 []

9'12"

9'24"

9'36"

[3] 3

9'44"

3 1 2 1

9'48"

Musical notation for 9'48" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 2 1 2 3 2 1 3 2 1 2 1 2 1 2 3 2.

10'00"

Musical notation for 10'00" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 1 2 1 3 1 3 1 2 1 3 3 1.

10'12"

Musical notation for 10'12" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 2 3 1 3 1 3 1 2 1 3 2.

10'24"

Musical notation for 10'24" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 3 [2] 2 1 2.

10'32"

10'36"

Musical notation for 10'36" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: [1] 2 1 2 3 2 3 1.

10'40"

10'48"

Musical notation for 10'48" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 3 1 2 3 1 1 1.

11'00"

Musical notation for 11'00" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: [3] 1 3 1 [2] [3].

11'04"

11'12"

Musical notation for 11'12" showing a sequence of notes and rests on a staff. Below the staff are rhythmic markings: 1 [3].

11'24"

2 1 3 2 3 2 1 3 1 2 1

11'36"

11'44"

1 2 1 1 3 1

11'48"

3-12

12'00"

1 2 1 2 1 2 1 2 1 2 1 2 1 2

12'12"

[3]

12'24"

2 1

12'36"

3 1 2 [1] 1

12'48"

2 3 1 2 1 3 1 3 1 3 1 3

13'00"

Musical notation for 13'00" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. The rhythm is indicated by numbers 1, 2, and 3 below the staff.

13'12"

Musical notation for 13'12" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. The rhythm is indicated by numbers 1, 2, and 3 below the staff. A double bar line is present, followed by a long rest marked with a '1' and a bracketed '3'.

13'24"

Musical notation for 13'24" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. The rhythm is indicated by numbers 1, 2, and 3 below the staff.

13'36"

Musical notation for 13'36" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. The rhythm is indicated by numbers 1, 2, and 3 below the staff.

13'48"

Musical notation for 13'48" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. The rhythm is indicated by numbers 1, 2, and 3 below the staff. A double bar line is present, followed by a long rest marked with a '3'.

14'00"

Musical notation for 14'00" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. The rhythm is indicated by numbers 1, 2, and 3 below the staff. A double bar line is present, followed by a long rest marked with a '3' and a bracketed '2'.

14'12" 14'20"

Musical notation for 14'12" and 14'20" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. The rhythm is indicated by numbers 1, 2, and 3 below the staff. A double bar line is present, followed by a long rest marked with a '3'.

14'24"

Musical notation for 14'24" showing a sequence of notes and rests on a staff. The notes are marked with diamonds and crosses. The rhythm is indicated by numbers 1 and 3 below the staff. A double bar line is present, followed by a long rest marked with a '3'.

14'36" 14'44"

3 [2] 3 1 2 3 1 2

14'48"

1 2 1 2 3 2 3 1 2 1 2 3 2 1 1 2 3 2 1

15'00"

3 2 1 2 1 2 3 1 3 2 1 3 2

15'12"

3 1 2 1 3 2 3 2 [1] 1

15'24"

2 1 2 1 2 1 3 1 2 1 3 [3]

15'36"

[2] 2 [2]

ostinato_and_interrupt_main.scd

```

1 (
2 // MAIN LAUNCH - Best to reboot interpreter and server first to make sure all buffers are cleared
3 ~dir = thisProcess.nowExecutingPath.dirname;
4 "ostinato_and_interrupt_generator_synthdef.scd".loadRelative(true, {
5   "ostinato_and_interrupt_player_synthdef.scd".loadRelative(true, {
6     "ostinato_and_interrupt_nrt_generator_function.scd".loadRelative(true, {
7       "ostinato_and_interrupt_lilypond_generator_function.scd".loadRelative(true, {
8         "ostinato_and_interrupt_gui_generator_function.scd".loadRelative(true, {
9           if(File.exists(~dir +/+ "../audio/ostinato_and_interrupt.wav"), {
10             ~appStatusString = "loading buffer";
11             ~generateGUI.value;
12             ~appStatusFunc.play;
13             Buffer.read(s, ~dir +/+ "../audio/ostinato_and_interrupt.wav", action: {
14               |buf| ~totalDur = buf.duration;
15               ~play = Synth.new(\play, [\buf, buf]);
16               ~appStatusFunc.stop;
17               {"~appStatus.string = "ready"}.defer
18             });
19           }, {
20             ~appStatusString = "generating data";
21             ~generateGUI.value;
22             ~appStatusFunc.play;
23             ~generateData.value(true));
24 }}}}}});
25 )

```

ostinato_and_interrupt_generator_synthdef.scd

```

1 (
2 //--SYNTHDEF THAT GENERATES THE PIECE
3 ~ostinato_and_interrupt = SynthDef(\ostinato_and_interrupt, {
4
5   // TODO: Replace PlayBuf with PlayBufCF
6
7   //-----ARG DECLARATION-----
8   arg scoreBuf, seed = 20170121, rt = 0, // set score buffer, random seed, and if run in realtime (sets outputs
9     differently)
10   percBufDelims = #[0, 1, 2, 3, 4, 5, 6], // set buffers for percussion samples
11   guitOpenBufDelims = #[0, 1, 2, 3, 4, 5, 6], // set buffers for open strings
12   guitHarmBufDelims = #[0, 1, 2, 3, 4, 5, 6], // set buffers for harmonics
13   guitMuteBufDelims = #[0, 1, 2, 3, 4, 5, 6], // set buffers for muted strings
14   guitBassBufDelims = #[0, 1, 2, 3, 4, 5, 6]; // set buffers for bass notes
15
16   //-----VAR DECLARATION-----
17   var fund, durUnit, tuning, oBassNotes, oOpenStringNotes; // static vars
18   var li, trig, lastoString, lastoDurTemp, switchTrig, lastoStepper; // feedback in
19   var env, iEnv, oEnv, currentDur, switch; // switch
20   var oTrig, oStepper, oBassNote, oString, oNote, oFreq, oDurTemp, oDur, oStringCounts,
21     oPluckedStrings, oSwitchTrig, oSwitchArm, oSwitchTrigDel; //ostinato
22   var startState, endState, endTrig; // start and end states
23   var iTrig, iSound, iDur, iString, iEnsemble, iPerc, iPluckedStrings,
24     iSwitchTrig, iSwitchArm, iSwitchTrigDel; // interrupt
25   var aDust, aLBuf, aFlicker, aBNoise, aWNoise, aSinBeat, aSinTrig, aFadeIn, aFadeOut; // electronic accompaniment
26   var count; // score
27   RandSeed.ir(1, seed); // random seed - change for different results
28
29   //-----STATIC VARS-----
30   fund = 38; // fundamental in midi (guitar low d)
31   durUnit = 0.2; // minimum durational unit
32   tuning = [1/1, 3/2, 2/1, 5/2, 7/2, 4/1]; // tuning of the open strings
33   oBassNotes = [10, 9, 8, 3, 2, 0]; // bass notes relative to fundamental in semitones
34   oOpenStringNotes = [0, 7, 12, 16]; // open string notes relative to fundamental in semitones (used only for score)
35
36   //-----FEEDBACKIN-----
37   li = LocalIn.kr(6, [0, -1, -1, 0, 0, 1]); // init vals
38   trig = li[0] + TDelay.kr(Impulse.kr(0), 12); // start the guitar 12 seconds after electronic accompaniment
39   lastoString = li[1]; // get last ostinato string for
40   lastoDurTemp = li[2]; // get last duration value (not yet multiplied by durUnit)
41   lastoStepper = li[3]; // last position of the ostinato
42   switchTrig = li[4]; // trigger to change from ostinato to interrupt
43   startState = li[5]; // delay before interrupts can start to occur
44
45   //-----SWITCH-----
46   env = EnvGen.kr(Env.new([0, 1], 60 * 13, \sine), 1 - startState); // env that controls the switching between
47     ostinato and interrupt
48   oEnv = 0.25 + (env * 3.75); // chance that ostinato will switch to interrupt over time
49   iEnv = 1 + (env * 29); // chance that interrupt will switch to ostinato over time
50   currentDur = (Line.kr(0, 60 * 20, 60 * 20) / 0.2).trunc; // time tracker
51   switch = Stepper.kr(switchTrig, 0, 0, 1); // state - ostinato or interrupt
52   Poll.kr(trig, currentDur, \currentDur); // poll current duration
53   Poll.kr(trig, env, \env); // monitor current position of envelope
54
55   //-----OSTINATO-----
56   // mute triggers when off
57   oTrig = trig * (switch <= 0);
58   // update string counts
59   oStringCounts = { arg i;
60     var isString = (i <= lastoString) * (lastoString <= i);
61     PulseCount.kr(oTrig * isString, Changed.kr(lastoStepper)) } ! 4;
62   // step through the bass note of the ostinato once all notes in a cell have been played
63   oStepper = Stepper.kr((oTrig * TWChoose.kr(oTrig, [0, 1], [1, 1], 1) * (Mix.new(oStringCounts > 0) >= 3)), 0, 0, 5)

```

```

62 ;
63 oBassNote = Select.kr(oStepper, oBassNotes);
64 // select duration favoring a change for longer notes to promote flurries of shorter notes
65 oDurTemp = TWChoose.kr(oTrig * TWChoose.kr(oTrig, [0, 1], [(((lastoDurTemp <= 0) * 0.75) + 1) * (lastoDurTemp > 5),
66     1], 1),
67     [1, 2, 3, 4, 5, 6, 7], Select.kr(oStepper < 3, [[4, 3, 2, 2, 2, 1, 1], [2, 3, 3, 3, 2, 1, 1]]), 1);
68 // add jitter to duration (if this is odd unfortunately a rounding error is produced)
69 oDur = 2 * (oDurTemp + TIRand.kr(0, Select.kr(oDurTemp < 3, [2, 0] ), oTrig));
70 // select string (always oBassNote if oBassNote has been stepped to next) and promote change on shorter notes
71 oString = TWChoose.kr(oTrig,
72     Select.kr(oStepper < 3, [[0, 1, 2], [1, 2, 3]]),
73     Select.kr(Changed.kr(oStepper), [[4, 3, 3] * (1 / pow(Select.kr(oStepper < 3,
74         [oStringCounts.drop(-1), oStringCounts.drop(1)]) + 1, Select.kr(lastoDurTemp < 2, [0.75, 2]))], [1, 0, 0]))
75     , 1);
76 // select note based on string
77 oNote = Select.kr((oString - (oStepper < 3)) > 0, [oBassNote, Select.kr(oString, oOpenStringNotes)];
78 // play guitar
79 oPluckedStrings = { |i| var string, isString, isStringDel, freq, snd;
80     string = 5 - i; // invert string number (since oString 1 is guitar string IV)
81     isString = oTrig * (string <= (5 - oString)) * ((5 - oString) <= string); // check if string is triggered
82     isStringDel = TDelay.kr(isString, 0.01); // slight delay for envelope
83     // play samples and select open string or bass note
84     snd = PlayBuf.ar(1, Select.kr(Latch.kr((oString - (oStepper < 3)) > 0, isStringDel),
85         [TIRand.kr(Select.kr(oStepper, guitBassBufDelims), Select.kr(oStepper, guitBassBufDelims) - 1, isStringDel)
86         ,
87         TIRand.kr(guitOpenBufDelims[string], guitOpenBufDelims[string + 1] - 1, isStringDel)
88         ]), Latch.kr(1, isStringDel), isStringDel) * (1 - EnvGen.ar(Env.new([0, 1, 0], [0.01, 0.01]), isString));
89     Out.ar(Select.kr(rt, [string - 2, [0, 1]]), snd * (1/3)); // ostinato guitar records to channels 0 - 3
90 } ! 4;
91 /* karplus strong version - legacy sonification used for auditioning the piece
92 oFreq = Select.kr((oString - (oStepper < 3)) > 0, [(oNote + fund).midicps, fund.midicps * Select.kr(oString, tuning
93     )]);
94 oPluckedStrings = { arg i;
95     var string, isString, snd;
96     string = 5 - i;
97     isString = oTrig * (string <= oString) * (oString <= string);
98     snd = Pluck.ar(WhiteNoise.ar(0.1), isString, 0.2,
99         Latch.kr(oFreq.reciprocal, isString), 10, 0);
100     Out.ar(Select.kr(rt, [string, [0, 1]]), snd);
101 } ! 4;*/
102 // endState - envelope has finished but cycles through switches until the final bass note is played
103 endState = Latch.kr(1, trig * (env >= 1) * (switch > 0) * (oStepper <= 2) * (oStepper >= 2));
104 endTrig = trig * endState * (oStepper >= 5);
105 FreeSelf.kr(TDelay.kr(endTrig, (oDur * durUnit) + 10));
106 // trigger switch and allow notes to pass until next 5 second interval (so interrupt always starts on a common
107 multiple of 4 and 5)
108 oSwitchTrig = (startState <= 0) * (endState <= 0) * oTrig * (PulseCount.kr(Changed.kr(oStepper), Changed.kr(switch)
109     ) > (4 - oEnv)) *
110     TWChoose.kr(oTrig, [0, 1], [1 - (env >= 1), oEnv], 1);
111 oSwitchArm = PulseCount.kr(oSwitchTrig, switchTrig); // switch trig armed
112 oSwitchTrigDel = 20 - (currentDur % 20); // count down to switch
113 oDur = Select.kr(oSwitchArm <= 0, [Clip.kr(oDur, 0, oSwitchTrigDel), oDur]); // clip dur if past switch
114 oSwitchTrig = oTrig * (oDur >= oSwitchTrigDel) * (oSwitchArm > 0); // trigger the switch
115 Poll.kr(oTrig, oDur, \oDur); // monitor duration of the ostinato note
116
117 //-----Interrupt-----
118 // mute triggers when off
119 iTrig = trig * switch;
120 // select sound type: mute, harmonic, or open string (make first interruption not have percussion)
121 iSound = TWChoose.kr(iTrig * TWChoose.kr(iTrig, [0, 1], [1, 2], 1), [0, 1, 2],
122     Select.kr(PulseCount.kr(Changed.kr(switch)) > 1, [[1, 1, 0], [1, 1, 1]], 1);
123 // select duration
124 iDur = Select.kr(iSound < 2,
125     [1, TChoose.kr(iTrig * TWChoose.kr(iTrig, [0, 1], [1, 1], 1), [1, 2, 3])]);
126 // select string as a stepper occasionally changing how many strings are skipped
127 iString = Stepper.kr(iTrig, 0, 0, 5, TWChoose.kr(iTrig, [1, 2, 3], [3, 2, 1], 1));
128 // play ensemble
129 iEnsemble = { |i| var string, isString, harm, freq, rel, fade, snd;
130     string = 5 - i; // invert string number (since iString 1 is guitar string IV)
131     isString = iTrig * (string <= (5 - iString)) * ((5 - iString) <= string); // check if string is triggered
132     harm = TRand.kr(1 + iSound, iSound * 5 + 1, isString); // set based on open string or harmonic
133     freq = fund.midicps * tuning[i] * harm; // calculate freq
134     rel = Select.kr(switch, [2, 0]); // set release
135     fade = EnvGen.kr(Env.asr(releaseTime: rel), // gate if sound is mute or with switch
136         Latch.kr(Select.kr(iSound < 2 * switch, [0, 1]), isString + (Changed.kr(switch) * (1 - switch))));
137     snd = SinOsc.ar(Latch.kr(freq, isString), 0, fade * (1/harm)); // simple sine tone with amp 1/harmonic number
138     Out.ar(Select.kr(rt, [string + 16, [0, 1]]), snd * (1/12)); // interrupt ensemble records to channels 16 - 21
139 } ! 6;
140 iPerc = { |i| var string, isString, isStringDel, freq, snd;
141     string = 5 - i; // invert string number (since iString 1 is guitar string IV)
142     isString = iTrig * (string <= (5 - iString)) * ((5 - iString) <= string) * (iSound >= 2); // check if sound is
143     percussion / mute
144     isStringDel = TDelay.kr(isString, 0.01); // slight delay for envelope
145     // play samples
146     snd = PlayBuf.ar(1, TIRand.kr(percBufDelims[string], percBufDelims[string + 1] - 1, isStringDel),
147         Latch.kr(1, isStringDel), isStringDel) * (1 - EnvGen.ar(Env.new([0, 1, 0], [0.01, 0.01]), isString));
148     Out.ar(Select.kr(rt, [string + 10, [0, 1]]), snd * (1/2)); // interrupt ensemble records to channels 10 - 15
149 } ! 6;
150 iPluckedStrings = { |i| var string, isString, isStringDel, snd;
151     string = 5 - i; //invert string number (since iString 1 is guitar string IV)
152     isString = iTrig * (string <= (5 - iString)) * ((5 - iString) <= string); // check if string is triggered
153     isStringDel = TDelay.kr(isString, 0.01); // slight delay for envelope
154     // play samples and select open string, harmonic, or muted string
155     snd = PlayBuf.ar(1, Select.kr(Latch.kr(iSound, isStringDel),

```

```

148     [TIRand.kr(guitOpenBufDelims[string], guitOpenBufDelims[string + 1] - 1, isStringDel),
149     TIRand.kr(guitHarmBufDelims[string], guitHarmBufDelims[string + 1] - 1, isStringDel),
150     TIRand.kr(guitMuteBufDelims[string], guitMuteBufDelims[string + 1] - 1, isStringDel)
151   ]), Latch.kr(1, isStringDel), isStringDel) * (1 - EnvGen.ar(Env.new([0, 1, 0], [0.01, 0.01]), isString));
152   Out.ar(Select.kr(rt, [string + 4, [0, 1]]), snd * (1/3)); // interrupt ensemble records to channels 4 - 9
153 } ! 6;
154 /* karplus strong version - legacy sonification used for auditioning the piece
155 iPluckedStrings =
156 { |i| var string, isString, freq, snd;
157   string = 5 - i;
158   isString = iTrig * (i <= iString) * (iString <= i) * (iSound < 2);
159   freq = fund.midicps * tuning[i] *
160     TRand.kr(1 + iSound, iSound * 5 + 1, isString);
161   snd = Pluck.ar(WhiteNoise.ar(0.1), isString, 0.2,
162     Latch.kr(freq.reciprocal, isString), 10, 0);
163   Out.ar(Select.kr(rt, [string + 4, [0, 1]]), snd);
164 } ! 6;*/
165 // trigger switch and allow notes to pass until next interval of 4 pulses then add 4 pulses (5 pulses = 1 second)
166 iSwitchTrig = iTrig * TWChoose.kr(iTrig, [0, 1], [iEnv, 1], 1);
167 iSwitchArm = PulseCount.kr(iSwitchTrig, switchTrig); // switch trig armed
168 iSwitchTrigDel = 4 - (currentDur % 4); // countdown to switch
169 iDur = Select.kr(iSwitchArm <= 0, [Clip.kr(iDur, 0, iSwitchTrigDel), iDur]); // clip dur if past switch
170 iSwitchTrig = iTrig * (iDur >= iSwitchTrigDel) * (iSwitchArm > 0); // trigger the switch
171 iDur = Select.kr(iSwitchTrig, [iDur, iDur + 4]); // add 4 pulses
172 Poll.kr(iTrig, iDur, \iDur); // monitor duration of interrupt note
173
174 //-----Electronic Accompaniment-----
175 aDust = Dust.kr(10); // random triggers
176 aLBuf = LocalBuf.new((SampleRate.ir / fund.midicps).trunc); // buffer for harmonic flickering sound
177 // fill buf with random bursts of noise
178 RecordBuf.ar(PinkNoise.ar(), aLBuf, run: Latch.ar(TWChoose.kr(aDust, [0, 1], [5, 1], 1), aDust + TDelay.kr(aDust,
179   0.01));
180 // play buf back at a rate equivalent to the bass note in the ostinato, select whether on or off on every ostinato
181 // note
182 aFlicker = PlayBuf.ar(1, aLBuf, 1, Impulse.ar((fund + oBassNote).midicps), loop: 1) * Latch.ar(
183   TWChoose.kr(aDust, [0, 1], [1, 2], 1), aDust) * (1 - switch) * TWChoose.kr(oTrig, [0, 1], [2, 1], 1) * 0.02;
184 aBNoise = BrownNoise.ar(0.007) * (1 - switch); // brown noise during ostinato
185 aWNoise = WhiteNoise.ar(0.002) * switch; // white noise during interrupt
186 // sine tone beating that can change rate (or not) on every ostinato note (around fundamental for ostinato and a
187 // fifth down for interrupt
188 aSinTrig = TWChoose.kr(oTrig, [0, 1], [1, 1], 1) + Changed.kr(switch);
189 aSinBeat = (SinOsc.ar((fund - (switch * 5)).midicps) +
190   SinOsc.ar((fund - (switch * 5)).midicps + 0.5 + Latch.ar(TRand.kr(0, 2.5, aSinTrig), aSinTrig))) * 0.05;
191 aFadeIn = EnvGen.kr(Env.new([0, 1], [1])); // short fade at start of piece
192 aFadeOut = EnvGen.kr(Env.cutoff(10), TDelay.kr(endTrig, oDur * durUnit)); // longer fade at end of piece
193 Out.ar(Select.kr(rt, [22, [0, 1]]), aBNoise * aFadeIn * aFadeOut); // brown noise records to channel 22
194 Out.ar(Select.kr(rt, [23, [0, 1]]), aWNoise * aFadeIn * aFadeOut); // white noise records to channel 23
195 Out.ar(Select.kr(rt, [24, [0, 1]]), aSinBeat * aFadeIn * aFadeOut); // sine beating records to channel 24
196 Out.ar(Select.kr(rt, [25, [0, 1]]), aFlicker * aFadeIn * aFadeOut); // harmonic flickering records to channel 25
197
198 //-----Score-----
199 // write score buffer for lilypond transcription
200 count = PulseCount.kr(trig);
201 BufWr.kr(Select.kr(switch,
202   [[switch, oString, oNote, 0, oDur], [switch, iString, 0, iSound, iDur]], scoreBuf, Select.kr(trig, [-1, count
203   ]));
204 Poll.kr(trig, count, \scoreCount);
205
206 //-----FeedbackOut-----
207 LocalOut.kr([
208   // feedback note trigger
209   TDelay.kr(trig * (1 - endTrig), Select.kr(switch, [oDur, iDur]) * durUnit - ControlRate.ir.reciprocal),
210   // feedback oString, oDurTemp, and oStepper for counts
211   oString,
212   oDurTemp - 1,
213   oStepper,
214   // feedback switchTrig
215   TDelay.kr(Select.kr(switch, [oSwitchTrig, iSwitchTrig]), Select.kr(switch, [oDur, iDur]) * durUnit -
216     ControlRate.ir.reciprocal),
217   // feedback whether or not in start state
218   PulseCount.kr(Changed.kr(oStepper)) <= 10
219 ]);
220 });
221 )
222
223 /*
224 (
225 // Uncomment to test / play everything in real time - see ^generateData for comments of synth messages
226 var sample.index = 0, seed = 20170121;
227 var percAllocs, guitOpenAllocs, guitHarmAllocs, guitMuteAllocs, guitBassAllocs;
228 var allocMSGs = {
229   arg inFolder;
230   var bufAllocs = [], bufDelims = [];
231   PathName(inFolder).folders.sort({arg a, b; a.folderName[0..1].asInteger < b.folderName[0..1].asInteger }).collect({
232     |folder|
233     bufDelims = bufDelims.add(sample.index);
234     folder.files.collect({|file|
235       bufAllocs = bufAllocs.add([\b_allocRead, sample.index, file.fullPath]);
236       sample.index = sample.index+1;
237     });
238   });
239 });
240 bufDelims = bufDelims.add(sample.index);
241 [bufAllocs, bufDelims]

```

```

237 };
238
239 ~dir = thisProcess.nowExecutingPath.dirname;
240 perc_allocs = allocMSGs.value(~dir ++ "../samples/percussion/");
241 guit_open_allocs = allocMSGs.value(~dir ++ "../samples/strings.open/");
242 guit_harm_allocs = allocMSGs.value(~dir ++ "../samples/strings.harmonics/");
243 guit_mute_allocs = allocMSGs.value(~dir ++ "../samples/strings.muted/");
244 guit_bass_allocs = allocMSGs.value(~dir ++ "../samples/ostinato.bass/");
245
246 s.listSendBundle(0,
247   perc_allocs[0] ++ guit_open_allocs[0] ++ guit_harm_allocs[0] ++ guit_mute_allocs[0] ++ guit_bass_allocs[0] ++
248   [{"/b.alloc", sample_index + 1, 10000, 5}, {"d.recv", ~ostinato.and.interrupt.asBytes(s)}]);
249
250
251 Synth.new(\ostinato.and.interrupt, [\scoreBuf, sample_index + 1, \seed, seed, \rt, 1,
252   \percBufDelims, perc_allocs[1],
253   \guitOpenBufDelims, guit_open_allocs[1],
254   \guitHarmBufDelims, guit_harm_allocs[1],
255   \guitMuteBufDelims, guit_mute_allocs[1],
256   \guitBassBufDelims, guit_bass_allocs[1]
257 ]));
258 )
259 */

```

ostinato_and_interrupt_nrt_generator_function.scd

```

1 (
2 //~FUNCTION THAT GENERATES THE PIECE (calls SynthDef(\ostinato.and.interrupt))
3 ~generateData = {
4   arg isLaunch = false, seed = 20170121; // set if ran on application launch and random seed
5   var sample_index = 0; // init sample index
6   var perc_allocs, guit_open_allocs, guit_harm_allocs, guit_mute_allocs, guit_bass_allocs; // allocation messages
7
8   // this function reads all the subfolders creating allocation messages and an array that tells synth the range of
9   // each type of sample
10  var allocMSGs = {
11    arg inFolder;
12    var bufAllocs = [];
13    var bufDelims = [];
14    PathName(inFolder).folders.sort({arg a, b; a.folderName[0..1].asInteger < b.folderName[0..1].asInteger }).
15    collect({
16      |folder|
17      bufDelims = bufDelims.add(sample_index);
18      folder.files.collect({|file|
19        bufAllocs = bufAllocs.add([0, [\b.allocRead, sample_index, file.fullPath]]); // allocation message
20        sample_index = sample_index+1;
21      });
22    });
23  bufDelims = bufDelims.add(sample_index); // start and end buffer index for each subfolder
24  [bufAllocs, bufDelims]
25 };
26
27 // run the above function on each folder
28 perc_allocs = allocMSGs.value(~dir ++ "../samples/percussion/");
29 guit_open_allocs = allocMSGs.value(~dir ++ "../samples/strings.open/");
30 guit_harm_allocs = allocMSGs.value(~dir ++ "../samples/strings.harmonics/");
31 guit_mute_allocs = allocMSGs.value(~dir ++ "../samples/strings.muted/");
32 guit_bass_allocs = allocMSGs.value(~dir ++ "../samples/ostinato.bass/");
33
34 // execute everything in non real time, generate soundfile starting with 4 seconds of silence
35 Score.recordNRT(
36   perc_allocs[0] ++ guit_open_allocs[0] ++ guit_harm_allocs[0] ++ guit_mute_allocs[0] ++ guit_bass_allocs[0] ++
37   [
38     [0, [\b.alloc, sample_index + 1, 10000, 5]],
39     [0, [\d.recv, ~ostinato.and.interrupt.asBytes(s)]],
40     [4, [\s.new, \ostinato.and.interrupt, 10000, 0, 0, \scoreBuf, sample_index + 1, \seed, seed] ++
41       [\percBufDelims, $[,] ++ perc_allocs[1] ++ [$]] ++
42       [\guitOpenBufDelims, $[,] ++ guit_open_allocs[1] ++ [$]] ++
43       [\guitHarmBufDelims, $[,] ++ guit_harm_allocs[1] ++ [$]] ++
44       [\guitMuteBufDelims, $[,] ++ guit_mute_allocs[1] ++ [$]] ++
45       [\guitBassBufDelims, $[,] ++ guit_bass_allocs[1] ++ [$]]
46     ],
47     [60 * 20, [\b.write, sample_index + 1, ~dir ++ "gen_data_resources/ostinato.and.interrupt.data.wav", "WAV"
48       , "float"]],
49     [60 * 20, [\c.set, 0, 0]],
50     ~dir ++ "gen_data_resources/ostinato.and.interrupt.osc",
51     ~dir ++ "../audio/ostinato.and.interrupt.wav",
52     headerFormat: "WAV", options: ServerOptions.new.numOutputBusChannels = 26, action: {
53
54       // trim the multichannel audio file down to the correct size
55       var datasf, insf, outsf, data, durSum, n, pad, newSize;
56
57       ~appStatusString = "writing files";
58       datasf = SoundFile.openRead(~dir ++ "gen_data_resources/ostinato.and.interrupt.data.wav");
59       datasf.readData(data = FloatArray.newClear(10000));
60       datasf.close;
61       data = data.clump(5).drop(1);
62       durSum = 0;
63       n = 0;
64       while( {data[n][4] != 0}, {
65         durSum = durSum + data[n][4];
66         n=n+1;
67       });
68     });
69

```



```

65 insf = SoundFile.openRead(`dir ++ "../audio/ostinato_and_interrupt.wav");
66 outsf = SoundFile.new.headerFormat.(insf.headerFormat).numChannels.(
67   insf.numChannels).sampleRate.(insf.sampleRate).sampleFormat.(insf.sampleFormat);
68 outsf.openWrite(`dir ++ "../audio/ostinato_and_interrupt_cut.wav");
69 pad = insf.sampleRate * 4 * insf.numChannels;
70 insf.readData(data = FloatArray.newClear(pad));
71 ((durSum + (22 * 5))/5.0).ceil.do({
72   insf.readData(data = FloatArray.newClear(insf.sampleRate * insf.numChannels));
73   outsf.writeData(data)});
74 insf.close;
75 outsf.close;
76 File.delete(`dir ++ "../audio/ostinato_and_interrupt.wav");
77 File.copy(`dir ++ "../audio/ostinato_and_interrupt_cut.wav", `dir ++ "../audio/ostinato_and_interrupt.wav
78   ");
79 File.delete(`dir ++ "../audio/ostinato_and_interrupt_cut.wav");
80
81 // call transcriber function
82 `appStatusString = "generating lilypond";
83 `generateLilypond.value;
84
85 // load the buffer for playback
86 `appStatusString = "loading buffer";
87 Buffer.read(s, `dir ++ "../audio/ostinato_and_interrupt.wav", action: {
88   |buf| `totalDur = buf.duration;
89   if(isLaunch == true, {`play = Synth.new(\play, [\buf, buf])}, {`play.set(\buf, buf)});
90   `appStatusFunc.stop;
91   {`appStatus.string = "ready"}.defer
92   });
93 });
94 );
95
96 // uncomment below to run generator without gui
97 /*
98 "ostinato_and_interrupt_generator_synthdef.scd".loadRelative(true, {
99   `dir = thisProcess.nowExecutingPath.dirname;
100   `appStatus = StaticText();
101   `generateData.value;
102 });
103 */

```

ostinato_and_interrupt_lilypond_generator_function.scd

```

1 (
2 //~FUNCTION THAT GENERATES THE LILYPOND FILES
3 `generateLilypond = {
4   var sf, data, notes, perc, parts, noteNames, durSum, lastState, lastDur, n, beatPos, lastBassNote, lGrey, dGrey,
5     lilyRepeat, lilyTime;
6   var inFile, outFile, inString, outString;
7   sf = SoundFile.openRead(`dir ++ "../supercollider/gen_data_resources/ostinato_and_interrupt_data.wav");
8   sf.readData(data = FloatArray.newClear(10000)); sf.close;
9   data = data.clump(5).drop(1);
10  notes = []; perc = []; parts = [[], [], [], [], [], [], []];
11  noteNames = ["d\'", "f\'", "a\'", "c\'\'', "e\'\'', "g\'\''];
12  durSum = 60; lastState = -1; lastDur = -1; n = 0; beatPos = 0; lGrey = 70; dGrey = 50; lastBassNote = 11;
13  while( {data[n][4] != 0}, {
14    var state, string, note, sound, dur;
15    state = data[n][0]; string = data[n][1]; note = data[n][2]; sound = data[n][3]; dur = data[n][4];
16    data[n].postln; durSum = durSum + dur; durSum.postln;
17    if(lastState != state, {beatPos = 0}, {});
18    for(0, dur - 1, {
19      arg b;
20      var lilyStem, lilyRhythmMark, lilyStartBeam, lilyEndBeam, lilyBar, sec, minString, secString, lilyTime,
21        lilyBracket, lilyNote;
22
23      lilyStem = case
24      {b == 0 && lastState == 0 && state == 1} {
25        " \\override Staff.Stem #'transparent = ##f "
26      }
27      {b == 0 && ((lastState == 1 && state == 0) || (lastState == -1))} {
28        " \\override Staff.Stem #'transparent = ##t "
29      }
30      {true} {" "};
31
32      lilyRhythmMark = case
33      {state == 0} {" " }
34      {dur > 3} {" " }
35      {lastState != state} {" -" ++ dur.asInteger.asString ++ " " }
36      {lastDur != dur} {" -" ++ dur.asInteger.asString ++ " " }
37      {true} {" "};
38
39      lilyStartBeam = if(beatPos % 4 == 0, {" [ "}, {" "});
40      lilyEndBeam = if(beatPos % 4 == 3, {" ] "}, {" "});
41      beatPos = beatPos + 1;
42
43      lilyBar = if(b == 0 && (lastState != state), {' \\bar \\|\\| "}, {" "});
44
45      sec = ((durSum - dur) + b) / 5;
46      minString = (sec.trunc / 60).trunc.asInteger.asString;
47      secString = (sec.trunc % 60).asInteger.asString;
48      if(secString.size == 1, {secString = "0" ++ secString}, {});
49      lilyTime = case
50      {b == 0 && lastState == 0 && state == 1} || (sec % 12 == 0)} {
51        ' \\mark \\markup{ \\fontsize #-2 \\| " ++ minString ++ "' ++ secString ++ '\\| " } '
52      }
53      {b == 0 && ((lastState == 1 && state == 0) || (lastState == -1))} {" " }

```

```

49     {true} {""};
50
51     lilyBracket = case
52     {b == 0 && state == 0 && string == 1 && (note != 7)} {
53         var res = if(lastBassNote != note, {"\\bracketify ", {""}); lastBassNote = note; res}
54     {b == 0 && state == 0 && string == 0} {
55         var res = if(lastBassNote != note, {"\\bracketify ", {""}); lastBassNote = note; res}
56     {true} {lastBassNote = lastBassNote; ""};
57
58
59     lilyNote = case
60     {(state == 0) && (b != 0)} {"s16 "}
61     {state == 0 && string == 0 && note == 0} {lilyBracket ++ noteNames[string] ++ "16 "}
62     {state == 0 && string == 1 && (note - 7) == 0} {lilyBracket ++ noteNames[string] ++ "16 "}
63     {(state == 0) && (string <= 1)} {
64         "\\once \\override NoteHead #'stencil = #ly:text-interface::print " ++
65         "\\once \\override NoteHead #'text = \\markup { \\translate #'(-0 . -0.8) \\whiteout \\pad-markup
66         #0.5 " ++ '\\ ' ++
67         if(string == 0, {note.asInteger.asString}, {(note - 7).asInteger.asString}) ++ '\\ ' ++ lilyBracket
68         ++ noteNames[string] ++ "16 "
69     {state == 0 && (string >= 2)} {noteNames[string] ++ "16 "}
70
71     {(state == 1) && (b != 0)} {"r16 " ++ lilyStartBeam ++ lilyEndBeam}
72     {state == 1 && sound == 0} {noteNames[string] ++ "16 " ++ lilyRhythmMark ++ lilyStartBeam ++ lilyEndBeam}
73     {state == 1 && sound == 1} {noteNames[string] ++ "16 " ++ "\\harmonic " ++ lilyRhythmMark ++ lilyStartBeam
74     + lilyEndBeam}
75     {state == 1 && sound == 2} {"\\xNote " ++ noteNames[string] ++ "16 " ++ lilyRhythmMark ++ lilyStartBeam ++
76     lilyEndBeam};
77
78     notes = notes.add(lilyBar ++ lilyTime ++ lilyStem ++ lilyNote);
79
80     perc = perc.add(if(sound == 2 || (state == 0),
81     {lilyBar ++ lilyTime ++ lilyStem ++ lilyNote},
82     {lilyBar ++ lilyTime ++ " \\once \\override Stem.color = #(x11-color 'grey" ++ lGrey.asString ++ ") "
83     ++ lilyStem ++
84     " \\once \\override NoteHead.color = #(x11-color 'grey" ++ lGrey.asString ++ ") " ++ lilyNote}));
85
86     for(0, 5, {
87         arg p; var grey;
88         grey = if(sound == 2, {dGrey}, {lGrey});
89         parts[p] = parts[p].add(if(string == p || (state == 0),
90         {lilyBar ++ lilyTime ++ lilyStem ++ lilyNote},
91         {lilyBar ++ lilyTime ++ " \\once \\override Stem.color = #(x11-color 'grey" ++ grey.asString ++ ")
92         " ++ lilyStem ++
93         " \\once \\override NoteHead.color = #(x11-color 'grey" ++ grey.asString ++ ") " ++ lilyNote}
94         ));
95     });
96     lastState = state;
97     lastDur = dur;
98     n = n + 1;
99 });
100
101 lilyRepeat = "\\repeat unfold " ++ ((durSum-60)/5/12).asInteger.asString ++ " { \\repeat unfold 59 { s16 \\noBreak
102 } s16 \\break } ";
103 lilyTime = "\\time 60/16 ";
104
105 inFile = File("~/dir +/ + ../lilypond/ostinato.and.interrupt.lilypond.score.template.ly", "r");
106 inString = inFile.readAllString;
107 inFile.close;
108
109 outFile = File("~/dir +/ + ../lilypond/ostinato.and.interrupt.lilypond.guitar.part.ly", "w");
110 outString = "<< " ++ lilyRepeat ++ lilyTime ++
111 "{ \\override Staff.Rest #'transparent = ##t " ++ notes.join ++ ' \\bar |.|.' } >>";
112 outFile.write(inString.replace("%<<music>>", outString).replace("piece = " ++ '\\part\\', "piece = " ++ '\\guitar/
113 all\\'));
114 outFile.close;
115
116 outFile = File("~/dir +/ + ../lilypond/ostinato.and.interrupt.lilypond.percussion.part.ly", "w");
117 outString = "<< " ++ lilyRepeat ++ lilyTime ++
118 "{ \\override Staff.Rest #'transparent = ##t " ++ perc.join ++ ' \\bar |.|.' } >>";
119 outFile.write(inString.replace("%<<music>>", outString).replace("piece = " ++ '\\part\\', "piece = " ++ '\\
120 percussion\\'));
121 outFile.close;
122
123 for(0, 5, {
124     arg p, staff;
125     outFile = File("~/dir +/ + ../lilypond/ostinato.and.interrupt.lilypond.ensemble.part-" ++ (6 - p).asString ++ ".
126     ly", "w");
127     staff = Array.fill(6, {i| if(i == (5 - p), {"#f "}, {"(x11-color 'grey" ++ lGrey.asString ++ ") "});}).join;
128     staff = "\\override Staff.StaffSymbol.stencil = #(color-staff-lines " ++ staff ++ ")";
129     outString = "<< " ++ lilyRepeat ++ lilyTime ++
130     "{ " ++ staff ++ " \\override Staff.Rest #'transparent = ##t " ++ (parts[p]).join ++ ' \\bar |.|.' } >>";
131     outFile.write(inString.replace("%<<music>>", outString).replace(
132     "piece = " ++ '\\part\\', "piece = " ++ '\\ensemble part ' ++ (6 - p).asString ++ '\\'));
133     outFile.close;
134 });
135 };
136 )
137 // uncomment below generate lilypond files without gui (requires resouces to exist)
138 /*(
139 ~dir = thisProcess.nowExecutingPath.dirname;
140 ~generateLilypond.value
141 )*/

```

ostinato_and_interrupt_player_synthdef.scd

```

1 (
2 //~SYNTHDEF THAT PLAYS THE PIECE AND ACCEPTS CONTROL FROM THE GUI
3 SynthDef(\pplay, {
4   arg buf = 0, env, playRate = 0, startPos = 0, startTrig = 0, curDur,
5   goVol = #[1, 1, 1, 1, 1, 1], giVol = #[1, 1, 1, 1, 1, 1], pVol = #[1, 1, 1, 1, 1, 1], eVol = #[1, 1, 1, 1, 1, 1],
6     aVol = #[1, 1, 1, 1, 1, 1],
7   goMute = #[1, 1, 1, 1, 1, 1], giMute = #[1, 1, 1, 1, 1, 1], eMute = #[1, 1, 1, 1, 1, 1], pMute = #[1, 1, 1, 1, 1, 1],
8     aMute = #[1, 1, 1, 1, 1, 1],
9   goPan = #[0, 0, 0, 0, 0, 0], giPan = #[0, 0, 0, 0, 0, 0], ePan = #[0, 0, 0, 0, 0, 0], pPan = #[0, 0, 0, 0, 0, 0],
10     aPan = #[0, 0, 0, 0, 0, 0],
11   masterVolGroups = #[1, 1, 1, 1, 1, 1], masterMuteGroups = #[1, 1, 1, 1, 1, 1],
12   allMasterVol = 1, allMasterMute = 1;
13   var phasor, player;
14   var guitarOTracks, guitarITracks, percussionTracks, ensembleTracks, accompTracks;
15   var guitarOTracksPanned, guitarITracksPanned, percussionTracksPanned, ensembleTracksPanned, accompTracksPanned;
16   var guitarOMaster, guitarIMaster, percussionMaster, ensembleMaster, accompMaster;
17   var allMaster;
18   var imp, delimp;
19
20   player = PlayBuf.ar(26, buf, playRate, startTrig, startPos * BufFrames.kr(buf));
21   phasor = Phasor.ar(startTrig,
22     Select.kr(playRate, [0, BufRateScale.kr(buf)]),
23     0, BufFrames.kr(buf), startPos * BufFrames.kr(buf));
24
25   guitarOTracks = { |i| var string = 5 - i; player[string - 2] * goVol[i] * goMute[i] } ! 4;
26   guitarITracks = { |i| var string = 5 - i; player[string + 4] * giVol[i] * giMute[i] } ! 6;
27   percussionTracks = { |i| var string = 5 - i; player[string + 10] * pVol[i] * pMute[i] } ! 6;
28   ensembleTracks = { |i| var string = 5 - i; player[string + 16] * eVol[i] * eMute[i] } ! 6;
29   accompTracks = { |i| player[i + 22] * aVol[i] * aMute[i] } ! 4;
30
31   guitarOTracksPanned = { |i| Pan2.ar(guitarOTracks[i], goPan[i]) } ! 4;
32   guitarITracksPanned = { |i| Pan2.ar(guitarITracks[i], giPan[i]) } ! 6;
33   percussionTracksPanned = { |i| Pan2.ar(percussionTracks[i], pPan[i]) } ! 6;
34   ensembleTracksPanned = { |i| Pan2.ar(ensembleTracks[i], ePan[i]) } ! 6;
35   accompTracksPanned = { |i| Pan2.ar(accompTracks[i], aPan[i]) } ! 4;
36
37   guitarOMaster = Mix.new(guitarOTracksPanned) * masterVolGroups[0] * masterMuteGroups[0];
38   guitarIMaster = Mix.new(guitarITracksPanned) * masterVolGroups[1] * masterMuteGroups[1];
39   percussionMaster = Mix.new(percussionTracksPanned) * masterVolGroups[2] * masterMuteGroups[2];
40   ensembleMaster = Mix.new(ensembleTracksPanned) * masterVolGroups[3] * masterMuteGroups[3];
41   accompMaster = Mix.new(accompTracksPanned) * masterVolGroups[4] * masterMuteGroups[4];
42
43   allMaster = Mix.new([guitarOMaster, guitarIMaster, percussionMaster, ensembleMaster, accompMaster]) * allMasterVol
44     * allMasterMute;
45   Out.ar(0, allMaster);
46
47   curDur = ((A2K.kr(phasor) / BufFrames.kr(buf)) * BufDur.kr(buf) * 5).trunc;
48   //Optional click - uncomment and send to an output not used to give the guitarist a click track.
49   //Out.ar(2, 10 * BPF.ar(WhiteNoise.ar * EnvGen.kr(Env.perc(0.01, 0.1), curDur % 4 <= 0), 440 * ((curDur % 20 <= 0)
50     + 1), 0.02));
51   SendTrig.kr(Changed.kr(curDur), 0, curDur);
52   imp = Impulse.kr(10);
53   delimp = Delay1.kr(imp);
54   SendReply.kr(imp,
55     '/allMasterLevels',
56     values: [Amplitude.kr(allMaster)]);
57   SendReply.kr(imp,
58     '/groupMasterLevels',
59     values: [
60       Amplitude.kr(guitarOMaster) ++ Amplitude.kr(guitarIMaster) ++
61       Amplitude.kr(percussionMaster) ++ Amplitude.kr(ensembleMaster) ++ Amplitude.kr(accompMaster)];
62   SendReply.kr(imp,
63     '/groupTrackLevels',
64     values: [Amplitude.kr(guitarOTracks) ++ Amplitude.kr(guitarITracks) ++
65       Amplitude.kr(percussionTracks) ++ Amplitude.kr(ensembleTracks) ++ Amplitude.kr(accompTracks)];
66   }).add;
67 }

```

ostinato_and_interrupt_gui_generator_function.scd

```

1 (
2 //~FUNCTION THAT GENERATES THE GUI
3 ~generateGUI = {
4   var win, clockStringFunc, metronomeStringFunc, metronomeColorFunc, masterView, faderViews, tabs;
5   var tabButtonReset, masterButton, guitarOButton, guitarIButton, percButton, ensembleButton, accompButton, startPos
6     = 0;
7   var groupNamees = ["guitar - ostinato", "guitar - interrupt", "percussion", "interrupt highlights", "fields / beats
8     / flicker"], groupAbbr = ["go", "gi", "p", "e", "a"];
9   var accompNames = ["brown noise", "white noise", "sine beating", "flicker"];
10  var goVol, giVol, pVol, eVol, aVol, goPan, giPan, pPan, ePan, aPan, goMute, giMute, pMute, eMute, aMute, volGroups,
11    panGroups, muteGroups;
12  var masterMuteGroups, masterVolGroups;
13
14  goVol = giVol = pVol = eVol = aVol = [0.8, 0.8, 0.8, 0.8, 0.8, 0.8];
15  goMute = giMute = pMute = eMute = aMute = [1, 1, 1, 1, 1, 1];
16  goPan = giPan = pPan = ePan = aPan = [0, 0, 0, 0, 0, 0];
17  volGroups = [goVol, giVol, pVol, eVol, aVol];
18  muteGroups = [goMute, giMute, pMute, eMute, aMute];
19  panGroups = [goPan, giPan, pPan, ePan, aPan];
20  masterMuteGroups = [1, 1, 1, 1, 1];
21  masterVolGroups = [0.8, 0.8, 0.8, 0.8, 0.8];

```

```

19
20 clockStringFunc = {
21     arg div;
22     var min, sec;
23     sec = (div / 5).trunc;
24     min = (sec / 60).asInteger.asString;
25     if(min.size == 1, {min = "0" ++ min}, {});
26     sec = (sec % 60).asInteger.asString;
27     if(sec.size == 1, {sec = "0" ++ sec}, {});
28     min ++ ":" ++ sec
29 };
30 // [-30, -105, -104] and [-30, -105, -113] are unicode inverse bullet and normal bullet, respectively
31 metronomeStringFunc = { arg div; case {div % 20 < 2}
32     {[-30, -105, -104].collect({arg int; int.asAscii}).as(String)} {div % 4 < 2}
33     {[-30, -105, -113].collect({arg int; int.asAscii}).as(String)} {true} {" " } };
34 metronomeColorFunc = { arg div; case {div % 20 < 2} {Color.red} {div % 4 < 2} {Color.blue} {true} {Color.black} };
35
36 `appStatusFunc = Task({
37     loop {
38         `appStatus.string = `appStatusString ++ "*"}.defer;
39         0.5.wait; {`appStatus.string = `appStatusString ++ "* *"}.defer;
40         0.5.wait; {`appStatus.string = `appStatusString ++ "* * *"}.defer;
41         0.5.wait; {`appStatus.string = `appStatusString ++ "* * * *"}.defer;
42         0.5.wait; {`appStatus.string = `appStatusString ++ "* * * * *"}.defer;
43         0.5.wait;
44     }
45 });
46
47 win = Window("ostinato and interrupt", Rect(500, 500, 1100, 500), false).front;
48 masterView = {
49     var view, masterIndicators, master, generator, transport, ranSeed, startPosText, pauseButton, clock, metronome;
50
51     OSCFunc({ arg msg, time; {
52         clock.string = clockStringFunc.value(msg[3]);
53         metronome.stringColor = metronomeColorFunc.value(msg[3]);
54         metronome.string = metronomeStringFunc.value(msg[3]).defer;
55     }, '/tr', s.addr);
56     OSCFunc.new({arg msg; {
57         {i| masterIndicators[i].value = msg[3 + i].ampdb.linlin(-40, 0, 0, 1)} ! 2}.defer,
58         '/allMasterLevels', s.addr);
59
60     view = View(win);
61     masterIndicators = [LevelIndicator(), LevelIndicator()];
62     master = HLayout(
63         VLayout(
64             HLayout(
65                 Slider(view).value.(0.8).action.({v| `play.set(\allMasterVol, v.value * 1.25)}),
66                 masterIndicators[0], masterIndicators[1]),
67             Button(view).states.({"mute", Color.black}, [{"mute", Color.black, Color.grey}]).action.({
68                 {v| `play.set(\allMasterMute, (1 - v.value).abs)}),
69             StaticText(view).string.("      master      ").align.(\center),
70             StaticText(view).string.(" (all) ").align.(\center)),
71         nil);
72     generator = HLayout(
73         Button(view).states.({"generate"}).action.({
74             `appStatusString = "generating data";
75             `appStatusFunc.start;
76             `generateData.value(seed: ranSeed.string.asInteger);
77         }),
78         ranSeed = TextField(view).string.("20170121"),
79         Button(view).states.({"reset seed"}).action.({ ranSeed.string = "20170121"}),
80         Button(view).states.({"random seed"}).action.({ ranSeed.string = 50000000.rand.asString}),
81         [ `appStatus = StaticText(view).string.("status: ready"), stretch: 1],
82         nil);
83     transport = HLayout(
84         Button(view).states.({"play", Color.black}, [{"stop", Color.black, Color.grey}]).action.({
85             { pState |
86                 pauseButton.value = 0;
87                 if(pState.value == 0, {`play.set(\playRate, 0, \startTrig, 0);
88                     clock.string = clockStringFunc.value((startPos * `totalDur * 5).asInteger)},
89                     {`play.set(\startPos, startPos, \playRate, 1, \startTrig, 1)}}),
90             pauseButton = Button(view).states.({"pause", Color.black}, [{"pause", Color.black, Color.grey}]).action.({
91                 { pState |
92                     if(pState.value == 1, {`play.set(\playRate, 0)}, {`play.set(\playRate, 1)}}),
93             StaticText(view).string.("start time"),
94             [Slider(view, Rect(0, 0, 30, 5)).action.({
95                 { |pos|
96                     var min, sec;
97                     startPosText.string = clockStringFunc.value((pos.value * `totalDur * 5).asInteger);
98                     startPos = pos.value;
99                 }, stretch: 1],
100             startPosText = StaticText(win).string.("00:00").font.(Font("Liberation Mono", 15)),
101             nil);
102     view.layout.(HLayout(master,
103         [VLayout(generator, nil,
104             HLayout(clock = StaticText(win).string.("00:00").font.(Font("Liberation Mono", 200)),
105                 StaticText(win).string.("|").font.(Font("Liberation Mono", 200)),
106                 metronome = StaticText(win).string.([-30, -105, -104].collect({arg int; int.asAscii}).as(String)).font.
107                     (Font("Liberation Mono", 300)).stringColor.(Color.red)),
108                 nil, transport
109             ], alignment: \top));
110     faderViews = { |group|
111         var view, masterIndicators, trackIndicators, master, tracks;
112         view = View(win);

```

```

112 masterIndicators = {LevelIndicator()} ! 10;
113 trackIndicators = {LevelIndicator()} ! 26;
114
115 OSCFunc.new({arg msg; {
116   {i| masterIndicators[i].value = msg[3 + i].ampdb.linlin(-40, 0, 0, 1)} ! 10}.defer},
117 '/groupMasterLevels', s.addr);
118 OSCFunc.new({arg msg; {
119   {i| trackIndicators[i].value = msg[3 + i].ampdb.linlin(-40, 0, 0, 1)} ! 26}.defer},
120 '/groupTrackLevels', s.addr);
121
122 master = HLayout (
123   VLayout (
124     [HLayout (
125       Slider (view).value_(0.8).action_(
126         {v| masterVolGroups[group] = v.value * 1.25; ^play.set(\masterVolGroups, masterVolGroups)}),
127         masterIndicators[group * 2],
128         masterIndicators[group * 2 + 1]), stretch: 2],
129     Button (view).states-({"mute", Color.black, ["mute", Color.black, Color.grey]}).action_(
130       {v| masterMuteGroups[group] = (1 - v.value).abs; ^play.set(\masterMuteGroups, masterMuteGroups)}),
131     StaticText (view).string-("      master
132       ").align-(\center),
133     StaticText (view).string-(" (++groupNames[group]++) ").align-(\center)
134   ),
135   nil);
136 tracks = { |part|
137   HLayout (
138     VLayout (
139       HLayout (
140         Slider (view).value_(0.8).action_(
141           {v| volGroups[group][part] = v.value * 1.25; ^play.set (groupAbbr[group] ++ "Vol",
142             volGroups[group])}),
143         Button (view).states-({"mute", Color.black, ["mute", Color.black, Color.grey]}).action_(
144           {v| muteGroups[group][part] = (1 - v.value).abs; ^play.set (groupAbbr[group] ++ "Mute",
145             muteGroups[group])}),
146         StaticText (view).string-("pan").align-(\center),
147         Knob (view).value_(0.5).action_(
148           {v| panGroups[group][part] = v.value * 2 - 1; ^play.set (groupAbbr[group] ++ "Pan", panGroups[
149             group])}),
150         StaticText (view).string- (
151           if (group == 4, {accompNames[part]}, {(6 - part).asString})).align-(\center)
152       ),
153       nil)
154     } ! if ((group == 0) || (group == 4), {4}, {6});
155     view.layout.(HLayout (master, nil, *tracks)) ! 5;
156   tabButtonReset = {masterButton.value = 1;
157     guitarOButton.value = 1; guitarIButton.value = 1; percButton.value = 1; ensembleButton.value = 1; accompButton.
158     value = 1;};
159   win.layout = VLayout (
160     HLayout (
161       masterButton = Button().states-({"master controls", Color.white, Color.grey, ["master controls", Color.
162         black]}).action- (
163         {tabButtonReset.value; masterButton.value = 0; tabs.index = 0 }).value_(0),
164       guitarOButton = Button().states-({"guitar (ostinato)", Color.white, Color.grey, ["guitar (ostinato)",
165         Color.black]}).action- (
166         {tabButtonReset.value; guitarOButton.value = 0; tabs.index = 1 }).value_(1),
167       guitarIButton = Button().states-({"guitar (interrupt)", Color.white, Color.grey, ["guitar (interrupt)",
168         Color.black]}).action- (
169         {tabButtonReset.value; guitarIButton.value = 0; tabs.index = 2 }).value_(1),
170       percButton = Button().states-({"percussion", Color.white, Color.grey, ["percussion", Color.black]}).
171       action- (
172         {tabButtonReset.value; percButton.value = 0; tabs.index = 3 }).value_(1),
173       ensembleButton = Button().states-({"interrupt highlights", Color.white, Color.grey, ["interrupt
174         highlights", Color.black]}).action- (
175         {tabButtonReset.value; ensembleButton.value = 0; tabs.index = 4 }).value_(1),
176       accompButton = Button().states-({"fields / beats / flicker", Color.white, Color.grey,
177         ["fields / beats / flicker", Color.black]}).action- (
178         {tabButtonReset.value; accompButton.value = 0; tabs.index = 5 }).value_(1),
179       tabs = StackLayout (masterView.value, faderViews[0], faderViews[1], faderViews[2], faderViews[3], faderViews[4])
180     );
181   );
182 );

```

ostinato_and_interrupt_lilypond_score_template.ly

```

1 \version "2.18.2"
2 \paper {
3   top-system-spacing =
4   #'((basic-distance . 15 )
5     (minimum-distance . 15 )
6     (padding . 0 )
7     (stretchability . 0))
8
9   #(set-paper-size "a4" 'portrait)
10  system-system-spacing =
11  #'((basic-distance . 24)
12    (minimum-distance . 24)
13    (padding . 0)
14    (stretchability . 0))
15
16  min-systems-per-page = 8
17  max-systems-per-page = 8
18
19  print-page-number = ##t

```

```

20 oddHeaderMarkup = \markup \fill-line { " " }
21 evenHeaderMarkup = \markup \fill-line { " " }
22 oddFooterMarkup = \markup {
23 \fill-line {
24 \on-the-fly #not-first-page
25 \concat {
26 "- "
27 \fontsize #1.5
28 \on-the-fly #print-page-number-check-first
29 \fromproperty #'page:page-number-string
30 "- "
31 }
32 }
33 }
34 evenFooterMarkup = \markup {
35 \on-the-fly #not-first-page
36 \fill-line {
37 \concat {
38 "- "
39 \fontsize #1.5
40 \on-the-fly #print-page-number-check-first
41 \fromproperty #'page:page-number-string
42 "- "
43 }
44 }
45 }
46 }
47 \header {
48 title = \markup { \normal-text \italic {ostinato and interrupt}}
49 piece = "part"
50 opus = \markup { \concat {"version generated: "} #(strftime "%Y.%m.%d" (localtime (current-time)))}
51 composer = "michael winter (mexico city, mx; 2017)"
52 tagline = ""
53 }
54 #(set-global-staff-size 16)
55 \layout {
56 indent = 0.0\cm
57 ragged-right = ##t
58 \context {
59 \Staff
60 \override StaffSymbol.line-count = #6
61 \override StaffSymbol.staff-space = #1.8
62 \override Beam.positions = #'(-5 . -5)
63 \override Stem.direction = #DOWN
64 \override Stem.stemlet-length = #1
65 \override Beam.breakable = ##t
66 \remove "Clef_engraver"
67 \remove "Time_signature_engraver"
68 }
69 }
70
71 #(define-public ((color-staff-lines . rest) grob)
72
73 (define (index-cell cell dir)
74 (if (equal? dir RIGHT)
75 (cdr cell)
76 (car cell)))
77
78 (define (index-set-cell! x dir val)
79 (case dir
80 ((-1) (set-car! x val))
81 ((1) (set-cdr! x val))))
82
83 (let* ((common (ly:grob-system grob))
84 (span-points '(0 . 0))
85 (thickness (* (ly:grob-property grob 'thickness 1.0)
86 (ly:output-def-lookup (ly:grob-layout grob) 'line-thickness)))
87 (width (ly:grob-property grob 'width))
88 (line-positions (ly:grob-property grob 'line-positions))
89 (staff-space (ly:grob-property grob 'staff-space 1))
90 (line-stencil #f)
91 (total-lines empty-stencil)
92 ;; use a local copy of colors list, since
93 ;; stencil creation mutates list
94 (colors rest))
95
96 (for-each
97 (lambda (dir)
98 (if (and (= dir RIGHT)
99 (number? width))
100 (set-cdr! span-points width)
101 (let* ((bound (ly:spanner-bound grob dir))
102 (bound-ext (ly:grob-extent bound bound X)))
103
104 (index-set-cell! span-points dir
105 (ly:grob-relative-coordinate bound common X))
106 (if (and (not (ly:item-break-dir bound))
107 (not (interval-empty? bound-ext)))
108 (index-set-cell! span-points dir
109 (+ (index-cell span-points dir)
110 (index-cell bound-ext dir))))))
111 (index-set-cell! span-points dir (- (index-cell span-points dir)
112 (* dir thickness 0.5))))
113 (list LEFT RIGHT))

```

```

114 (set! span-points
115 (coord-translate span-points
116 (- (ly:grob-relative-coordinate grob common X))))
117
118 (set! line-stencil
119 (make-line-stencil thickness (car span-points) 0 (cdr span-points) 0))
120
121 (if (pair? line-positions)
122 (for-each (lambda (position)
123 (let ((color (if (pair? colors)
124 (car colors)
125 #f)))
126 (set! total-lines
127 (ly:stencil-add
128 total-lines
129 (ly:stencil-translate-axis
130 (if (color? color)
131 (ly:stencil-in-color line-stencil
132 (first color)
133 (second color)
134 (third color))
135 line-stencil)
136 (* position staff-space 0.5) Y)))
137 (and (pair? colors)
138 (set! colors (cdr colors))))))
139 line-positions)
140 (let* ((line-count (ly:grob-property grob 'line-count 5))
141 (height (* (1- line-count) (/ staff-space 2))))
142 (do ((i 0 (1+ i)))
143 (= i line-count)
144 (let ((color (if (and (pair? colors)
145 (> (length colors) i))
146 (list-ref colors i)
147 #f)))
148 (set! total-lines (ly:stencil-add
149 total-lines
150 (ly:stencil-translate-axis
151 (if (color? color)
152 (ly:stencil-in-color line-stencil
153 (first color)
154 (second color)
155 (third color))
156 line-stencil)
157 (- height (* i staff-space) Y))))))
158 total-lines))
159
160 #(define-public (bracket-stencils grob)
161 (let ((lp (grob-interpret-markup grob (markup #:fontsize 3.5 #:translate (cons -0.3 -0.5) "[")
162 (rp (grob-interpret-markup grob (markup #:fontsize 3.5 #:translate (cons -0.3 -0.5) "]")
163 (list lp rp))))
164
165 bracketify = #(define-music-function (parser loc arg) (ly:music?)
166 (.i "Tag @var{arg} to be parenthesized.")
167 #f
168 \once \override ParenthesesItem.stencils = #bracket-stencils
169 \parenthesize $arg
170 #f)
171
172 {
173 \new Score
174 \with {
175 \remove "Bar_number_engraver"
176 proportionalNotationDuration = #(ly:make-moment 1 16)
177 }
178 <<
179 \new Staff
180 \with {
181 \remove "Stem_engraver"
182 }
183 %<<music>>
184 >>
185 }

```