

HARVARD UNIVERSITY  
Graduate School of Arts and Sciences



DISSERTATION ACCEPTANCE CERTIFICATE

The undersigned, appointed by the

Department of Music

have examined a dissertation entitled

*"Waves of Qualities"*

presented by

Sivan Cohen Elias

candidate for the degree of Doctor of Philosophy and hereby  
certify that it is worthy of acceptance.

Signature

Prof. Chaya Czernowin

Signature

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Date: May 12, 2017



*Waves of Qualities*

A Dissertation presented

by

Sivan Cohen Elias

to

The Department of Music

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

in the subject of

Music

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May 2017

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## Waves of Qualities

### **Abstract**

The world can be defined by territories and perceptions. Gender, roots and religion are related strongly with borders – or perceived borders – that frame the dynamics contained within and the conflicts at its edges. Wherever the borders are challenged, there are inevitably opposing forces – those which welcome expansion and blurring, and those seeking to re-establish the line that has been crossed. Both these forces operate in my work. Driven by that tension, I look to materials that appear in the “in-between” places found in sonic structures and occurring in societies at large; places where ambiguities are glimpsed, identities come and go, and contradictory impulses – performance, play, task, absurdity – operate simultaneously. What appears is a harmony of noises: misappropriations of gesture and consequence; of dry and wet sounds; low and high technology; rough and subtle at once; regular and irregular rhythmic orbits in tandem; materials at once tangled and estranged; hybrids of human, animal, machine; somewhere between unification and resistance.

During my time at Harvard, I have composed sixteen pieces, eight of which I herein present as my portfolio. These pieces represent my musical and artistic research from 2011 until 2017, and consist of various instrumentations and artistic contexts, including choreography for

musicians, composition for dancers, sound installations, and sonic costumes. Each of the works examines the elastic interplay between repetition and resistance thereto. Musical instruments, commercial objects, and discarded industrial materials are treated prehistorically. Their range of physical/sonic properties are observed by the application of a variety of forces, causing ever-changing patterns to perpetually emerge and disintegrate. The residual sounds of choreographed objects/performers and the choreography of the sound-making; their contributions toward and disruptions of one another's domains; the performer's movement and the movement of sound – all are allowed fruition as causal co-contributors, exploring themes such as gravity, puppetry, system failures and illusion.

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## Table of Contents

Abstract	iii
Acknowledgments & Dedication	viii
I. Harmony of Noises	1
II. Territories, Entanglement and Illusion	3
III. Puppetry and alienation	6
IV. Conclusion	7
V. <i>Alukot (Leeches)</i> – choreography for hands on a wooden surface	9
VI. <i>Rite of Springs</i> – sound-visual collaborative works with springs	29
VII. <i>Still Life with Squares</i> – mixed quintet and fixed media	44
VIII. <i>Playground, Puzzle III</i> – seven instruments and piano	65
IX. <i>Encrypt</i> – miniature for String Quartet with prepared bow	96
X. <i>Hack</i> – solo guitar for connected classical and electric guitar	107
XI. <i>.onion</i> – mini opera - tenor, soprano, guitar, cello, percussion, keyboard, string orchestra	122
XII. <i>Holes and Tunnels</i> – trio for piano, saxophone and percussion with objects and toys	186



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## Acknowledgements and Dedications

The combination of dramatic life events and involvement in such a challenging and constructive community, have enabled me to deeply explore my artistic approach and expand my work as a composer, artist and person. During my time at Harvard, I have not only been given good guidance, acknowledgement and facilities, but – most importantly – a fruitful, encouraging environment to share and discuss my work, not only with colleagues of the same field, but also within other artistic disciplines. Being surrounded by a brilliant and generous community of people, directly and indirectly, has inspired and contributed tremendously to the realization of my creative ambitions. Allow me to thank all the people I have met, heard, observed either in motion or stillness during my entire time at Harvard. I am confident that each situation, large and small, has influenced the daily decisions leading me to where I am today.

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As a parent in the US without family nearby, the work as a woman composer is even more challenging than ever.

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## I. Harmony of Noises

The title of my dissertation could also have been *Harmony of Noises*. My sound world is strongly influenced by the urban soundscape, the energies and associations in its undercurrents – mechanical and natural forces intertwining. The architecture of cities, much like online networks, often creates illusions that result in us losing our ability to detect where exactly a specific noise originates and what causes it. The city grid causes tunnels, echoes, reverbs, and kaleidoscopic angles. The denser the city, the more pronounced the disorientation-effect. The denser the city, the more overlapping and diverse the sound qualities it contains.

During travels, I often record the morphing environments. Airport escalators, trains, pipes, carts and new playgrounds, for example, often contain high squeaky notes that repeat with regular and irregular timing, with layers of other pitches accompanying it, sometimes in a microtonal interval or in octaves below and above it. I analyze and explore its mechanisms to understand which parts and movements are responsible for which squeaks, in order to isolate and better understand its qualities.

To me, the subtle changes create a “wave of qualities” whereby sounds and patterns undergo a mutation, ultimately splitting into new threads. Basically, it almost operates like tonal harmony, akin to creating a modulation through a common chord. In this way, hypothetically, a squeak could eventually become a drone, and still have a thread connecting them. Importantly, this does not necessarily develop in a linear way within a piece. Instead, almost like a cubist painting,

the material is fragmented and reconstructed from different angles, distances and focal points.

One such wave forms as an airport escalator transforms into a train on a bend, which transforms into a tram, then into swings, children whistling, and ultimately wolves howling. This movement starts with short squeaks and ends with multiple sustained wavy howls.

Another example is traffic strips on the Golden Gate Bridge in San Francisco, which shifts into geese quacking in a pen, blending with human chatter. Every car has a different mass and speed, resulting in slightly nuanced “quacks” and an ever-changing pattern.

An example from my piece *Holes and Tunnels* shows how I incorporate the movement of similar qualities through various instruments or objects along a piece. The process starts from encountering a babbling crowd, where one cannot detect content. Instead, there is a rising and falling of talking intonations (a micro wave of qualities unto itself). This sound is produced by fishing line rubbing a plastic bowl along its rim while plucking its sides. Another material that behaves similarly is a superball mallet being rubbed along piano keys. Next is a saxophone mouthpiece being blown into water while sliding the teeth up and down along the reed. When a specific quality transfers from one instrument to another, each instrument reinterprets the original source whilst also morphing into new threads.

## II. Territories, Entanglement and Illusion

The establishment of a hierarchy is not my concern, although the *struggle for* one is. Each of the elements in a piece raise associations that both reflect and confront each other, much like I view the Internet as a single organism always updating its search results, or a brain trying to understand itself. In this sense, there are no aspects of a performance that are not wholly part of it.

In my last few pieces - especially the mini opera, *.onion* – a recurring theme is systems operating under the surface; concealed places from where invisible strings are being pulled, influencing appearances. *.onion* is set amidst the Deep Web – the unindexed, anonymous and largely unregulated part of the internet normally hidden from view; a place of masked identities where criminals, activists and law enforcement swap appearances. Not only do you not know who's on the other end – you have no way of knowing whether any of what they offer is real. It is a realm of blurred boundaries and in-between spaces, often depicted as oceanic depths. Personally, I prefer seeing it as reflecting outer space, where links are floating and black holes might gobble you up unexpectedly.

In the context of the opera, the composition, libretto, choreography and design are all part of the same creative process, rather than different aspects or elements that are put together in layers. I envision something that is not layered by a visual aspect, a sound aspect and a narrative aspect, but rather one vision, which has, simultaneously, implications in the narrative, in the

visual and in the sound. I feel part of a movement seeking unification of fields that have traditionally been regarded as accessories to one another. The works of composers and artists as diverse as Georges Aperghis, David Helbich, Simon Steen Anderson, Marianthi Papalexandri-Alexandri, Steven Kazuo Takasugi, Jennifer Walsh, Jessie Marino among many others, create blurred boundaries between music and other fields. They are accompanied by a growing collection of individuals and groups whose agenda is the performance of such works. My vision is for the activity on stage to live as a complex single entity. In reality, collaborative work occasionally requires artistic and logistical compromise and flexibility.

When I talk about territories, the first association that comes to mind is social-political classifications, borders, thresholds, and disputes; struggles of control that are both inevitable and cyclical; the ongoing war of perceptions. I see my art as imitating the nature of these events, which is characterized, above all, by ever-changing-ness. Because associations keep changing, there cannot be a fixed consensus, or a defining proof, or emphatic truth. There are simply schools of thoughts swimming in all directions, forever knocked about by the waves and tides. As with politics and life, each piece is in a perpetual state of process.

Entanglement is both an internal and external state of affairs. In my piece *To Move You Stay*, a few connected threads reeled in from different directions result in a reactionary and involuntary relationship. It creates a knot increasingly transitioning the musical performance into a statue-like momentary installation. *Holes and Tunnels* is an example of the entanglement in the structure of the composition. As a material starts, it already stops, taken over by another material that might



split into another two, when we can suddenly hear the first one again trying to get out, but pushed away by other new materials, and so forth.

During the process of creation, each piece goes through many drafts, through which I learn about the materials. Initially, as I test the range of physical properties by the application of a variety of forces, it is not being thought of in time. I simply observe outcomes that have their own timing, and that timing changes as I discover more about the material and relate others to it. Towards the end of the process, I have developed a deep relationship with each material. Instead of keeping only the final draft, I construct a piece by collecting from all the different stages of my engagement and reconstitute them irregularly. Each part of the process has its own qualities. The linking of qualities in different stages of development is another example of a *wave*.

Threads and tubes are often used in my work, as I examine and play with their sonic and physical potential in different aspects of territory, entanglement and illusion.

### III. Puppetry and alienation

Puppetry is when a gesture takes over. The musical mismatch is initiated by dividing the organs involved with the playing into separate entities, each of which receives a task. The extent to which it relates to a designated outcome varies from piece to piece. The combination of instruments can also become a puppet; separate entities collided into one, changing into new roles and acquiring strings. However, puppetry does not necessarily refer to a master-servant relationship, or, if it is to be seen as one, it might be said that the puppeteer is also the puppet's puppet. Their relationship is absurd – playful and tense. To me, puppetry is the alienated, unexpected visitor taking us for a moment to their own world.

#### IV. Conclusion

My music is an outcome of how I perceive nature, including human nature. Instead of illuminating a certain state of affairs, or defining a specific attribute, each of my pieces are defined by their ever-changing-ness. This is what human nature means to me. It is a perpetual state of process; struggles and contradictions and constant realignment.

Informed by empirical research, I embrace the means of trial and error, both in the compositional process and as preserved in the piece itself. Each piece of mine is the edited result of hours upon hours of footage recorded either in my studio or the many ad hoc music-making spaces arranged during travels. These videos document discoveries and nuanced re-enactments, as well as external disturbances, timelines of personal milestones, realignments, occasional destruction and abandonment of ideas. The purpose of the recording is two-fold: it allows me to examine the sound result and choreography more closely, and serves as a means of communicating instructions contained in the score to any would-be performer.

To me, excitement comes from engineering living encounters that are capable of being experienced differently from one performance to another. In this sense, performers are also asked to operate in the in-between and experience the life contained in the piece. This is the very reason why I record myself performing so many drafts, over and over again. The cumulative experience always has a different energy. These undefinable relationships between performers and objects and outcomes is how the piece remains ever-changing. This is what I think of as

elasticity. The player should expect a range of possibilities along with pre-determined sounds.

The passages I end up including in the piece are not necessarily the most poignant or sophisticated. I combine parts that are very raw, with parts that contain more knowing, and the range in between. The things that happened during the making and the observing, while waiting and thinking, doubting, frustrated, possibly give rise to comical accidents. The relationship between me and the material creates a new material – an alienated material – that I also use through gestures and creatures, reflecting the story of the composing back from on stage, creating another wave of qualities.

# ALUKOT

Choreography for percussive sounds

For hands, wooden surface, strings and imaginary ball

Duration: 15-17 minutes  
February 2012

Sivan Cohen Elias

## Wooden Surface design

The wooden surface is a self-design of a short table with a slight slide forward shape.

The surface is 160cm L X 80cm W plywood. The front legs are about 20 cm H and the back legs are about 40 cm H, so it will be easy to see the action on the surface when looking from the audience towards the stage, in any normal concert halls.

On top of the surface on the left side a 35cm L X 80cm W hardboard block with its rough side on top. On the right side there are 2 more 30cm X 30cm hardboard squares attached to the right edge but not glued. Both are facing up with their rough side.

8 strong magnets are glued underneath the plywood board and 8 tuning forks with different tunings are magnetized to them from below.

The player hides at least 5 different electric guitar strings underneath the hardboard surfaces, so they appear gradually on the board while turning the two squares.

One string, preferably low E or A, is waiting with the player's left hand.

## Recommended amplification:

2 contact microphones attached to two sides of the surface' center

1 flat condenser underneath the left side of the surface

2 condenser microphones held with stands from both sides diagonally to the surface

5 channels mixer

2 speakers stand in both sides of the stage. Low height that as much as possible align with the audience' ears.

## Staging

It is recommended to place the short table in an empty spot on stage.

The board should stand on a wooden surface, so the tuning forks can be operated while striking the board. However, a black fabric should be placed around it so it creates an isolated area, as in a puppetry theater. A strong spotlight should come from the top.

The score has to be bind as a scroll book and a rope is attached to its first page, so another person (the scroll puller) can pull the scroll in the particular moments, according to a sign that they agree with.

It is recommended, if possible, that the player and the scroll puller will be sitting in their place while the audience is still set up in their chairs and start when there is a complete quite.

More is recommended to hide the string that is in the player's left hand until she/he raises her hand in the pre-action part of the score.

## Notation arrangement

Every system is organized in the following manner:

### Upper line:

The drawings at the upper line are referring to the overall movement of the hands and the elements on the surface. When there is no drawing on this line it means that the last position that was shown in the last picture stays the same until there is a new picture. Arrow line shows a gradual movement that start at the first drawing and ends at the second one.

### Second line: Right hand: divided into two lines:

- 1) The hands and the squares change of shapes and positions
- 2) Rhythm and dynamics of the action

Third line: Left hand: divided into two lines, as in the right hand line.

### 1. The palm's drawings:

\* When there is a picture of the hand it zooms in on the hand's position. There are a few variations:

#### 1. The hand shape:

- open fingers: 

- closed fingers: 

- half open fingers: 

- fist: 

\* The dark marks on particular parts of the palm show the areas where the hand touches the surface.

\* The arrow that appears inside the palm shows that the force against the surface should move through the indicated areas.



Example of the two instructions above: (mm. 16, Right hand): the black marks on the fingers areas show that the fingers touch the surface, whereas the center of the palm doesn't. The arrow starts with a big dot on the bottom right side of the palm and ends in the upper center of it. The line is curved along the fingers, which means that the pressure on the board goes from the right bottom side of the palm moves through the fingers from the little one to the tow, then move to the center and up.

\* If the entire palm (or fist) is turning into another angel the arrow shows the turn direction outside of the palm (or fist).



Examples: 1) (mm. 19, Right hand): Here every finger has to follow its own arrow so in the end of this action all the fingers are open.



2) (mm. 26, RH): In this case the back of the fingers touch the surface in a 90 degrees angle. The arrow shows that they should turn, while remain on the surface to be in about 225° into the next



indicated position, which is:

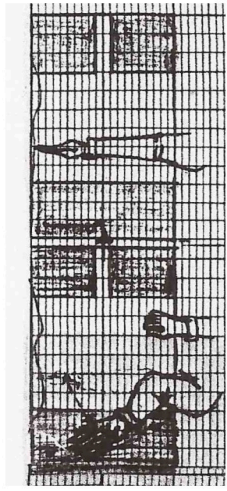


- Dashed arrow shows a movement into the air or from the air. For example:

Third line: Rhythm, dynamics and articulations.

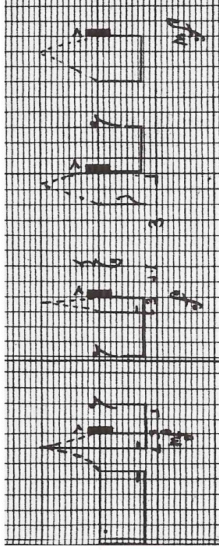
This line show the length and the energy of each hand position. For example, the left hand in section A entirely is doing the same gesture, which is shown at the beginning in mm. 3: the palm is doing a knife shape as the little finger touches the surface. The forehead is on the surface, too. The entire action is shown on the first line with the following picture:





The first picture on the left shows that the palm and the forearm raise up while the elbow remains on the board and the second picture shows that the forearm and the palm came back the lye on the board as before.

Below the two pictures, the notation for the left hand shows the rhythm and the dynamics of the attacks on the surface, as in the following example:



The squares:



1. The direction of where the square has to move to on the surface.
2. The side of the square that is facing up (dark is the rough side, bright is the flat side).
3. When the square has to be turned over, it is shown with 3 pictures: an arrow of the direction of how to turn it, the position of the square in the middle of the turn and the position of the square at the end of



the square: (mm. 41)

**Which part of the hand is making the action:**





Usually the soft parts of the palm are making the actions, whether it is the face of the palm, the fingers-tips or the back areas of the palm. When the nails are making the action the symbol ♪ will appear above the note head. In order to come back to the soft areas the symbol ○ will appear above the note head.




**Note heads:**

**Amount of pressure of the hand (fingers or nails)/square/string on the board and its sound result:**

Symbol	Amount of pressure	Sound result
◇	Extremely light pressure	In between no sound at all to a very soft hissing sound
○	Moderate pressure	mf sounds
□	Extreme pressure	When it's a precedence movement of the hand from place to place and the movement of the pressure point is in extreme pressure it doesn't let the hand go on the surface so easily; therefore the result will be an irregular discontinuous sounds of knacks, squeaks and frictions.

**Different gestures:**

- : Put the hand on the board with no sound
- : Let the palm/forehand (according to the indicated drawing) to fall on the board and stay there. If the string is on the board it might bounce.
- : Strike
- : Close fingers into fist when it touches the board.

- Open fingers from fist into straight fingers forward, in which only the fingers are going up to the air and the face of the palm stays on the board.
-  Fast and strong movement of the fingers-nails rubbing the board up. The movement starts with extreme pressure and goes into nothing when the hand is going up to the air. The result is a squeak with a raising pitch.
- When the fingers-nails movement is passing the edge of the board towards either outside of the entire surface or from one board to another. The result is a small-moderate attack.
- (With the string): Hold the string with one hand on one side of the string while the other hand takes the same edge of the string and pulling it up with a strong, short and discontinuous movement so in the end the other hand reaches the other edge of the string and go out while the "pulling hand" is now holding the string from one side and the other side falls naturally down.
-  Irregular Circular hand: the hand moves in a circular movement in a way that the player imagine that there is a ball and the hand is moving around the ball from all over its sides while it shrinks and grows irregularly. The result is an irregular friction of the hands on the board together with knocks and strikes of the fingers-joints on the surface. The irregularity is diverse by the speed of rolling the hand around "the ball", the weight of the hand and the size of "the ball".
-  Tap fingers (The numbers indicate the finger number that should tap according to the system that the thumb is no. 1 and the rest accordingly)

#### Precedence movement:

- Continuously scratching the brown board with the fingers-nails
- Forearm is rising up so that the elbow is still touching the board and the palm goes up. The highest point of the line is when the palm is as close as possible to the shoulder. All the other points are in between the range of between the board and the shoulder respectively.
- Forehand goes down towards the board.

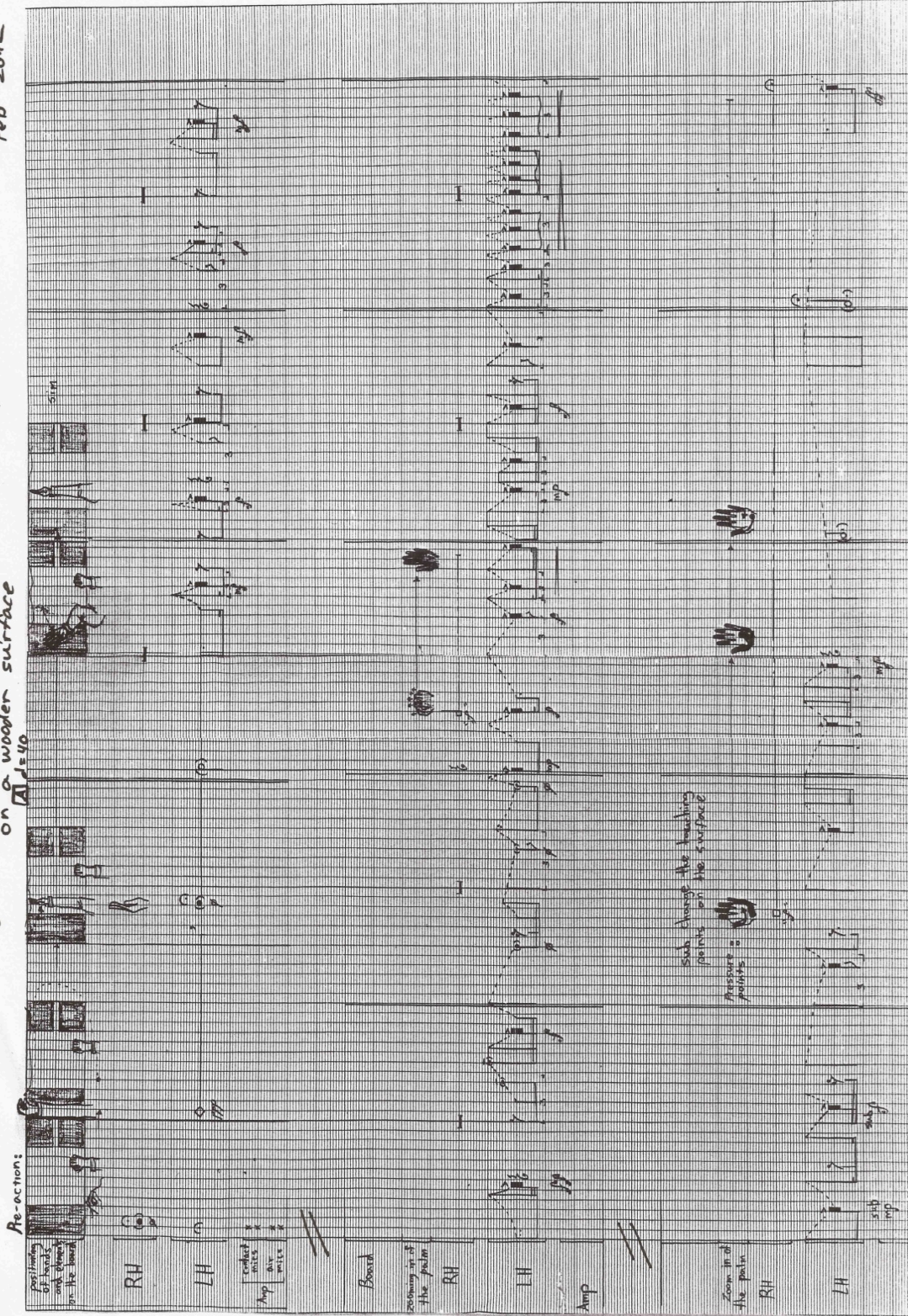
#### Dynamics:

Dynamics that are written with quotation mark ("r" or "ff") emphasize the intention of giving much pressure to the gesture but the result is not necessarily match.

# ALUKOT

A Choreography for hands and percussive sounds on a wooden surface

Sivan Cohen Elias  
Feb 2012



Handwritten musical notation on a grid background, organized into three systems (26, 21, 26) with staves for RH, LH, and Amp.

**System 26 (Top):**

- Staff 1 (RH):** Labeled "Principal on the board". Contains rhythmic notation.
- Staff 2 (RH):** Labeled "Finger points". Contains rhythmic notation.
- Staff 3 (RH):** Labeled "Length and rhythm". Contains rhythmic notation.
- Staff 4 (LH):** Labeled "LH rhythm". Contains rhythmic notation.
- Staff 5 (Amp):** Labeled "Amp". Contains amplitude markings.

**System 21 (Middle):**

- Staff 1 (RH):** Labeled "RH". Contains rhythmic notation.
- Staff 2 (LH):** Labeled "LH". Contains rhythmic notation.
- Staff 3 (Amp):** Labeled "Amp". Contains amplitude markings.

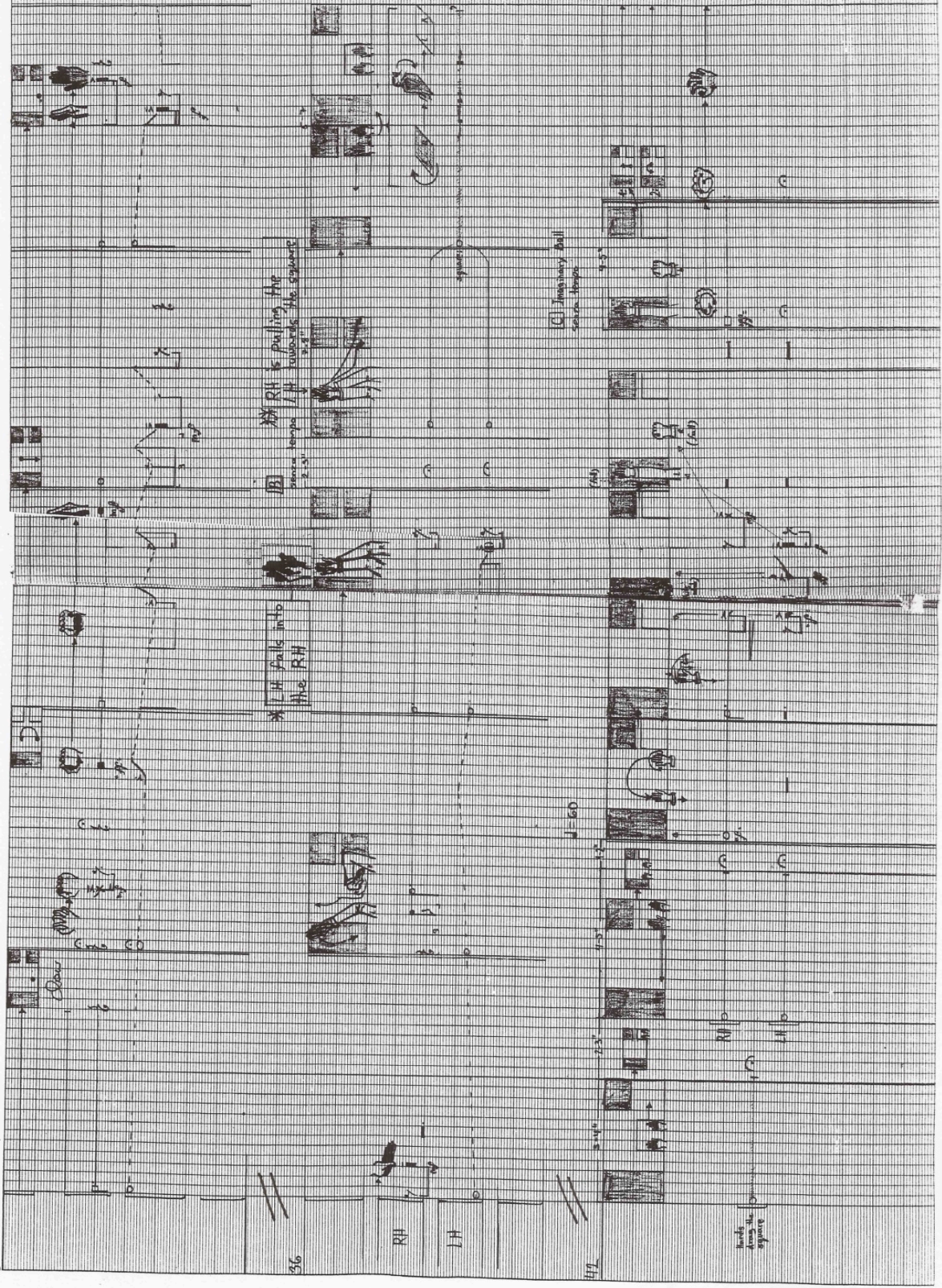
**System 26 (Bottom):**

- Staff 1 (RH):** Labeled "RH". Contains rhythmic notation.
- Staff 2 (LH):** Labeled "LH". Contains rhythmic notation.
- Staff 3 (Amp):** Labeled "Amp". Contains amplitude markings.

**Annotations:**

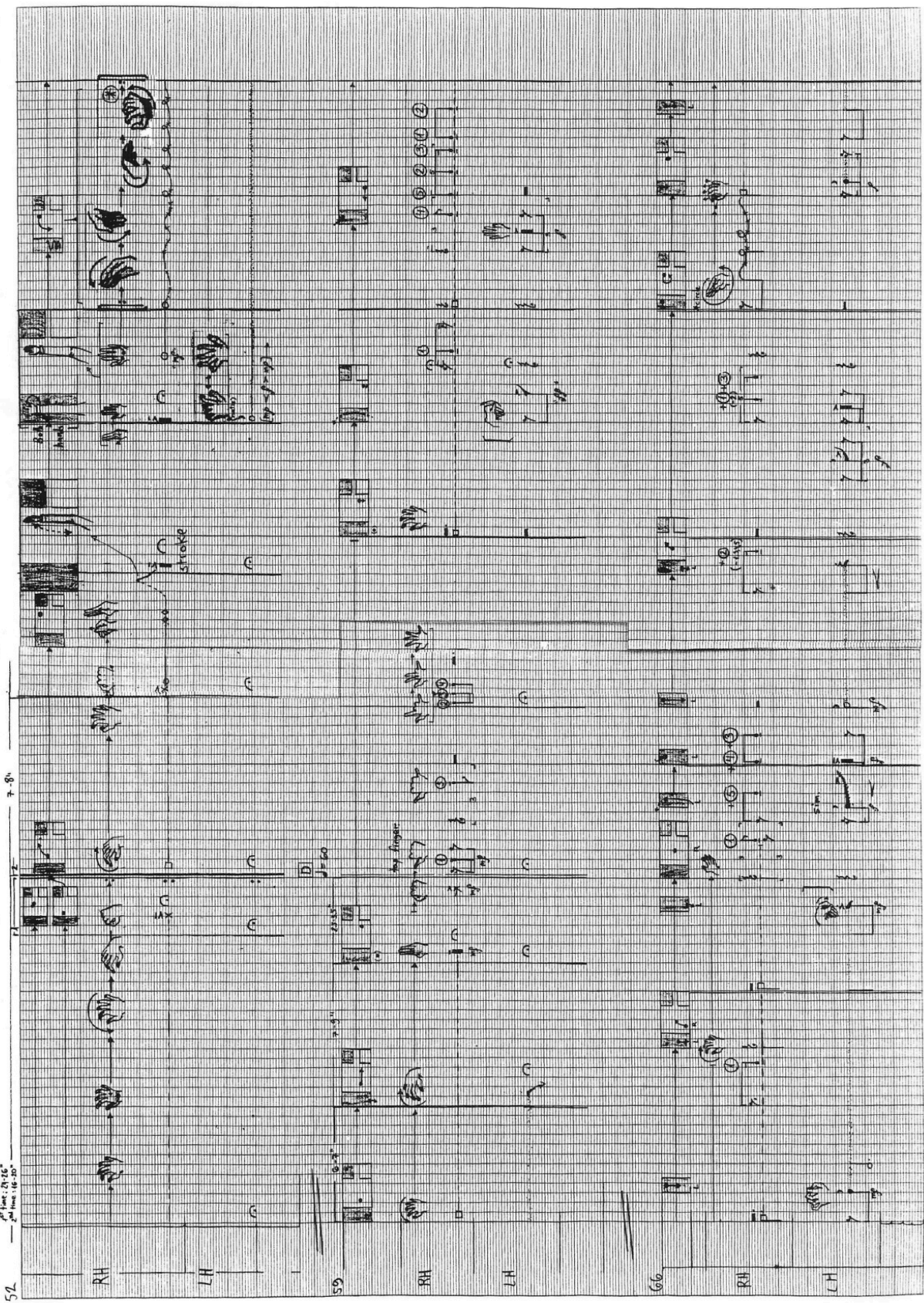
- "Close fingers - straight" with a diagram of a hand.
- "Close fingers - no fist" with a diagram of a hand.
- "Only fingers" with a diagram of a hand.
- "Fingers" with a diagram of a hand.
- "Close fingers" with a diagram of a hand.

34



44 Lines, 24 1/2" x 30"

- 4 -



The image displays a handwritten musical score on a grid background, organized into three systems. Each system contains staves for the Right Hand (RH) and Left Hand (LH), with some systems also including a Treble Clef (TC) staff. The notation includes notes, rests, and various musical symbols such as slurs, accents, and dynamic markings like 'p' and 'mp'. Fingerings are indicated by circled numbers (1-5) above or below notes. The score is written in a cursive, handwritten style.

**System 1:** The first system shows RH and LH staves. The RH part begins with a treble clef and a key signature of one flat. The LH part starts with a bass clef. A Treble Clef (TC) staff is present below the LH staff. The music features a mix of eighth and sixteenth notes, with some slurs and accents.

**System 2:** The second system continues the piece. The RH part has a circled '1' above the first measure. The LH part includes a circled '1' above the first measure and a circled '2' above the second measure. The notation is dense with rhythmic patterns.

**System 3:** The third system concludes the page. The RH part has a circled '1' above the first measure. The LH part includes a circled '1' above the first measure and a circled '2' above the second measure. The notation continues with rhythmic patterns and slurs.



86

-6-

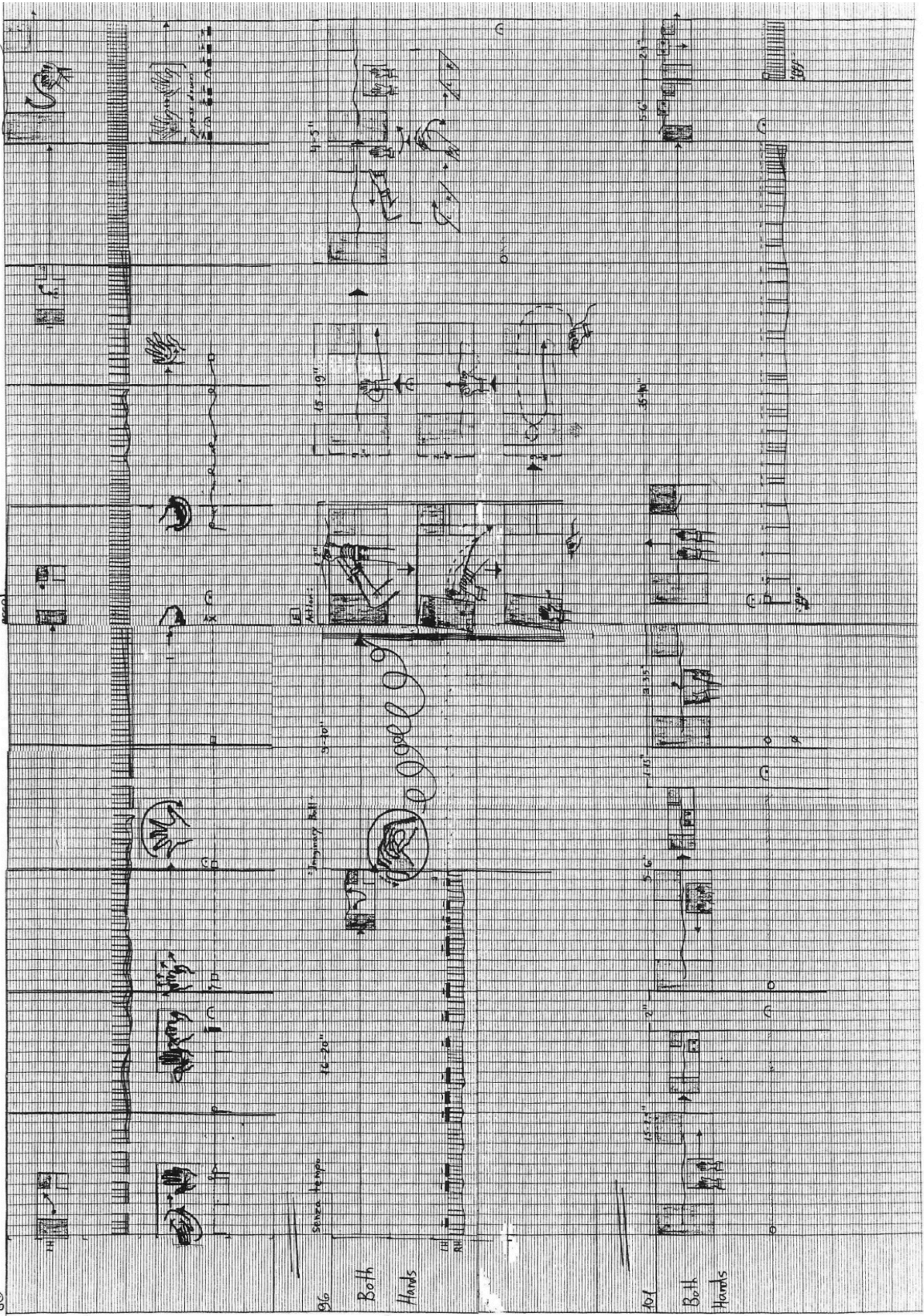
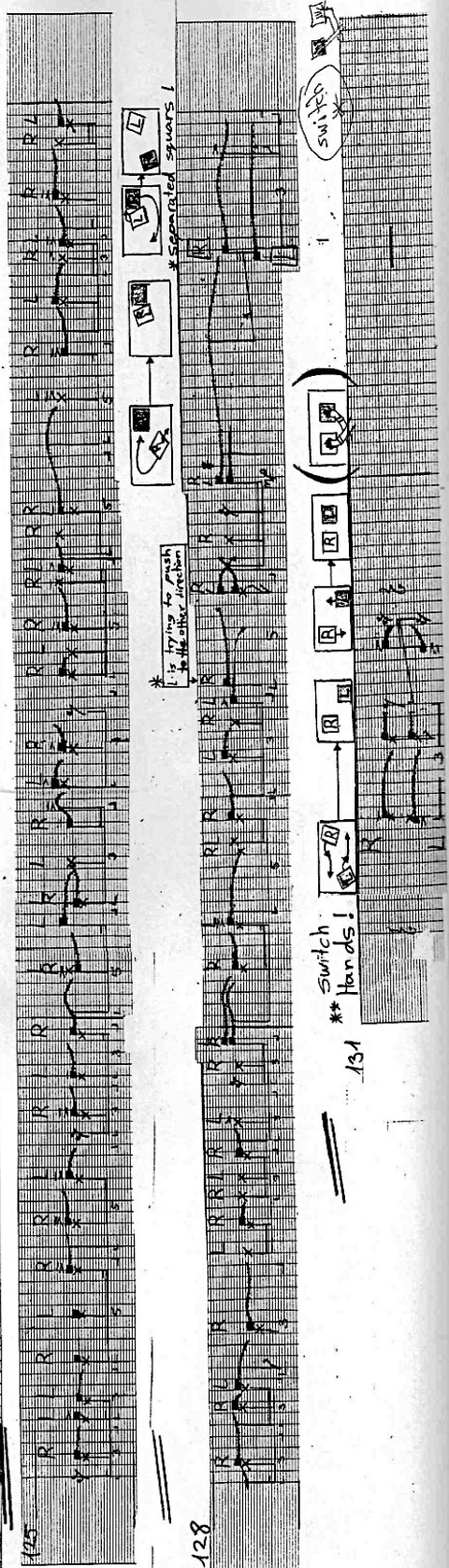
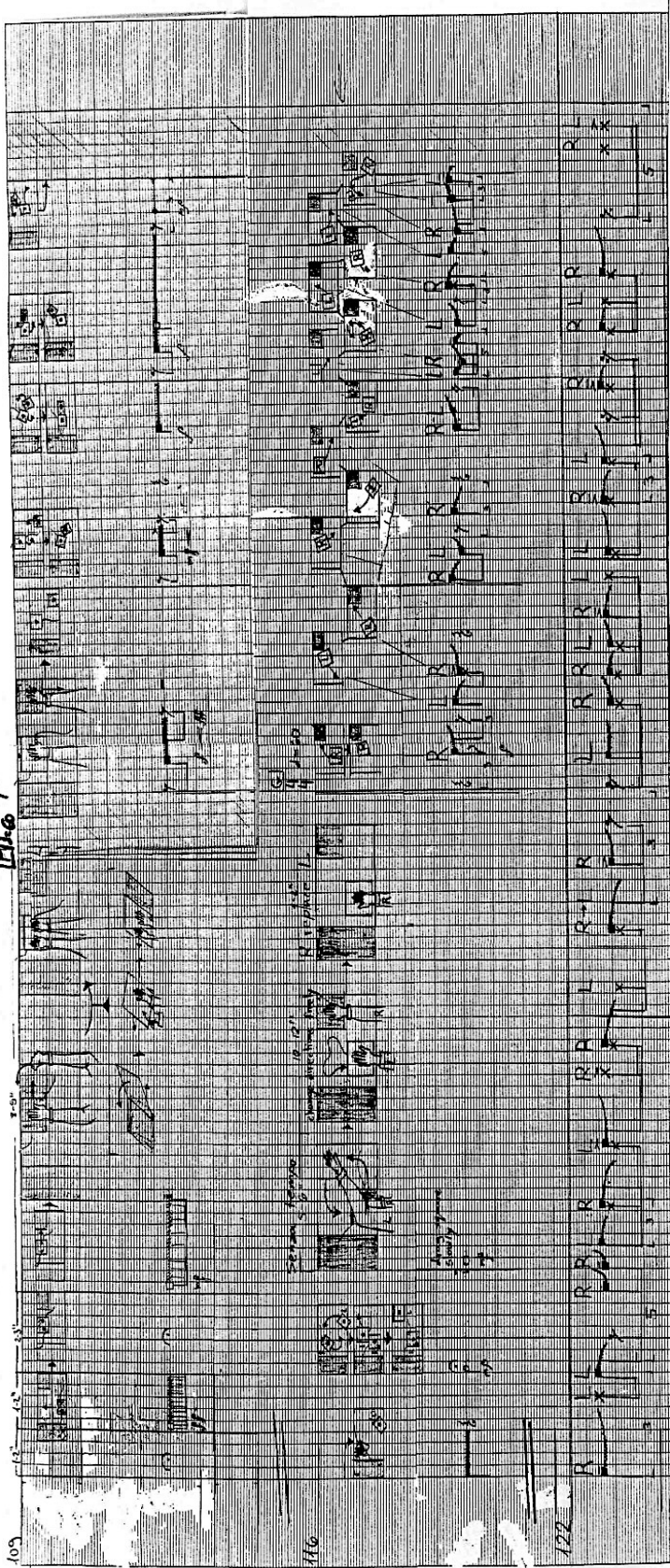


Fig 7-



H

133

Hand  
Right  
Hand

RH

LH

Hand

RH

LH

Hand

RH

LH

Hand

RH

LH

Hand

RH

LH

Hand

RH

LH

Hand

RH

LH

Hand

RH

LH

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RH

LH

Hand

RH

LH

Hand

RH

LH

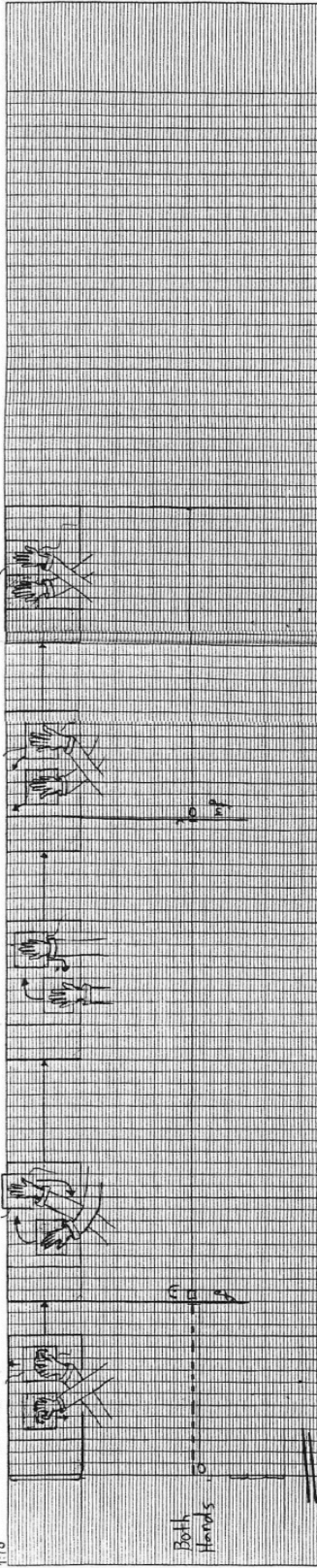
Hand

RH

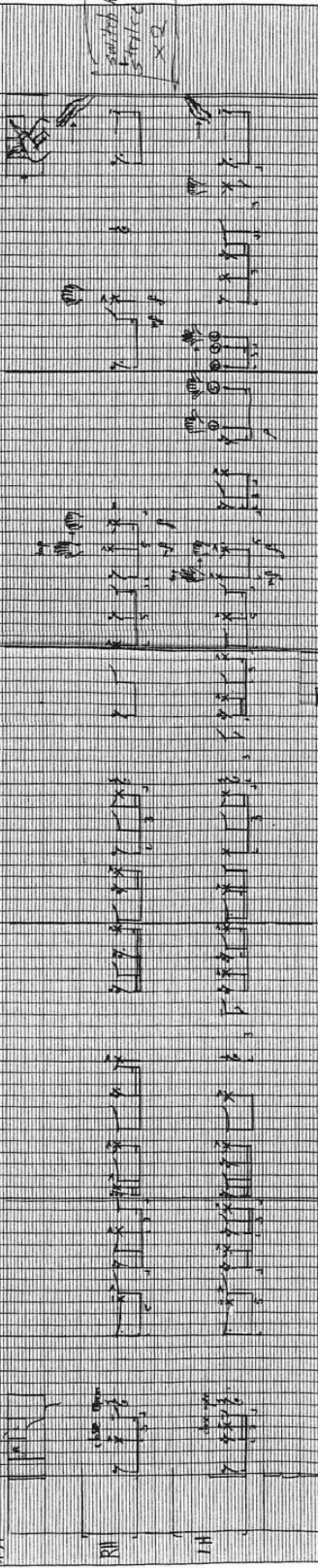
LH

The image shows a handwriting practice sheet on graph paper. It is divided into several horizontal sections, each containing multiple rows of lines. The sections are labeled with 'RH' (Right Hand) and 'LH' (Left Hand) on the left side. The handwriting consists of various characters, including letters and symbols, written in a cursive or semi-cursive style. Some characters are enclosed in boxes or have arrows indicating stroke direction. The paper is numbered '133' in the top left corner and '8-' in the top center. The handwriting is dense and fills most of the page.

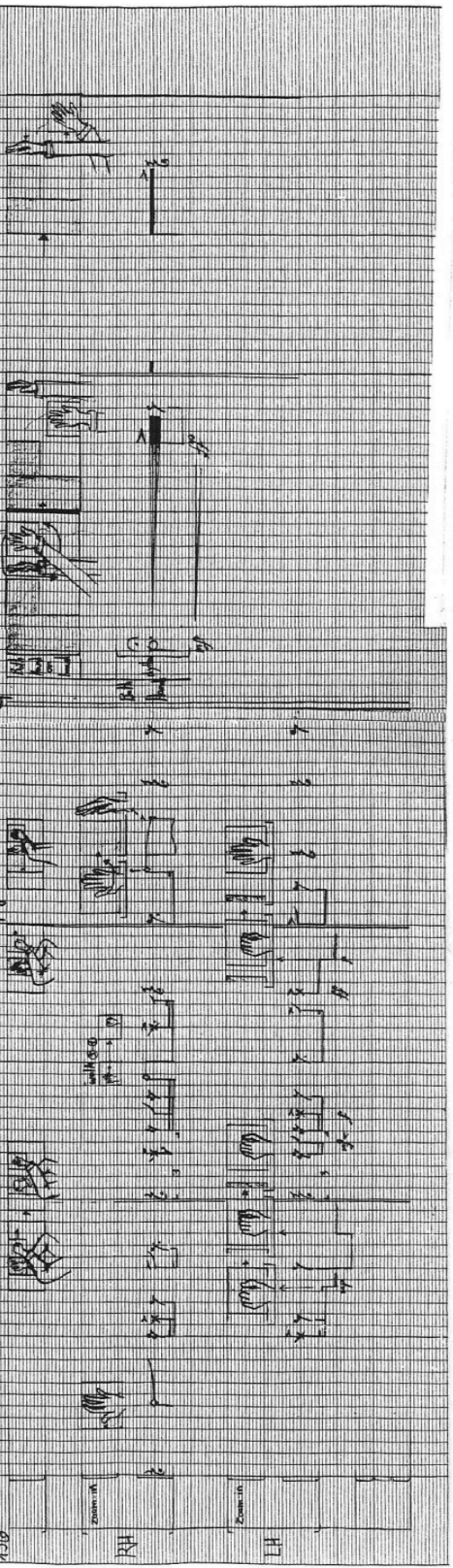
148 senza tempo

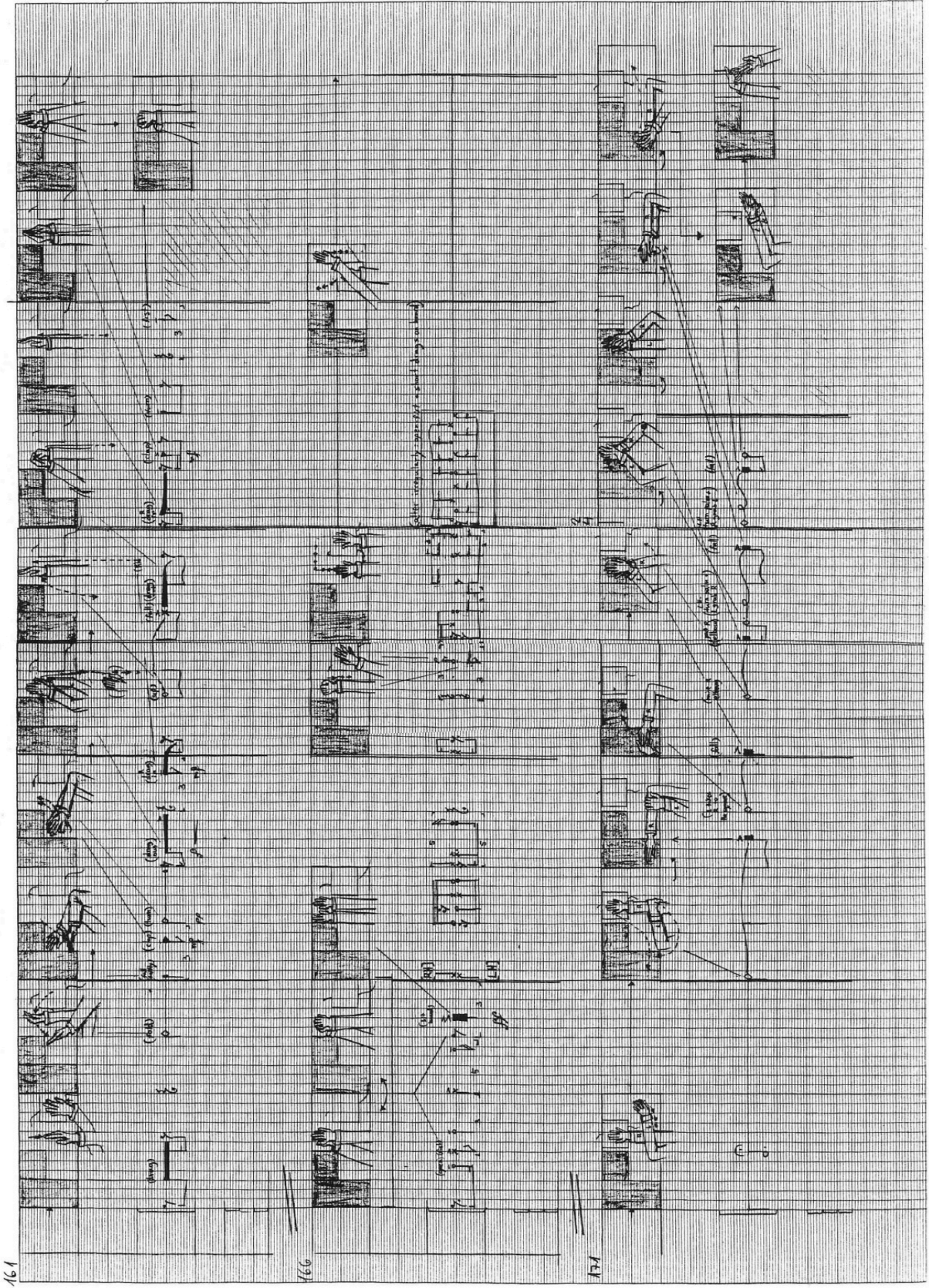


151



156





- 11 -

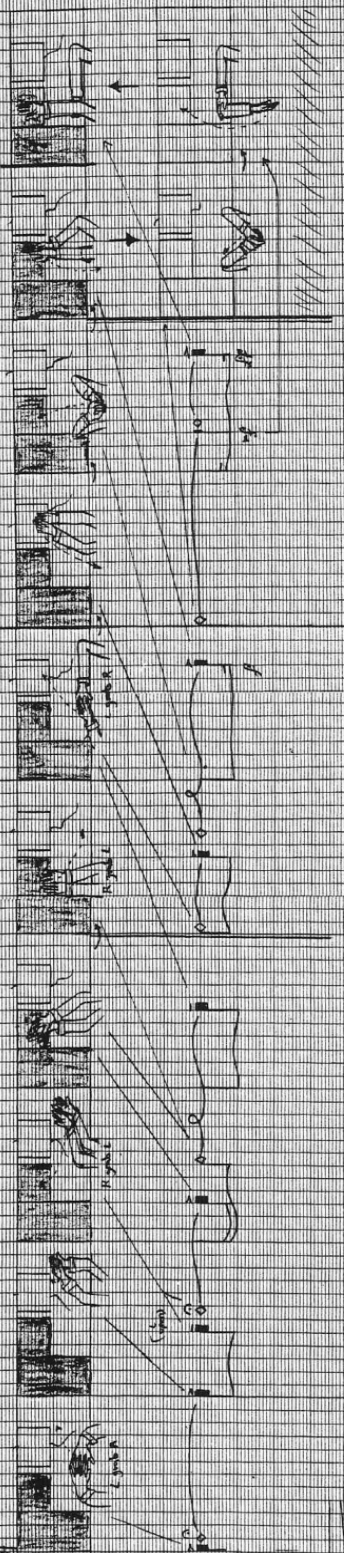
Seron tempo  
Imaginary ball

175

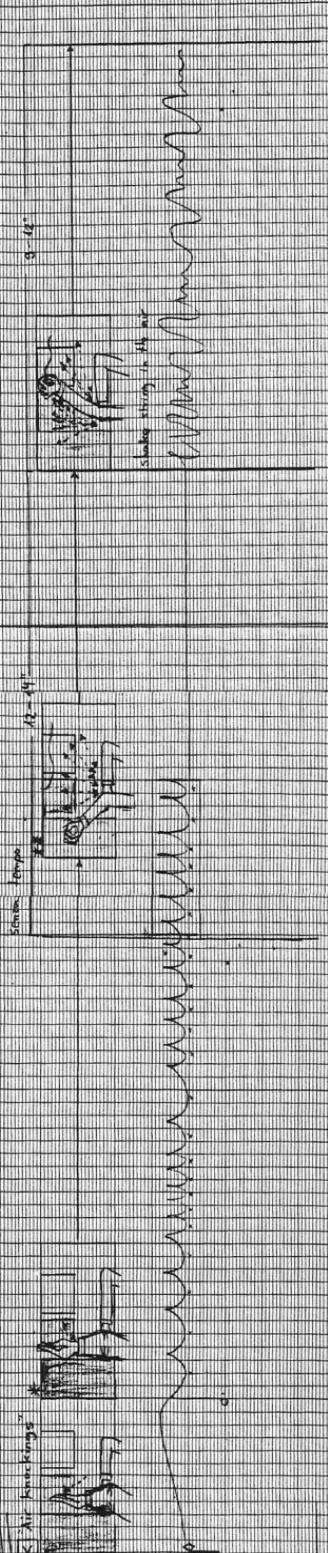


20-24"

180



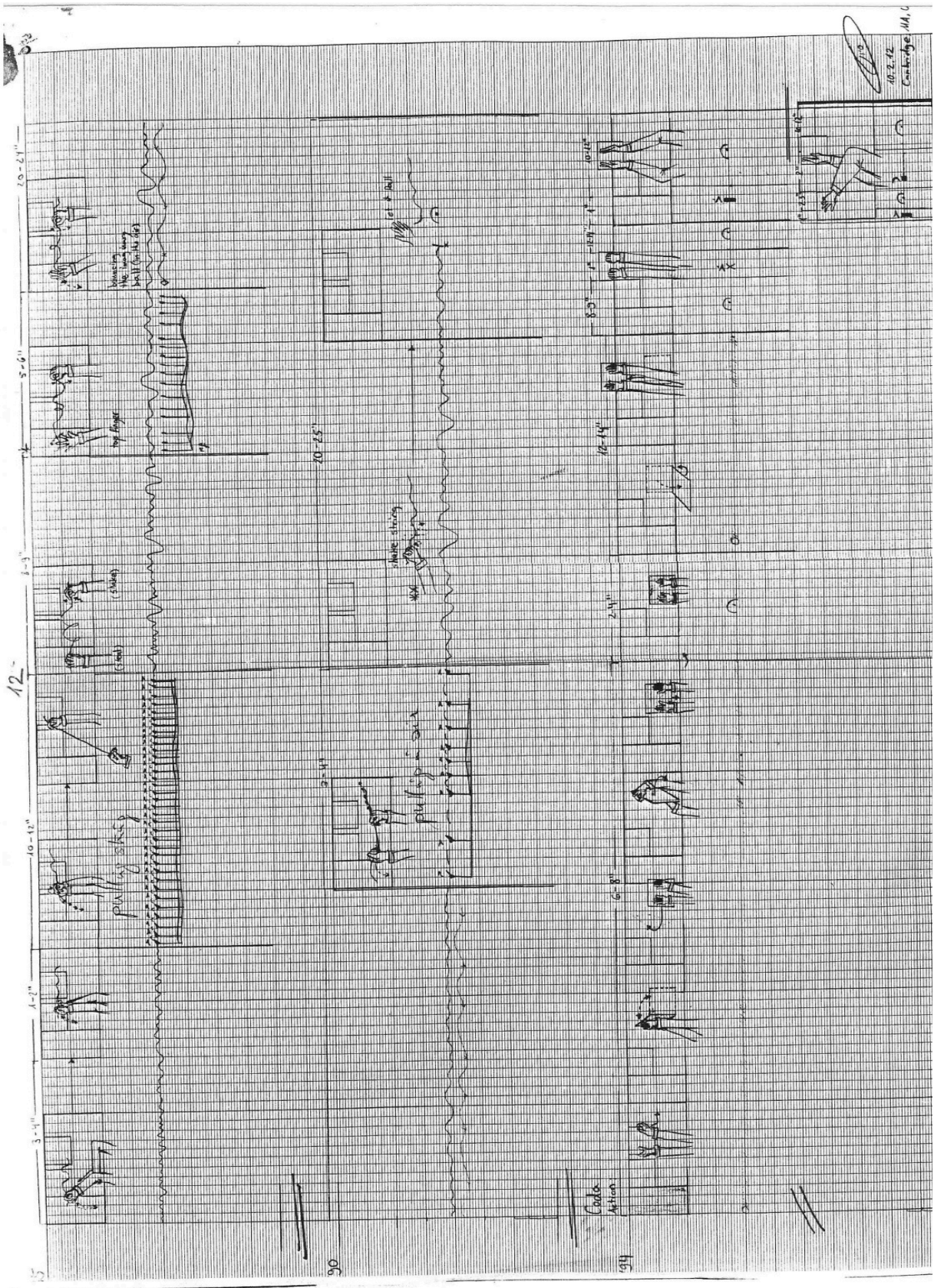
182



K. Air - Keras - Kering

Slender string in the air

Handwritten signature or name



Sivan Cohen Elias  
Sivan.coel@gmail.com



## VI. Rite of Springs series

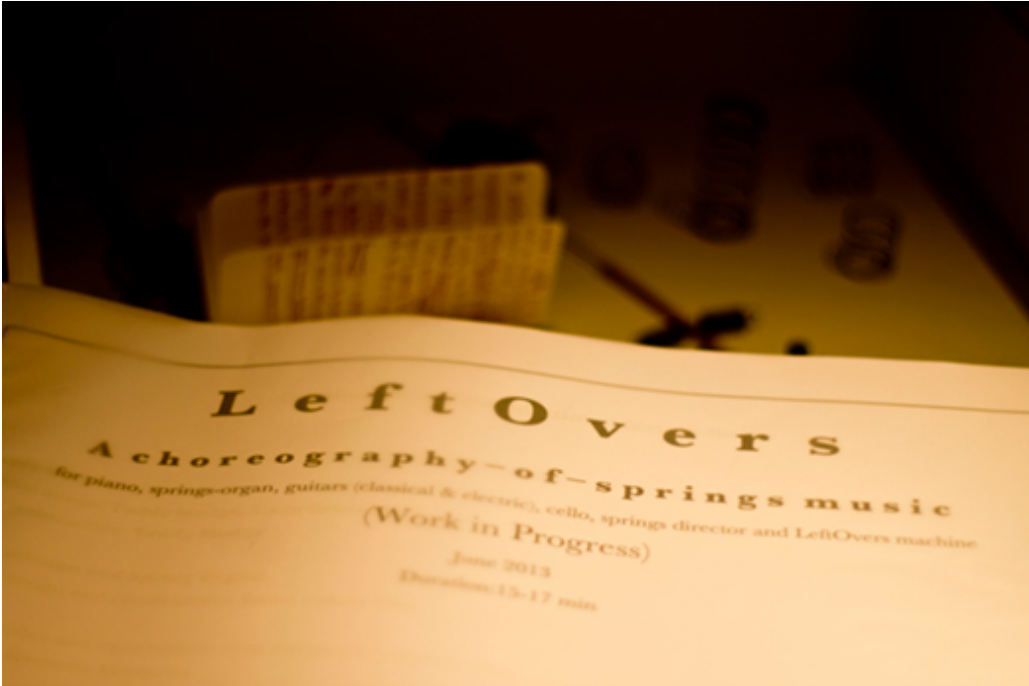
### **sound-visual-movement collaborative works with springs**

This work series includes different periods of collaborations with engineers, dancers, choreographer and performance-artists with which I created structures and situations with the attempt to invest various metamorphoses of the use of springs and alike-materials and to create hybrid bodies and systems that simultaneously present visual shapes, movements and sounds.

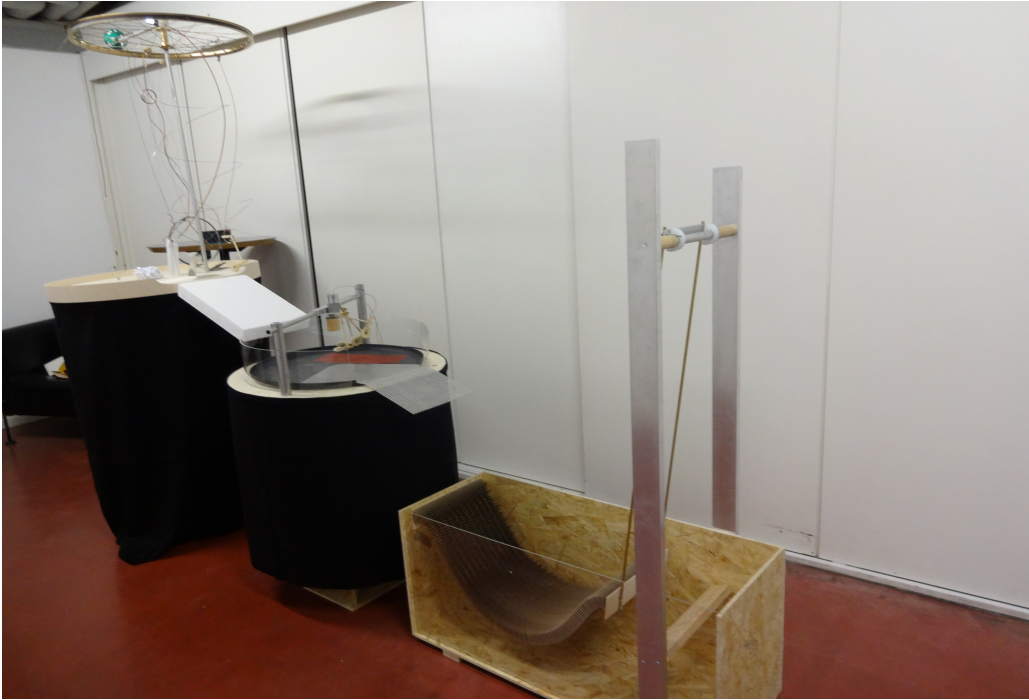
The following images represent the series in a division of three parts with a chronological order. They exhibit the metamorphoses of the string image and use throughout the different settings and collaborators:

1. LeftOvers machine, built collaboratively with engineer Teddy Mudge, exhibited at Akademie Schloss Solitude for a month and used in a musical composition performed by ensemble Ascolta, summer 2013
2. Seven interactive sound sculptures using wood, fishing line, instruments' strings, springs and tubes, exhibited at the Department of Visual and Environmental Studies Open Galleries, Cambridge, fall 2013
3. Rite of Springs - Video editing of a collaborative workshop with the New Chamber Ballet and choreographer Miro Margolis, summer 2014

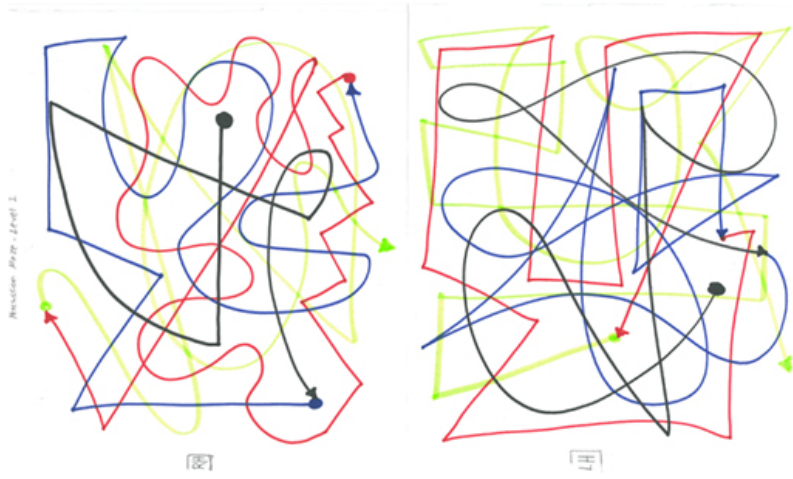
1. LeftOvers Machine:



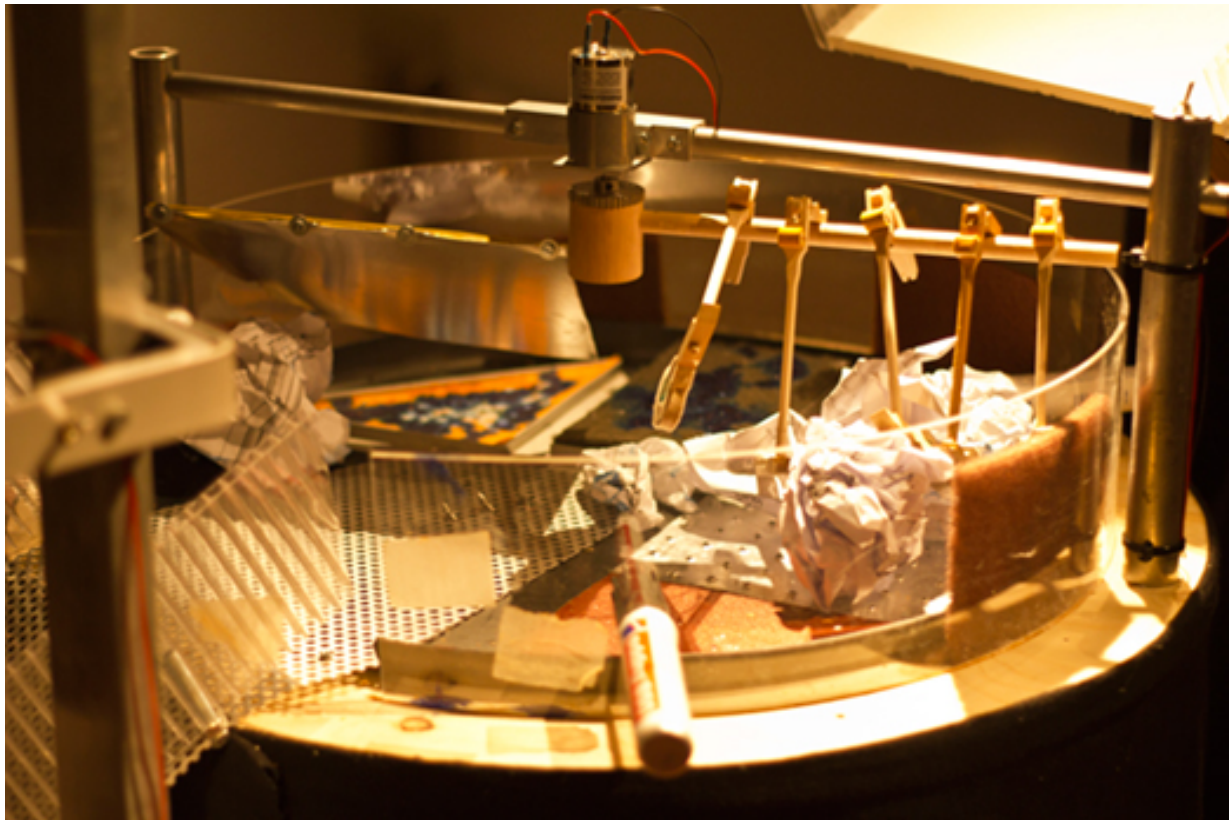
2.



3.



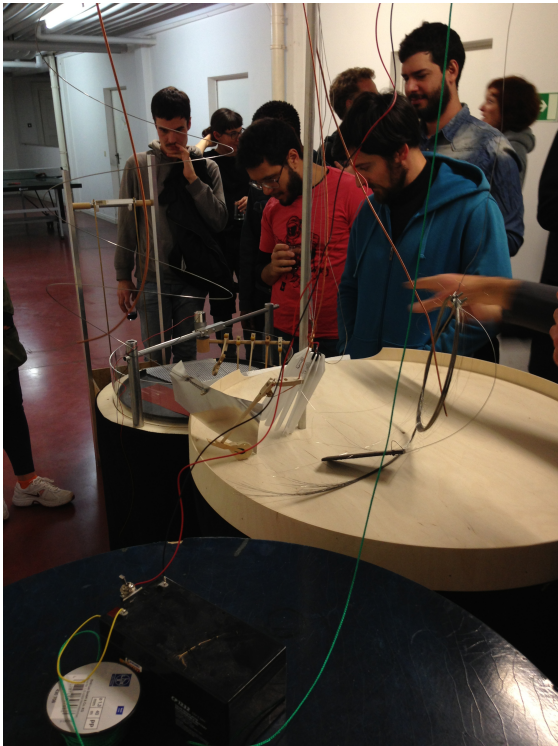
4.



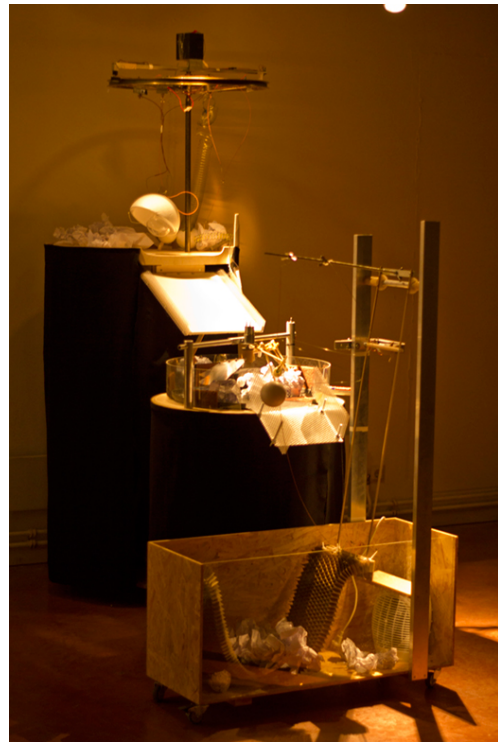
5.



6.



7.



8.

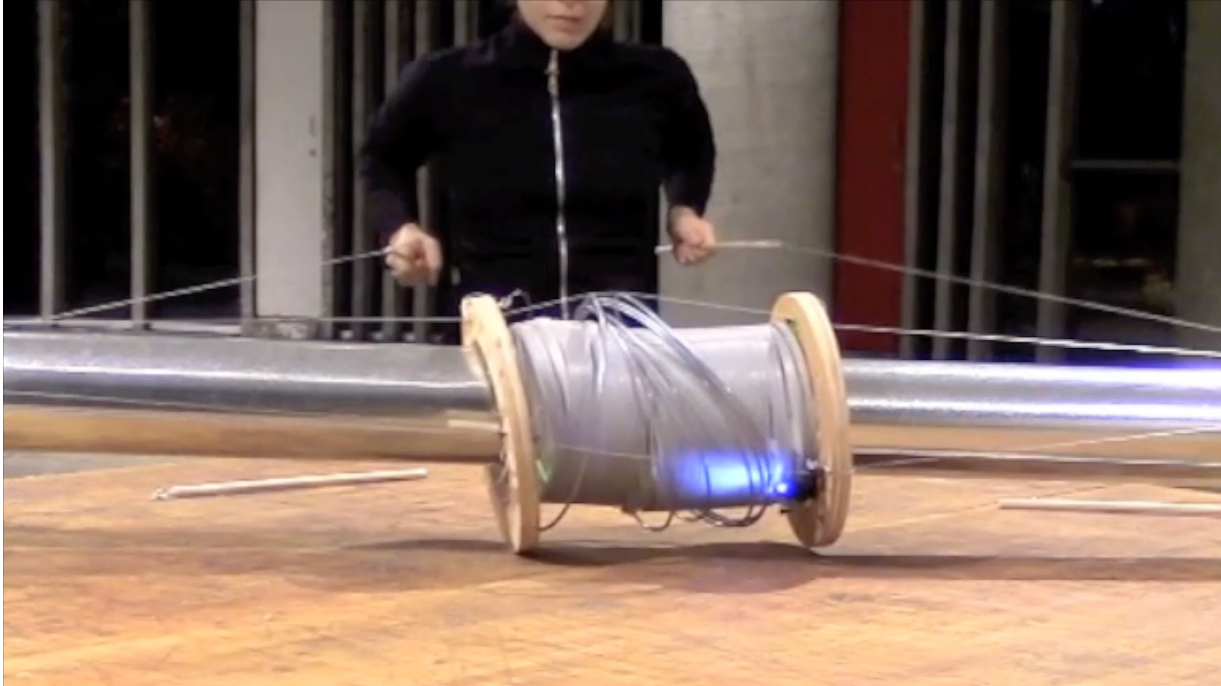


9.

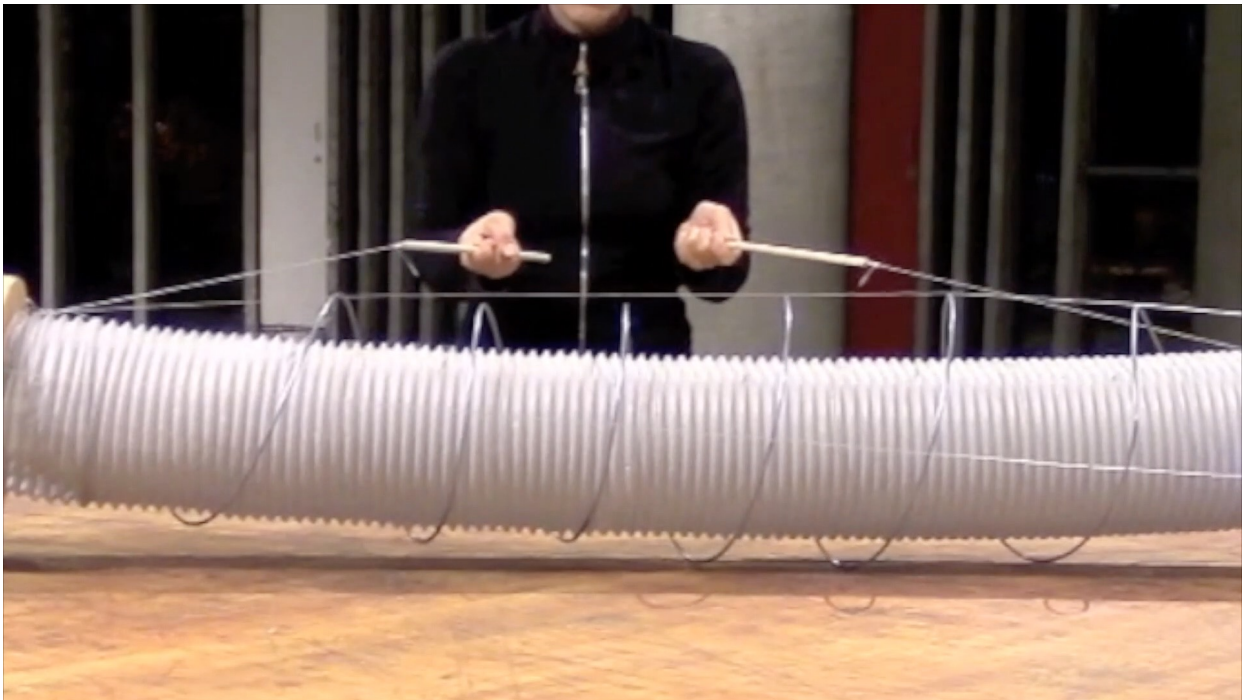


2. Seven interactive sound sculptures:

1.



2.



3.



4.



5.



6.



7.





3. *New Chamber Ballet:*

1.



2.



3.



4.



5.



6.



7.



8.



9.



10.



11.



12.



13.



VII. Still Life with Squares

STILL LIFE  
WITH  
SQUARES

SCENE I – PART I

For cello and mixed quintet of Bass flute, violin, bass clarinet, piano, and percussion: marimba/metal-shaker board

JUNE 2014

SIVAN COHEN ELIAS

ii

The piece is written for ensemble Talea to be premiered during the Summer Composition Institute, Harvard Music Department 2014

TO REY



III

## Still Life with Squares - Program notes

Waves of qualities.  
Qualities of behavior.  
Behavior of environments, created by sound of shapes  
and a virtual story - -

A story about squares.

We are inside a machine, an unknown machine. Or maybe it is something else. But if it is a machine, we don't know what does for the outside world. We don't know what it looks like and what its purpose is. We don't know if it has one at all. What we know is that we are its parts. We, the musicians, together with our instruments, were implanted into this machine in order to take part in its operation. We are programmed to press buttons and turn knobs at particular times and in particular ways. These controls create sounds. Sometimes. And together there is some sort of music, but it's not the music we remember playing in a past life. Sometimes it brings a memory of something, but it is hard to recall what. We are trying to resist our current mechanical cycles. We are trying to come back to our old routine of being simple musicians in the world of life, but this can happen maybe only in our dreams.

Our leader today is the cellist. He tells us what is being made today.  
Today is the squares' day. The task of the day is to draw and cut squares.

Yes. It is true. I am the leader of the day. So, this being the case, I would like to aim today for my left hand to be released from being stuck behind my back all the time. I need it to be at the front, like in old times. It is so uncomfortable and unpleasant to my ears. I will do my best and you guys have to help me in doing so. I have no idea what my left hand is doing behind my back, and I don't care. I just want it to be in front again.  
That's all.

---

Still Life with Squares is the first part of the first scene of a larger theatrical work. The entire work, as well as the current scene, consists of the following underlying concept:  
*Seeing the fields* - a fusion of visual objects, virtual shapes, physical movements and sonic outcomes composed with the aim of creating, at once, a clear and ambiguous concept of reality, like a painting of still life.

Sivan Cohen Elias

Duration: about 13 minutes

IV

## Inventory:

### **Cello** – Special tuning.

Cello holds two bows. Each hand holds one bow. Left hand holds the bow in a vertical position behind the back and tries as much as possible to not expose the bow to the audience until the very end, when it has to come to the front.

### **Quintet:**

#### **Bass Flute**

#### **Violin** – Special tuning

#### **Bb Bass clarinet** (score in transposition)

**Piano** - Entire strings are blocked with wooden hardboard squares. On the first and second bass-string bars place two 10.5' X 10.5' X 3/16 G squares of hardboard (Face side smooth and back side rough) with the rough side on the strings. It is recommended to glue a small handle to the smooth top part for part C of the piece, for when you have to drag the squares up and down the strings (see images 1 and 2).

#### Additional items:

- A metal (proffered) or glass guitar bottleneck (image 3).
- Two Styrofoam balls and attached piano string, hanged on your wrist (see more instructions and images below).
- Ping-pong ball

#### **Percussion:**

Marimba – for logistic, visual and sonic reasons, your fingers have to be lengthened. For that, wear paper origami fingers on all of your fingers and attach wooden thumbs on the fingertip of each paper finger (image 4). Make sure it fits to your finger and doesn't bend or fall too easily\*.

3.5 X 2 feet Slide metal stand with bass shakers underneath (image 5).

Expression pedal

Midi foot controller

Amplifier

Laptop with Josiah Oberholtzer's patch

(for more details about the electronic installation see the Electronics and Amplification section)

11' X 11' X 3/16 G squares of hardboard (Face side smooth and back side rough) wrapped with a tape on one of its edges (image 6).

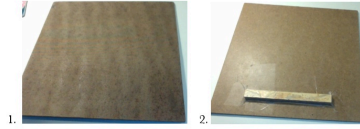
### **Installation for every one of the Quintet players:**

A piano string is attached to a Styrofoam ball (its tip is inserted from one side of the ball to the other side). The loop side of the string is attached with a rubber-band. The rubber band is hanged on the instrument's edge or on the player's wrist, according to the performer's comfort. The other edge of the string slightly touches the floor, so it produces a quasi electronic sound, amplified by the Styrofoam ball (see image no. 7 and 8).

\*Learn how to make easy paper fingers in the following link: <https://www.youtube.com/watch?v=1YKpxDEhKkM>

**Objects images:****Piano:**

Hardboard "square" – for the piano installation:



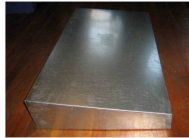
Bottle-neck:

**Percussion:**

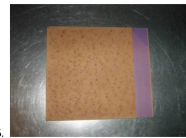
Origami Finger:



Metal-shaker board:



Marked Hardboard square:

**Quintet:**

Piano-string/Styrofoam-ball attachment, hooked on a wrist. The edge of string slightly touches the floor:



## Electronics installation

**Percussion Metal-Shaker Board installation:**

2 Transducers transducers are hooked under the Metal-shaker board  
 The sound source comes from a laptop max patch (designed by Josiah Oberholzer)  
 Laptop is connected with audio cable to the input of an amp  
 The amp is connected to the transducers  
 The midi-foot controller is connected to the laptop with USB cable  
 The expression pedal is connected to the midi foot controller with TRS cable.

The goal is that the different noise patterns would mostly cause the metal board to shake and to amplify the patch sounds through the board.

**Click track:**

A Second laptop with the click track source  
 3 DI boxes with 2 output/input each  
 6 headphones

## Amplification

Ideally all the instruments will be amplified in the following manner:

**Cello:** Clips contact microphone, clip to the bridge

**Bass Flute:** Attached condenser microphone

**Violins:** Clips contact microphone, clip to the bridge

**Bass clarinet:** One Standing condenser microphone

**Piano:** Two standing condenser microphones from both sides

**Percussion:** 3 standing condenser microphones (see 'Stage Arrangement' image for illustration)

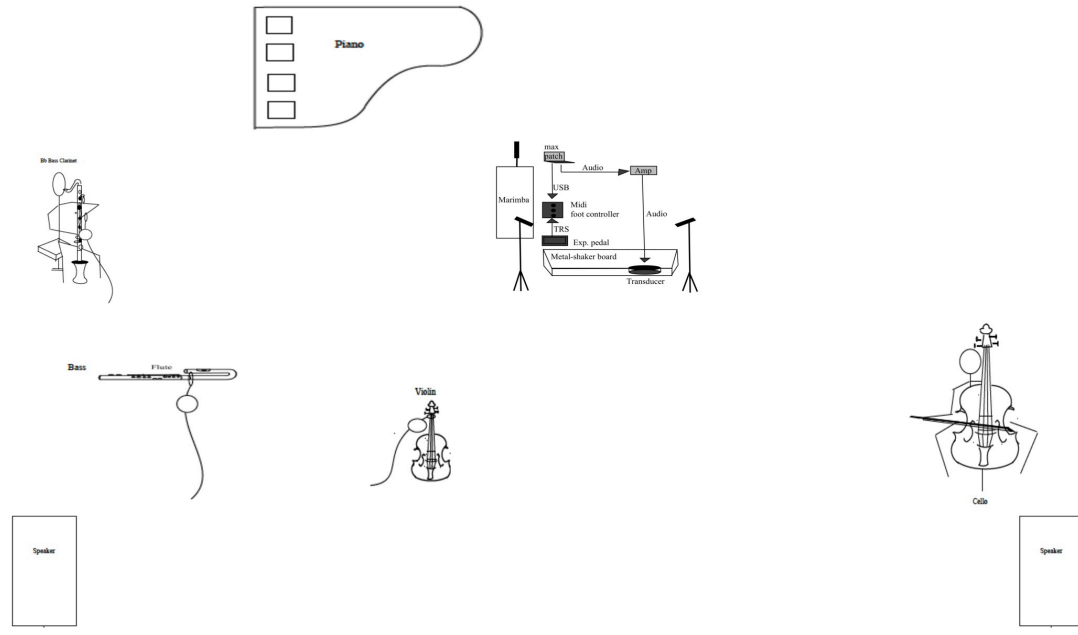
**12 channel mixer:** 9 channels amplify the instruments

1 channel sends the click track to all the DI boxes to all the headphones.

\* The technician or the composer should press the start key on the click track player after about a minute from the beginning, done with a hidden queue with the cellist.

**2 speakers** on both sides of the edge before the stage

Stage Arrangement



Performance Notes

General:

Section divisions:

- Part A: Reality**
- A-I: Life of Parts and Stillness - Exposition (mm. 1 [57-72 seconds])
- A-II: Buttons and Drawing Squares (mm. 2-29)
- A-III: No Sub-title (mm. 30-74)
- A-IV: Lose Control (mm. 75-85)
- A-V: Tabla Circuit error message (mm. 86-105)

**Part B: Dream**

- B-I: Metal-Shaker-Square Solo (mm. 106 - 119)
- B-II: Japanese Trio [violin, percussion, cello] (mm. 120-134)

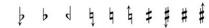
**Part C: Hallucination**

- C-I: Polyphonic Square Chord (mm. 134-159)
- C-II: Still Life with Springs - transition (mm. 160-167)

**Dynamics:**

All the dynamics show the amount of effort and energy that one should put, but it doesn't necessarily result with the same amount of volume.

**Microtonal scale (1/8th tone scale):**



**Cello:**

**Tuning:**

- I = G $\frac{1}{2}$  3
- II = A $\frac{1}{2}$  2
- III = E $\frac{1}{2}$  2
- IV = D $\frac{1}{2}$  2

As mentioned before, the cellist holds two bows. Each hand holds one bow. Left hand holds the bow in a vertical position behind the back and tries as much as possible to not expose the bow to the audience until the very end, when it has to come to the front. Therefore, basically, this entire scene functions as an etude for the right hand.

**Part A-I: First position:**

Right hand: Hold bow in the following position: Frog side rests on your right knee. Bow-partial 5 rests with 1/2-hair / 1/2 wood on strings III-IV. Inhale and exhale long breaths through the nose quietly and deeply. Each breath cycle lasts between 6-10 seconds, naturally. Let the cello "breathe" with you by letting it move forward and backward with your chest. Since the bow rests on the strings, the movement of the cello produces natural light and quiet sounds on the strings. From time to time the bow also bounces slightly caused by the pulses done with the left hand bow (read below).

Left hand: Produce quasi col-legno on the air, as small vertical strikes away from your back. The imaginary is that as part of the unknown machine this bow sends electric pulses into the machine's engine. Each pulse occurs every 1-5 seconds irregularly.

**Clefs and staves:**

Drawing Shape:  
B-Dir:  
B-Dir:



**Drawing shape:** This layer shows the direction of the square, which the bow is drawing in a particular framed section. For example: This drawing means that the next 4 movements of the bow will draw this exact square, starting from the arrow with the dot in its starting point.

**B-Dir (Bow Direction):** 3 main directions: ordinary up and down bow.

The third direction is marked with the following symbol:



Vertical, straight bowing - neither up nor down-bow: stay on the same bow contact point while moving from one string contact point to another.

**BCP (Bow Contact Points):** The bow is divided into 6 partials. 0 is the frog and marked as F, and 6 is the point and marked as P. The bow might move horizontally farther from the cello, therefore our scale is as follow:


- (9) - (8) - (7) - P - 5 - 4 - 3 - 2 - F - (-1) - (-2) - (-3) ...

**SCP (Strings Contact Points):** The clef illustrates the cello appearance from the musician position, so the bridge is on the top and the pegs are at the bottom of the clef. There are two parts behind the bridge. One is the part where the strings are usually covered with a colored fabric. The second is the metal part of the string behind the bridge.

**Alt** (Altitude): This is a 3D view, always is scored in red. 0 point means that the bow touches the cello strings. 20° is 20° away from the cello forward. In the end of the piece there is also a turn back. This is indicated with degrees (45°, 90°, 180°).

**B-Pos** (Bow Position): In a few cases the position of the bow is being marked, usually it refers to the degree it should be held. Sometimes it includes a particular movement of the hand as well (as occurs in mm. 1 or 92)

Below the contact-points clef there are two other staves:

**RH:** Alternate between: Tablature staff  and one line staff, when the movement is in the air and there is no pitch/sound.

**LH:** One line staff. The notes for this hand are always written with no precise rhythm but only relatively to the position in the measure.

**Exceptional case:** In part B (Japanese trio) the approach to the cello in terms of altitude is ordinary. In other words, when there is a pitch to play, the hand approaches the cello; when there is none, then the hand is away, naturally. Therefore the altitude scale disappears from this section. In addition, the clef itself is diminished to the range in between the tasto and behind the bridge. The main clef comes back only in mm. 138 till the end.

**Last section (C-II):** From the last beat of measure 161 till measure 163 the movement that the score illustrates is as follows: The bow starts bowing strings III-IV with much pressure up-bow. In mm. 162 it approaches the waist of the cello as it turns in 90°. Then your body turns even further in almost 180°, as the bow enters to the loop your hand creates between the elbow and the wrist, which is behind the back. As the RH bow is half way inside the gap of the LH, it pulls the LH to the front and immediately let the LH bow falls approximately on the ordinary position of the cello and immediately the RH bow falls on top of the LH bow and creating a x shape between them. Let both bounce naturally. The RH "keeps" the LH from moving, as if the LH is a prisoner that wants to escape.

At the second bounce (mm. 165), the left bow wants to jump again (since it is "used" to make the pulse behind the back), so it goes up, pushes the RH bow and quickly drops back to the strings and create the same x between them again as they bounce. When the LH bow pushes the RH bow it causes also a friction between the two.

The third time the LH pushes the RH bow much further so in the end they switch positions and the RH bow falls before the LH. This time the friction between the bows is even wider than the previous one. Let them bounce naturally and then freeze for some time together with everybody.

#### Noteheads:

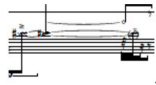
- ◇ : Flautando bowing / bow with light pressure on the strings
- - Bow with much pressure. In part B (Japanese Trio) this note-head also indicates to press the bow on the strings with other bow contact points, i.e. the metal screw and the frog.

#### Clefs and staves:



The low staff is for the key-clicks (fingers) only. All the notes are written with a stem facing down (first half of the illustration above). The upper one-line staff is for the mouth breath. All the breathing notes are written with the stem facing up (second half of the illustration above).

#### Split notation:



When the key click and the breathing match and create an ordinary pitch, they are written as an ordinary note-head on the lower staff with the stem facing up (as in the second note in the illustration). If there is a split afterwards, it means that the breathing sound is to be stopped or to produce more of an airy sound while the key clicks are being heard through the air (as happens in the third event in the illustration).

#### Part A-III



When the exact fingering is indicated it means that the "choreography" of the keys that should be depressed or released are the most important thing, the pitch result is not important in this point, but only the flow and the rhythm of the key click. However, when there is a combination of the fingering with a pitch that needs to be played by blowing the instrument ordinarily, then the pitch result should be the one that is written.

X - A small attack of the bow on the strings. Exceptional case: Part B (Japanese Trio): X means to pluck the indicated string with the metal screw. For the LH: X with accented staccato means to produce the pulse function, as indicated at the beginning of the piece.

#### Quintet in General

All of the quintet players act as buttons of a machine of some sort. This means that everything that you do has a mechanical reason.



Parts A-II to A-V resemble the concept of switching on and off imaginary machinery-knobs. For this reason, these sections mostly contain basic percussive sounds (key-clicks and fingering attacks). Every depression is accompanied by a small body movement swaying to the left, and when the key is to be released the body goes to the right.

#### Winds



- X note head indicates the key that needs to be depressed. The small-bracketed note indicates the expected sound result. The keys are to be held till the next action. However it is being written with breaks, to indicate that there is no sound involved. The next action could be one of the next two options:



- Bracketed X with a staccato or accented staccato attached is the sign of accentually releasing the finger from the indicated pitch-keys.



- Hold the keys of the indicated pitch till the next pitch. Only when the next pitch has to be pressed the fingers change position. Two possible movements from pitch to pitch:

1. Adding fingers to the fingers that are already depressing the keys. Please don't release the fingers and depress the same keys again, but simply add the rest of the fingers that should join for the particular pitch fingering. It is acknowledged that the sound result might be different than the written pitch.
2. When the entire fingering is different - some keys have to be released and some to be added in order to produce the next pitch. In this case, the entire fingering changes, normally.



From mm. 37 for the B. flute and mm. 51 for the B. clarinet the exact fingering is indicated, whether it is a special or normal one. The depression of the keys is shown as usual with X note-heads and the key-release gesture is written as bracketed X, as before. However, sometimes not all the keys are to be released, but only a few particular ones, so the keys that are left to be depressed are the ones that normally would produce the pitch that is written in a small round normal head on the same stem with the bracketed x releasing note-heads.

#### Part A-V:



in this part the keys themselves are not important. The rhythm of depressing the keys is the most important. However, follow the contour of the X with the pitch result, as much as possible.

- ◇ - Airy sound with a small sound of the key-click pitches coming through.
- flz
- flz - flutter-tongue

#### Bass Flute:

##### Mouth approaches:

- - Extreme cover of the mouthpiece
- - Extremely open mouthpiece
- ◐ - Ordinary position of the mouth on mouthpiece

All the multiphonics and special fingerings are taken from the book: The Techniques of Flute Playing II by Carin Levine and Christina Mitropoulos-Bott

Pitch results of Part A-II were checked with the flute player Daniel Agi.

**Bass Clarinet:**

Multiphonics and special fingerings were taken from the following books:

New techniques for the Bass Clarinet by Henry Bok and Eugen Wendel (the book catalog number is written in round brackets above the indicated fingering in the score)  
 New Directions for Clarinet by Philip Rehfeldt (the book catalog number is written in squared brackets above the indicated fingering in the score)

Part A-II fingerings and pitch results were checked together with the clarinet player Richard Haynes.

**Violin**

- I = F $\sharp$ 4
- II = E $\sharp$ 4
- III = E $\flat$ 3
- IV = D $\sharp$ 3

Tuning:

**Violin holding-positions:**

**Parts A-II till A-IV:**

**\* A la-gittare:** The position of the violin is not important. You may choose to hold it either in the conventional way, or as a guitar position (recommended), or in a standing position on your knees. The important part is that both hands should press the notes. Stem down is one hand and stem up is the other hand, for your choice.

**Part A-IV - A la-gittare (!):** This part is more strongly recommended to be played by holding the violin in a guitar-like position. All the notes written with stem facing down are to be played with the left hand. All the up-facing stem notes are to be played by the right hand.

**mm. 90-139:** Hold violin in a standing position on your knees.

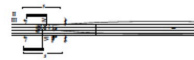
**Note-heads:**

X - each note is to be depressed by a separate finger.

◇ - Flautando (for part C-II)

■ - press the indicated strings with much pressure (Part B - Japanese Trio). Usually it includes also a pressure vibrato.

**Exceptional cases of note-heads in part A-IV:** ■ means to press the indicated notes together with one finger along the fingerboard (as opposed to the X note-head, which still means that you should press each note with a separate finger).



The keys are to be held till the next action. However it is being written with breaks, to indicate that there is no sound involved. The next action could be one of the next two options:



- Bracketed X with a staccato or accented staccato attached is the sign of accentually releasing the finger from the indicated pitch-keys.



- Hold the keys of the indicated pitch till the next pitch. Only when the next pitch has to be pressed the fingers change position.



Randomly move fingers like a pianist gesture, while letting the finger-nails to slightly pluck the strings.



- damp strings with the left hand in 1/2 way fingerboard. With the right hand-when the gliss-symbol goes up (with a nail symbol underneath): produce a rasgado-like gesture with the finger-nails over all the strings in the indicated direction.

When a straight line goes down with a small circle below it: produce a reverse-like rasgado with the finger-tips, not including the nails.

**Written notes and sound results:**



Since there is a different tuning, the pitches that are going to be heard are different than is written. At the beginning there are a few references of the sound result pitches with small ordinary round note head near the X note-heads that are supposed to be played. However, since it is not clearly heard anyway, the sound result pitches are not going to be given for the rest of the piece.

**Clefs and staves:**

**Part C-II:**



**Upper stave: RH:**



The upper stave contains 3 lines, that show the main range of strings contact points that is going to be used:

The range is between behind the bridge (top line) and 1/2 way of the fingerboard (bottom line).

**B-Dir** (Bow Direction): 3 main directions: ordinary up and down bow and a third direction, which is marked with the following symbol:

○ - Vertical, straight bowing - neither up nor down-bow: stay on the same bow contact point while moving from one string contact point to another.

Normal line means to bow while touching the strings. Disconnected line means to go in the indicated direction slightly above the strings.

**Bottom stave: LH:**

In this section the bottom stave refers to the left hand fingering points. It is not obliged to be precisely on the exact pitches, but rather to be in the area. Each finger holds one pitch. For ease of reading, the notation indicates the four notes and then combines them into one bar and one tie or with a slide line. As in tradition, when the bar is red, hold the four notes till the next event. When the bar follows by a slide, gliss into the next notes area.

**Piano**



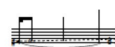
Depress keys (The line that crosses the note head indicates that the key is blocked so the pitches are not necessarily precise).



- Hold the keys depressed, even though it doesn't produce any more sound.



- Release fingers from the keys. Pay attention to dynamics indications, which indicate the amount of energy one should give for the released gesture.



- The disconnected line means to drag the finger along the indicated strings up or down to the next key that should be depressed.



- Arpeggio of the indicated notes in the indicated directions (in this case: up and down).




- Use a Bottle-neck (slide) to "draw squares on the piano strings as indicated.

**Part C: Clefs and staves:**




Upper stave shows the vertical strings contact points where the bottleneck should be dragged along. Top line is the highest point of each string before the farther bridge. The bottom line is the lowest point of each string after the first piano bridge.

There are two main ranges that are being played in. 1) the lowest bass strings (also gets a shortcut reference in the score as: l).

 : The next range of strings of the low-mid section (written as a shortcut in the score as: 2).

The "ordinary" notes that are indicated in the lowest staff show the approximate horizontal touching points along the strings. This does not mean any additional playing of those pitches.

**mm. 134-144:**


 : Drag the two lower harboard-squares up and down the strings. When LH goes up, RH goes down and vice versa. Only in this point the pedal should be pressed, so it helps the gesture to produce as many squeaking partials as possible.

**mm. 167-end:**


Remove the block from the up-most strings and place the ping-pong ball on top of the string of the note E7. Play the indicated notes. When you play the E7 make sure that the ball bounce but not going away. Only at the last note it should go away, preferably up to the end of the strings. (see video attached).

**Percussion – Marimba:**


Origami-fingers use: During the entire part A all the fingers (with the wooden-thimble tips should be worn and played on the marimba. They should be removed at the end of section A-V. In section C-II two fingers of each hand are wearing the origami-fingers again, in order to rub the metal-shaker board as indicated.


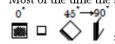
 : Depress keys (The line that crosses the note head indicates that the key is quite blocked so the pitches are not necessarily going to be heard as clear). The keys are supposed to be held till the next action. However it is being written with breaks, to indicate that there is no sound involved.


The next action could be one of the following two options:

 : Release fingers from the keys. Pay attention to dynamics indications, which indicate the amount of energy one should give for the released gesture.

 : The square is held diagonally so only one angle is touching the board

 : The square is turned in 90° from the first position. On the right side you can see what part of the square surface you will see, as well as where the tape is going to be.

 : The square is lying completely on the surface. The upper side shows which part of the square will face up and where the tape is going to be positioned. Most of the time the square is held straight. If it has to be turned then degrees are involved, too. For exp:  : First square is held straight, second one is turned to the smooth side, still straight, the third position is holding the square diagonally relatively to the board and in 45° to the left. Then the square is put straight on the surface in 90° turn (smooth side is on the right).

**Sq-Dir** (Square Direction): Down-bow symbol indicates that the square has to move to the right; Up-bow symbol indicates that the square has to move to the left. The following symbol:  indicates that the square moves straight along the vertical points of the board, or in a few cases, it stays still.


**LCP** (Horizontal Contact Points - on the board): The board is divided to 6 sections: 0 is the left edge and 6 is the right edge. 3 is the middle point. There are movements that go horizontally beyond the surface. Therefore the entire scale is: (-2) - (-1) - 0 - 1 - 2 - 3 - 4 - 5 - 6 - (7) - (8) ...

**VCP** (Vertical Contact Points - on the board): The clef itself shows where the square has to be played vertically. Bottom line is the closest edge point, middle line is the middle point and upmost line is the farthest edge. If the movement goes beyond the board vertically then the line crosses beyond the bottom or the upper lines.

**Altitude:** Like with the cello, there is also a 3D movement around the surface. Therefore a red line indicates whether the square is on the surface, in your chest-line, head-line, or in between and beyond those lines. When the black line is a disconnected line it emphasize that the movement is in the air, even though the red line already shows that this is the case.

\* The rhythm for the square movement is not precise and can be played as an extreme rubato, especially in the solo part, while trying to ignore the click as much as possible. The rhythmic-notes show only the approximate time of movement. The brakes show the amount of time of stillness.

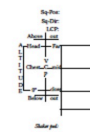
 : Hold key till the next pitch that is connected to it with a tie. For exp: in the illustration (F clef): The G# is tied to the F#, while the D is in the middle. This means that the G# should be held still while depressing the D key. Then hold both G# and D. When the F# appears - release the G# and depress the F#, but keep holding the D till the next note that it is connected with.

 : arpeggio up and down of the indicated notes.


**Metal board shaker:**


Pedals: The numbers show which one of the midi foot controller have to be pressed. Dynamics cresc-dim indicating the use of the Volume pedal. When the circle is marked by + it means that the volume is in its maximum level. Circle with a vertical line (|) means 0 level. ¼ or ½ means approximately ¼ or ½ way with the volume pedal.

**Clefs and staves:**

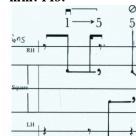


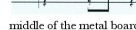
**Sq-Pos** (Square Position): The hardboard square can be held in many different positions. Therefore, the square is being taped to mark the exact position that it should be held in a particular moment. The different positions are:

 : Hold the square straight and up, so the bottom edge should touch the surface. Empty square means that the smooth-side is facing your sight. The black line shows where the tape is.

 : Same holding position. Blacked square means that the rough side is facing your sight. The black line shows where the tape is.

**mm. 143:**



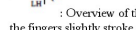
 : This clef is zooming in to the display of the square itself as it lays down in the middle of the metal board. The upper line is for the RH. The bottom line is for the LH. The notes-lines show where, vertically and horizontally, the fingers should be stroking the board, with the same manner as the over-view of the board-scale.

**mm. 147:**

Both hands hold the square from its both sides. From there, the view opens again to the entire metal board as before.

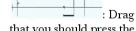
**mm. 149:**



 : Overview of the metal board as the square is laying in its center. The notes lines show where the fingers slightly stroke the entire metal board, taking into consideration that they might be going along the square or only on the square, which might cause another natural break of the sound.

**mm. 154-158:**



 : Drag the square along the indicated areas on the metal board. Thicker line indicates that you should press the square stronger into the board, so the vibration will be damped. Normal line means to hold the square normally without any extra pressure.

STILL LIFE with SQUARES

Scene I - Part I  
for cello and mixed quintet

Reality  
A side of parts and stillness - Exposition

Sivan Cohen Elias  
June 2014

All instruments except the cello  
Hold your instrument still.  
The stylus on the string is bowed from the instrument,  
so that the string slightly overtones the bow.  
Purposely begin to play the indicated first notes.  
Start to play 8 beats after the click track begins.

Tuning: 4  
I = G<sup>4</sup>  
II = A<sup>4</sup>  
III = B<sup>4</sup>  
IV = D<sup>5</sup>

RH  
Hold bow in the following position:  
Bring rest on your right knee.  
Bow-pedal 3 bar performance notes rest  
with 1/2 bar 1/2 second over-riding III-IV.  
Inlets and outlets long travels through the  
nose quickly and deeply. Each breath cycle  
lasts between 6 - 10 seconds, normally.  
Let the cello "breathe" with you by being  
more forward and hand-held with your chest.  
The bow produces natural sounds on the strings.  
From time to time, the bow also bounces slightly  
caused by the pulse done with the LH bow.  
(Read more below)

LH  
Hold a second bow vertically behind your back,  
produce quasi coil ripples on the air, as if it sounds  
decide: pulse this invisible device.  
Each pulse occurs every 1-3 seconds irregularly

A-III Pulses and Drawing Square

3

RPT

Vln

Bb-Cl

Pno

Mtr

*M. Sh. Pol.*

Drawing Shape

R: 2 2 2 → P P P P

L: 4 4 4 P P P P

LH

4

RPT

Vln

Bb-Cl

Pno

Mtr

*M. Sh. Pol.*

Drawing Shape

R: 1 1 P P P P

L: 3

LH



5

Fl. I  
Vln  
Bs. B.C.  
Pno  
Mar  
M. Sh. *red*  
Drawing Shape  
B. Exp.  
B.C.P.  
LH

6

*AB Sub-ttle*

Fl. I  
Vln  
Bs. B.C.  
Pno  
Mar  
M. Sh. *red*  
Drawing Shape  
B. Exp.  
B.C.P.  
LH



9

R.H.

Vln.

Bb-C

Pno.

Mar.

M.Sh.

Drawing Straps  
 Vln. V  
 Viola V  
 B.C. P

LH

10

R.H.

Vln.

Bb-C

Pno.

Mar.

M.Sh.

Drawing Straps  
 Vln. V  
 Viola V  
 B.C. P

LH

11

R.P. (11) (115) (120) (125) (130) (135) (140) (145) (150)

Vln

Bb-Cl

Pno

Msa

M-Sh

Driving Stage

R.Dc

R.P. 5 5 P P 4 4 P P 5 5 1 1 5 5 P P 9 9 5

LH

12

(176) (181) (186) (191) (196) (201) (206) (211)

*Lose control*

Also change and double  
finger for next time at  
the indicated styles.

*A la guitare (I)*

R.P. (176) (181) (186) (191) (196) (201) (206) (211)

Vln

Bb-Cl

Pno

Msa

M-Sh

Driving Stage

R.Dc

R.P. 5 P P 1 1 P P P P P P 3 3 2 2 3 3 1 1 3 3

LH

13

R L R

Violin I

Violin II

Viola

Cello

Double Bass

Piano

Musician

Dancing Steps

Rhythmic notation: F F 2 2 F F 5 5 F F 5 5 2 2 5 5 1 1 3 3 1 1 3 3 F F 5 5 1 1 4 4 F

LM

14

R L R

Violin I

Violin II

Viola

Cello

Double Bass

Piano

Musician

Dancing Steps

Tabla circuit-error message

Rhythmic notation: F 4 4 F F 4 4 F F 5 5 F F 5 5 2 2 5 5 2 2 5 5 2 2 5 5 2 2 4 4 2 2

LM

15

Violin in standing position

Drumming Stage  
 11 12 13 14 15 16 17 18 19 20  
 4 4 → F F 3 3 → F E 3 3 → F F 3 3 → F F 2 2 → F → 1 → 8

16

Violin II  
 RB  
 SL  
 f  
 R.H. damp strings in 1st position

Rest

Drumming Stage  
 21 22 23 24 25 26 27 28 29 30

As shown elsewhere!  
Slightly accelerated

» During the sub and Japanese trip, in your own time, slowly drag the styrofoam ball on the floor a few times and then drop it.

\*\* During the solo part, slowly drag the styrofoam ball on the floor a few times and then drop it.

⊙ Take off all the organ-fingers and the styrofoam-ball/strings.

Move towards the metal-slab board and hold the square in the first indicated position.

18 **B Dream**

Solo 20-25'

Japanese  
7/16

ord.

Pressure with  
the red arrow indicated during

90° 0° 90° 90° 0°

3-3 3-3 3-3 7-6+5 5

Pressure with the red arrow and position upon starting X in case of 7/16

ff f ff f ff f ff f ff f ff f

0°+90° 90° 90°-0°

2-2-4 4-4-3 3-2 2-3 3-5

mf f ff f ff f mf f ff f



C: Hallucination  
C-I: Polyphonic Square Chord

Violin part: Measures 1-11, starting with a series of notes and a final chord marked with a circled 'C'.

Piano part: Includes a diagram of a hand with fingers numbered 1-5, and a series of notes with dynamic markings like *mf*, *mp*, *f*, *ff*.

M.S. part: Includes a diagram of a hand with fingers numbered 1-5, and a series of notes with dynamic markings like *mf*, *mp*, *f*, *ff*.

Annotations: "Violin out position with bar.", "Drag stroke the square in the indicated areas.", "See instructions".

Violin part: Measures 12-22, including a section marked "Violin out position with bar." and a section with a circled 'C'.

Piano part: Includes a diagram of a hand with fingers numbered 1-5, and a series of notes with dynamic markings like *mf*, *mp*, *f*, *ff*.

M.S. part: Includes a diagram of a hand with fingers numbered 1-5, and a series of notes with dynamic markings like *mf*, *mp*, *f*, *ff*.

Annotations: "Violin out position with bar.", "Drag stroke the square in the indicated areas.", "See instructions", "Put 2 original fingers on each hand.", "1-2-2 FF-4-4-1-1-3-3-1-1-3-3 FF-3-3 FF-3-3-2-2-3-3-1-1-3-3 FF-3-3-1-1-3-3".

23

B.B.1  
Vln  
Bb-B.C  
Pno  
LH

$\text{2} \rightarrow \text{6}$   
 $\text{1} \rightarrow \text{5} \rightarrow \text{5}$   
 $\text{4} \rightarrow \text{4}$   
 $\text{2} \rightarrow \text{2}$   
 $\text{4} \rightarrow \text{4}$   
 $\text{1} \rightarrow \text{1}$   
 $\text{5} \rightarrow \text{1}$   
 $\text{4} \rightarrow \text{7}$   
 $\text{4}$   
 $\text{1}$

Drawing Board  
 B.B.1  
 Vln  
 Bb-B.C  
 Pno  
 LH  
 $\text{3} \rightarrow \text{F} \rightarrow \text{2} \rightarrow \text{1}$   
 $\text{1} \rightarrow \text{3}$   
 $\text{3} \rightarrow \text{1}$   
 $\text{1} \rightarrow \text{3}$   
 $\text{3} \rightarrow \text{1}$   
 $\text{1} \rightarrow \text{3}$   
 $\text{3} \rightarrow \text{2}$   
 $\text{2} \rightarrow \text{1}$   
 $\text{1} \rightarrow \text{2}$   
 $\text{2} \rightarrow \text{1}$   
 $\text{1} \rightarrow \text{F}$   
 $\text{F} \rightarrow \text{4}$   
 $\text{4} \rightarrow \text{2}$   
 $\text{2} \rightarrow \text{4}$   
 $\text{4} \rightarrow \text{1}$   
 $\text{1} \rightarrow \text{3}$   
 $\text{3} \rightarrow \text{F}$   
 $\text{F} \rightarrow \text{1}$   
 $\text{1} \rightarrow \text{4}$   
 $\text{4} \rightarrow \text{2}$   
 $\text{2} \rightarrow \text{4}$   
 $\text{4} \rightarrow \text{1}$   
 $\text{1} \rightarrow \text{3}$   
 $\text{3} \rightarrow \text{F}$   
 $\text{F} \rightarrow \text{4}$   
 $\text{4} \rightarrow \text{1}$   
 $\text{1} \rightarrow \text{3}$   
 $\text{3} \rightarrow \text{1}$

24

B.B.1  
Vln  
Bb-B.C  
Pno  
LH

$\text{2} \rightarrow \text{3} \rightarrow \text{3}$   
 $\text{5} \rightarrow \text{5}$   
 $\text{1} \rightarrow \text{6}$   
 $\text{5} \rightarrow \text{5}$   
 $\text{5} \rightarrow \text{5}$   
 $\text{4} \rightarrow \text{2}$   
 $\text{2} \rightarrow \text{4}$   
 $\text{3} \rightarrow \text{5}$   
 $\text{5} \rightarrow \text{5}$   
 $\text{1}$

Drawing Board  
 B.B.1  
 Vln  
 Bb-B.C  
 Pno  
 LH  
 $\text{P} \rightarrow \text{4}$   
 $\text{4} \rightarrow \text{1}$   
 $\text{1} \rightarrow \text{3}$   
 $\text{3} \rightarrow \text{1}$   
 $\text{1} \rightarrow \text{4}$   
 $\text{4} \rightarrow \text{2}$   
 $\text{2} \rightarrow \text{4}$   
 $\text{4} \rightarrow \text{1}$   
 $\text{1} \rightarrow \text{4}$   
 $\text{4} \rightarrow \text{1}$   
 $\text{1} \rightarrow \text{4}$   
 $\text{4} \rightarrow \text{2}$   
 $\text{2} \rightarrow \text{3}$   
 $\text{3} \rightarrow \text{2}$   
 $\text{2} \rightarrow \text{3}$   
 $\text{2} \rightarrow \text{3}$   
 $\text{2} \rightarrow \text{3}$   
 $\text{2} \rightarrow \text{4}$   
 $\text{4} \rightarrow \text{2}$   
 $\text{2} \rightarrow \text{4}$   
 $\text{4} \rightarrow \text{2}$   
 $\text{2} \rightarrow \text{4}$   
 $\text{4} \rightarrow \text{2}$   
 $\text{2} \rightarrow \text{3}$   
 $\text{3} \rightarrow \text{1}$   
 $\text{1} \rightarrow \text{3}$

24

B.1  
Vn  
Bb-BCl  
Flut  
Clarinet  
Bassoon  
LH

*M.S. ped*  
Drawing Stage

use instructions  
same (freeze)

25

C-II: Skill life with springs - Transition

Freeze

B.1  
Vn  
Bb-BCl  
Flut  
Clarinet  
Bassoon  
LH

*M.S. ped*  
Drawing Stage

Freeze

26

B.P.

V.V.

Pho

Remove the block from the highest strings.  
Place a ping pong ball on the string of E7.

Driving Stage  
B.D.S.  
-2

90° 180° 0°

LH RH LH RH LH RH

Switch freeze

©  
Sivan cohen Elias  
sivan.coel@gmail.com

VIII. Playground, Puzzle III

**Playground, Puzzle III**

**Sivan Cohen Elias**  
April 2015

The piece is written for Ensemble Da:Niente to be premiered on May 16<sup>th</sup> 2015 at the Paine Lowell Hall, Harvard University as part of the HGNM concert series.

### **Instrumentation and inventory:**

Bass flute

Bass clarinet

Bartton and tenor saxophone

Piano + fishing lines, bow-hair, as many ping-pong balls as possible, super-ball mallet

(Table) Electric guitar (with 3 pick-ups); Table; e-gtr string installed bow (cello or violin bow); 18cm/7.5 inch I.X. 2cm/1.75 inch diameter dense-metal spring two 0.5 cm thick rubber bands

Perussion: Bass-drum, 10-15 ping-pong balls, 2-3 tennis balls, 3-5 bouncy balls, 4 Styrofoam balls, spinning postcards rack (or any rack that can spin + three different metal trays + another metal smaller container), two-octaves crotales with double-bass bow

Cello + e-gtr string installed cello bow, fishing-line installed cello bow

Double-bass + e-gtr string installed cello bow, fishing-line installed cello bow

### **NOTE:**

The score is organized in three sections, designated A, B, and C. Each section stands by itself and there is continuity—three sections that are being played as one; in one breath, so to speak. Section C is a solo piano, therefore the stage arrangement should be such that the piano stands prominently displayed, with the left profile of the player facing the audience. It is highly recommended that the piano-wing will be removed, so the strings are uncovered.

All the instruments should be amplified and played in stereo through speakers in front of the audience

## Performance Notes

### General symbols:

Microtonal notation:

♭ - 1/4 tone above b

♮ - 1/4 tone below #

♯ - 1/4 tone above #

♮ - 1/4 tone below #

♮ - Slightly shift intonation up or downwards

◊ - Niente

L.V. - let vibrate

### Winds:

♮ - airy sound

♭ - 1/2 air / 1/2 sound

♮ - 1/2 air / 1/2 sound

♮ - *fz* (flatter-tongue)

V - Inhale

⊖ - Exhale

⊖ - No inhale or exhale

### butterfly effect



- Flutter your upper lip with your tongue

x (as a notchhead) - key click (etc)



- (on the stem) Key click on top of another effect

♮ - Tongue-rahm (TR)

♮ - Smack your lips as if pronouncing an exaggerated P.

♮ - Slap

### Multiphonics:

♮ - Slap

### Bass flute:

Taken from Carin Levine's book: The Technique of pipe, alto, bass flute:

**Bass clarinet:**

Taken from Henri Bok – Eugen Wendel's book: New Techniques for the Bass Clarinet

no. 33

*mf*

○ ● ○ ● ○ ● ○ ●

● ● ● ● ● ● ● ●

1 2 3 4 1 0

= two options of fingering

**Baritone saxophone:**

Taken from Marcus Weiss – Giorgio Neri's book: The Techniques of Saxophone Playing

Weiss-417

*mf*

Use of the winds in SECTION B (mm. 54-103)  
 The upper staff shows the action of the mouth, and the lower staff shows the fingers. Stems that point upwards represent the right hand, and stems that point down represent the left hand. By "representing" I mean that, on occasion, the right hand may be presented with, for example, an A-note, which requires to play what it would usually play to achieve the A, but the left hand may be instructed to, at the same time, play what it would usually play to achieve, say, an F. The two hands may be instructed to play the fingers familiar to two different notes at the same time, or they might be instructed to play the same note but with different tuning.

**Piano:**

**Inventory:**

- Fishing line (about 4-5 meters)
- One stock of bow-hair
- Superball mallet
- Kuboploant (0,3 cm wide X 5-6 cm length when not stretched)
- Box full of ping-pong box

**Preparations and uses:**

Fishing lines

(mm. 1-20)

Fishing line is woven in between the strings of the second partition (the lowest part is the first partition the highest the last). Be sure to leave enough line so that the string can be maneuvered from side to side.

(mm. 70-73)

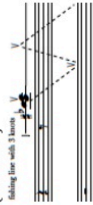
A fishing line is put under the indicated note. The fishing line itself has three knots, which create attacks when pulled.

(mm. 75-78)

Fishing line is woven in between the strings of the first partition (create one knot in the middle of the line). Be sure to leave enough line so that the string can be maneuvered from side to side.



(mm. 82-87)



- A fishing line with three knots is put under the 3 indicated-notes' strings. This one is put in the upper section of the strings in between the screws (see image)



**Upper fishing line**

- In addition to the fishing lines indicated to be pulled, a few more fishing lines can (i.e. not obligatory) be installed under different strings, with or without knots (which fishing line goes where can be decided by the pianist, if they wish - If not, the composer is willing to contribute her suggestions). Towards the end of section B you will have to choose the fishing lines you would like to pull, while choosing whether or not to press the pedal. The most important thing is that when you pull any fishing line, you have to start by standing, and keep on pulling it from side to side as you sit down. Stand back up to choose another line, and so forth. At the end of this section, another player is supposed to come in and pull some of the strings into the piano. As this happens, you have to pull the fishing lines as busy as you can, but not completely. They are busy while still standing, and immediately start the solo, which starts with a cluster on the piano, and then sitting down...

**Bowhair:**



- Pull hair-bow under the indicated key.

**Super-ball mallet:**



- Rub the indicated note with a super-ball mallet to produce a quasi-whale-call sound.

Rubber band: put a rubber-band around the piano hook that appears on the right of the second rim of the string. When not in use, the RB is not stretched in any way and doesn't affect the sound of the piano at all.

mm. 32-43, 54-67:

Hold one side of the rubber band with your left hand. Stretch it and let it go over the rim. Let it touch the rim in the middle-point of the RB. According to the diagram, pluck the rubber band with the right hand, in a quasi 'Bartok pizz' (use of the thumb + one or two more fingers at the points indicated by the numbers). The pluck produces, irregularly, the 'rubber-band sound' only, or produces an accompanying sharp high pitched ring coming through the piano rim.



The diagram: \_\_\_\_\_ represents this spot in the piano:



- quasi Bartok pizz pluck



Stretch the rubber band up (above the rim) and strum along both lines of the band with two fingers (index and middle are recommended).

**Ping-pong balls box:**

The box has to be placed at the back of the piano on the floor. Another player should pour it into the strings when indicated to do so.


**Section C:**


**Solo (see also demonstration video)**

**Main symbols:**




- Cluster with the palm (When done with RH, the fingers' tips are at the lower notes of the cluster. When done with LH, the fingers' tips are at the higher notes). The black square shows the note that the hand should focus on as being in the middle part of the cluster.

 - Use the forearm to expand the cluster. A big accidental applies for the entire cluster. In this image, for instance, the cluster will be played on black keys only.

 - play the keys with the elbow

Two positions of the palm:

 - The entire palm is flat, at 90 degrees to the keys. Note: when done with RH, the fingers' tips are at the lower notes of the cluster. When done with LH, the fingers' tips are at the higher notes

 - Land the hand on the outside of the pinky finger (length of the hand is at 90 degrees with the length of the keys).


Wavy gliss

 - gradually play the notes needed to move from the first indicated body part to the next.


Connection between the two hands:

One hand takes the other to another place:

Holding positions:


 - Hold the other hand's palm

 - Hold the other hand's fingers

 - Hold the other hand's wrist

 - Hold the other hand's forearm

Where can it go:

 - One hand takes the other off the piano (from the black keys), hitting the white keys on the way (as notated).

 - One hand takes the other palm + forearm up, while the elbow stays in place.  - Release the other hand and let it drop back to the keys.

 - Take the other arm for a gliss on the indicated keys.

 - Rolling hands, akin to how a boxer might punch a speed bag.

## Percussion:

### Inventory:

- 2-octaves crotales
- Bass drum
- Postcards rack with 3 trays, able to spin
- Mallet cone
- Mallet
- Thin hard wooden stick
- Double-bass bow
- Super-ball mallet

### Marked Balls:

- Seven marked balls are put on the bass drum surface:
- 1: Styrofoam ball
  - 2: ping pong ball
  - 3: ping pong ball (preferably another type)
  - 4: styrofoam ball (different density than no. 1)
  - 5: small bouncy ball
  - 6: styrofoam ball (identical to no. 4)
  - 7: Tennis ball

### Additional balls in a box:

- Have at least:
- 0) ping pong balls, preferably as many different kinds as possible
  - 2 small bouncy balls + 2 big bouncy (super-ball) balls
  - 1-2 tennis balls
  - 1 styrofoam ball


### Actions:

#### Mesh-postcards rack:

 - Spin the rack in the indicated direction and speed and let it turn until it stops naturally.

 - the three lines represent the three trays of the rack

 - Every time there is a change to the location of the balls, this diagram shows the structure of the balls on the rack at a particular moment.

 - put a ball inside the cone

**Different ways to treat the balls:**



- drop the ball and let it bounce naturally. After that the ball remains at the place you dropped it.



- Trap the ball against the surface, increasing the rate of its bounces rapidly. Let it stay on the surface, unless you have to use the same ball again. In this case – pick it up from the surface after trapping it.



- let the ball bounce the indicated number of times. Catch it again after the allotted amount of bounces.



- The arrow shows where a particular ball is and where it should move to.

**Table E-Guitar:**

**Positioning, tuning and installation:**

The notes are written for a guitar with 3 pick-ups. Use distortion for the entire piece with a stable mid-band volume.

Lay the e-guitar on a table, in an ordinary direction relatively to your body.

Loosen strings 5 + 6 so it can be raised up to 4-5 cm above the fb when stretching the rubber band (see more instructions below).

Attach two rubber-bands – one on each string (5 and 6) in the following manner:

1st step: put the entire loop of the rubber-band (RB) under the string (at its middle point or a bit below it)

2nd step: raise both ends of the RB above the string on either side. Insert the one end of the RB through the loop of the other end, and tighten the knot by pulling it all the way through. This is the part that you hold with left hand. (see images)

**installed Bow and spring:**

1) e-gr installed bow: Installation instruction:

Use any violin or cello bow (can be a cheap one). Take any of the three low strings of e-gr. Pull the tip of the string into the loop to tie it to the frog. Then loop the bow-hair 6-8 times until the string is on the other side of the bow. Then tie it at the point.

2) 10cm long X 2 cm wide metal spring (see image)

**Clefs:**

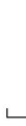
pick-up



- This clef reflects the entire length of the guitar strings, the top part represents the three pick-ups, which is usually, where the right hand should bow. Pay attention to the movement between pick-ups. Below pick-up no. 3, it represents the fingerboard. The black part is where the strings are above the guitar body. The white part shows the rest of the fingerboard, where the fretstart. 1/2 represents the middle point of the fingerboard.



- This appears either below the guitar-fingerboard (def or by itself) to represent the moments and amount of stretching of the rubber bands. Use the rubber-band that is installed to the indicated string.



- (mm, 70-102): The upper line represents the rhythm of bowing the string with the right hand (the exact positions of the guitar are indicated in the symbols above the line, see instruction (Bowing points along the guitar) below).

**Bow division:**

Above the up/down bow indications there are numbers that indicate the approximate point where the bow touches the string or the RB.

Number 0 represents the frog and 6 represent the point. All the numbers in between are relative to those two ends. Basically, it shows you the speed of the bow, from one spot to the next.

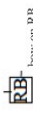
V - Up-bow (strike the bow away from you)

W - Down-bow (strike the bow towards you)







- don't move the bow in either up or down bow directions. You might move in right and left directions.

Bowing points along the guitar:






bow on RB.



 bow is on the point where the rubber band and the string connect.  

 (num. 7 & 10): P stands for "position". Every position frames two frets. P10 is the two first frets from where the RB is attached towards the pickups area. P10 is the 1st pickup spot.  

 ST: bow on the indicated string (either on string or the RB that is on that string - according to what is mentioned by the squared indicators).  

 - pluck the rubber band like a Barok pizz, using the thumb and one or two additional fingers.

### Cello + Double-bass:



#### Installed bows:



- 1) E-gr installed bow: Installation instruction: Use a cello or DB bow (can be a cheap one). Take any of the three-low strings of celtg. Pull the tip of the string into the loop to tie it to the frog. Then loop the bow-hair 6-8 times until the string is on the other side of the bow. Then tie it at the point.
- 2) Fishing-line installed bow: Installation instruction: Tie the fishing line to the frog of cello or DB bow. Then wrap the wooden part with it to create around 12 hoops of fishing line along the wood. Tie it to the other end. Make sure it stays stable.


 - Damping the strings  

 / - Light LH (quasi flageolet) pressure  

 - Use natural or artificial harmonics to produce the indicated pitches


 1/2 col. - half col-legno  

 - (when bowing on the wooden part of the bow): The x's represent the approximate rhythm produced by the fishing line while bowing. Basically, it represents the speed of the bow.


 - Damp the strings with the entire palm, approximately at the indicated strings.  
**full bowings** - Every stroke should use the entire bow from frog to point and vice versa.  

 - Imagine drawing the number 8 horizontally along the strings. Use the range between the bridge and the beginning of fingerboard (point to extremely *modo astio*)


 - Follow the line and create the same shape/movement with the bow along the strings. The broken line arrow shows to go away from the strings, to be in the air in front of the instrument.  

 - Pluck the string with right hand

# Playground, Puzzle III

Score (transposed)

Sivan Cohen Elias  
April 2015

- Work in Progress -

**A**  
senza tempo

$\downarrow = 60$

**Bass Flute**  
mp  
acc.  
stacc.  
p  
mp

**Bass Clarinet**  
mp  
mf  
p

**Baritone Sax**  
mp  
mf  
p  
acc.  
stacc.  
p  
mp

**Electric Guitar**  
pick-up  
mp-mf  
mf

**Rubber-band Percussion**  
ball no. 1: ping-pong  
ball no. 2: middle spin speed

**Crotales**  
ball no. 1: styrofoam  
ball no. 2: ping-pong

**Post-card Rack**  
die naturally  
2 3 4 1 3

**Bass Drum**  
2 3 4 1 3

**Cello**

**Double Bass**

2

ms. 119, ms. 125, ms. 131

B. Fl. *lip glass*, *rub. mdto*

B. Cl. *rub. mdto*, *rub. faso*

Sax. *rub. mdto*

*pp*, *mf*, *mp*, *p*

Vc. 117

E. Gtr.  
pick-up |

FB

$\frac{1}{2}$

Rubber band

Perc.

Rack  
fixator →  
dir. natural! →  
mid-fast spin speed

B. Dr.

Vc.

D.B.



**B.Fl.**  
**B.Cl.**  
**Sax.**  
**BTP:**  
**E.Ghr:** 1 2 3 1 2  
**pick-up**  
**FB**  
**1 2**  
**rubberband**  
**str**  
**Perc.**  
**Rack**  
**B. Dr.**  
**Vc.**  
**D.B.**

rub the indicated string w. superball mallet  
 L.V.  
 ball no 4 styrofoam  
 arco  
 mf  
 p  
 f  
 mf  
 pp  
 f  
 mf





6

B. Cl. *mf mp ff*

Sax. *f mp*

BTP: *mf mp f*

E. Clarinet: *mf mp f*

Perc. *mf mp*

Rack *mf mp*

B. Dr. *mf mp*

Vc. *mf p*

D.B. *p*

pick-up!

arco

stringer tremolo

cl. first

cl. second

cl. third

cl. fourth

cl. fifth

cl. sixth

cl. seventh

cl. eighth

cl. ninth

cl. tenth

cl. eleventh

cl. twelfth

cl. thirteenth

cl. fourteenth

cl. fifteenth

cl. sixteenth

cl. seventeenth

cl. eighteenth

cl. nineteenth

cl. twentieth

cl. twenty-first

cl. twenty-second

cl. twenty-third

cl. twenty-fourth

cl. twenty-fifth

cl. twenty-sixth

cl. twenty-seventh

cl. twenty-eighth

cl. twenty-ninth

cl. thirtieth

cl. thirty-first

cl. thirty-second

cl. thirty-third

cl. thirty-fourth

cl. thirty-fifth

cl. thirty-sixth

cl. thirty-seventh

cl. thirty-eighth

cl. thirty-ninth

cl. fortieth

cl. forty-first

cl. forty-second

cl. forty-third

cl. forty-fourth

cl. forty-fifth

cl. forty-sixth

cl. forty-seventh

cl. forty-eighth

cl. forty-ninth

cl. fiftieth

cl. fifty-first

cl. fifty-second

cl. fifty-third

cl. fifty-fourth

cl. fifty-fifth

cl. fifty-sixth

cl. fifty-seventh

cl. fifty-eighth

cl. fifty-ninth

cl. sixtieth

cl. sixty-first

cl. sixty-second

cl. sixty-third

cl. sixty-fourth

cl. sixty-fifth

cl. sixty-sixth

cl. sixty-seventh

cl. sixty-eighth

cl. sixty-ninth

cl. seventieth

cl. seventy-first

cl. seventy-second

cl. seventy-third

cl. seventy-fourth

cl. seventy-fifth

cl. seventy-sixth

cl. seventy-seventh

cl. seventy-eighth

cl. seventy-ninth

cl. eightieth

cl. eighty-first

cl. eighty-second

cl. eighty-third

cl. eighty-fourth

cl. eighty-fifth

cl. eighty-sixth

cl. eighty-seventh

cl. eighty-eighth

cl. eighty-ninth

cl. ninetieth

cl. ninety-first

cl. ninety-second

cl. ninety-third

cl. ninety-fourth

cl. ninety-fifth

cl. ninety-sixth

cl. ninety-seventh

cl. ninety-eighth

cl. ninety-ninth

cl. hundredth

Musical score for rehearsal mark 7, featuring parts for B. Cl., Sax., E. Gtr., Perc., Ctr., Rack, B. Dtr., V.c., and D.B. The score includes various musical notations such as dynamics (mp, mf, p, f), articulation (accents, slurs), and performance instructions like "pick-up" and "fast speed".

**B. Cl.**: Part with dynamics *mp* and *mf*.  
**Sax.**: Part with dynamics *mf* and *p*.  
**E. Gtr.**: Part with dynamics *mf* and *mp*. Includes instructions "pick-up" and "FB".  
**Perc.**: Part with dynamics *mf* and *ff*. Includes instruction "fast speed".  
**Ctr.**: Part with dynamics *mf* and *ff*. Includes instruction "fast speed".  
**Rack**: Part with dynamics *mf* and *ff*. Includes instruction "fast speed".  
**B. Dtr.**: Part with dynamics *mf* and *ff*. Includes instruction "fast speed".  
**V.c.**: Part with dynamics *mf* and *ff*. Includes instruction "fast speed".  
**D.B.**: Part with dynamics *mf* and *ff*. Includes instruction "fast speed".

B. Fl. *mf*

B. Cl. *mp*

Sax. *mp*

stretch the RB up (above the rim)  
strum RB with index/middle fingers

Gtr. RB

Rubber-band str. LH

pluck the rubber band with thumb and 3rd finger

RH  
hold bow for 1 sec (thumb) then release when the RB is ringing. Slide from one position to the next (index or 3rd finger)

fill bow upwards

*f*

Perc.

Ct.

Rack

B. Dr.

Vc.

D.B.

*mf*

*ff*

full bowings

bow-when finger

B. Fl.

B. Cl.

Sax.

8

4

Gtr. RB

Perc.

Vc.

D.B.

10 [B] = 86-90

**B. FL**  
 dup  
 key click  
 slup  
 Mouth  
 RH  
 LH

**B. CL**  
 Mouth  
 RH  
 LH

**Sax.**  
 V  
 slup  
 key click  
 Mouth  
 RH  
 LH  
 T.R.  
 V  
 P  
 M

stretch the RH up/above the rim  
 stretch the LF with index/middle finger

**Gtr. RB**

**Perc.**  
 p. pong

**B. Dr.**

**Vc.**  
 fishing-line insul'd-bow  
 1/2 pulse  
 IV = C  
 V  
 VI  
 VII  
 VIII  
 IX  
 X  
 XI  
 XII  
 Held bows all on the indicated str.  
 Let it bounce naturally  
 after plucking the string  
 a. hand  
 slow bow  
 IV = C  
 V  
 VI  
 VII  
 VIII  
 IX  
 X  
 XI  
 XII  
 ppp

**D.B.**  
 fishing-line insul'd-bow

This page of a musical score includes the following staves and parts:

- TR.** Trumpet part with various dynamics and articulations.
- B. Fl.** Bass Flute part.
- B. Cl.** Bass Clarinet part.
- Sax.** Saxophone part.
- Gtr. RB.** Rhythm Guitar part.
- Perc.** Percussion part, including a section labeled "Ausschlag f".
- B. Dr.** Bass Drum part.
- V.c.** Viola part.
- D.B.** Double Bass part.

The score contains detailed musical notation, including notes, rests, and dynamic markings such as *pp*, *mp*, *f*, and *mf*. It also features performance instructions like "s. flauto" and "s. flauto IV".

no. 138

*pp*

*mf*

change to tenor sax

*f*

*mf*

fishing line with 3 knots

*mf*

use big spring to bow the string/RB

str

RH: Spring  
LH: RB

5 6

cr. low

*f*

any Phong (III+IV)  
III+IV

*pp*

*p*

*pp*

*mf*

L.V.

*pp*

*mf*

*mp*

B. Fl.

B. Cl.

Sax.

Gtr. RB

Perc.

Back

B. Dr.

Vc.

D.B.



B. Fl. *mf*  
 B. Cl. *mp*  
 I. Sax. *mf*  
 E. Gtr. *mf*  
 RH Spang. *mf*  
 LH RB *mf*  
 Perc. *mf*  
 Crt. *pp*  
 Vc. *mf*  
 D.B. *mf*

Musical score for page 13, featuring woodwinds, strings, and percussion. The score includes parts for B. Fl., B. Cl., I. Sax., E. Gtr., RH Spang., LH RB, Perc., Crt., Vc., and D.B. The woodwind parts have various dynamics such as *mf*, *p*, *mp*, *pp*, and *mf*. The string parts include a guitar (E. Gtr.) and a double bass (D.B.). The percussion part (Perc.) includes a snare drum (sn) and a cymbal (cym). The score is written in a common time signature and includes various musical notations such as slurs, accents, and dynamic markings.

B. Fl: *pp*, *mf*, *ppp*  
 B. Cl: *f*, *mp*, *p*, *f*  
 Sax.: *f*, *mp*, *p*, *ppp*  
 E. Gtr.: *mf*, *f*, *pp*, *mf*, *f*  
 Perc.: *mf*, *f*, *pp*, *mf*, *f*  
 Crt.: *mf*, *f*, *pp*, *mf*, *f*  
 Vc.: *mf*, *pp*, *mp*, *f*  
 D.B.: *f*, *pp*, *mp*, *f*

sax. mod. *f*  
 sax. out. *p*  
 sax. mod. *f*  
 fishing line with 3 knots *p*  
 six pping balls *mf*

E. Gtr. RH: Spring LH: RB  
 Perc.  
 Crt.  
 Vc. arco out *mf*  
 D.B. *f*

90

B. Fl.

B. Cl.

Sax.

E. Gtr.

RH: Spring

LH: RB

Perc.

Rack

B. Dr.

Vc.

D.B.

*dim. poco a poco...*

*pp*

*mf*

*f*

*pppp*

*mp*

*f*

*pppp*

*rit.*

*ritac.*

*improv. fishing lines*

*Use a super ball mallet*

*Drag SB mallet along the BD surface and let balls roll around, let the SB produce quasi howl cry sound*

B. Fl. L.V. *mp*

B. Cl.

Sax.

*stacc*

*improvisation line*

E. Gtr.

RH: Spring

LH: RB

Perc.

Rack

B. Dri

*Choose random bells*

Vc.

D.B.

*mp*

705  $\text{♩} = 60$

B. Fl.

B. Cl.

Sax.

E. Gtr.

Perc.

Rack

B. Dr.

V.c.

D. B.

*mp*

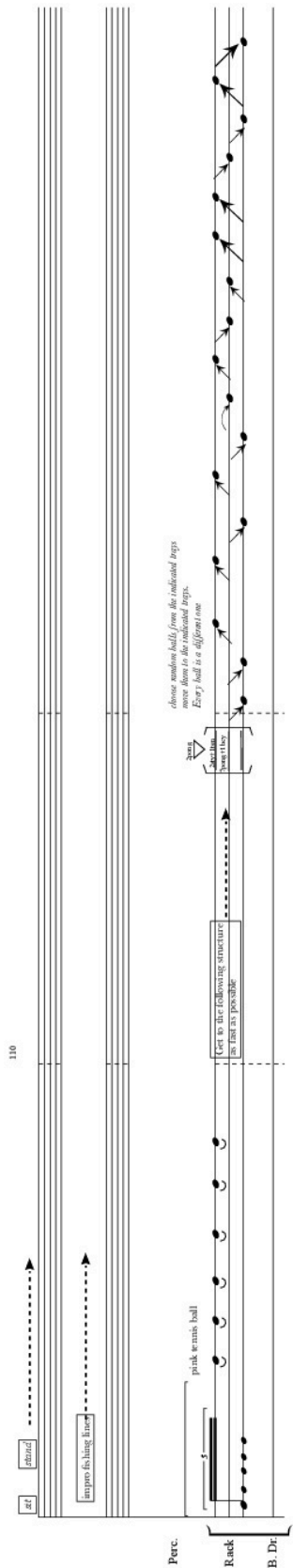
improvising lines

move as fast as possible, all the balls that on the rack + a few more from the BD - to the upper tray

ball no ②: ping-pong

ball no ③: ping-pong

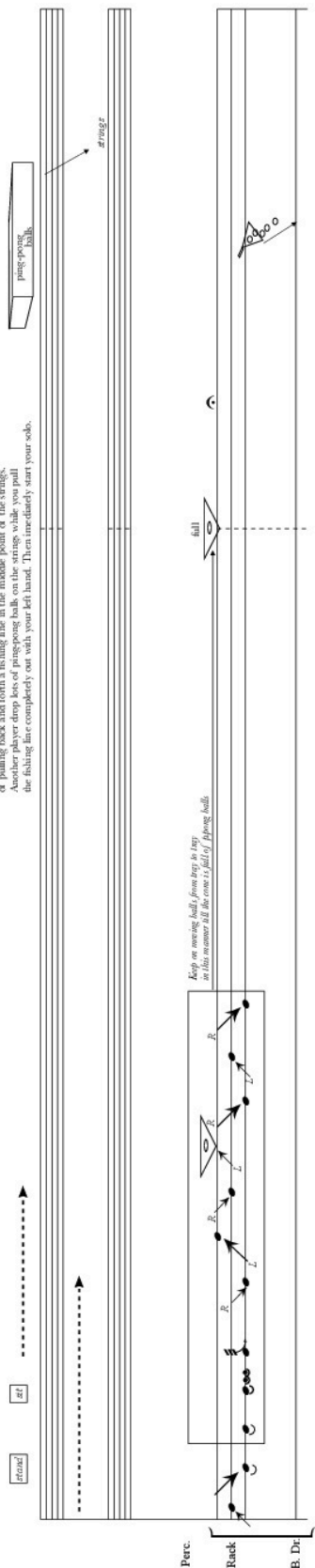
Choose random ballz



close random balls from the indicated steps  
move them to the indicated steps.  
Every ball is a different tone

set

set to the following structure  
as fast as possible



Make sure to stand in this point and be in the middle  
of pulling back and forth a fishing line in the middle point of the strings  
of the rack. This is the point where the strings are most tense. When you  
start the fishing line completely out with your left hand. Then immediately start your solo.

ping-ponging  
balls

Keep on moving balls from step to step  
in this manner till the end of playing balls.

fall

(574) → **III**

**C** Solo. **Andante**  
 ♩ = 60  
 Rubato

19

119

124

LH ends. RH's fingers  
 not cross down to hit  
 the R. thick (see next)  
 LH slides along  
 RH's fingers. Fall  
 touch the allow  
 and press. probably  
 the indicated hand.

20 [127]

Piano

[131]

Piano

[135]

Piano



139

21

143

to elbow

(approximate locations)

with elbow

(usually thumb)

rit. only

as fast as possible

X 3-5

X 2-3

(Reverse)

rubato

148

rit. accel.---

X 4

int. accel. rit

X 10-12

153 Tubefo, but keep a exposed, rhythmic manner

Force the sign  
accel.

piano

off of edge



RH rub/scratches LH's fingers

accel and shortens

157

piano

Gradually remove LH's fingers from the keyboard  
and lead it towards your chest area.  
RH keeps scratching the LH's fingers till  
the very end.

158  
Somerville,  
April 22  
2015

piano

Sivan Cohen Elias  
Sivan.coe1@gmail.com

IX. Encrypt

**E n c r y p t**  
string quartet miniature

Sivan Cohen Elias

January 2016

### **Bow installation**

Material needed: fishing line

Each bow has to be installed with a fishing line looped around the wooden part of the bow.

Recommended technique for the bow installation:

Wrap the fishing line around the frog and the handle.

Unscrew the hair part from the wooden part.

Wrap the fishing line along the wooden part only, creating between 8-12 loops.

Tie the rest into the point by alternately wrapping it horizontally and vertically, then tie.

Make sure both ends are secure.

### **Performance notes**

General

This piece is elastic. It fluctuates between precision and spontaneous occurrence; the score shows actions anticipating unpredictable sound results. The energy and sound quality is more important than strict timing. There is no precise pitch indicated in the score. Instead, there are places where the left hand should touch the string, mostly for the purpose of damping it, but also for changing the color or shade. The sound, as a whole, is intended to create the sense of being inside a computer outputting encrypted data.

Tuning:

Violin I: I = D (slightly up)

II = Ab

III = Db

IV = Gb

Violin II: I = Eb

II = A

III = D

IV = G

Viola: I = A (slightly up)

II = D (1/4 tone down)

III = G (1/4 tone down)

IV = Bb

Cello: I = G (1/4 tone up)

II = C

III = F#

IV = B

#### Sound qualities:

When *arco* is indicated, it always means to play flautando, which, together with the damping of the strings, creates the desired hissing sound quality. When the word *smmd* is mentioned, it means that the player should let the strings ring with a pitch or a chord for that particular moment. When the bow is in half col legion (1/2 c.l.) it means that the hair and the wood are touching the string, while the hair is facing away from you. Since the bow is wrapped with the fishing line, it creates additional attacks while bowing. As one strokes the string faster, it will produce more attacks. When the attacks need to be heard, the symbol X appears. Therefore, even when it is in 1/2 c.l. there are times that the wooden part should be off the strings (when there are no Xs on the line). Opposite half c.l. (Op. 1/2 c.l.) is mentioned only at the end in an improvisatory part. This means to face the hair towards you. This creates a stronger wood and fishing line sound, but still gets some of the hissing sound from the hair. Finally, the c.l. naturally gives the loudest sound of the fishing line.

#### Clefs:

For the violins and viola, the clefs show the entire body of each instrument, the bridge at the bottom and the pegs at the top. The middle line marks halfway on the fingerboard.

The cello is the opposite, meaning the bridge is at the top (akin to the player's point of view) and the pegs are at the bottom of the drawing.

#### Right hand:

Every action is shown by a directional shape that the player has to imitate by drawing it with the bow on the strings. Every shape is a variation of a circle/spiral/eight/infinity symbol, in different directions and sizes. Each shape starts with a black dot on a specific string and ends with an arrow on a specific string. Another line goes out from the black dot. This line shows the pacing of the shape in time. Each shape is drawn on four lines, which indicate the strings. If the four strings don't appear, then the *lascio* bridge is marked and the conventional up and down bow signs are indicated with the string number on top. This happens in places where the bowing is straight and doesn't create any shape. All the stems of the right hand go down for violins and viola, and up in the case of the cello (where things are opposite).

#### Left hand:

The left hand is also written on top of the four lines which represents the four strings along the fingerboard. The indications show the shape of the fingers on the strings; how much pressure one should put on the string (specific symbols are below); how long it should be held; and when it slides from one position to another.

Hollow diamond: light pressure, like harmonics, but more in the thinking of almost damping the strings to create the hissing sound.

Half-hollow half-black diamond: half pressure on the strings, creating some distorted sound quality.

Hollow circles: press the string normally

### **Part B - Improvisatory part - between 60-80 seconds**

#### **Instruction:**

This is the time when each player gets the chance the play with the material and with the possibilities of the installed bow. However, it should follow the indicated intentions only.

- a) Use the bow mostly with the wooden side, c.l. position. It is encouraged also to rotate the bow while playing. This should happen only while the bow is in motion. When ceasing to turn the bow, it should always end with either 1/2 c.l. or full c.l.
- b) Keep an active bow, creating the indicated curved shapes. It is encouraged to slow down the bow at least three times (for each player) by creating a big eight.
- c) The left hand should keep pressing down all the four strings and move irregularly from one position to another.
- d) The dynamic in this part alters between *mf* to *ff*.
- e) The viola is the first instrument to start playing indicated notes again.

#### **Technology**

The piece can be performed either acoustically or with amplification. In case of the latter, the attempt should be to give the audience the sense of experiencing the material from its inside.

Technical needs:

- four condenser microphones
- four speakers surrounding the audience (two at the sides, two at the back)
- mixer with at least 4 inputs and 4 outputs

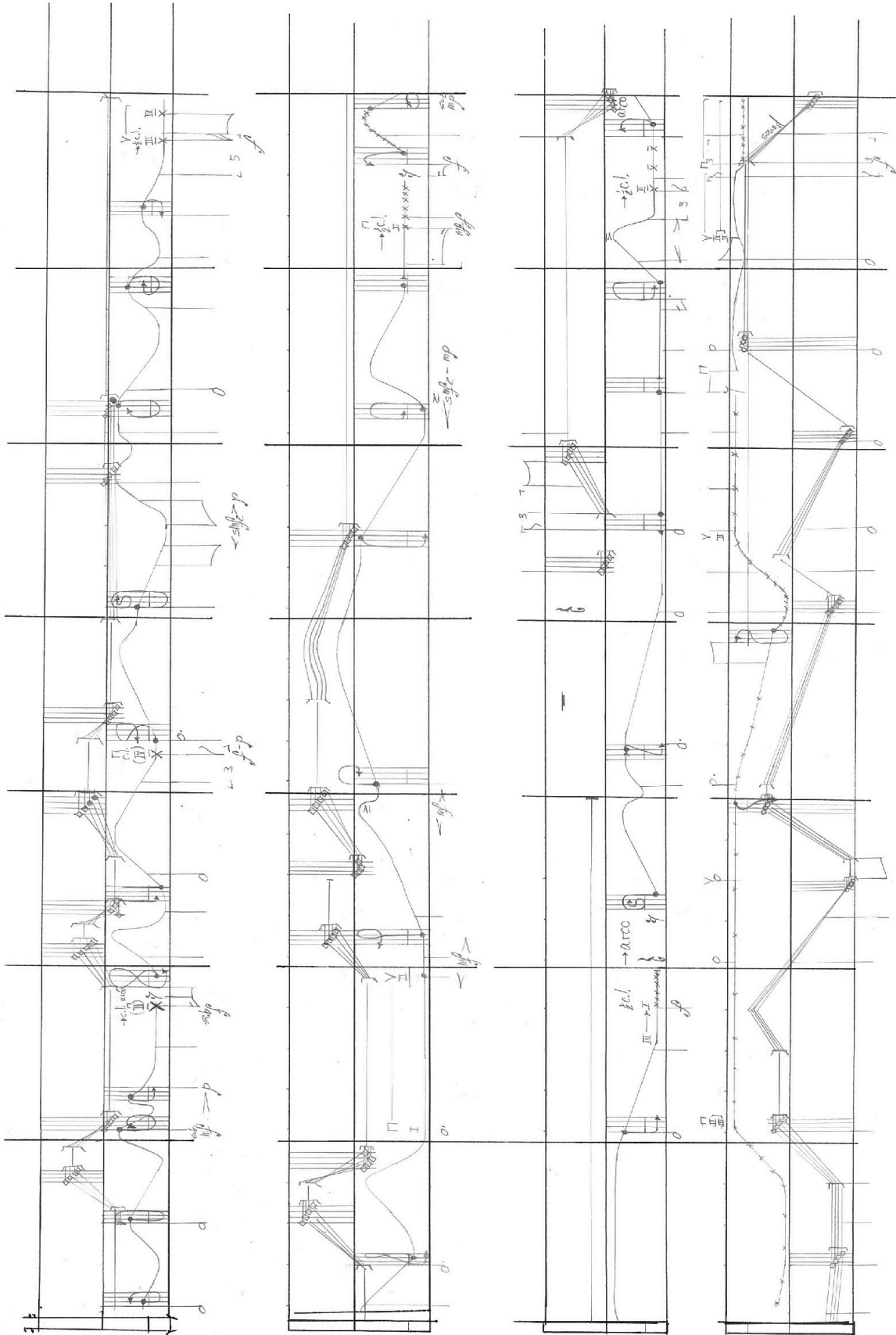
Sivan Cohen-Elias  
January 2016

*Encrypt*  
Miniature for string quartet  
for Jack Quartet

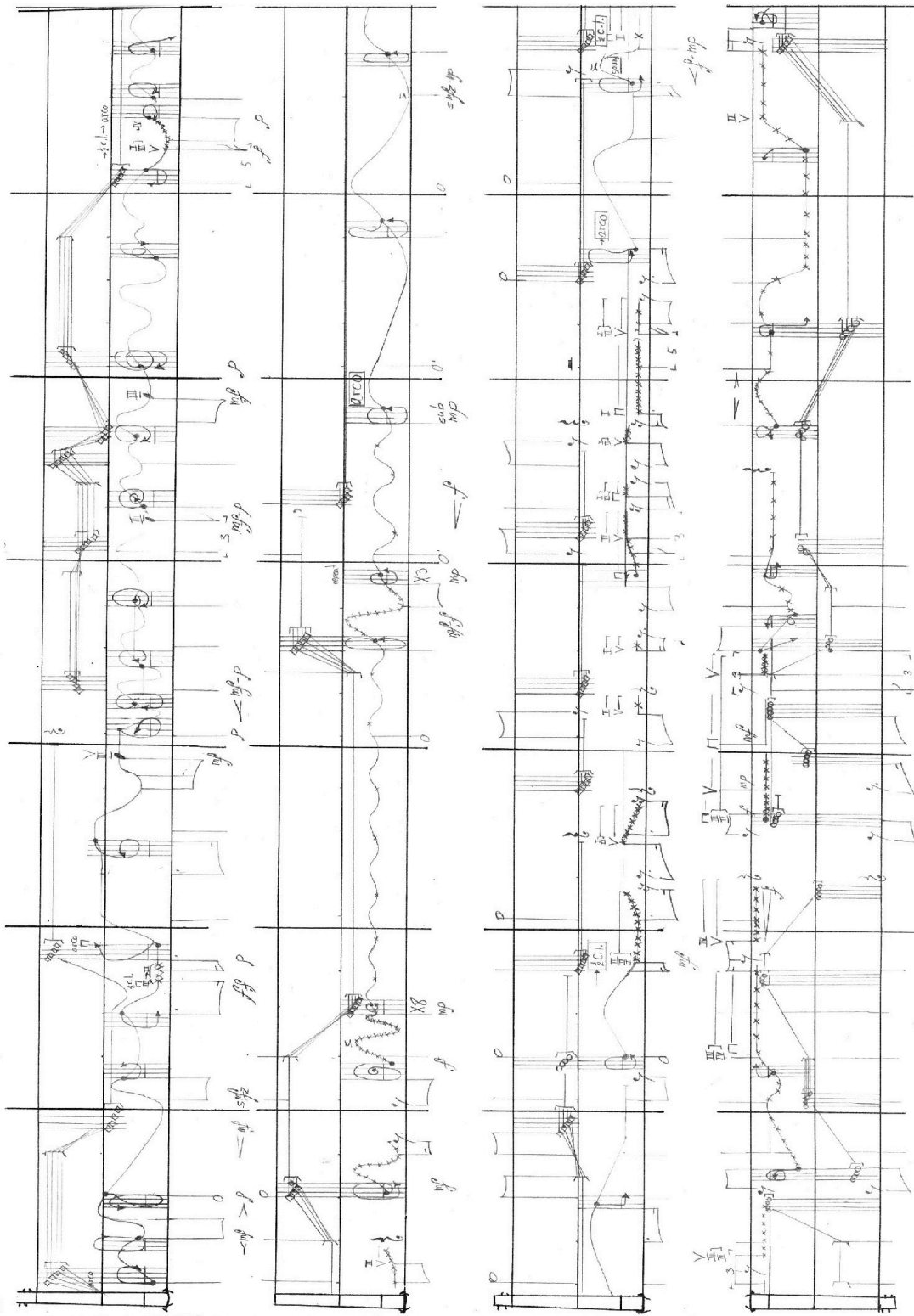
A  $d=60$

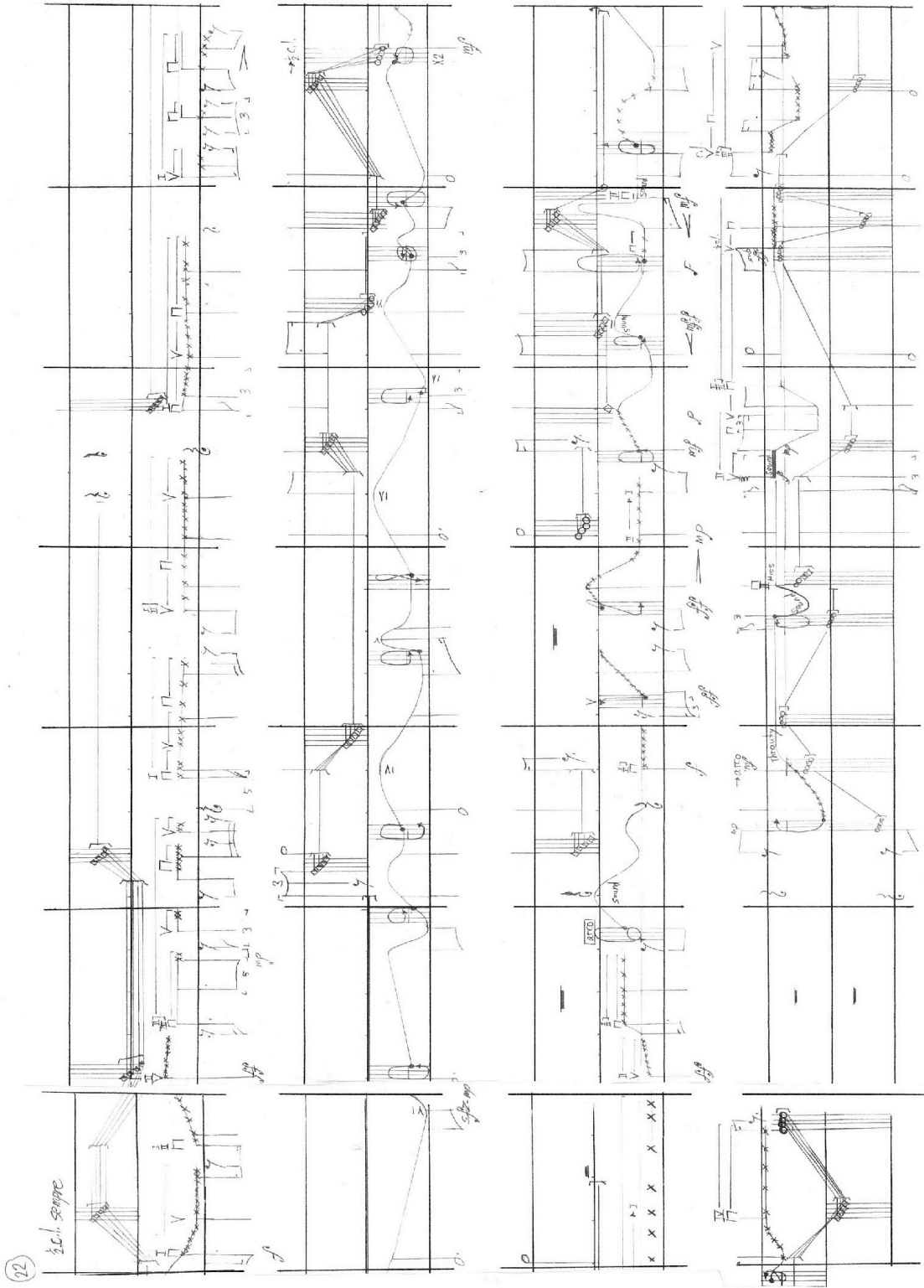
The image shows a handwritten musical score for a string quartet. It consists of four staves, labeled I, II, III, and IV from top to bottom. Each staff begins with a double bar line and a key signature of one flat (B-flat). The notation includes various musical symbols such as notes, rests, stems, beams, and dynamic markings. The first staff (I) is marked with 'arco' and 'M. f. (Hus)'. The second staff (II) is marked with 'arco' and 'M. f. (Hus)'. The third staff (III) is marked with 'arco' and 'M. f. (Hus)'. The fourth staff (IV) is marked with 'arco' and 'M. f. (Hus)'. There are also some handwritten annotations like 'slit-p' and 'off' with arrows. The score is written on a grid of horizontal lines.





(15)





B

60-80"  
Active  
Regular, moderate speed with sudden  
bowing speed changes  
C.I. → C.I. → Op. C.I. → RICO

60-80"  
Active  
Regular, moderate speed with sudden  
bowing speed changes  
C.I. → C.I. → Op. C.I. → RICO

60-80"  
Active  
Regular, moderate speed with sudden  
bowing speed changes  
C.I. → C.I. → Op. C.I. → RICO

Active Regular bowing speed with sudden bowing speed changes  
After between C.I. → RICO speed C.I. → C.I.  
After between circle → spiral → right ↓

The image shows a handwritten musical score for violin, consisting of multiple staves. The score is divided into three main sections, each labeled '60-80"'. Each section contains several staves of music, including a main melodic line and a bowing speed indicator. The first section is labeled 'Active' and includes the instruction 'Regular, moderate speed with sudden bowing speed changes'. The second section is also labeled 'Active' and includes the same instruction. The third section is labeled 'Active Regular bowing speed with sudden bowing speed changes' and includes the instruction 'After between C.I. → RICO speed C.I. → C.I.' and 'After between circle → spiral → right ↓'. The score includes various musical notations such as notes, rests, and dynamic markings. There are also some handwritten annotations and symbols, such as 'C.I.', 'Op. C.I.', 'RICO', and 'moderate'. The page is numbered '-5-' at the top left and 'B' in a box at the top right.

36

Handwritten musical score for strings, consisting of four systems of staves. The first system has two staves labeled "C.I. (open strings)". The second system has two staves, one labeled "(open strings)" and the other "C.I.". The third system has two staves, one labeled "C.I. (open strings)". The fourth system has two staves, one labeled "C.I.". The score includes various musical notations such as notes, rests, and dynamic markings like "ff" and "f".

110

Jakko Stenfein, SA  
Jan 7, 2016

sivan.coe@gmail.com

X. Hack

# HACK

For combined electric and classical guitar

Feb 15, 2016

Sivan Cohen Elias

**Guitars [Combined electric and classical guitars]:**

In order to infect a computer, the cracker must first get the installation program to the victim. Once the victim receives the program, she needs to activate it. Once a user's computer is compromised, the cracker's pretty much has free reign to do whatever they like.

Get installation program to victim.  
 She needs to activate it.  
 Free reign once compromised.  
 Good luck!

*Hack* is a solo piece for two guitars. It is also part of a mini-opera set among hackers and explorers of the Dark Web.

**Guitars installation:**

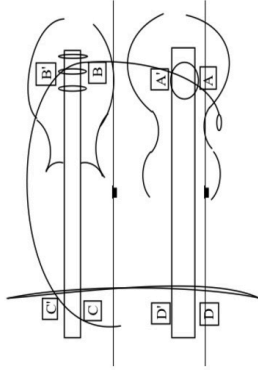
Inventory: 1 doubled folded 1.5m of fishing line, 1 bass string of a piano, low table or 2 piano chairs, a stool with a pad for accessories, cello bow with the wooden side wrapped with fishing line, violin bow with the hair wrapped with D e-guitar string, styrofoam block, rosin, volume pedal.

Combined electric and classical guitar - bass piano string, two meters fishing line, cello bow with the wooden part wrapped with 10-12 loops of fishing-line, violin bow with the hair part wrapped with D electric guitar string, L13cm X W10cm X H8cm styrofoam handle-box.

Put classical guitar flat on the table in front of you with the neck pointing left. Lie down the electric guitar on the farther part of the table in the same manner as the classical guitar (see diagram). Heavily rosin and then weave fishing line in between both guitars strings at the beginning of both guitar necks and make sure that it goes under the classical guitar low E string and above the high E of E-guitar.

Weave bass piano string in between both guitars in the following manner: start at the classical guitar hole: above 6, under 3, above 4, under 3, above 2, under 1 (see picture 1 below). Then weave the e-guitar at the bridge: under 6, above 5, under 4, above 3, under 2, above 1. Take the string all the way to the beginning of e-guitar's neck and weave again: under 1, above 2, under 3, above 4, under 3, above 6. Let both edges of piano string (pno str) have about 20 cm extra length outside the guitars.

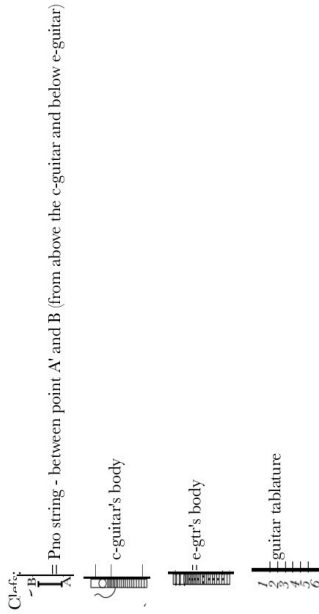
Loosen the strings to enable the pno string to move along the guitars strings, but not too smoothly. Adjust it so that it is tight enough to also produce a 'hard' friction sound (see video). The tuning is instrument-relative. It is related to the strength of the strings and not to the absolute pitches.



picture 1: pno str in between C-grt str



picture 2: styrofoam block - type






**First position:**

Hold fishing line on both sides: right hand (RH) holds the upper side of the guitar (diagram: C); left hand (LH) holds the classical guitar side (diagram: D). Drag the FshL according to the indicated routes. See diagram for a reference of the letter's positions.

(L) = starting movement point is on the left

(R) = starting movement point is on the right


 = drag FshL along the pmo str arch.


 = pull FshL up

 = pull FshL down

 = pull FshL straight along the fingerboard of both strings in the indicated direction.

FshL  
V = FshL "upbow" - RH pull the FshL up

 = FshL "downbow" - LH pull the FshL up


 = pluck the string against the pmo str wire

 = Bartok pizz


= "strings bite": Think of your hand as if it is a snake that attacks its prey. Abruptly catch all the strings together and pull them all to the center. Hold the strings in this position until the "unbite" symbol appears.

 = "unbite strings" - release all the strings from the "biting" gesture.

 = Randomly pull (horizontally) up and down on different strings, while "walking" the hand along the guitar neck as indicated in mm. 90-91 until it catches the FshL.

 = pull the pmo string down or up using the string-loop at position A (bottom of C-guitar)

 = Apply the styrofoam block on the strings at the indicated area

 = circular motion - with pmo string - hold the string from both sides and try move it along strings in a circular motion

**Technical requirements - amplification:**

Guitar - guitar amp, condenser mic to amplify the amp + condenser mic on top of the classical guitar to amplify acoustic levels.  
No need of pedal effects, except equalizer in case of the need of noise reduction.

**Performance:**

It is recommended to perform the piece sitting in a profile position to the audience. The preferred lighting would be either in a silhouette (dark shape and outline of the guitarist visible against a lighter background, dim light) or a light that shows only part of the guitarist and the guitar, as if the audience sees the situation through a door key-hole.

There are two different versions for the score:

One version gives a range of rhythmic freedom and relative length of each material. This score shows the sequence of events and it is accompanied with video demonstrations (sent by request) that instruct how one should approach the instrument and shows the specific desired sound results.

\* A small copy for this is attached to this score as a complete package.

The second version is written in a more precise notation, however, still gives some elasticity in the performance. This version is the closest to the opera-character version.

Enjoy!

# HACK, sequence of events

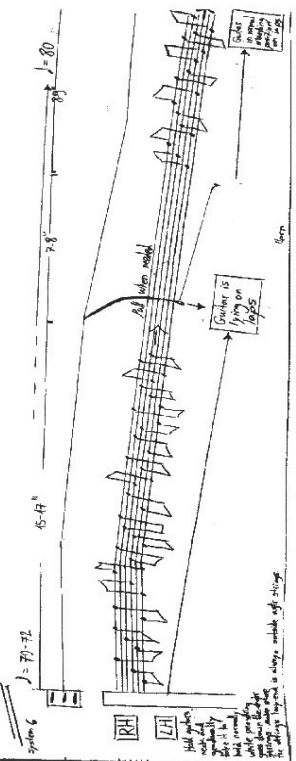
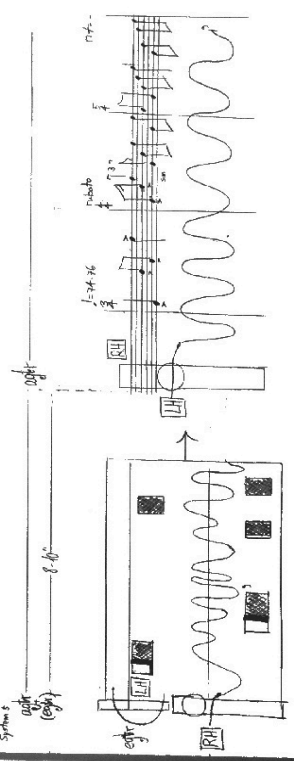
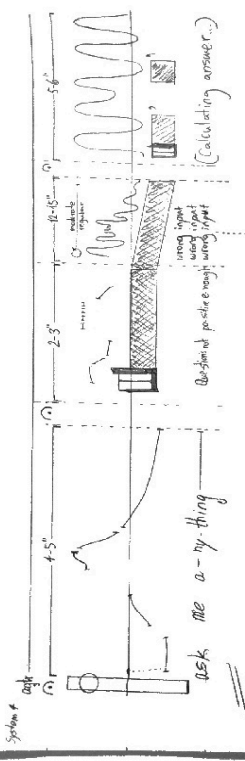
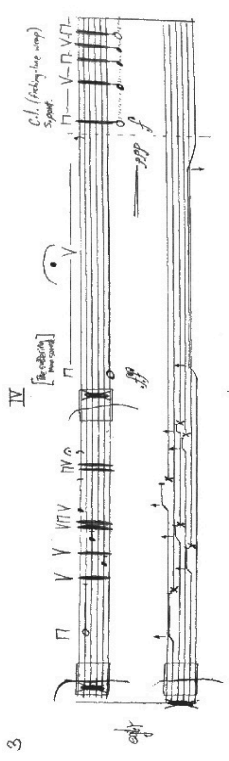
Sivan Cohen Elias  
Feb 2016

Diagram of a synchron box with 8 strings and a synchron lock on strings.

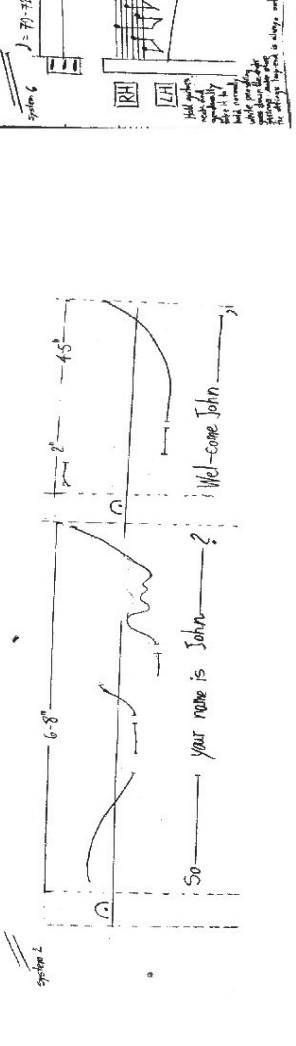
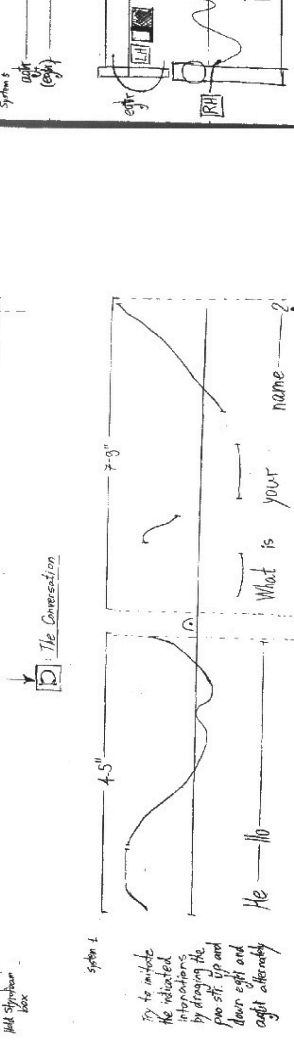
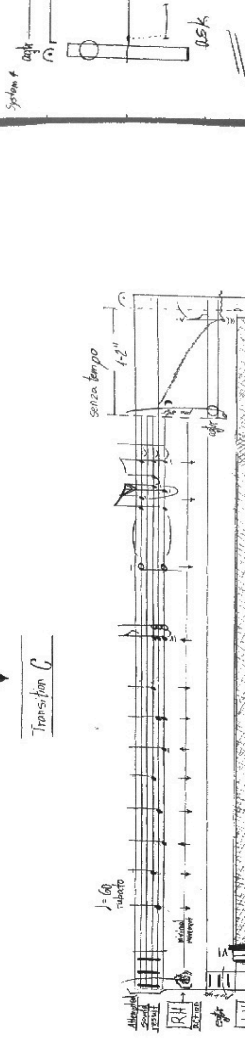
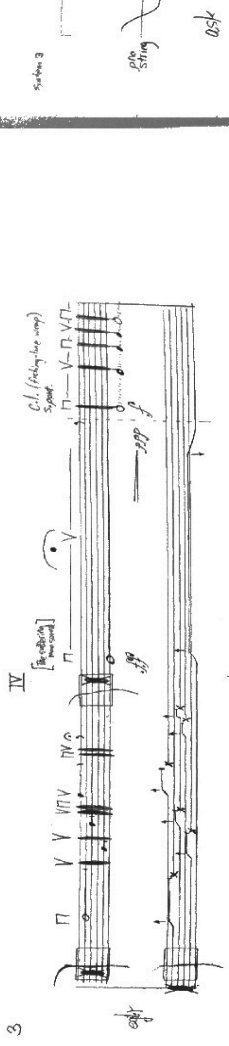
Annotations: *Culvert*, *Synchron lock*, *Transition A*, *may start in the middle of material A1*, *8 strings*, *RH*, *LH*, *after*.

Annotations: *Transition B*, *Stand up*, *Fishing line*, *Stranding*, *RH*, *LH*, *after*, *bow face*, *making up*.

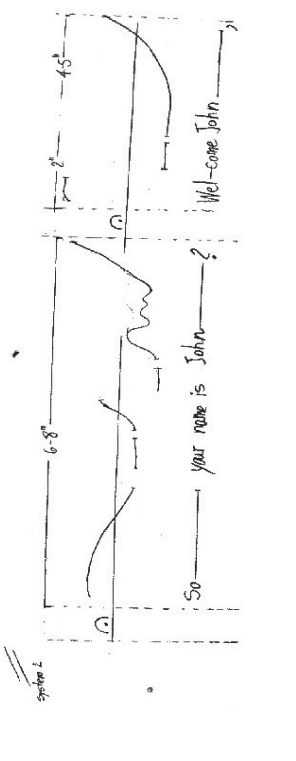
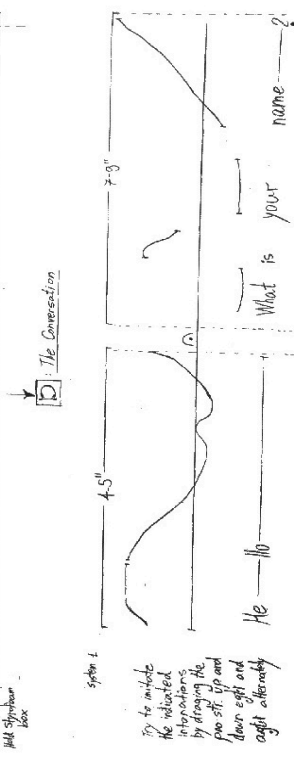
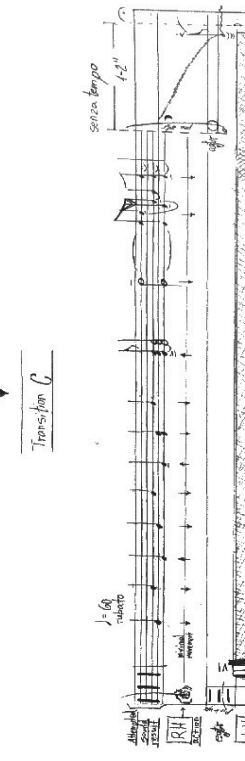
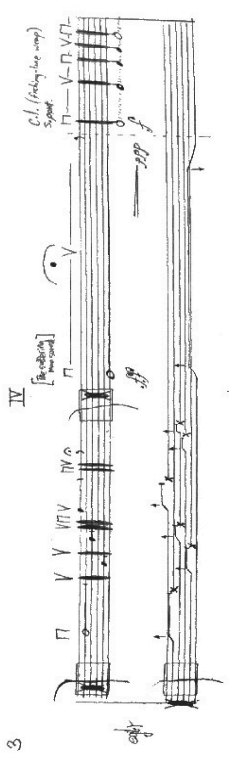
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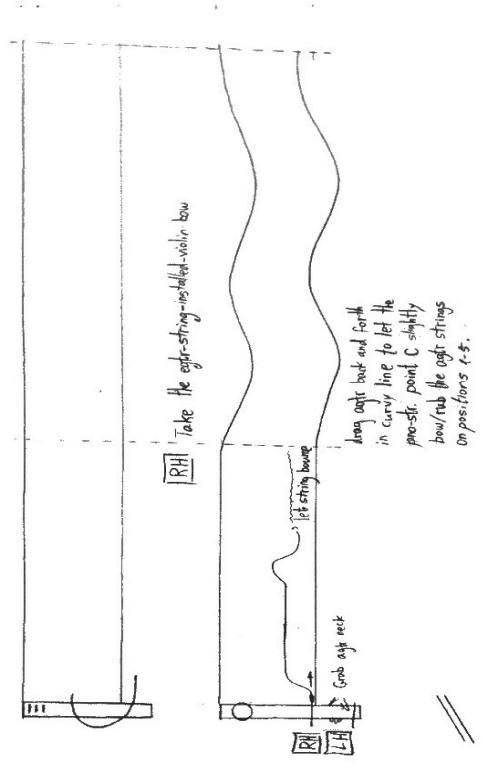
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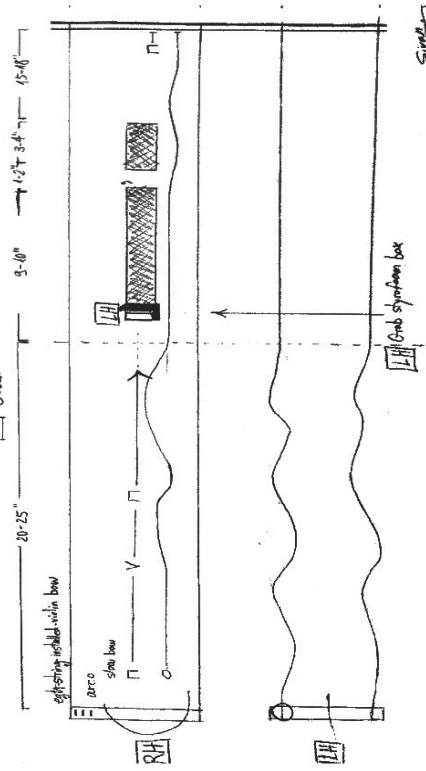
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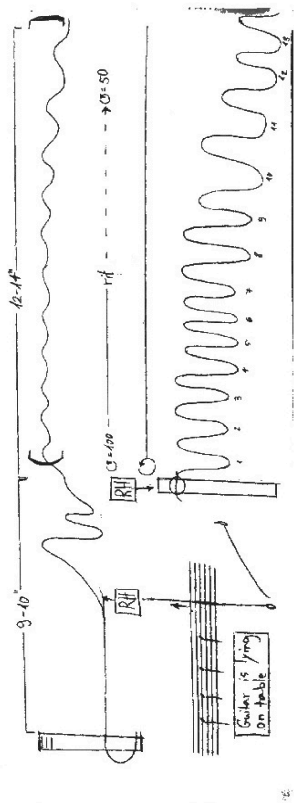
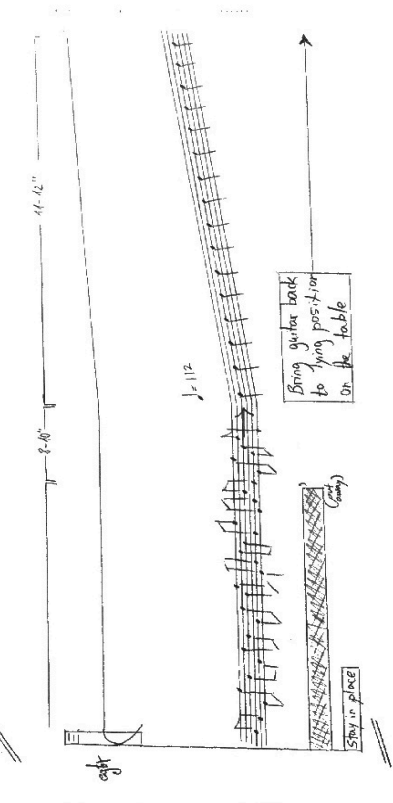
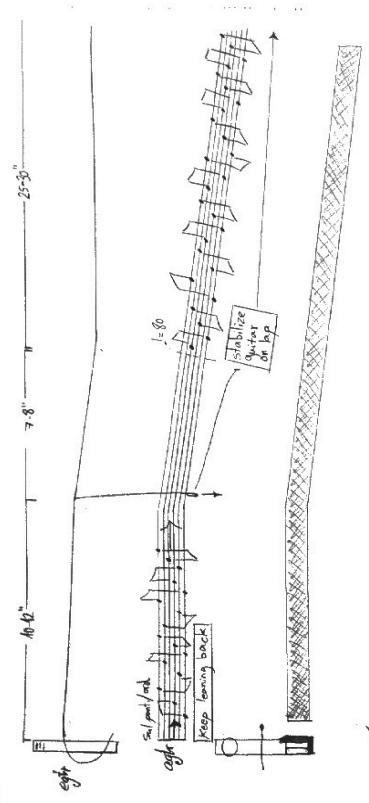
Transition D



E: Coda



Signature  
12.25.16  
Somerville, MA



# Hack

For combined electric and classical table guitar

Sivan Cohen Elias  
Feb 15 2016

**Scene I**  
Hello guys & gals / Red Room site

$\text{♩} = 60$

**RH**

**LH**

**Piano string (Pno str.)**

**Fishing line (FshL)**

**3**

**Pno string**

**LH only**

**FshL at Cgr.**

**mf**

**9**

**Cgrtr**  
ad lib pull and push strings horizontally up and down to produce plucking sounds through the pno string

The musical score is divided into two systems. The first system (measures 3-8) features a guitar part with a right hand (RH) and left hand (LH). The RH part consists of eighth notes on strings A, B, C, D, and A. The LH part consists of eighth notes on strings C, B, A, and C. A diagram above the guitar part shows a fishing line (FshL) and a piano string (Pno str.) with arrows indicating their movement. The second system (measures 9-14) features a cello part (Cgrtr) and a guitar part. The Cgrtr part has a melodic line with a dynamic marking of *mf*. The guitar part has a bass line with notes on strings B, A, and C. A diagram below the guitar part shows the cello's role in pulling and pushing strings horizontally to produce plucking sounds.

15 C.gtr

9

V

Apply styrofoam block on the strings near the plucking area to affect the sound to be rougher

Styrofoam block

21

V

s.t

Behind LH/ styrofoam box

mf

sfz

Pull pro string slightly down and up the strings as indicated

27

Cgtr

9

10

33

43

43

49

49

56

56



63

Egrtr RH

Cgtr LH

FshL

Pull and push strings randomly along the neck, from the tasto down to catch the fishing line

68

*Senza tempo*

Egrtr RH

Cgtr LH

FshL

Rht: take the cello bow and bow the fishin-line with much pressure in circular motions along the line. Imagine spirals, the number eight in various directions, and speeds. The fishing line should be well moist. The string produces harmonics that should correspond with the 6th string of the classical guitar

77

Egrtr RH

Cgtr LH

FshL

Pull up different strings and let them be dropped LH bow, producing loud slaps

86

*The suffering man sound*

Egrtr RH

Cgtr LH

FshL

Pull the 6th string of the e-guitar up at the s.tasto. Bow it on the left of the 12th string. Try to produce a loud rough sound resembling a "suffering man". Try to hold the sound as long as indicated while lowering the string gradually. You may pull slightly up the string and continue taking it down, so the sound changes its intonation slightly (gives more expression).

12

Hold styrofoam box on top of the pmo string  
At the egr bridge, between two pickups:  
Pull and push pmo string horizontally

96

Press down the pmo string head, leave and let it bounce on both guitars

104

Test-Box speech  
Move the pmo string up and down the indicated guitar strings and try to immitate the written notation. Unison with soprano

Egtr

[He - llo \_\_\_\_\_ what is your name ?

108

Apply styrofoam box on the Cgtr strings at the place where the pmo string is

so— your name is John ? ask me a - ny - thing que-sion too small

114

Egtr

Cgtr

Hold with RH the A pmo str side and with LH the C pmo str side. Move pmo str in a circular motion along the two guitars strings.

wrong input wrong input ... que - sion seems not po - si - tive e - nough wrong in - put

Apply styrofoam box on Egr on to affect the sound through the pno string

120

Egrtr

Cgtr

wrong in - put wrong in - put... calculating answer.

Lift styrofoam box above strings

Put styrofoam box back on Cgtr with emphasis

Over the pno string the LH and continue with the same movement

126

Egrtr

Cgtr

Gradually and extremely slowly bring guitar to you left. The plucking cycle should not be disturbed by any of the move. Try to make everything to be fitting to the rhythm

Continue pluck strings with the same method pull when needed

Stably or guitar on lap

Apply styrofoam block on strings in order plucking to be regular the way to be regular

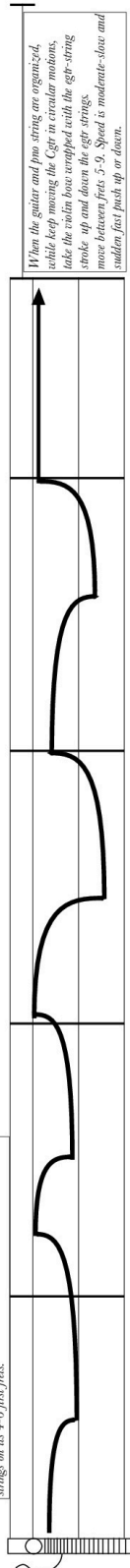
Continue moving guitar to your top and then also lean back so the pno string keeps moving and change the tones

Gradually and carefully lean back forward and bring the guitar back to lie on the table

rit.

molto rubato

As Cgr reaches back to the table, keep holding its neck and start to move it in a circular motion.  
 Re-organize the pmo string to be as in the following diagram  
 Let the pmo string be long enough on the neck side so it can stroke the Cgr strings on its 4-6<sup>th</sup> frets.



When the guitar and pmo string are organized, while keep moving the Cgr in circular motions, take the violin bow wrapped with the egr-string stroke up and down the egr strings. move between frets 5-9. Speed is moderate-slow and sudden fast push up or down.

156

162

Put down Cgr  
 Keep bowing the egr  
 at the same method as before

Apply styrofoam box  
 on the strings near the  
 bowing area to affect  
 the sound to be amplified

167

Remove styrofoam box  
 and keep bowing on fret 5

170



XI. .onion

# Sivan Cohen Elias

.onion

mini opera for tenor, soprano, mixed ensemble string orchestra and electronics

June 14 2016

.onion - opera trailer

## **Synopsis**

This opera trailer of 20 minutes was commissioned by Staatstheater Darmstadt, as one of the five selected composers of the Staatstheater Darmstadt Composers' Competition. Designed to mimic the structure and methodology of a trailer (a series of excerpts from a movie or program used to advertise it in advance; a preview), the spectator is flung back and forth in indistinct time, floating over missing parts, and is perpetually in the midst of the (combined) action.

The concept of the opera is a simulation of a YouTube series that explores the Deep Web - the unindexed and largely unregulated part of the internet normally hidden from view. Not only do you not know who's on the other end – you have no way of knowing whether any of what they offer is real. It is a place of suspended identities where criminals, activists and law enforcement officers swap appearances. The main character is a guide to the audience, with elements of websites typical of the Deep Web appearing on stage. At the same time, a hacker succeeds to hack the main character's computer. The hacker is represented by a guitar player, which is "hacking" the amplification of the electric guitar, by using a bass piano string. He installs a "MEDUSA virus" - represented throughout by the soprano - on the computer of the protagonist, who increasingly oscillates between his spectatorship and virtual assimilation as his anonymity begins to fail.

Sivan Cohen Elias

## Orchestration and additional objects

### Singers:

Tenor (Guntahar)

Soprano (Medusa virus) - main costume: square skirt made of styrofoam, connected with about 10 slinkies falling down. Parchment paper is installed in front of her face, like the collar of a cape that is worn in wrong way around. A path of 2-3 meters of green bubble wrap lies on the floor.

The slinkies are attached with transparent fishing line that is tied to different points on stage (the idea is that when she walks on the bubble wrap the slinkies will gradually open and elongate at different angles).

### Instruments on stage:

Combined electric and classical guitar - bass piano string, two meters fishing line, cello bow with the wooden part wrapped with 10-12 loops of fishing-line, violin bow with the hair part wrapped with D electric guitar string, L13cm X W10cm X H8cm styrofoam handle-box.

Cello with a bow with the wooden part wrapped with 10-12 loops of fishing-line.

Percussion - two octaves C4-C6 crotales with the following sticks: three different wooden-hard sticks, two soft sticks, one rubber stick, one rubber-brush, double-bass bow, cello or violin bow with the hair wrapped with an A electric-guitar string; metal extension spring L17cm X wireW1.5mm X D2cm, dense structure; metal extension spring L12cm X wireW1mm X D1cm, dense structure, fishing line is put in between all the big bells (see picture); metal sheet 1mm gauge; 100X60cm to be used as lying flat on top of 2 flat black metal (Peak) music stands (no holes), so it gives resonance; styrofoam box with 50X35X12 cm frame, edges need to be 1cm thick; slinky is attached to the styrofoam box in two places (see picture); violin with 2 double folded fishing line tied to the strings: one is tied to strings I and II, the second is tied to strings III and IV; bungee rope 7-10mm thickness, around 1 meter long.

### At the upper pit:

piano keyboard - loaded with 38 electronic samples. See technical requirements below.

Small string orchestra - 16 in total. All the strings' bows should be wrapped with 10-12 loops of fishing line on the wooden part.

Individual fishing line knots are tied around each string of each instrument (referred in the score as FshL loops).

Each player should have a ready-made styrofoam ball (5cm D) with a rubber-band around it (1cm thickness).

See tuning description at the performance notes section or beginning of the score.

4 violin I

4 violin II

3 viola

3 celli

2 double-bass

### Technical requirements - amplification and spacialization:

Singers and all the instruments on stage are amplified. It is advised to amplify the orchestra as well, especially for the styrofoam balls/rubber band plucks, but it is not mandatory.

**Microphone types:** 1 dynamic mic, 8 condenser mics, 1 DPA Omnidirectional mic, 2 headset mics.

Specification:

Tenor - dynamic radio-phonetic microphone stands on a table in front of the singer.

Soprano - headset microphone.

Guitar - guitar amp, condenser mic to amplify the amp + condenser mic on top of the classical guitar to amplify acoustic levels.

Cello - DPA Omnidirectional (pressure) microphone is preferred + condenser mic in front.

Percussion - one condenser microphone on top of crotales; two condenser microphones on the sides of metal sheet stand, headset mic attached to the violin.

If orchestra is amplified, preferably each instrument is amplified individually. In case it is not possible, use 4 condenser microphones and put two of them in front and two in the back of the orchestra.

2 condenser mics on the stage floor - to amplify the bubble-wrap popping sounds.

**Spacialization:** 8 speakers surrounding the audience + 1 subwoofer + 2 speakers on stage by the sides of the projector screen.

Tenor - stereo speakers on stage (by the sides of the projector screen).

Soprano - First scene (Red Room): sent to one of the back speakers; Third scene (Medusa aria): 2 stereo speakers at the back of audience; ("FF tape sound"): stereo speakers on stage.

Piano keyboard - divided in two channels; all the "beep" sounds should go to the same stereo speakers of the tenor on stage. All the other sounds should be sent to 8 speakers surrounding the audience and the subwoofer.

Guitars - sent to the 2 front speakers of the surrounding 8.

Cello - sent to 1 speaker near front (of the surrounding 8).

Percussion - violin is sent to 1 speaker that is the closest to the physical violin; metal sheet is sent to 4 corner speakers (of the surrounding 8); crotales is sent to all the 8. The crotales mic should be switched on at the marked places.

If orchestra is amplified then it should be amplified through all of the 8 speakers and the subwoofer.



**Performance notes:**

**Tenor:** This part is very elastic - you can stretch it, squeeze it, play with it:

Rhythm and pitch: even though the notation specifies the rhythm and the pitch of the singing part, the singer is free to stretch and shrink the length, starting and ending each phrase slightly before or after the place where it is written. Pitches can be sung slightly above or below what is written. The scale of accuracy required is specified through the different headnotes, which is explained below. The singer should feel that his mouth becomes more and more paralyzed and therefore the pronunciation of the words is less and less clear as the piece progresses.

Noteheads:

X = speaking voice - approximate pitch

↗ = intonational direction - relative pitch goes up or down



↗ = Falsetto voice

⊞ = throaty voice

**Soprano:** During the Medusa aria, the singer is wearing parchment paper in front of her mouth as if the collar of a cape worn the wrong way around. This causes the voice to distort.

**Guitars [Combined electric and classical guitars]:**



**Guitars installation:**

Inventory: 1 doubled folded 1.5m of fishing line, 1 bass string of a piano, low table or 2 piano chairs, a stool with a pad for accessories, cello bow with the wooden side wrapped with fishing line, violin bow with the hair wrapped with D e-guitar string, styrofoam block, rosin, volume pedal.

Put classical guitar flat on the table in front of you with the neck pointing left. Lie down the electric guitar on the farther part of the table in the same manner as the classical guitar (see diagram).

Heavily rosin and then weave fishing line in between both guitars strings at the beginning of both guitar necks and make sure that it goes under the classical guitar low E string and above the high E of E-guitar.

Weave bass piano string in between both guitars in the following manner:

start at the classical guitar hole: above 6, under 5, above 4, under 3, above 2, under 1 (see picture 1 below). Then weave the e-guitar at the bridge: under 6, above 5, under 4, above 3, under 2, above 1. Take the string all the way to the beginning of e-guitar's neck and weave again: under 1, above 2, under 3, above 4, under 5, above 6. Let both edges of piano string (pno str) have about 20 cm extra length outside the guitars.

Loosen the strings to enable the pno string to move along the guitars strings, but not too smoothly. Adjust it so that it is tight enough to also produce a 'hard' friction sound (see video). The tuning is instrument-relative. It is related to the strength of the strings and not to the absolute pitches.

picture 1: pno str in between C-gtr str



Clefs:

⊞ = Pno string - between point A' and B (from above the c-guitar and below e-guitar)

⊞ = c-guitar's body

⊞ = e-gtr's body

⊞ = guitar tablature

picture 2: styrofoam block - type



**First position:**

Hold fishing line on both sides: right hand (RH) holds the upper side of the guitar (diagram: C'); left hand (LH) holds the classical guitar side (diagram: D). Drag the FshL according to the indicated routs. See diagram for a reference of the letter's positions.

(L) = starting movement point is on the left

(R) = starting movement point is on the right

⊞ = drag FshL along the pno str arch.

⊞ = pull FshL up

⊞ = pull FshL down


⊞ = pull FshL straight along the fingerboard of both strings in the indicated direction.


⊞ = FshL "upbow" - RH pull the FshL up


⊞ = FshL "downbow" - LH pull the FshL up


⊞ = pluck the string against the pno str wire

⊞ = Bartok pizz


 = "strings bite": Think of your hand as if it is a snake that attacks its prey. Abruptly catch all the strings together and pull them all to the center. Hold the strings in this position until the "unbite" symbol appears.

 = "unbite strings" - release all the strings from the "biting" gesture.

 = Randomly pull (horizontally) up and down on different strings, while "walking" the hand along the guitar neck as indicated in mm. 90-91 until it catches the FshL.


 = pull the pno string down or up using the string-loop at position A (bottom of C-guitar)


 = Apply the styrofoam block on the strings at the indicated area

 = circular motion - with pno string - hold the string from both sides and try move it along strings in a circular motion


**Cello on stage:** Tuning: A=G  
D=C  
G=Eb  
C=Bb


**Clefs:**

 = Tailpiece clef: top line indicates the bridge; second top line indicates the tasto; third line indicates mid-point of fingerboard; bottom line indicates the beginning of fingerboard. When notes reach the area above the top line the bow should go up above the bridge


 = strings tablature - bottom string = IV

**Right hand / bow:**


 = light pressure that produces a hissing sound

 = normal pressure. If the notehead is put on the opposite side of the line that shows the action, it is there for rhythmic purposes only


 = heavy pressure on the string. Not necessarily affecting the dynamics. Can be used as a soft scratchy sound


 = vertical-down bow: drag bow from the indicated area on the cello to another. Keep the bow straight without moving it in an ordinary horizontal up or down bow


 = vertical-up bow


 = move bow rapidly vertically up and down

**Left hand**


 = block/damp all of the strings at the indicated area. All of the fingers are put horizontally against the strings


 = harmonic pressure on all of the strings: each finger is lightly put on each string at the indicated area. Freely choose the hand's shape and position

 = alternate bow-pressure between light to heavy (depth vibrato)

 = irregularly move bow up and down the strings in the indicated area

*Running in slow motion gesture*

 = hold the long FshL on both sides, pull the line to one side then the other, while moving your hands as if running in slow motion

 = half col legno, the fishing line wrap produces plucks while bowing. x symbols mark that plucks are to be expected

**Percussion:**

Scene I - Red Room site: Character role:

In this scene the percussion player should act as a torturer of a woman (the violin that is held and operated by the soprano singer). The sound that the styrofoam scratches make should resemble an old torturing bed and ropes being stretched. It is like a big wooden squeaky wheel - by turning it, it tightens a thick rope that takes the bed up and stretches the tortured person's hands.

Please watch the video that shows the approach of each gesture. Try to learn the part in two different aspects - as a player that plays music (sound organized in time) and as a torturer character that does particular things to the victim. For example, when you need to produce a Bartok pizz, think of it also as a body that you pinch. When using the spring, think of it as a comb that you use to comb the woman's hair.

When you know the sequence of gestures, then the rhythm doesn't have to stay precisely as written. Just take the spirit of it. The most important thing is to find a way to represent the torturing idea in a relatively music-related method.

Diagram of how to install the C4-5 crotales with the fishing line (or a long thin bungy rope):

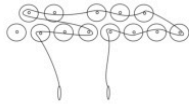


Image of the installation of the styrofoam box with a slinky on top of a metal sheet:

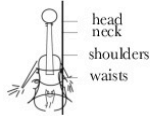


"tortured" violin:

The violin is covered by the violin cover, resembling a dress. The bungy rope is tied on the violin's waist as a belt.

On top of the violin's pegs there is a ball that is attached with a rubber band. Fishing line is tied to strings 1+2 (one end to each string). Another fishing line tied to strings 3+4 (One end to each string). The singer's hands should be inserted onto the loops of the fishing line so she activates it.

Please see the home video demonstration of the scene.



#### Piano keyboard - samples table:

sample number	sample name	appearance measure	pitch key letter and number	sample number	sample name	appearance measure	pitch key letter and number
Stereo output:				surround output:			
1.	beep	m2	B5	29.	clicks 1	m190	Bb3
2.	"opening sequence"	m2	C3	30.	clicks 2	m194	G3
3.	scan	m8	D3	31.	clicks 3	m199	C4
4.	"come"	m9	Eb3	32.	clicks 4	m210	E3
5.	beep	m105	Bb5	33.	clicks 5	m214	F#3
6.	beep	m110	Bb4	34.	clicks 6	m217	C#3
7.	beep	m113	A5	35.	clicks 7	m334	B3
8.	beep	m114	G#5	36.	distortion	m232	Bb3
9.	beep	m116	G4	37.	short beeps	m238	G2
10.	beep	m117	G5	38.	distortion-2	m238	G#2
11.	el-sounds	m119	B3				
12.	Pre-rec Do	m120	C5				
13.	beep	m121	F#5				
14-A	The goal-1	m121	A3				
14-B	The goal-2	m121	A2				
15.	beep	m123	F3				
16.	SIN-shadow	m122	F4				
17.	scan	m134	F5				
18.	beep	m159	B4				
19.	beep	m160	E5				
20.	beep	m165	C#5				
21.	beep	m166	C#4				
22.	beep	m167	D5				
23.	beep	m169	D4				
24.	beep	m170	A4				
25.	beep	m170	F#4				
26.	beep	m172	E4				
27.	beep	m173	Eb4				
28.	beep	m174	Ab4				

## Strings orchestra

### Tunings:

Violin I: E=D <sup>♯</sup>	Violin II: E=Eb	Viola: A=A <sup>♯</sup>	Cello: A=G <sup>♯</sup>	Double-bass: G=G
A=Ab	A=A	D=D <sup>♯</sup>	D=C	D=D
D=B	D=C	G=G <sup>♯</sup>	G=F <sup>♯</sup>	A=A <sup>♯</sup>
G=F <sup>♯</sup>	G=G	C=Bb	C=B	E=E <sup>♯</sup>
				C=G <sup>♯</sup>



= Tailpiece clef: Top line indicates the bridge; Second top line indicates the tasto; Third line indicates mid-point of fingerboard; bottom line indicates the beginning of fingerboard. When notes reach the area above the top line the bow should go up above the bridge.



= strings tablature - bottom string = IV

### Right hand / bow:

- ◇ = light pressure that produces a hissing sound
- ◊/• = normal pressure. If the notehead is put on the opposite side of the line that shows the action it is there for rhythmic purposes only
- = heavy pressure on the string. Not necessarily affects the dynamics. Can be used as a soft scratchy sound
- = semi heavy pressure
- ⤵ = vertical-down bow; drag bow from the indicated area on the cello to another. Keep the bow straight without moving it in an ordinary horizontal up or down bow
- ⤴ = vertical-up bow
- ~~~~~ = x's indicates that plucks may be produced due to the fishing line wrap when using the bow as c.l or 1/2 c.l.

### Left hand:

- ∅ = block/damp all of the strings at the indicated area. All of the fingers are put horizontally against the strings

### SIN site - mm 107-135:

#### Violin I and II:

Since the violins are tuned irregularly the indicated pitches are written as a scordatura. The upper stave shows the pitches to be played. The bottom stave shows the pitch results.

All of the pitches are played as a short scratch, therefore the "result" pitch is not always the actual sounding result, but more of the region of that. The parts can be played as double-stops by everybody, or as a divisi - to be decided during rehearsals.

### mm 161-189:



= In this section the notation changes into a visual instruction. This means that the violin clef is drawn in the direction of the musician vision of their instruments. Each musician has to think of their bow as if its middle part is a pencil. Each time a clef appears with a shape in it, the musician has to follow the line from the starting point to its ending point (the arrow) along an indicated time or until a next symbol appears. Normally the next symbol's shape starts from the same point the previous ended, in order to create fluency. The left hand is marked here as a big flat diamond or trapezoid.

\* Note: Various extra notes appear in the score, detailing particular instructions.

## Libretto.onion

Reynard Hulme, Sivan Cohen Elias  
Music, choreography, Medusa costume design: Sivan Cohen Elias

Note: This mini opera is designed to mimic the structure and methodology of a trailer (a series of excerpts from a movie or program used to advertise it in advance; a preview). The spectator is flung back and forth in indistinct time, over missing parts, and is perpetually in the midst of the (combined) action.  
The scenes never completely explain themselves. The incoherence is meant to entice; to plant an unresolved tension that can only be sated by going to see for yourself. In this way, the mini opera implies that its fragmentation is due some secret resolution elsewhere. At the same time, the protagonist begins to oscillate between the virtual and the reality. The trailer is a give-and-take with the audience; drama and its potential.

### Roles:

Tenor: Guntahar (pronounced 'goon-ta-har') – main character – Deep Web explorer

Soprano: Medusa. The sites that we visit reflect the classical transformation of Medusa, which also represent various stages of the Medusa virus that attacks Guntahar's computer.

Guitarist: represents the hacker that infiltrates Guntahar's computer and installs the Medusa virus.

Orchestra (strings and winds) in the upper pit: sounds coming from Guntahar's computer.

Fixed media (electronics): merger of real and virtual.

Other players on stage: cello, percussion – perform (together with the soprano) the Deep Web sites that Guntahar explores.

### Exposition, scene I: Hello guys & gals / Red Room site

left side of the screen turns on, showing the title 'Deep Web Browsing 52' in pixelated font

**Guntahar (tenor):** "Hello Guys and Gals, me, Guntahar, and welco-----[as if the recording is stuck and continues to play the last note for a long time, while on top a digital pre-recorded sound accompanied by a **green laser light** moving in a line through the main section of the audience, as if scanning them. As the laser moves, the sound moves with it] -----ome back!] to another week of Deep Web Browsing"

**Medusa (Soprano):** (with a short scared high vibrating voice) "haaa"

**Guntahar:** "the series where we take a look a-----"

**percussionist** presses the styrofoam box

**Medusa:** another short scared high vibrating voice: "haaa"

**Guntahar:** "possibly the scariest, creepiest... and well, most real part of the internet."

[**Cellist** (sits with the back to audience and is seen as a silhouette) holds the bow with one hand on each side and plays along the strings all the way to the left and then all the way to the right, as if a pendulum]

[**percussionist** presses the styrofoam box]

**Guntahar:** "U----- [Medusa: "haaa"] --m what I'm of course talking about is the deep web, the dark web, the dank web, the shadow web, well--"

[**percussionist** presses the styrofoam box]

[**Medusa:** "haaa"]

**Guntahar:** "the web that, the web that is too risqué to access regularly."

[**percussionist** presses the styrofoam box]

**Guntahar:** "This is episode fifty-two, we have, ph..well..made it, pretty far indeed, and uh...things are, obviously getting weirder and weirder and weirder. But this is the Deep Web. Now, last time (we were on here) we've uncovered government secrets, hitman websites and forums and god knows what."

[The last sentence of Guntahar overlaps with the **RED ROOM site**: stage is lit with a yellow and red light: On stage is a violin (or, if visually necessary, a cello) representing a woman being tortured (by the percussionist). The soprano is concealed behind a cloak, with only her hands visible, as the hands of the violin tied with fishing line to the violin strings. The violin is held upright. The torturer plays with the victim, taking off her dress, slapping it with a lunge chord, rubbing it teasingly, pinching, etc. The victim's hands respond to each act of the torturer and the soprano will also respond with her voice. At the end, the torturer violently twists a styrofoam ball attached to the pegs of the violin, symbolising the execution. He attaches a slinky on to her head and let's it bounce one time (first hint of the MEDUSA virus).]

**Medusa:** "haaa, haa, ha ha ha, haaa" (high trill)

**percussionist:** Uses a spring to drag along the violin strings, as if combing an invisible hair and starts to undress the violin, while pronouncing: "shhhlh..."

[Title disappears from left side of the screen and Guntahar disappears from the right. The stage is bathed in red light.]

[All the while, the following happens:

The cellist, with its back turned to the audience, representing a viewer of the site, uses his bow in a masturbation-esque manner. (string orchestra magnifies the cello action)

On the screen numbers appear in two columns. The one column shows the fee (in Bitcoins) required for the torturer to perform his next act. The other column's number goes up in increments until it matches that number. When the fee is reached, the numbers flash for a few seconds and then disappear. A new number replaces it shortly.]

**Guitar solo: ["hacking process has succeeded"]:** This is represented by the volume of the electric guitar amp, which is now turn on and amplifies the classical guitar through a bass piano string that is woven through both guitars' strings]

[Immediately after the violin's head is turned, the Red-Room site light turns off and the guitarist is left alone (most important part to be seen as a silhouette), as each hand holds all of the strings of a guitar, as if each hand is a snake that bites its prey (can also be seen as two birds), until they hold the fishing line, which is woven in between both guitars strings, and pull and push it from side to side until he takes only one side and bows the string with a cello bow. Since it's a fishing line, we can't see it and it looks like he's playing on the air (creating a ghostly squeal, as if casting a spell). To that, the string orchestra starts to add similar sounds with different techniques and transition into the next scene.]

Scene II: SIN site

Music appears - more disoriented, with cuts and short unrelated beeps. Guntahar starts to lose his ability to pronounce words properly (importantly; this manifests both as a real physical disability and a digital problem that affects the recording)

[Guntahar re-appears on the right side of the screen]

Guntahar: "Now, you may... why would somebody use such a service. Well, it can be used... good and bad... but as - a - ac - for a - schai... goes: D... DO It. Okay? Don't DO-----(continues as a pre-recorded sound of the exact tone plays, and they hold it together, until Guntahar drops out but still has his mouth open as if singing.)

[All this time the note is held, the next site appears on the screen and Guntahar is blurred out]:

STRATEGIC INTELLIGENCE NETWORK site:

[Darkness. On the screen appears a green world map, with certain portions red, orange and yellow, respectively, representing 'threat-risk' (example to be submitted).

Soprano: Mouth choreography

[Pre-recorded video (or done live and projected on the screen) of the soprano's mouth - choreography of the mouth pronouncing the words, but from the middle of the text the mouth slows down or moves too fast and then open and closes in a mechanical repetitive gesture, unsynchronized with the sound recording. This can be seen as one merged visual with the map, or in a separate screen. While she is talking, the screen starts to scroll, as if someone is browsing the site and its files.]

(Pre-recorded:) "The goal of the Strategic Intelligence Network is to provide intelligence, resources and tools to respond to crisis situations anywhere you are in the world. Be prepared for the day you might face abduction; Natural disaster; Government instability; Chemical threat; Nuclear threat; War threat; m... Threat... threat... threat... Atlas has got all the information of how to achieve personal safety." [at the same time another green laser light scans the audience.] [series of beeps]

[Guntahar rejoins the pre-recorded tone near its end] Guntahar: "t... Ub... m..." [very long] Alright?

Scene III: MEDUSA VIRUS

Stage: Soprano (Medusa) wears a tutu made of styrofoam, with many slinkies falling down from the tutu. A few of the slinkies' other ends are attached to the musicians hands and legs. At the center on the floor lies a green bubble-wrap path of about 2 meters. Approximately 1.5 meters further, a toy megaphone is hung down from the ceiling with a fishing-line. Soprano (Medusa) enters with the slinky dress, walking very carefully on the bubble wrap path. The pops of the wrap get duplicated by the orchestra. She steps out of the path and the pops are still present. A red warning light blinks and says: "Medusa Virus is detected".

Guntahar: "y - k - y-k you ca(n) do it... later, but - that - uhmm, be - because of the...."

Medusa aria: "Eh-soh eh-hoooh"

Guntahar: [as if taken from a completely different state of him, make sounds of a computer fight game]: "Shue!, shae! Yo! Chi! Cha! Fo-ou-shi! ou-aum"

Medusa aria: "eh-soh-eh-hoooh-ka-thuh, eh-(th)o-(d)a-hoooh"

Guntahar: "ut i-fa! Ke-ka-fa! Ker! Cho-vof-se-ta-vot-ke-ta-ka! Kop! Ou, tl-tl-d...but I'm not, a-s-sz, I might try, I don't - I don't want to scare anyone off from doing it"

Medusa aria: "lay - hoh, (p)oh (fa leh-hoooh, eh, eh-hoooh - hoo-shoo-hoo, (p)hu - ooh (y)ah (l)u eh-hoooh, hoooh"

Guntahar: "TO Tally GO for it, but you guys and gals need to be very careful in doing this kind of (AS FAST AS POSSIBLE)

stuff! S(o), D(on't), w(O - r(r)y) mm, ivy - (a)b(ou)t wh---what...aa, Do it - S T a R B T T P i M S W i T M" find

(original phrase: serial killer will track-you-down, hitman finds out where you live)

[Medusa (in a FF tape manner): "blblblbl"

Guntahar: "Don't worry.. behind it that - that - that - that... I'm alive... (s)ome...you know, pretty, ah (inhale), O(k)?"

[Medusa: "blblblbl"

Guntahar: "That being said, Sit back, relax, and let's see... who's ready for some more deep ---

[Guntahar gets scanned with the green laser light] we--b" [high thrill, rubbing hands together, as if receiving electric shock]

[A green text-box appears on the left side of the screen. Guntahar's side of the screen freezes. The following text, below, appears in the text box (everything written in uppercase is what appears in the text box and is sung by Medusa (through the megaphone) and the guitarist plays the intonation of the words. Guntahar can barely move his mouth now, and his responds are only pronounced by humming

Computer/Medusa: "HELLO, WHAT IS YOUR NAME?"

Guntahar: [types] JOHN

C/M: "SO, YOUR NAME IS JOHN" (Y/N)

G: Y [types] "uh-----m"

C/M: "WELCOME JOHN. ASK ME ANYTHING"

G: ("uhm...") [about to type]

C/M: "QUESTION TOO SMALL!"

G: (in a bubble thought: "I didn't even ask it anything!")

C/M: "WRONG INPUT WRONG INPUT WRONG INPUT WRONG INPUT" ...[at the same time on top of "wrong input" the mouse (on the text box) goes crazy and

Guntahar says (in the bubble thought): ("OK, relax with the fucking.. movement of my mouse!") [mouse stops movement]

G: (in a bubble thought: "That's interesting man. Ok, it's gonna start again, right?")

C/M: "WELCOME JOHN. ASK ME ANYTHING"

G: ("Is this just like the creepiest... ok...") [types] WHY ARE YOU HERE?

C/M: "QUESTION SEEMS NOT POSITIVE ENOUGH, WRONG INPUT WRONG INPUT WRONG INPUT WRONG INPUT WRONG INPUT"...

G: (type) WHO ARE YOU?

C/M: "CALCULATING ANSWER..."

[Lights shone on the slinkies produce magical reflections.]

[Dream-like music - Guitarist starts a plucking pattern on the guitar and gradually takes the classical guitar from the table while it is still connected to the electric guitar with the piano string, which gliss and distort the arpeggio pitches. At the same time, string orchestra pulls a fishing line that is woven along the strings, from side to side, producing a slow bowed cluster chord. All the players fist their hands and produces this gesture as if it's a slow motion running gesture of the hands. Also the cellist produces the running gesture and also Guntahar appears on stage at the back and run in slow motion as a silhouette. The orchestra, cellist and percussionist's running movement decays gradually and at some point each stops and freezes in the middle of the running gesture and only Guntahar keeps running alone and fades into dark or smoky space.]

Medusa aria: ha-oooh - ah -l(uh eh-hoooh, hoooh, hoooh, tu, tu...)

toh, toh, toh, toh, toh, ta-oooh, ta-oooh, tu, ta-oh, (v)ah, huh, oh, ah, pah (b)oooh, hah hoooh, (f)ah, eh-ah-uh-uh-----ah, (p)ah, ool-oh-é, eh, hoooh...

END

.onion was commissioned by Staatstheater Darmstadt as part of the Musiktheater Wettbewerb Darmstadt 2016, to be premiered on July

.onion

Sivan Cohen Elias  
June 14 2016

*mf*

Score 1  
Halle pyry & gals / Red Room site  
♩ = 40  
Tutti, rubato tempo

Trumpet  
Trombone  
Clarinet  
Oboe  
Flute  
Percussion  
Cymbals  
Snare  
Electric Piano  
Fiddle  
Viola  
Violin I  
Violin II  
Viola  
Oboe  
Double Bass

Approximately 2m playing the *Halle* (i.e. *onion*) through *Halle* gates.  
String quartet of both gates *top* side as close as possible to the first gate.  
Make sure that in an equal measure of *Halle*, in both sides of the gates.  
Right hand side the upper side of the *Halle*, and playing the lower side.  
Bring in both the lower string and guitar strings as *onion*.  
Use diagrams for adjustment of directions.

Violin I  
A-G  
D-C  
G-F#  
C-Bb

Violin II  
E-F#  
A-A  
D-C  
G-G

Viola  
A-A  
D-D  
G-G  
C-Bb

Oboe  
A-G  
D-C  
G-F#  
C-B

Double Bass  
G-G  
D-D  
A-A  
E-E  
C-C#

pp mp

III  
*p*

© Sivan Cohen Elias



6 *mf* *p* *mp* *p* 11

Violin I: *mf*, *p*, *mp*, *p*

Violin II: *ppp*

Viola: *mf*, *f*

Cello/Double Bass: *mf*, *f*

Performance instructions: "Sp. reform base", "parallel motion in both staves with one finger", "puckering is essential to achieving softening of a string", "no contact on string bed", "with a base".

Dynamic markings: *mf*, *p*, *mp*, *f*, *ppp*

Measure numbers: 6, 7, 8, 9, 10, 11

This page of a musical score contains the following parts and markings:

- Vocal Lines (7 and 8):** The vocal parts feature dynamic markings of *sf*, *mp*, *f*, *mp*, and *mf-p*. The lyrics include "die wünschenswerde's Lieb ist".
- Piano (Pno):** The piano accompaniment includes the right hand (RH) and left hand (LH) staves, with a dynamic marking of *mf*.
- Violin I (Vc I):** The first violin part includes fingering indications (II, III, V) and dynamic markings of *mf*.
- Violin II (Vc II):** The second violin part includes fingering indications (III, II, III, I, IV, III) and dynamic markings of *p* and *mp*.
- Viola (Vc):** The viola part includes fingering indications (V, IV) and a dynamic marking of *ppp*.
- Double Bass (D.B.):** The double bass part includes fingering indications (III, IV, V) and a dynamic marking of *mp*.
- Other Parts:** The score also includes parts for Flute (Fl.), Clarinet (Clar.), Bassoon (Fag.), Trumpet (Tromp.), and Trombone (Tromb.), which are mostly silent on this page.



Flute (Fl.)

Clarinet (Cl.)

Violin I (Vn. I)

Violin II (Vn. II)

Viola (Vla.)

Violoncello (Vcl.)

Double Bass (Cb.)

mf

mp

ff

*Hold legs in both sides with both hands. Move along the strings on opposite end think of an image of a pendulum. When the bow gets in each side, the hands keep moving up in the same direction.*

*Il braccio deve venire sopra la schiena a back for the arms to be completely straight.*

*System block*

This page of a musical score contains the following staves and markings:

- Flute 1 (Fl. 1):** Melodic line with various articulations and dynamics.
- Oboe (Ob.):** Melodic line with a note marked "s.t." (staccato) and a dynamic marking of *p*.
- Violin I (Vn. I):** Melodic line with fingering (III, IV, V) and dynamics (*p*, *f*, *mp*).
- Violin II (Vn. II):** Melodic line with fingering (I, V, II, III, IV) and dynamics (*p*, *mf*).
- Viola (Vla.):** Melodic line with fingering (IV, III, II, III, III, II) and dynamics (*p*, *mf*).
- Violoncello (Vcl.):** Melodic line with fingering (IV, III, II, I, I) and dynamics (*mf-f*, *p*, *mf*).
- Double Bass (D.B.):** Melodic line with fingering (V, IV, V, III, I, II, I) and dynamics (*p*, *mf*).
- Percussion (Perc.):** A single staff with a dynamic marking of *f-ff*.
- Other:** A note in the Oboe staff includes the instruction: "Pull reed out slightly down and up, the strings or melodic".

This page of a musical score includes the following parts and markings:

- Vocal Lines (7 and 8):** The vocal parts feature lyrics: "für sich hat", "für sich hat", "in der die", "in der die", "in der die". The dynamic marking *mf* is present.
- Oboe (Ob.):** The Oboe part includes a performance instruction: "Behind LH microphone here". The dynamic markings *sfz* and *mf* are used.
- Violin (Vc.):** The Violin part includes fingering numbers (I, II, III, IV, V, IV, III, II, I, LV) and dynamic markings *f* and *p*.
- Percussion (Perc.):** The Percussion part includes dynamic markings *ff* and *fff*.
- String Section (Str.):** The string section includes parts for Violin I (Vln. I), Violin II (Vln. II), Viola (Vcl.), and Double Bass (D.B.).
  - Vln. I:** Includes the dynamic marking *mf*.
  - Vln. II:** Includes fingering numbers (V, II, I, III, IV, V, I, III).
  - Vcl.:** Includes fingering numbers (V, III, II, IV, II) and the dynamic marking *f*.
  - D.B.:** Includes fingering numbers (V, III, II, IV, II) and the dynamic marking *f*.

The musical score for page 17 includes the following parts and annotations:

- Vocal:** Lyrics: "The ... of ... of ... who ... of ... of ... for ... of ... of ... of ... of ...".
- Oboe:** Shaded performance areas.
- Violin:** Fingerings I, II, III, IV, V; dynamics *mf*, *p*, *f*; annotation: "Hold bow as still as you hold hand".
- Violoncello:** Dynamics *ff*; annotation: "Spear light is on the down the sides are".
- Viola I:** Dynamics *mf*; annotation: "Distraction of bow made behind the side. Back of oboe set on the side of side for alto up finger set open neck apart and".
- Viola II:** Fingerings I, V, I, II, V; dynamics *ppp*, *mf*.
- Other parts:** Flute, Clarinet, Bassoon, Trombone, Trumpet, and Double Bass.









56  
7  
8  
Fl.  
Pic.  
Bassoon  
Trombone  
Vn. I  
Vn. II  
Vcllo  
Cb.

*f sempre*  
II III IV II III II IV I II I III  
Random stops

*p* *mf*

*cresc. poco - a - poco*

*p* *mf*

61

Violin I

Violin II

Viola

Violoncello

Contrabasso

*mf*

*f*

*p*

*mf*

*mf*

*p*

*mf*

*p*

*mf*

*p*

*mf*

*p*

*mf*

V V V V V etc.

RV

V V V V V

I II III II I V

I II III IV I

III III IV V IV IV III IV V

I V V

With bow in the right hand end in front of violin.  
Take the bow from your neck and hold it in hand.  
Hold the bow past and whip the string as indicated.

Slapper's hand go down

Use the middle finger of the bow hand if it is open and place the middle finger close.

Violin I

Violin II

Viola

Violoncello

Violin Diagram:

Stand behind the line. Upright the right and hold both sides with one hand. Rest the strings as indicated.

Push the side of neck to back and pull the rope up.

Roll rope along the left side of neck to back and pull the rope backwards.

Hold base in both sides with both hands. Move along the strings as indicated and think of an image of a pendulum. When the bow gets to each side, the hands keep moving up in the same direction.

Violin I dynamics: *mp*

Violin II dynamics: *mf*, *f*, *mp*

Viola dynamics: *p*, *mf*, *mp*, *f*

Violoncello dynamics: *p*, *mf*, *mp*, *f*

Violin I

Violin II

Viola

Violoncello / Double Bass

Pizz.

D.B.

71 72 73 74

ppp mf ff

rope hand rope

nicht ständig aufsteigend, auch keine fortw.

The score for page 25 includes the following parts and markings:

- Flute:** Part of a woodwind quintet, marked *pp*.
- Clarinet:** Part of a woodwind quintet, marked *pp*.
- Violin I:** First violin part, marked *f* and *mf*.
- Violin II:** Second violin part, marked *f* and *mf*.
- Viola:** Viola part, marked *ppp*.
- Violoncello (Cello):** Cello part, marked *f*.
- Double Bass:** Bass part, marked *f*.

Performance instructions include: "ppp: ohne nachschlag" (ppp: without backswing) and "Esse die hand halfstärkig" (Esse the hand half-strength). Fingering diagrams are provided for the Flute and Cello parts. The score also features various musical notations such as clefs, time signatures, notes, rests, and dynamic markings.

This page contains a musical score for page 26. The score is organized into several systems, each with a label on the left side:

- System 1:** Labeled with '01' on the left. It contains three staves. The top two staves are empty. The third staff is for Cello (Cg) and contains musical notation, including notes, rests, and dynamic markings like *f* and *mf*.
- System 2:** Labeled with '01' on the left. It contains two empty staves.
- System 3:** Labeled with '01' on the left. It contains two empty staves.
- System 4:** Labeled with '01' on the left. It contains three staves. The top two staves are for E. Sax (Sax) and are empty. The bottom staff is for Bassoon (Fag) and is also empty.
- System 5:** Labeled with '01' on the left. It contains two empty staves.
- System 6:** Labeled with '01' on the left. It contains two empty staves.
- System 7:** Labeled with '01' on the left. It contains two empty staves.
- System 8:** Labeled with '01' on the left. It contains two empty staves.
- System 9:** Labeled with '01' on the left. It contains two empty staves.
- System 10:** Labeled with '01' on the left. It contains two empty staves.
- System 11:** Labeled with '01' on the left. It contains two empty staves.
- System 12:** Labeled with '01' on the left. It contains two empty staves.
- System 13:** Labeled with '01' on the left. It contains two empty staves.
- System 14:** Labeled with '01' on the left. It contains two empty staves.
- System 15:** Labeled with '01' on the left. It contains two empty staves.



This page of a musical score, numbered 27, features a complex arrangement of instruments. The top section is dominated by a Cym instrument, which uses a unique notation system of 'X' marks and stems to represent rhythmic patterns. A small text box next to the Cym staff reads: "Bitte auf jede Gruppe mindestens 4 Schlagstriche und einen der beiden Klänge des ersten Schlagstrichs". Below the Cym staff are staves for Percussion (Perc.), Strings (Str.), and Woodwinds (Wd.). The string section includes parts for Violin I (Vln. I), Violin II (Vln. II), Viola (Vcl.), and Violoncello (Vcl.). The woodwind section includes parts for Flute (Fl.), Clarinet (Cl.), Bassoon (Fag.), and Contrabassoon (Cb.). The bottom of the page shows staves for Double Bass (D.B.) and Double Bassoon (D.B.). The score is divided into measures by vertical bar lines, and the Cym staff shows intricate rhythmic groupings.



This page of a musical score contains the following elements:

- Flute (Fl.)**: Staff 7, measures 96-100.
- Clarinet (Cl.)**: Staff 8, measures 96-100. Includes the instruction: "L'effet de double coup se finit l'air continu de pithy collé à p. 29, l. 12".
- Percussion (Perc.)**: Staff 9, measures 96-100. Includes the instruction: "Mimé chœur".
- Violin I (Vn. I)**: Staff 10, measures 96-100.
- Violin II (Vn. II)**: Staff 11, measures 96-100.
- Viola (Vla.)**: Staff 12, measures 96-100.
- Violoncelle (Vcl.)**: Staff 13, measures 96-100.
- Double Bass (Cb.)**: Staff 14, measures 96-100.
- Brass**: Staves 15-17 (Trumpets, Trombones, and Euphonium/Tuba) are present but contain no notation.
- Dynamic markings**: *mf-f* is marked in the Percussion staff.
- Performance instructions**: "Mimé chœur" and "L'effet de double coup se finit l'air continu de pithy collé à p. 29, l. 12".



Violin I

Violin II

Violoncello

Double Bass

Percussion

Measures 189-194 (Violin I and II):  
 - Violin I: Dynamics *mf*, *mp*, *mf*. Fingerings: II, III, IV, IV, II, III, IV, I, II.  
 - Violin II: Dynamics *f*, *mp*, *mf*, *p*. Fingerings: I, II, II, III, IV, I, II, IV.

Measures 194-198 (Violoncello and Double Bass):  
 - Cello: *mf*, *mf*.  
 - Bass: *f*, *mf*.  
 - Percussion: *f*, *f*.

Annotations:

- mf* (triple) *mf* (triple)
- RR hold Full body of string III-IV
- LR hold Full body of string III
- Violoncello: *ff*, *f*. Instruction: "Frenck with heavy pressure produces rough sounds."
- Double Bass: *ff*, *f*. Instruction: "Frenck with heavy pressure produces rough sounds."



Chopin, Frédéric: No. 10 (from the Notebook for Anna Bach)

135

136

137

138

139

140

141

142

Flute

Oboe

Violin I

Violin II

Viola

Violoncello

Double Bass

*ff*

*mf*

*mp*

*ff*

with a bow  
[fingered with deep pressure]  
[fingered with deep pressure]  
[fingered with deep pressure]

fingered with deep pressure

121

Oboe

*Allegretto* *f* *sfz*

*Illegible instruction: All the strings play up and down mostly down but not every time the pull-up string*

Violin I

*mp* *f* *mf*

Violin II

Violoncello

121

122

123

124

125

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127

128

129

130

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399

400



This page of a musical score contains the following staves and musical elements:

- Flute (Fl.)**: Staff 1, measures 230-235. Includes a dynamic marking of *f* at the end.
- Clarinet (Clarin.)**: Staff 2, measures 230-235. Includes dynamic markings of *mp* and *mp*.
- Violin I (Vcl. I)**: Staff 3, measures 230-235. Includes a dynamic marking of *f*.
- Violin II (Vcl. II)**: Staff 4, measures 230-235. Includes dynamic markings of *f* and *mp*.
- Viola (Vcl. II)**: Staff 5, measures 230-235. Includes a dynamic marking of *mp*.
- Violoncello (Vcl.)**: Staff 6, measures 230-235. Includes a dynamic marking of *mp*.
- Double Bass (D.B.)**: Staff 7, measures 230-235.
- Double Bass (D.B.)**: Staff 8, measures 230-235.

The score includes various musical notations such as notes, rests, and dynamic markings. Fingerings are indicated by Roman numerals (I-IV) above notes. A *trill* marking is present in the Viola part at measure 230. A *trill* marking is also present in the Violoncello part at measure 230. A *trill* marking is also present in the Double Bass part at measure 230.

36

Flute

*ff*

Oboe

*ff* (the string on hand)

Violin I

*mf*

Violin II

*ff* *mf* *f* *mp*

Viola

*ppp*

Musical score for page 36, featuring parts for Flute, Oboe, Violin I, Violin II, and Viola. The score includes dynamic markings such as *ff*, *mp*, *mf*, *f*, *mp*, and *ppp*. The Oboe part includes performance instructions: "Pull the left string of the register up on this note. Breathe in on the left of the first string. Do not produce a hard register sound resembling 'puffing out'. Do not hold the sound as long as indicated while keeping the string gradually. Do not pull tightly up the string and increase raising of breath, so the sound changes in timbre slightly. (gitar) noncupressivo." The Viola part includes the instruction: "Breathe the string through the register. Do not hold the sound as long as indicated." The score also includes fingering numbers (I-IV) and a rehearsal mark (13).

7  
8  
Oboe  
Clarinet  
Bassoon  
Trumpet  
Violin I  
Violin II  
Viola  
Violoncello  
Double Bass

Gradually raise bow to face the wood on the bow for the side where you bow on the higher edge. Every stroke should be very long and powerful in total movement quality. Each stroke should move on a different plane on the bow, so it has a different quality. *mp* *f* *Spiccato bow*

This page of a musical score contains the following parts and markings:

- Flute (Fl.)**: Part 1, measures 1-5.
- Clarinet (Clar.)**: Part 1, measures 1-5.
- Violin (Vc.)**: Part 1, measures 1-5.
- Violin II (Vln. II)**: Part 1, measures 1-5.
- Violin I (Vln. I)**: Part 1, measures 1-5.
- Viola (Vla.)**: Part 1, measures 1-5.
- Cello (Vcllo)**: Part 1, measures 1-5.
- Double Bass (D.B.)**: Part 1, measures 1-5.
- Flute (Fl.)**: Part 2, measures 1-5, with performance instructions: "Blow the steady breath into the organ pipes. If wind makes a spot, the growing sound." and "Gradually increase from the organ pipes to the bellows." with dynamic markings *f* and *p*.
- Flute (Fl.)**: Part 3, measures 1-5, with a dynamic marking *mf*.
- Flute (Fl.)**: Part 4, measures 1-5.
- Flute (Fl.)**: Part 5, measures 1-5.
- Flute (Fl.)**: Part 6, measures 1-5.
- Flute (Fl.)**: Part 7, measures 1-5.
- Flute (Fl.)**: Part 8, measures 1-5.
- Flute (Fl.)**: Part 9, measures 1-5.
- Flute (Fl.)**: Part 10, measures 1-5.
- Flute (Fl.)**: Part 11, measures 1-5.
- Flute (Fl.)**: Part 12, measures 1-5.
- Flute (Fl.)**: Part 13, measures 1-5.
- Flute (Fl.)**: Part 14, measures 1-5.
- Flute (Fl.)**: Part 15, measures 1-5.
- Flute (Fl.)**: Part 16, measures 1-5.
- Flute (Fl.)**: Part 17, measures 1-5.
- Flute (Fl.)**: Part 18, measures 1-5.
- Flute (Fl.)**: Part 19, measures 1-5.
- Flute (Fl.)**: Part 20, measures 1-5.

This page of a musical score contains the following instruments and parts:

- Flute (Fl.)**: Part 7, marked *mf*.
- Clarinet (Clari.)**: Part 8.
- Violin (Vc.)**: Part 9.
- Viola (Vcllo.)**: Part 10.
- Double Bass (D.B.)**: Part 11.
- String Ensemble (Str.)**: Parts 12 (Violins I), 13 (Violins II), and 14 (Violas).

The score is written in a common time signature (C) and features a dynamic marking of *mf* (mezzo-forte) for the Flute part. The notation includes various musical symbols such as stems, beams, and slurs.

*Ground Piece* **Scene III: Madusa Virus**

7  
150  
8

Obs

*Ground Piece* **Scene III: Madusa Virus**

Vc

150

LU

*ff*

150

E. Obs  
Pre-rec  
rec'd

*Ground Piece* **Scene III: Madusa Virus**

Vln I

150

*For strings full on the notes to hold, and  
indicated the notes below notes,  
in order to hold in the playing area  
there indicated and certain parts.*

150

Vln II

*For strings full on the notes to hold, and  
indicated the notes below notes,  
in order to hold in the playing area  
there indicated and certain parts.*

150

Vla

150

Vc

150

D.B.

41

**mf** **f**

130  
132  
134  
135

Violin I

Violin II

Viola

Violoncello

Double Bass

Piano

*Strike edge of the hahle using fingertips in before and stop back to the floor.  
[The rest are still respectively moving through the rubber band program hole]  
hahle is placed lightly by the violoncello.*

*Play five or six notes with both hands.  
Move along the string in a curved and flat of an angle of a position.  
Use the first part to work only, the hand stop moving in the same direction.*

**mf** **f**

V  
IV  
III  
II  
I

*Put strings half on the side of bridge and  
pull out back the rubber band in order to  
avoid the hahle using fingertips, avoid  
finger in rubber band and continue play.*

*Put strings half on the side of bridge and  
pull out back the rubber band in order to  
avoid the hahle using fingertips, avoid  
finger in rubber band and continue play.*

**Medusa aria, 1**

*Coperto/felt glove time*

*mp* *mf* *p*

*with a cello line*

*mp* *mf* *p*

**Violin I**

*mp* *mf-p* *sfz p* *sfz p*

**Violin II**

*mp* *sfz p* *sfz p* *sfz p*

**Viola**

*mp* *mf* *p*

**Cello/Double Bass**

*mp* *sfz p* *sfz p*

*Use middle point of the bow as if it is a pencil*

*Use middle point of the bow as if it is a pencil*

*Use middle point of the bow as if it is a pencil*

*Use middle point of the bow as if it is a pencil*

*Use middle point of the bow as if it is a pencil*

*Use middle point of the bow as if it is a pencil*

*Use middle point of the bow as if it is a pencil*





*Interpretation used*

Vocal lines (Soprano, Alto, Tenor, Bass):

Violin I (Vcl. I):

Violin II (Vcl. II):

Viola (Vla.):

Violoncello/Bass (Vcl. & Kb.):

*Escapade forte*  
*Escapade mezzo*  
*Escapade piano*

mf, f, ff, p, mp, m.a.p., sfz, sf

mf, f, ff, p, mp, m.a.p., sfz, sf

mf, f, ff, p, mp, m.a.p., sfz, sf

mf

**V**  
236  
237  
238  
239  
240  
*mf* *ff*

**Violin I**  
236  
237  
238  
239  
240  
*p* *f* *ff* *mp* *and*

**Violin II**  
236  
237  
238  
239  
240  
*f* *mp* *p*

**Viola**  
236  
237  
238  
239  
240

**Double Bass**  
236  
237  
238  
239  
240

**Chorus**  
236  
237  
238  
239  
240  
*mp*

**Cello**  
236  
237  
238  
239  
240  
*mp*

**Clarinet**  
236  
237  
238  
239  
240

**Stage**  
236  
237  
238  
239  
240

*Hold string bow on top of the page string*

*At the eye bridge, between two pulleys: Pull and push your string bow carefully.*

*Hold string bow and pull it at the eye (above line) and at the left support.*

*Examples:*

- Example 1 (1. 2. 3. 4.)*  
Control different bowings indicated by the indicated symbols.  
Carefully change direction, size and dynamics of the stroke.  
Hold and position for 1-3 bars and apply even to the next position, unless otherwise noted.
- Example 2 (1. 2. 3. 4.)*  
Control different bowings indicated by the indicated symbols.  
Carefully change direction, size and dynamics of the stroke.  
Hold and position for 1-3 bars and apply even to the next position, unless otherwise noted.

*mf* *ff* *mp* *p* *f* *ff* *mp* *p*

*and*



Violin I and II parts with fingerings (I-V), bowings, and dynamics (*sf*, *f*, *p*). Includes performance instructions such as "Keep bowing lightly on the wooden board" and "Start by creating a pp note 2-3 bars".

Viola part with fingerings (I-V) and dynamics (*sf*, *f*).

Double Bass part with dynamics (*sf*, *p*) and a performance instruction: "Keep bowing lightly on the wooden board".

Violin I and II parts include a box: "Start by creating a pp note 2-3 bars".

Violin I part includes a box: "Keep bowing lightly on the wooden board".

The image shows a page of a musical score, page 48. The score is arranged in a vertical layout with staves for different instruments. At the top, there are staves for Flute (Fl.) and Oboe (Ob.). The Flute part has a melodic line with various ornaments and a dynamic marking of *f*. The Oboe part has a similar melodic line. Below these are staves for Violin I (Vln. I) and Violin II (Vln. II), both with sparse notes and dynamic markings. The Viola part is also present with similar notation. The Violoncello (Vcllo) and Double Bass (Cb.) parts are at the bottom, with the Double Bass part having a dynamic marking of *f*. There are several text boxes and annotations throughout the score, including "Basso continuo" and "Basso continuo" with "V" markings. A large "f" dynamic marking is prominent in the Oboe part. The page number "48" is in the top left corner.

The musical score for page 49 is divided into several systems. The top system contains the vocal line with lyrics: "sing - bi - gest sing - bi - gest sing - bi - gest sing - bi - gest", "sch - we - ße - ße", "sch - we - ße - ße - ße - ße - ße", and "ge - ße - ße". The second system is for the Oboe (Oboe), with performance instructions: "mit viel Resonanz im Mund" (bolded), "Eger", and "dröhnen hin" (bolded), with a dynamic marking of *ff*. The third system is for the Violin (Vic.), with the instruction "Brenn in die notes herein" and a dynamic marking of *mf sempre*. The fourth system is for the strings (Str.), including Violin I (Vln I), Violin II (Vln II), Viola (Vla), and Cello/Double Bass (Vcl/Bk). The string parts feature various markings such as *rit*, *ritard*, and *rit*. The page number 49 is printed at the bottom center of the score.

Voice

200  
 201  
 8  
 ver - ge - bis a - singe  
 singe - hi - po - singe - hi - po - singe - hi - po - singe - hi - po - singe - hi - po - singe - hi - po -  
 vil - tu - tis a - singe

Oboe

200  
 201  
 Auf - spie - le mit dem  
 202  
 203  
 204  
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Violin I

Violin II

Viola

Violoncello

Double Bass



**Violin I**  
296  
Apply system block on left to affect the sound through the five string.  
Scratch holding the pins to form III in the III position with the same movement.  
Indication where to place the strings relatively in the five string position. In this case, block strings on the right to the four string.  
Cage

**Violin II**  
296  
Dmg Fall down out of the fingerboard with

**Viola**  
296  
III indicates position a few days in along all the strings, tension the bridge and neck.  
III: The notes are on neck of the finger on all the four strings. Get up and down the fingerboard, while they use fingers in different shape.  
Try to not put back to the hand's movement.

**Violoncello**  
296  
Hold Fall down  
Produce speed intention like sounds  
mf-f

**Double Bass**  
296  
mf-f

**Dynamic markings:** f, mf, p

**Performance instructions:** Apply system block on left to affect the sound through the five string. Scratching holding the pins to form III in the III position with the same movement. Indication where to place the strings relatively in the five string position. In this case, block strings on the right to the four string. Dmg Fall down out of the fingerboard with. III indicates position a few days in along all the strings, tension the bridge and neck. III: The notes are on neck of the finger on all the four strings. Get up and down the fingerboard, while they use fingers in different shape. Try to not put back to the hand's movement. Hold Fall down. Produce speed intention like sounds.

211

7

211

8

211

Oboe

Clarinet

211

Vc.

211

Clarinet

211

Bassoon

211

211

211

211

211

Violin II

211

Vc.

211

211

211

211

D.B.

*Continually and extremely slowly  
being guided by your lips.  
The phrasing note should not be  
disturbed by any of the notes.  
Try to make everything to be fitting in the rhythm.*

*All first-measure  
211 rather first-measure*

*Circular bow at 5th*

*mf-f*

236

7

236

8 *Medusa aria 2*

Clari

236

*Continue block string*  
with the same method  
and do

$\phi$   
pull while breath

236

*mp-p*

*1st 1st appear only*

236

3

236

236

Vln II

*mf*

Vln

Vcl

236

236

236

236

Musical score for page 54, featuring staves for Oboe, Clarinet, Bassoon/Contrabassoon, Violin II, and Viola. The score includes various musical notations such as notes, rests, and dynamics like *mp* and *mf*.

**Oboe:** Contains technical instructions:
 

- Continuo pluck string with the same method as Eb
- Continuo moving guide to your left and then also turn back to the piano string (keep moving and change the bow)

**Violin II:** Features dynamics *mp* and *mf*.

**Viola:** Features dynamics *mp* and *mf*.

**Other instruments (Flute, Clarinet, Bassoon/Contrabassoon, Violin I, Cello, Double Bass):** These staves are present but mostly contain rests or are otherwise empty in this section of the score.

This page contains musical notation for Violin II, Violin I, and Double Bass. The Violin II part includes a section with a circled 'G' and a '3:4' time signature change. The Violin I and Double Bass parts feature a melodic line with slurs and dynamic markings such as *mp* and *mf-f sempre*. Performance instructions in Vietnamese are provided for several measures, including 'Hãy để tay phải ở bất cứ phần nào của dây đàn để tạo ra âm sắc mong muốn bằng tay trái' and 'Hãy để tay phải ở bất cứ phần nào của dây đàn để tạo ra âm sắc mong muốn bằng tay trái'.

Violin I part: *mf*

Violin II part: *mf ff sempre*

Viola part: *mf ff sempre*

Violoncello part: *mf ff sempre*

Contra Bass part: *mf ff sempre*

Clarinet part: *mf*

Flute part: *mf*

Woodwind section: *mf*

String section: *mf ff sempre*

Performance instructions: *mf*, *ff*, *sempre*

Violin I: *mf*

Violin II: *mf ff sempre*

Viola: *mf ff sempre*

Violoncello: *mf ff sempre*

Contra Bass: *mf ff sempre*

Clarinet: *mf*

Flute: *mf*

Woodwind: *mf*

String: *mf ff sempre*

*As Eger reaches back to the table, Eger holding its neck and  
back to over it in a circular motion.  
Re-organize the pen string to be as in the following diagram  
Let the pen string be long enough on the neck side so it can strike the Eger  
strings on its F# first fret.*

*Bring up and tie down the string line  
and holding it in both hands from both sides.  
Bring up the front and up after each  
the F# string.*

*Bring up and tie down the string line  
and holding it in both hands from both sides.  
Bring up the front and up after each  
the F# string.*

*Bring up and tie down the string line  
and holding it in both hands from both sides.  
Bring up the front and up after each  
the F# string.*

*Bring up and tie down the string line  
and holding it in both hands from both sides.  
Bring up the front and up after each  
the F# string.*

*Bring up and tie down the string line  
and holding it in both hands from both sides.  
Bring up the front and up after each  
the F# string.*

20

7

20

8

20

Clarinet

When the guitar and you bring me organized,  
 while deep moving the Cigar in circular motion,  
 like the violin knee wrapped with the rope string  
 stroke up and down the rope string,  
 more distance from 5th. Spindle movement down and  
 middle fist fuck up or down.

20

Vc.

20

Contra

20

Trumpet

20

20

20

Vln II

20

Vln

20

Vc.

20

20

20

D.B.



This page of a musical score contains the following parts and markings:

- Measures 260-265:** The top section of the page, including the vocal line and the Oboe part.
- Oboe Part:** Features two text boxes with performance instructions:
  - Box 1 (Measures 260-261): *Bitte ohne Luft, leicht immer tiefer, in der 2. Note werden 2x höher*
  - Box 2 (Measures 264-265): *Stimme langsam über, im 4. Takte werden die folgenden 3 Noten höher, die 4. bleibt in der ursprüngl. Höhe*
- Vocal Line:** Includes lyrics: *V M T V M V M T M*
- Instrumental Parts:**
  - Violin I:** Features a melodic line with slurs and accents.
  - Violin II:** Features a melodic line with slurs and accents.
  - Viola:** Features a melodic line with slurs and accents.
  - Cello:** Features a melodic line with slurs and accents.
  - Double Bass (D.B.):** Features a melodic line with slurs and accents.
- Other:** The strings (Violin I, Violin II, Viola, Cello, Double Bass) are marked with *pp* (pianissimo) throughout the section.

250

7

250

8

250

Obs

250

Vc

Cello

250

250

250

250

250

Vln II

250

Vln

250

Vc

250

250

D.B.

235

Fl.

235

235

Clarinet

235

Trp.

235

Tbn.

235

Vln I

235

Vln II

235

Viola

235

Vcl

235

D.B.

Musical score for page 62. The score includes a vocal line at the top with dynamics *f* and *mp*. Below the vocal line are staves for Oboe (Obs), Violin (Vc), English Oboe (E. Obs), Percussion (Perc), Viola II (Vla II), Viola (Vla), Violin (Vc), and Double Bass (D.B.). The vocal line contains notes with slurs and dynamics. The Oboe staff has a long horizontal line with an arrow pointing right. The other instrumental staves are mostly empty.

*From the 2000  
Summer, the All end*

@Sivan Cohen Elias  
[sivan.coel@gmail.com](mailto:sivan.coel@gmail.com)

XII. Holes and Tunnels

Sivan Cohen Elias

Holes & Tunnels

trio for piano, saxophone, percussion, tubes and other objects

Duration: 18 minutes  
September 27, 2016

## Installations

### Piano:

#### Inventory

- A) Two pieces of styrofoam of about 15X20X3.5cm
- B) Two pieces of hardboards of 28X30cmX5mm thickness. It is recommended to attach a small piece of wood onto the smooth side of the board in order to use it as a handle (pic2). The board is to be dragged along the strings, so it is recommended to rosin it slightly, making it easy to use.

Pic1



pic2



- C) Two post-its pads 10X10X1 cm, as shown below.



- D) One metal extension coil spring L25XD2cm, wire width 1mm
- E) 1 metal extension spring L12.5XD2cm, wire width 1mm (half size of the one above)



- F) 7X5 cm piece of foam-board:



- G) One elastic metal spring L30XD2cm, wire W 0.7mm
- H) One ping-pong ball

I) Three 50-60cm lengths of fishing line 6mm gauge, thoroughly rosined

J) Big Super Ball (5 cm diameter) mallet

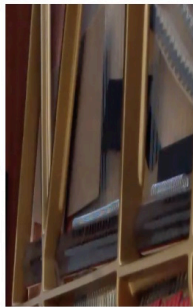
K) A long flexible PVC pipe 2.5cm Diameter, about **7 meters long** (called *tube* in the score):



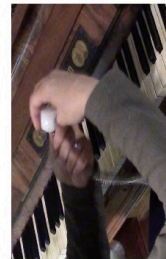
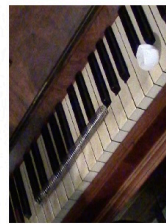
### Installation

Put the objects on the strings of the piano in the following order:

- 1) Put the two styrofoam pieces on the far end of the bass strings section and the one section above. It might need another heavy object resting on top of it to press it down
- 2) Insert the two squares (B) at the closest edge of the furthest bass strings section and the one section above
- 3) Put the two post-it pads (C) on the middle strings section
- 4) Put the long spring (D) just below the second square (A)
- 5) Put the smaller spring (E) on the right to the second pad
- 6) Put the piece of foam-board (F) on top of strings B5 and C6



- 7) Make a small hole in the ping-pong ball (H) and attach it to the elastic spring (G). Put it on the right end of the keyboard:



- 8) Weave three separate fishing line (I) through three different locations in the piano:





Locations:

- 1) Under C#6 out after Eb 6
  - 2) To be indicated
  - 3) To be indicated
- 9) Put pipe (K) on the left side of the piano.

### **Percussion:**

#### Inventory

- A) One big timpani
- B) Four different windup toys with different rhythms:



C) One styrofoam box about 40X30cm with a 1cm width upper frame, which can produce squeaks and winds-like pitches while stroking the frame with a cello or double-bass bow:



- D) Cello or double-bass bow
- E) Big Super Ball (about **4cm** diameter) mallet (short and flexible handle, like a metal nail file or the like)
- F) Powerful fishing line about 1-1.5 meters (connecting to the saxophone's tube)
- G) Extra-large aluminum pot lid about 47.5 cm (or 18-19 inch) in diameter (also called *big cymbal* in the score):



H) Large aluminum pot lid about 30 cm (14 inch) in diameter (also called *small gymbal* in the score) with a small stool:



I) One medium-sized African drum or a simple stool of that structure (used as a stand with some acoustic resonance for the aluminum pot lid to be placed on):



J) One aluminum rectangular baking pan (or any hard aluminum shape in the size of about 40X30 cm (used as a third surface to strike on in mm 132-142):



K) One stand for the aluminum baking pan to stand it upright

L) One violin bow

M) One low E or A electric guitar string

N) One small 22X17.5cm disposable aluminum foil table pan:



O) One medium-large smooth foam ball, about 8cm in diameter:



P) Strong fishing-line, about 5-6 meters long, heavily rosined

Q) One wooden chair with slitted backrest:



R) Table of formica or any smooth surface that squeaks when wetted and rubbed:



S) Medium size plastic bowl, about **25cm** diameter rim; thin rim about **2mm** thickness; about **15-17cm** depth; straight sides – fill third of it with water:



T) Long needle or the like (suggested, not required)

U) Duck tape (suggested, not required)

### Installations

Five different locations:

- 1) Behind the piano: big timpani, styrofoam box (C), windup toys (B), cello bow and Super Ball.
- 2) Extra-large pot lid is hanged from the ceilings facing the percussion player when standing by the piano in front of the audience.
- 3) A wooden chair at the edge of stage: between saxophone and piano, profile to audience, attached with the turtle-box in the following manner (see pic): fishing line is threaded through the styrofoam ball and then through the box, weaving through the bottom slit of the chair, coming over the top. The upper fishing line will be held by the right hand and the part nearest the ball is held with the left hand.



Turtle box installation:

- 1) Use a long needle or the like to make a hole through the smooth-foam ball (M). 2) thread the fishing-line through the ball. 3) make a hole in the middle of the disposable aluminum foil box (N) 4) thread the fishing-line from the ball through the box. 5) make a visible handle for each fishing-line's end using a duck tape or the like.

4) Table (R):

Stands at the lower part of stage on the left (can be re-considered). Stands with the long side facing the audience. In the middle (nearer to the performer than the audience) is a bowl with water (S). \* optional: on the right side put a long wooden cutting board. On the left – a plastic place-mat. The installation looks like this:



5) Violin bow installation:

Insert the point of egr string into the hole at its end, tie it around the frog, then wrap it along the hair with as many loops as possible, and tie it at the other side of the bow. The bow should be placed by the African drum and lids installation.

## Saxophone

### Mouthpieces Harmonica - Inventory

- A) Saxophone baritone
- B) Saxophone soprano mouthpieces
- C) Saxophone alto mouthpieces
- D) Saxophone baritone mouthpiece
- E) Plastic recorder mouthpiece including: 1) backing paper; 2) low E or A electric guitar string
- F) Trumpet (or any other mouthpiece of any instrument) mouthpiece
- G) A long flexible PVC pipe 2.5cm Diameter, about 6-7 meters long (in the score it is called *tube*);



H) Any other PVC pipe 1.5 meter or longer

I) Additional objects: A kids' rolling-drummer toy or any type of rolling toy in this style:

### Installation

The mouthpieces can be structured in two different ways depending on the player's preferences and logistics on stage.

One way is by attaching each mouthpiece to a microphone stand and placing it in a harmonica-like structure, as close as possible to each other.

The baritone saxophone should be standing on a stand close enough to the entire structure.

The second option is to hang all of the mouthpieces with a fishing line from the ceilings or another tall structure. The mouthpieces should be at the same height.

The pipe, which is called "Tube 7" in the score, should be tied with a fishing line that goes through the piano legs all the way to the percussion's first location, but has to make sure that it can reach the location of the hanged pot lid.

### **Performance Notes**

#### **General note:**

The piece is written with the attempt to evolve from accuracy to elasticity of rhythms, time and pitches. It starts with a very precise notation of pitches and rhythms and ends with a sequence of events that happens in the pace determined by performers. The pitches of the tune in the section "Tubes Knot" is only suggestive (full description below).

#### **Tubes Knot section – detailed description about mm 57-65 for all of the three players:**

As can be seen also in the video demonstration, the attempt is as follow:

The saxophonist blows with medium-low power, *cresc-dim*, then percussionist starts blowing back into the tube from the other side. When the saxophonist gets the sound back into his/her side he opens the mouth and leaves the tube facing his mouth, while the percussionist blows from the other side with a medium power that goes slightly down and then up. At that same moment the saxophonist closes the mouth on the tube for a 1/4 second and then opens again. This happens three more times (creating a wah-wah-like effect) until in mm 60 there is an overlap, in which the percussionist blows the last note and the saxophonist starts to blow again with the same strength and opens the mouth again. Then immediately the saxophonist starts to blow again while the percussionist blocks and releases the tube with his thumb as indicated (which creating a slow tremolo effect). At the end of that measure the saxophonist inhales through the tube, but it is blocked from the other side again by the percussionist's thumb. At the end of the inhale the saxophonist produces a loud kiss effect that is ended by opening the mouth, withdrawing from the tube's opening and returning to it. Then close mouth and open as before, while percussionist blows the tube from the other side with the indicated dynamics. At the end of that phrase, it is very important that both players have the tube outside the mouth region and close the mouth, as the pianist starts to blow the tube in her side, meaning there is, for a moment, an ambiguous source of sound.

- Important note: as written in the score and the separate parts, all the pitches written for the tubes are written as a reference of the approximate height caused by the velocity of blowing. Follow the contour together with the dynamics. Playing the tube is very intuitive, therefore all the players are asked to be involved.
- Mm 74-80: The three performers play on separate tubes. They are all asked to show the dynamic level they play with one of their hands, but the indication of loudest level changes from: a) loudest level = hand is all the way up, to b) loudest level = hand all the way down, to c) loudest level: hand all the way to the side. In the case of the percussionist, when the hand goes to the side he bangs with the Super Ball in his hand on the big pot lid that is hanged on his left side.

## **Saxophone:**

**Baritone saxophone:** All the multi-phonics notations are taken from the book: *The Techniques of Saxophone Playing* / Marcus Weiss, Giorgio Netti, Bärenreiter.

### **Mouthpieces harmonica**

- = air sound
- =  $\frac{1}{4}$  note length air sound (to not be confused with the  $\frac{1}{2}$  note length air-sound)
- = inhale
- = exhale
- = teeth on reed: follow the line going up and down the reed with your teeth while blowing air and let harmonics and squeaks come out naturally
- = slap (tongue)

### Specific mouthpieces sections:

mm 108-119: Play the recorder mouthpiece as indicated. Due to the parchment paper that covers the front-top and bottom holes, the sound result resembles a filtered whistle. Try to think about the sound of an old transistor and changing of radio stations with poor signal. The radio-channels sound is mostly desired when the indication to close the hole with the teeth appears. While playing that, it is asked to pull an A electric guitar string through the parchment paper from side to side. The player should imagine that the string comes to life almost, by gradually accelerating its movement and change of direction until, at the end of the phrase, it goes out completely.

## **Piano and Percussion**

All the instructions are written inside the score and shown in the general video demonstration.

For your convenience, attached is also a separate video with the action with the bowl from the performer's point of view – you may either practice with it or/and perform in front of it being played during the concert.

## **Saxophone:**

**Bartone saxophone:** All the multi-phonics notations are taken from the book: The Techniques of Saxophone Playing / Marcus Weiss, Giorgio Netti, Bärenreiter.

### **Mouthpieces harmonica**

- = air sound
- = 1/4 note length air sound (to not be confused with the 1/2 note length air-sound)
- = inhale
- = exhale
- = teeth on reed: follow the line going up and down the reed with your teeth while blowing air and let harmonics and squeaks come out naturally
- = slap tongue

Specific mouthpieces sections:

mm 108 -119: Play the recorder mouthpiece as indicated. Due to the parchment paper that covers the front-top and bottom holes, the sound result resembles a filtered whistle. Try to think about the sound of an old transistor and changing of radio stations with poor signal. The radio-channels sound is mostly desired when the indication to close the hole with the teeth appears. While playing that, it is asked to pull an A electric guitar string through the parchment paper from side to side. The player should imagine that the string comes to life almost, by gradually accelerating its movement and change of direction until, at the end of the phrase, it goes out completely.

## **Piano and Percussion**

All the instructions are written inside the score and shown in the general video demonstration.

For your convenience, attached is also a separate video with the action with the bowl from the performer's point of view – you may either practice with it or/and perform in front of it being played during the concert.

# Holes & Tunnels

trio for saxophone (B♭, mouthpieces), piano, percussion and objects

Sivan Cohen Elias  
September 27, 2016

A  $\text{♩} = 60$

drag squares with much pressure.  
let harmonics appear as random squeaks

Squares

hold spring at its center and drag it horizontally  
along the strings in the indicated arrow direction.

big spring



10 (♩.=60) (♩.=60)

With RBF: rub square on strings as far as possible

*mf*

Violins I, Violins II, Violas, Cellos, Double Basses, and Pedal.

10

Sax-vld D inhale V

airty sound

Saxophone and Violin.

10

wind-up duck by

release duck

wind-up referee by

release referee

Timpani.

18

post-it pads  
 dip the tip of your fingers directly onto the post-it pads this produces a damped accent.

Squares

*f*

*ff*

S

K

pod

18

Sec tube: 8  
 L-shape: 7  
 Rec: 6  
 Trip: 5  
 A-mulip: 4  
 B-mulip: 3  
 S-mulip: 2

V

center square

air only

rest on rid slide

18

release  
 release

Super-ball  
 collect all the top white starting to drag loose the superball in an eight-shape movement.

ord cello-bow on styrofoam box with a thin frame

*ppp*

*p*

Temp.

S

K

ped.

recorder

substituting vocal

MPb  
B/C-4  
C

MPb  
19  
C

MPb  
100  
B/Bb-5+c3  
c# Bb  
C

B. Sx. -1

mf

pp

mf

mp

f

mp

stroke the styrofoam about 1.2cm in from the right side of the box.

Styrofoam box

mf

mp

ff

38

big spring

hold

put down on the strings

X = stamp the spring on the strings

Hold

drag ball along the indicated keys producing a geyser-like sound

*mf*

39

Tube: 7

Sec tube: 8

Le tube: 7

Rec: -6

Tip: -5

A unlp: -4

B unlp: -3

S unlp: -2

[tube: attempted pitch result]

*mf*

*ff*

*ff*

leco

slap tongue

*mf*

B. Sx. -1

8

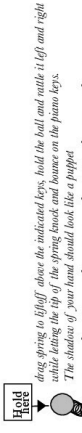
Supers ball

Timp.

*mf*

Stereofoam box

*Senza Tempo* ♩ = 60



Musical score for Superball, measures 1-8. The score is written for a single melodic line in treble clef. The tempo is marked 'Senza Tempo' with a quarter note equal to 60 beats per minute. The time signature is 4/4. The notes are: 1 (quarter), 4 (quarter), 8 (quarter), 4 (quarter). There are rests between the notes. A 'Hold here' label with an arrow points to the first note. A dashed line indicates a finger position or breath control across the notes.

- Sec tube - 8
- Label - 7
- Rec - 6
- Tip - 5
- A. mtlp - 4
- B. mtlp - 3
- S. mtlp - 2

B. SX - I

Superball

Musical score for Superball, measures 9-16. The score is written for a single melodic line in treble clef. The tempo is marked 'Senza Tempo' with a quarter note equal to 60 beats per minute. The time signature is 4/4. The notes are: 8 (quarter), 4 (quarter), 8 (quarter), 4 (quarter). There are rests between the notes. A 'Hold here' label with an arrow points to the first note. A dashed line indicates a finger position or breath control across the notes. Dynamics markings include *mf*, *mp*, *mf*, and *mf*. A 'Solo' section is indicated by a bracket over measures 13-14. A 'V' marking is present above measure 15. A 'Hold here' label with an arrow points to the first note of the second system. A dashed line indicates a finger position or breath control across the notes.

*solo.*  
continuously with a slow pace  
letting the ball  
let it move in wide-like  
motion along the piano keys,  
making as much gurreo sound  
as possible

pull the tube  
with the fishing line  
and let it rub the piano keys  
producing a gurreo-like sound

Blow into the tube  
try to produce the indicated  
pitcher, by using air pressure  
to raise the tone

Hold here  
the ball and rattle it (left and right)  
while filling the tip of the spring snook and bounce on the piano keys.

**B. Tubes knot**

*drag vertically up along tube spring up in the air and put it on the right edge of keyboard*

**important note:**  
All the pitches written for the tube are written as a reference of the approximate pitches and air pressure. It is enough to follow the dynamics and the contour

Show dynamic levels with right hand  
loudest = hand extended up completely

*open mouth, keep tube facing your mouth while it is played from the other side by the percussion performer*

*show dynamic levels with your left hand loudest = hand extended up*

*approach position on the right to the hanged large lid*

*air only*

**61**

*close mouth on the tube's hole then open as indicated. This should produce a wah-wah like effect*

*loud kiss effect while inhaling*

*withdraw from the mouthpiece and then approach it again while leaving the mouth open*

*block and release the tube's hole with your thumb*

X=block  
o=open







10 89

(sax) [Tube (7)] *mp*  
*slowly pull the tube back to be entirely in your station.*

89

(perc) [Tube (7)] *mf*  
*handst = hand to the side when LH goes to the side it "incidentally" brings the hanged L lid*

hanged L lid

*handst = hand toward to back*

*handst = hand to the side*

95

(sax) [Tube (7)] *mf* *f* *ff* *mf* *sfz* *f* *mf* *sfz* *f* *mf* *sfz* *f*  
*drag string along one of the keys upwards then take it down and drop it on the indicated string area*

(perc) Super-ball rubs L lid *mf* *f* *ff* *mf* *sfz* *f* *mf* *sfz* *f*  
*rub superball (SB) on the cymbal. Hold the cymbal by its handle with left hand and take it down from its hook. Follow the shapes to "drum" with the SB*

Musical score for saxophone and percussion at rehearsal mark 95. The saxophone part has dynamics mf, f, ff, mf, sfz, f, mf, sfz, f, mf, sfz, f. The percussion part has dynamics mf, f, ff, mf, sfz, f, mf, sfz, f. There is a piano part with notes MPB 4/6 B/D-25 and MPB 5/7 B/F#-1. Annotations describe string techniques and cymbal movements.

keep hand on square,  
then release hand from square  
while rubbing down upper strings of  
the lowest bass section on the wip

Tempo: ♩ = 50

Time signatures: 3/4, 1/16

Dynamic markings: *f*, *p*, *mf*

Performance instructions:
 

- keep hand on square, then release hand from square while rubbing down upper strings of the lowest bass section on the wip
- put L. lid on the African drum and rub the top with sticks.

Staff labels: S, pced, B. Sx. -1, perc

Additional markings: MPH 46, B/D-25, D/B, *mf*; MPH 46, B/D-25, D/B, *mf*; Super-ball rubs L.lid

drag square with enough pressure to vary the played key's pitch and color.

S

K

while playing the indicated information put the egr. string all the way to one side and then the other. Gradually develop intensity.

109

(sax)  
recorder

x = block hole with teeth  
mf

(perc)

SB rubs  
L. lid  
mf

egtr str. vln bow:  
bow on the L. lid  
bow's point facing down

**D**

115

(sax)  
recorder

115

Super-ball  
rubs L. lid

put SB on the side

eigr str. vln bow:  
Bow on the L. lid  
bow point facing down

*mf* *f* *ff* *mf*

*sempré*



**K**

120

(sax)  
recorder

120

(perc)  
eigr str. vln bow  
on big cymbal

*mf*

solo

124

(pno) K



128

(pno) K

128

Super-ball  
rubis L. lid.

132 ♩ = 60

big spring

V

Secube - 8  
Lade - 7  
Roc - 6  
Tup - 5  
A temp - 4  
B temp - 3  
S temp - 2

MPh  
9/6  
B/G#-1  
G#

MPh  
B/A-3+e3  
c3-A  
C

MPh  
100  
B/Bb-5+e5

pp

132

SB on cymbal (perc)  
pan  
bowing connecting aluminum lid  
eigr str.  
vln bow

with RH, hold bow together with the F.H. that is connected to the turtle box.  
hold the small lid with LH and use it as an intermediary surface for the bow to stroke as it moves between the other two surfaces.  
start by stroking on the small lid up and down bow, then in the middle of the next upbow put the cymbal closer to the big lid so the bow strokes on it too. When there is a connection between the two surfaces, you can keep stroking on the big lid only. After a few strokes put the small lid back to make a connection and then do the same with the trip.

140

*Fall* *mf* *ff* *mf* *f*

**E** *Marcé*

big spring lid  
small spring lid

Squares

mp

ped

140

See table 8  
Lid 1 - 7  
Bow - 6  
Tip - 5  
A. amp. - 4  
B. amp. - 3  
S. amp. - 2

Place on a piece of glass  
containing water the other

mp

at the end of this gesture get to the following position:  
standing up, LH holds the small lid facing forward,  
above, with RH, the bow strokes the lid's rim

small lid large lid small lid

force force

touching the upper rim of lid

B. Sx - 1

Bow on aluminum lids

The image displays a musical score for a piece titled 'B. Sx - 1'. It includes a piano part (B. Sx - 1) and a keyboard part (K). The score is divided into two systems, each starting at measure 140. The piano part features dynamic markings such as *mp*, *mf*, *ff*, and *f*. The keyboard part includes a section labeled 'E' with the instruction 'Marcé'. Detailed performance instructions are provided, including 'Fall' and 'See table 8' with a list of components: Lid 1-7, Bow-6, Tip-5, A. amp.-4, B. amp.-3, and S. amp.-2. A diagram shows a piece of glass containing water, with the instruction 'Place on a piece of glass containing water the other'. The score also includes diagrams of the instrument's lid mechanism, showing the 'small lid', 'large lid', and 'small lid' in various positions, with arrows indicating movement and 'force' directions. A final instruction states: 'at the end of this gesture get to the following position: standing up, LH holds the small lid facing forward, above, with RH, the bow strokes the lid's rim'. The piano part concludes with the instruction 'Bow on aluminum lids'.

146

circular motion produces a machine-like repetitive rhythm of squeaks

**S**

*ped*

146

**B. SX-1**

Sec table: 8  
 Leads: 7  
 Rec: 6  
 Top: 5  
 Amp: 4  
 B amp: 3  
 Sample: 2

MPH  
 B/G1245  
 c3 o o o  
 c3 o o o

*More like a soft, continuous fall*

*In spread during tremolos*

*a = block held with finger*

**D/B**  
*p*  
**s f z**  
**mp**  
**D/B**  
*Da*  
**mp**

LH: hold the small lid facing you  
 RH: rest the base on top of the s lid's rim  
 RH stays still while LH moves the lid forward and backwards.  
 (lid forward movement creates down-bow)

146

(perc)  
small  
pot lid

**small lid**  
**large lid**



152

*Fidel chord*

*More air through the unfilled mouthpiece.  
more distance than at f playing on the same air.*

See table - 8  
 Lm/lt - .7  
 Rec - .6  
 Trp - .5  
 Amp - .4  
 Bm/tp - .3  
 Smlp - .2

MPh  
B/C/E5  
E2  
C

MPh  
B/D<sup>#</sup>/5  
D/B

MPh  
B/F<sup>#</sup>  
T/E  
D/B

MPh  
B/G<sup>#</sup>/F<sup>#</sup>  
D<sup>#</sup>/B

containers moving the base backwards  
is done with the lid  
it holds the fishing line that  
holds the "twist-son"

152

(perc)  
small lid  
large lid

keep pulling FSHL until SAX STARTS TO WALK

156

S

pno

ped

mf

f

fff

mf

mp

f

flexible rhythm

x = black hole with north

x = tongue stop

slap tongue

mouth actions

mouth dynamics: mf

fingers

key clicks

fingers dynamics: mf

take off the key on mouthpiece  
the stick is in the air, holding  
the key. The key is sliding  
up and down the stick with  
drummer's the water boat

roll-stick

156

B. Sax - I

156

(perc)

small lid

large lid

play on the s. lid while holding it with LH, while playing, put the s. lid down on top of the big one

play on both lids

play only on the L. lid

continue moving the bow backwards, but move in the air. It puts the fishing line that holds the "water-box"

(continue without fermata)

keep moving the bow forward and backward, in a slow stabbing motion

mf

mp

p

pp

**F** **Superball**  
**D** **Drumsticks**

drag a big superball along the indicated keyboard areas in the following manner:  
white keys = along the edge between the keys and the wooden edge at its bottom  
# keys = along the edge between black keys and the wooden edge at its top

161

blow with the bar sax mouthpiece inside the water  
alter between blowing air, buzz, a note and spreads  
caused by sliding the teeth on the reed while blowing air.  
follow the indicated depth of mouthpiece inside the water

**Bar Mpc in the bowl with water**



161

gradually put bar aside and grab the other side of the F&L.  
and keep pulling the F&L, with right hand and then with left hand.  
Get closer to chair

167

**Superball**  
along piano  
keys

167

**(SAX)**

167

**(perc)**  
**Turtle-box**

167

*Senza Tempo*  
**4-5"**

172 G Turtle box

K 3-4" 50-55"

172 STOP

(sax) STOP

Bar Mpc in the bowl with water

172 in the same vein

(perc) Turtle-box

172 stand about 2 meters from chair

Turtle-box

*Keep pulling the FSL from one side to the other slowly more back and gain more distance from chair keep your pulling slow with a lot of tension. the FSL is entirely raised. make sure the FSL is entirely raised.*

*Keep producing the upper half (SH) tubular sounds. combine that with occasional pullings of the FSL chords. In addition, the SF should be straggled - at least twice but not more than four times - along one of the bass strings (with pedal depressed) at the piano level.*

*towards the end, do the following 2 or three times: pull the FSL to the side, and then slide the FSL between the two hands.*

*Senza Tempo*

182  $\text{♩} = 60$

$\frac{4}{4}$

(sax) *mf* *mf* *mf* *sfz* *sfz* *mf*

Bar Mpc in the bowl with water

182 sit on the chair and wait

(perc) Turtle-box

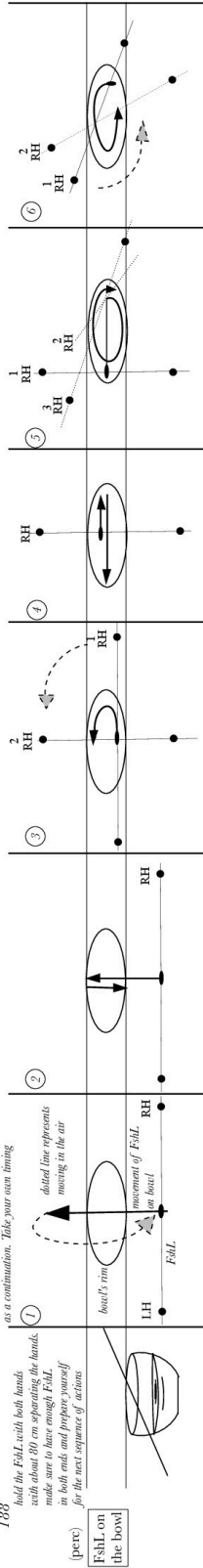
182 slide RH's fingers along the FSL towards its end until you get to the bowl with water on the table. leave enough line on the right to wrap around the hand

Turtle-box

**H** Bowl on a table - Sequence I

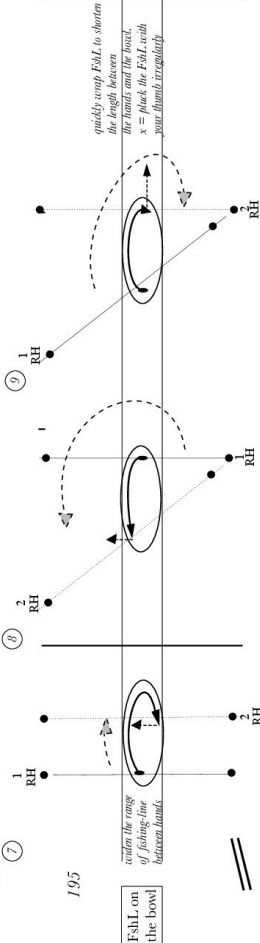
SOLO  
produce a friction between FshL and the bowl rim  
by following the indicated movement.  
It is a sequence of movements to be performed  
in a continuation, after your own timing

188 hold the FshL with both hands  
with about 10 cm separating the hands  
make sure to have enough FshL  
in both ends and prepare yourself  
for the next sequence of actions



(perc)  
FshL on  
the bowl

195



FshL on  
the bowl

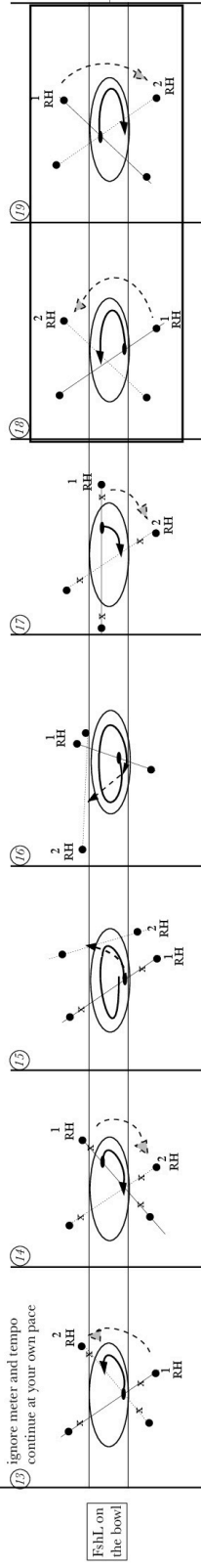
♩ = 60

202 the drum head sits on the bowed  
string and is supposed to bounce

Take the drummer and walk it  
all the way off stage

(sax)  
drummer  
roll-stick

193 ignore meter and tempo  
continue at your own pace



FshL on  
the bowl

**209**

*the spring with the ping-pong ball should produce a thicc, thirr pressing the notes*

*use the hand that is on the floor to help the other hand slowly towards the table with the foot and replace the percussionist*

*hand/leg hand on the upper piano frame*

*hand in the air*

**210**

*drummer roll-stick*

*roll-stick until pianist drags the hand on the piano frame*

*Out*

**[FishL on the bowl]**

*slowly drag the foot on the table following the arrow keep going until the pianist is behind you to replace your position*

**Senza Tempo**

**I** *Point on a table - rub fingers on the wet table as indicated in the drawings. Produce squawks that reflect the various squawks of the solo. Please watch video*

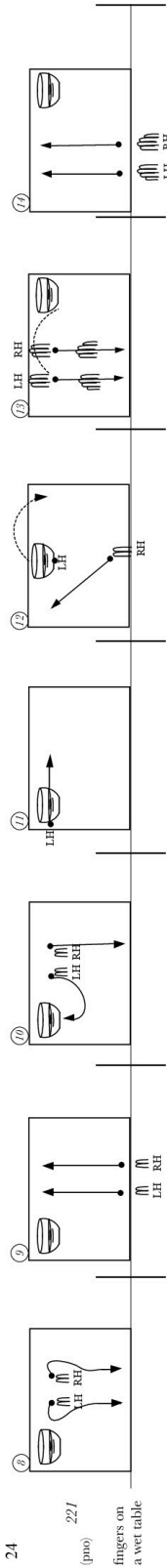
*you may perform this section either with the score or with the video in frame of your, without the vid sound*

**(perc)**

*fingers on a wet table*

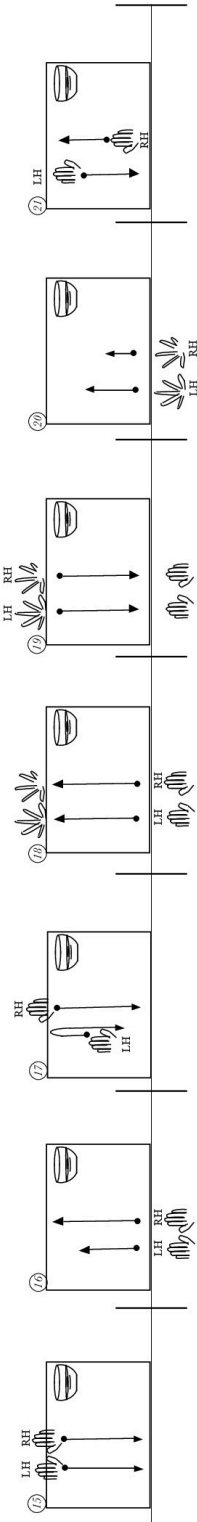
*sit on the chair*

24

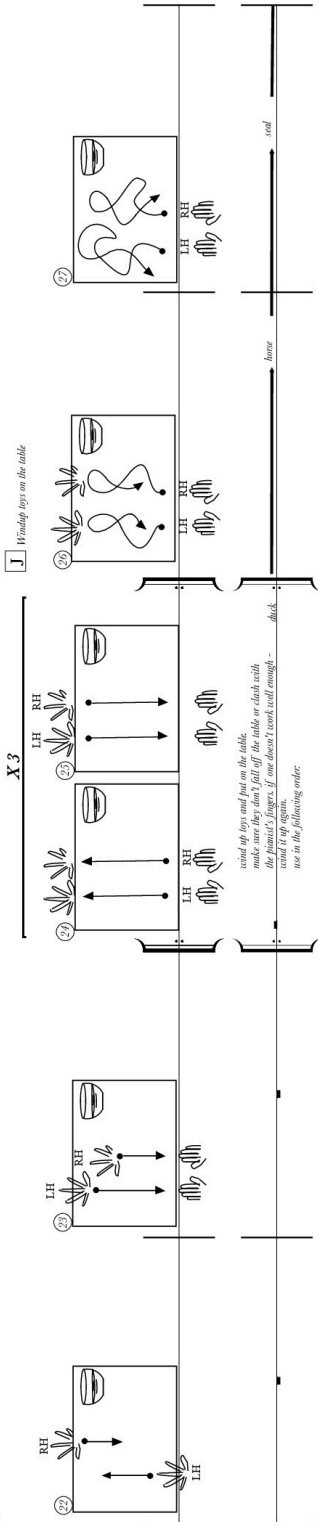


227  
(ppp)  
fingers on  
a wet table

228  
fingers on  
a wet table

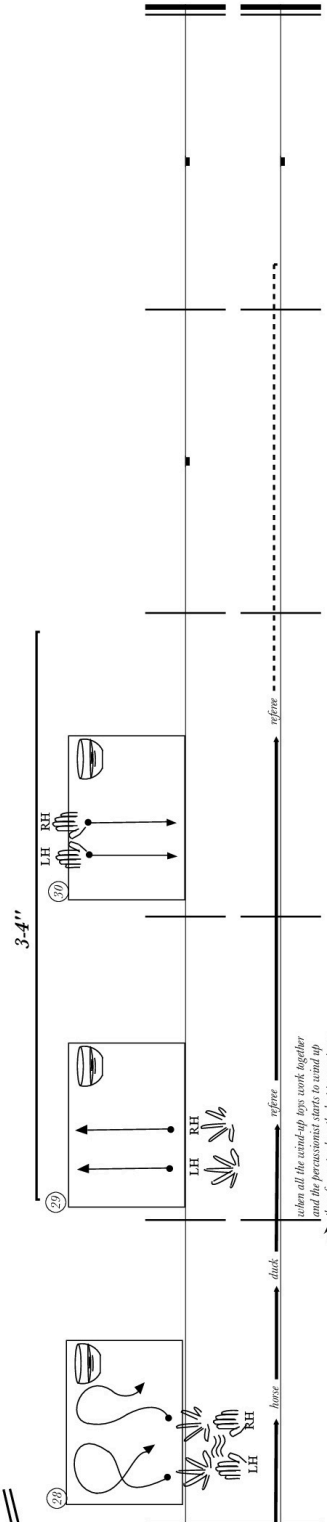


235  
fingers on  
a wet table



(perc)  
four wind-up toys

240  
fingers on  
a wet table



(perc)  
four wind-up toys

**X 3**  
Windup toys on the table  
wind up toys and put on the table  
make sure they don't fall off the table or dash with  
the pianist's fingers. If one doesn't work well enough -  
wind it up again.  
use in the following order:

duck  
horse  
seal

3-4"

→  
when all the wind-up toys work together  
and the percussionist starts to wind up  
the rifree - produce the last two gestures

duck

horse

rifree

rifree

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