ALMEIDA-RIBEIRO

Furnas II

2020. 2023

Bass clarinet and Live-Electronics
SCORE

Clarinete baixo e Eletrônica em tempo real
PARTITURA

© 2020 (rev. 2023) Felipe de Almeida Ribeiro
www.AlmeidaRibeiro.com

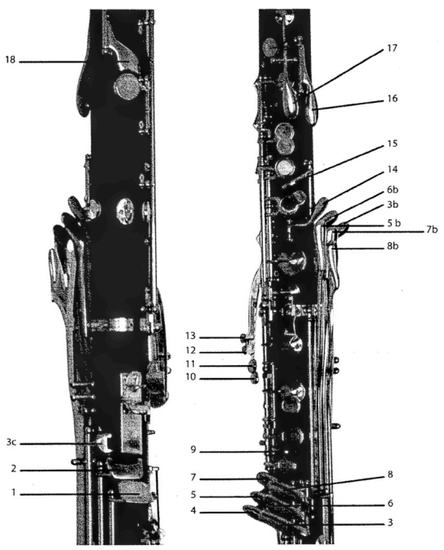
FURNAS II was composed following a visit to Vila Velha's Furnas in southern Brazil. Serving as the second movement of the Furnas cycle, this piece invites the performer to delve into the intricate realm of sound production within their instrument. The goal is to achieve a rich and expansive sonority, while remaining attentive to the guidelines set by the notation. The composition revolves around the concept of mobility, urging the performer to constantly explore an inner sonic universe during their rendition.

GENERAL INSTRUCTIONS

Performer engagement is paramount in shaping this performance, encouraging active involvement in its construction. Exploring the intricacies of sound production within their instrument to achieve a rich tonal range becomes a central endeavor. Notably, this composition takes the form of a duo, consisting of the bass clarinet and electronics. Recognizing the significance of both components is vital to its overall conception. Employing a stopwatch is recommended to ensure precise timing for each section.

INSTRUCTIONS FOR BASS CLARINET

The notation employed in this composition serves as a guide for actions and instructions aimed at achieving specific sonic qualities. Consequently, the audible outcome is not explicitly notated, as the notation doesn't entirely capture the ultimate timbral manifestation. The performer is encouraged to delve into the intricacies of sound production within their instrument, thus attaining a wide tonal spectrum, even while adhering to the parameters suggested by the notation. Notably, all fingerings are sourced from Harry Sparnaay's book, referencing a French Buffet bass clarinet model.

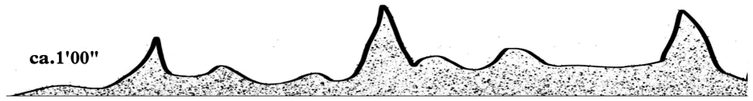


Improvisational skills are essential for performing this composition. On page 1, the musician is encouraged to fluidly move between staves as desired. It's permissible to pause midway through a system and transition to a new one. The objective is to blend the provided techniques organically. Additionally, the performer should select one of the designated "density" plans. Kindly execute all three plans, arranging them in the order of your preference.

For the subsequent pages (2-3-4), the player is encouraged to freely determine the sequence for each system. Feel free to repeat a system, interchange between them, and employ permutations, ensuring that the duration of each page does not extend beyond 2 to 3 minutes.

Ordinario is utilized to cease any of the techniques mentioned subsequently. When referring to "ordinario" it indicates the production of sound centered around a single fundamental pitch.

Density graphics are displayed to better instruct the player on how to perform page 1. High amplitudes suggest higher activity (more attacks, more activity).



Bisbigliando involves utilizing alternate fingerings on a bass clarinet to produce subtle microtonal fluctuations within a specific pitch, resulting in a wavering or quivering effect in the sound.

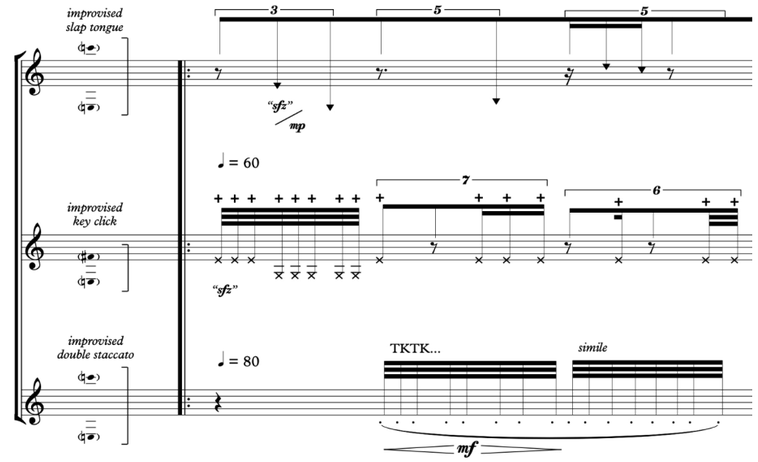
Microtonal accidentals may present cents indication. The notation used for this piece is:

(from left-to-right): quarter-tone higher, three quarter-tones higher, flat slightly higher, natural slightly higher, sharp slightly higher, quarter-tone lower, flat slightly lower, natural slightly lower, sharp slightly lower. It is crucial to play without vibrato.

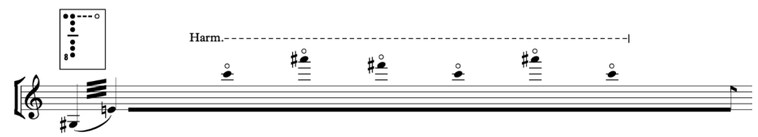
Slap tongue is a technique used by bass clarinet players where the tongue strikes the reed with a percussive motion, producing a sharp and percussive sound effect. Notehead: triangle.

Key click is a technique where a key is pressed down forcefully, often without sounding a specific pitch. This produces a percussive sound that can add rhythmic or textural elements to the music. Notehead: X.

Double staccato: Every instance of 'slurred dotted notes' indicates the use of double staccato technique. Every instance of this technique is followed by "TKTK". The option for triple staccato is available if the player deems it musically appropriate to enhance a particular phrase.

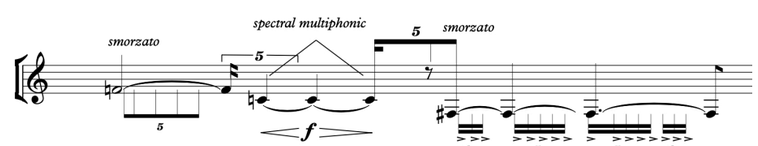


Multiphonics on the bass clarinet refer to the production of multiple tones simultaneously. In this piece, these tones are not fixed and require the player to infuse them with subtle variations in dynamics, embouchure, overtones, air pressure, and pitch. When encountering notated multiphonics in a score, it's important not to hold them rigidly. Instead, the notation serves as a set of guidelines for the evolving sound. Players are encouraged to explore transitions between the indicated notes and occasionally, fully realize the prescribed multiphonic. Most multiphonics are performed as a tremolo between two notes / fingerings.



Spectral Multiphonic: a multiphonic based on the overtones produced by the fundamental notated pitch.

Smorzato: with constant flow of air, apply pressure on the upper lip with the lower lip in irregular duration/dynamics. A pulse-rythmic notation is given underneath each pitch.



ELECTRONICS

Please follow the instructions below to prepare the performance.

LIST OF EQUIPMENT

- 2 Cardioid or Hypercardioid clip-on Condenser Microphones.

- 1 Audio Interface 2 XLR microphone inputs (48V) and 2 outputs.

- 1 Computer with Cycling Max (this patch was created on version 8x).

- 2 Powered Loudspeakers.

Note: While not mandatory, it is highly recommended to use a MIDI controller for managing the output levels. An external controlling device enhances the overall control and performance experience. For this patch, all is mapped to a “Novation Launchcontrol” controller.

PATCH

[1] The patch can be downloaded at https://almeidaribeiro.com/

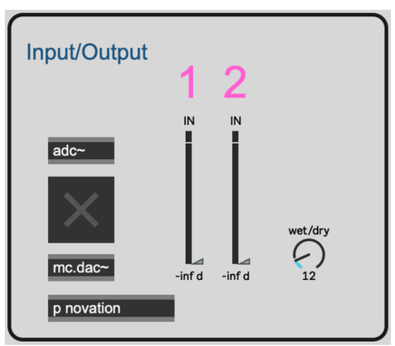
[2] Make sure all externals are installed and within Max's reach at “File Preferences”. The externals consist of: [8delay~] and [mc.8delay~].

[3] Please download the “HISS TOOLS” library from Cycling's Package Manager.

SETUP

[1] The microphone placement should be as close as possible to the bass clarinet.

[2] Launch the patch and activate the audio.



[3] Audio Interface: Adjust the microphone gains (channels 1 and 2) to an appropriate level.

[4] Max Patch: Set the microphone IN levels to an appropriate setting.

[5] Max Patch: Adjust all OUT faders to suitable levels.

[6] The reverb is initially set to 12 (bass clarinet) and 6 (tape). Feel free to choose a different parameter according to the acoustics of each venue.

PERFORMANCE

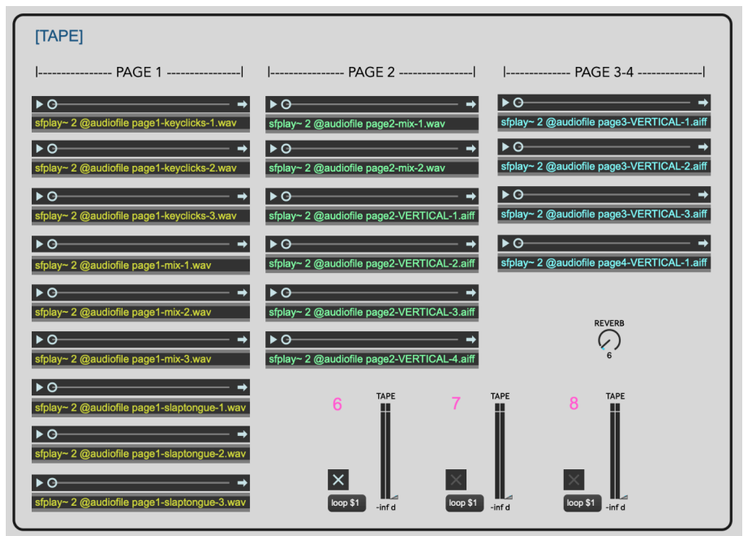
This piece unfolds as a dynamic duo between the bass clarinet and electronic sounds, offering ample space for improvisation within the provided material. The electronic performer's role revolves around attentive listening to the on-stage musician's performance. Reacting in real-time, akin to the dynamics of chamber music, is essential, resulting in a collaborative sonic creation.

However, it's crucial to exercise restraint and avoid saturating the final sonic result. Carefully select which sounds to trigger. Equally important is recognizing when to abstain, creating sections solely dedicated to the bass clarinet's solo moments.

For the performance, you will be tasked with two essential actions:

[1] FIXED-MEDIA: triggering Tape files

Tape files are categorized by colors, each corresponding to a specific page. Page 1 is represented by yellow, page 2 by green, and pages 3-4 by blue. Each file is labeled according to the bass clarinet sound techniques.



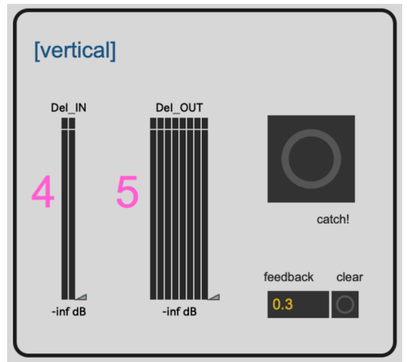
Your role, as the electronic musician, involves attentive listening to the live player's actions and responding accordingly. For example, if the player opts for a sequence of key clicks on page 1, feel free to trigger a corresponding file, such as “page1-keyclicks-1.wav.” You have the liberty to choose which file to play. Also, feel free to actively participate in the performance by introducing new (contrasting) sounds to the bass clarinetist. For example, when the player is executing the same key click sequence, you can trigger “page1-slaptongue-1.wav” to inspire the player to respond in a way that harmonizes with the electronic elements.

Allow “solo bass clarinet” moments, characterized by either pure acoustic expression or moments of silence. This deliberate choice enhances the final result by thoughtfully integrating electronic sounds into the overall sonority. Such an approach fosters a dynamic and cooperative atmosphere between the electronic and acoustic components, ultimately elevating the overall performance. Ultimately, you have the freedom to let a sound resonate as you transition to a new section featuring different sounds.

[2] LIVE-ELECTRONICS: feeding the “Vertical” delay

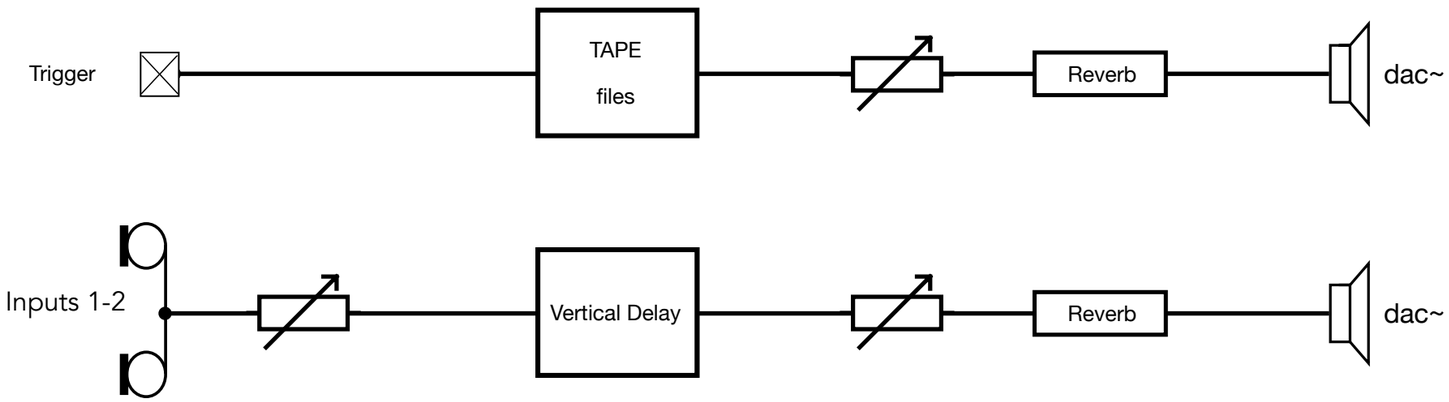
This specialized delay is designed for elongated sounds, specifically intended for use with sustained, textural elements from the bass clarinet, such as multiphonics. The objective is to capture a snapshot lasting approximately 1 second. Open-close the "DEL IN" fader to capture a brief segment of a sustained sound, or alternatively, utilize the “catch” button. The sonic outcome is a textured, prolonged sound that aligns with the overall envelope of a sustained sound from the bass clarinet.

Avoid letting the fader open for too much time, as it will rapidly increase in amplitude and be overwhelming. Do NOT use this for page 1.



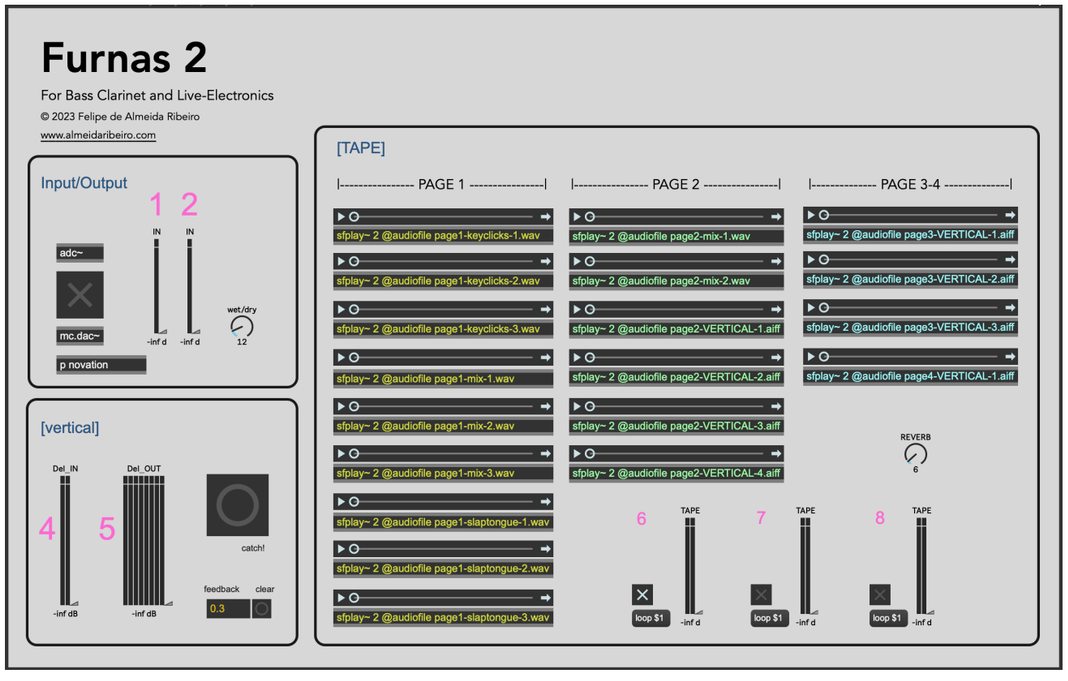
The feedback parameter is configured at 0.3. Feel free to experiment if you believe an alternative value may enhance the overall sonority. However, be mindful that exceeding 0.5 could lead to a prolonged delay, potentially hindering the transition to a new section.

SCHEMATICS



Numbers in **magenta** are related to the MIDI controllers' faders.

Feel free to use the "loop" function to repeat sound files →



This piece was developed at the EXPERIMENTALSTUDIO des SWR during a residency.

EXP | Experimentalstudio Freiburg des SWR

The creation of this work was kindly supported by

Unterstützt von / Supported by
Alexander von Humboldt Stiftung / Foundation
250 Humboldt
CNPq Conselho Nacional de Desenvolvimento Científico e Tecnológico
CAPES
Universal, Nº 409750/2021-2

Furnas 2

for bass clarinet and live-electronics

written on the occasion of the SiMN festival and premiered by Anna Koch

Almeida-Ribeiro

1 **As a loop... switch techniques ad libitum**

Bass Clarinet

improvised slap tongue

♩ = 40/46

3 5 5 5 3 5 3

"sfz" / mp

etc.

improvised key click

♩ = 60

7 6 3 6

"sfz"

improvised double staccato

♩ = 80

TKTK...

simile

mf

Density

1st layer
Medium density
Low dynamics.

ca.2'00"

2nd layer
Medium density
High dynamics

ca.1'00"

ca.45"

3rd layer
High density
High dynamics

© 2020, 2023 Felipe de Almeida Ribeiro

2

♩ = 40

B. Cl.

Elect.

slap

ordinario

sfp

(p)

pp

Harm.

mf/mp

bisbigliando

p

p

mp

Harm.

ppp

mf

pp

smorzato

spectral multiphonic

smorzato

f

mf

pp

Harm.

ppp

mp

3 ♩ = 40

10

reverse envelope

B. Cl.

Elect.

sfz *f* *sfz* *f* *sfz*

smorzato

3

p *f*

5

spectral multiphonic

p *mf*

Key 13

3

pp *mp* *mf*

Key 13

3

pp *p* *mp*

slap

3

sfp *(p)*

smorzato

3

(p) *f*

5

mf

3

sfp

smorzato

sfp 3

slap

3

sfp

4 ♩ = 40

B. Cl.

slap

sfp (*p*) *mf* *mp* *p* *mf*

Elect.

15

B. Cl.

p *mf* *p*

Elect.

B. Cl.

pp *mf* *p*

Elect.

B. Cl.

pp *mf* *p*

Elect.