always extra folds: A Composition Portfolio

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Abstract

This portfolio dissertation brings together a selection of the musical work I produced over seven years (2013–20). My work during this time evolved to embrace new modes of engaging with performers and audiences. I sought to question the physical relationships between performers and their instruments, to consider the frame of the concert experience, and to reevaluate the collaborative and co-compositional strategies that a written score may produce in rehearsal and performance. The eight scores included represent the range of approaches I took during my time at Harvard, from traditionally notated scores for familiar instruments to text scores for more or less flexible groups of performers. They also reflect my interests in self-built instruments and extending performance possibilities through audiovisual digital media.

*Tomorrow I will build a house here, if I can hold still* (2014) — the first work developed at Harvard — demonstrates an increasing focus on touch, fluidity of instrumental and sonic gesture, and marks the beginning of my embrace of longer durations and sustained sonic textures. A trio of scores — *rumour* — *distant land* (2014), *always extra folds of birds of paper and you could move your finger along the length of them and have witnesses* (2017), and *I began the day inside the world trying to look at it, but it was lying on my face, making it hard to see.* (2018–20) — document an evolving practice of score creation that takes a dynamic and open working relationship with performers and performance contexts as its point of departure. These text scores often permit flexibility when it comes to the precise instrumental resources required, but they also aim to change the purpose of rehearsal and performance. These scores are designed to be discarded during the rehearsal process, opening it to collaborative acts of creation, sharing responsibility between composer and performer. A series of closely related works — *local bond* (2015), *union–seam* (2016), and *union|haze* (2016) — demonstrate a notational practice that prescribes a formal and temporal flow, while leaving space for carefully balanced moment-to-moment adjustments as performers adapt to each other and their instruments. Core to all three of these pieces is a viola and cello hybrid instrument, which at times requires four performers to work together to produce a single sound. The 2018 ensemble work, *this line comes from the past,* in some ways synthesises many of the approaches I have explored over the past years. It marks a return to a more traditional instrumental writing and fixed form, but seeks to draw on the sonic and instrumental research of earlier pieces, translating those for a different setting.
## Contents

Abstract iii

Acknowledgments v

Preface vii

1 *Tomorrow I will build a house here, if I can hold still* (2014) 1

2 *rumour — distant land* (2014) 17

3 *local bond* (2015) 97

4 *union–seam* (2016) 117

5 *union|haze* (2016) 137

6 *always extra folds of birds of paper and you could move your finger along the length of them and have witnesses* (2017) 163

7 *this line comes from the past* (2018) 187

8 *I began the day inside the world trying to look at it, but it was lying on my face, making it hard to see.* (2018–20) 219

List of Supplementary Material 247
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Preface

The scores included here were all designed, sometimes with extreme specificity, for physical use in a variety of printed formats. Due to the formatting constraints of an academic thesis, these formats are not reproduced here, but every attempt has been made to provide the score materials in as clear a way as possible within the given constraints. In particular, the score for rumour — distant land (pp.17–96) was originally bound as a set of small booklets such that the performers could have several open simultaneously, using one of the booklets as reference material, while reading others in parallel. Their inclusion here serves to document the work towards producing the score, but cannot reflect the original intended reading experience.
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One is too few, and two is only one possibility.

DONNA HARAWAY, *Simians, Cyborgs, and Women*

There were always extra folds of birds of paper and you could move your finger along the length of them and have witnesses, and do this for minutes at a time never having to explain what you were doing nor the desired effect, because it was clear that these folds were the scarring that made people feel safe in public.

RENEE GLADMAN, *Calamities*
I

Tomorrow I will build a house here, if I can hold still (2014)

for flautist and cellist

First performed by Paolo Vignaroli & Karolina Öhman
26 June 2014
Le Regard du Cygne, Paris, France
TOMORROW I WILL BUILD A HOUSE HERE, IF I CAN HOLD STILL

Chris Swithinbank
**Performance Notes**

**GENERAL REMARKS**

**Tempo** are approximate and always flexible while maintaining a rhythmic integrity.

**Dynamics** will not always relate to the acoustic result. For example, in the case of many of the unpitched sounds, *fren* indicates an intensity of action parallel in some way with the intensity of action when playing *fren* using traditional sound production methods. Often this is indicated by the use of question marks around a dynamic marking.

Unless otherwise indicated by a hairpin, all **dynamics changes** are **asbute**.

Alterations by intervals smaller than a semitone are indicated by $\uparrow$ and $\downarrow$, indicating **quarter sharp** and **quarter flat** respectively.

**FLUTE**

The flute part is written for a standard C-flute.

It employs a **two-octave system** for most of the work. The upper octave indicates the position of the flute with respect to the mouth, while the lower octave indicates fingering and pitches.

The top line of the upper octave indicates a normal, open position, while the bottom line indicates a closed position with the flute mouthpiece entirely inside the flautist's mouth. Lines indicate transitions between these two states or more complicated switching between them.

The lower octave describes the pitch contour of the material, but most often is indicative of fingering.

When **square notations** are used, they indicate an air sound with little pitch content (although colored by fingering, length of pipe, open or closed position, etc.). Most often, when **normal notations** are used, they are written without any indication on the upper octave as the mouth position should be free to achieve a successful pitch as possible.

**DIAMOND NOTATIONS** indicate the fundamental of a harmonic or overblown cluster.

**Large circular notations** indicate a quiet, stable whistle tone (e.g. b. 187). The flute part employs the symbols $\uparrow$ and $\downarrow$ to indicate notes that should be **inhaled** or **exhaled** respectively. (Where there is no indication, it can be assumed that the usual exhalation is to be employed.)

**CELLO**

The cello must be tuned as follows:

```
\[ \text{C} \quad \text{G} \quad \text{D} \quad \text{A} \quad \text{E} \quad \text{B} \]
```

In the score, the lower of the two main cello staves indicates **fingered pitch** as if the cello were in standard tuning. **Nontuning pitch** is notated on the smaller, bottom stave to clarify the result of both the *resonance* and any harmonic fingerings.

The **upper staff** of the cello part indicates bow position on the instrument. Most often this is notated with a solid line that also indicates transitions between bow positions.

This clef is used to indicate bow position from *nobile super tene* (below the stave), through *ordinario*, and **sul ponticello**, to actually on the wood of the bridge (2nd line from the top of the stave, this indicates a pencil line sound), on the strings below the bridge, to on the tailpiece (above the stave).

This alternative clef is used to indicate bowing on the instrument's side.

This serrated line indicates an over-pressed 'scratch' tone. Arrows on the stem indicate a bow movement that is entirely vertical.

This notation indicates a **circular bow movement** that describes a circle upon the string, in this example starting from *sul nobile*, pulling the bow, moving down the string to *sul ponticello* by which point there is a gradual switch to pushing the bow.

This thick slash notation indicates **legno tratto**, the wood of the bow being drawn up or down the string (ff. 205-243).

This cross notation indicates **legno battuto**, a percussive striking of the string with the wood of the bow. Either a single attack or a 'battuto' series of bouncing iterations.

This 'H' symbol above notes indicate a **hammer-on** action with the left hand where the finger strikes the fingerboard at the notated pitch and then holds its resonance in combination with whatever alteration or glissando follows it. (Usually without any relaxed right-hand action.)

This symbol also indicates a **damping-grip**, which prevents the string from resonating, thereby avoiding any pitches harmonic or otherwise from sounding when playing with the bow. When used with a glissando as at left, this can also indicate a sliding of the hand along the strings without any bow action.

This symbol indicates that the bow should be raised vertically in the air, with the tip pointing upwards, and slowly drawn downwards, keeping the bow vertical as if bowing some object or metaphorically bowing the flute’s whistle tone. This action should be repeated as naturally as possible, as if the bow has been thrown from the instrument’s strings, and the return to the cello should be pre-emposed as little as possible, taking place suddenly as if rapidly magnetised and flung back into the cello’s orbit.

For any questions or performance issues, please contact the composer:

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Tomorrow I will build a house here, if I can hold still...
180
q = 108
q = 108
194
q = 108
q = 108
38
38
24
24
24
24
 senza misura
single, high whistletone, held as long as possible

senza misura
(as long as possible, senza dim.)

senza misura
sul pont.
rumour — distant land (2014)

for four performers

Commissioned by the Bludenzer Tage zeitgemäßer Musik

First performed by DieOrdnungDerDinge

(Inigo Giner Miranda, Vera Kardos, Daniele Pintaudi, Cathrin Romeis)

20 November 2014

Remise Bludenz, Vorarlberg, Austria
rumour — distant land

materials towards a performance for four people

commissioned by the Bludenzer Tage zeitgemäßer Musik for DieOrdnungDereDinge
contents

This score consists of seven books. It is not to be considered as a linear set (lettering is for ease of reference only), but rather each volume exists in parallel. The volumes nevertheless divide into two types:

**universal**
- context: texts
- material environments
- temporal map

**specific**
- rememberance, shelter, touch (for iñigo giner miranda)
- flight, trace, rectilinear (for daniele pintaudi)
- gather, dowse, cradle, weld (for vera kardos)
- custody, terror, crossing over (for cathrin romeis)

While the universal volumes provide information that binds together the whole, the specific volumes pertain to the actions of one performer alone. There is one specific volume per performer.
context: texts
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FROM Plague Lands by Fawzi Karim

Disappears:
Exchanges
His clothes for a sash from the sunset,
His memory for some luggage,
His rash for a magic cap,
The convoy for red horses
Racing through the night towards a legend.
Here, take this tautly wound thread.

Mete it out and, turning backwards, sing its length.

With the looseness of unbunched hair and mist in morning gardens, retread that distance.

Every kink and curl of scattered line a trace of its tightness.
A Man comes in carrying a full-grown tree on his back.

Man You! Will you help me?

Yusuf Yes, Uncle.

Ali Why?

Man What?

Ali Why the tree?
Man I planted this tree seven years ago. For four years it was too young to bear fruit. A cold winter came, it almost died and took a full year to recover. Then: fruit. My neighbour’s children picked it, all of it, long before it was ripe. This tree I’ve been tending for some time now and only last year did I taste its fruit.

Ali It’s a sin to uproot a healthy tree!

Man What happens to me will happen to it. That became clear as I walked out of my house, so I went back and dug it up.

Ali You’ll kill it or it’ll kill you! Look at the state you’re in.

Man I left my house, I left my land, I left my hills, I left my well in the Ibn Amer valley. Where am I going? I’ve no idea. I’m fifty and I’ve never once left my valley. Why would I? But now, now I’m going to the plains and the dust. I won’t leave my tree. I won’t become a small ring in a big trunk.

Yusuf What does that mean?

Man I’ve rested enough. Help me put it on my back. The enemy is near.
Ali Don’t help him. He needs more rest. You won’t make it.

Man I’ll try.

Ali And then?

Man I’ll replant it. It’ll recover and bear fruit. When it’s time to go home I’ll pull it up and plant it back where it belongs.

To imagine them under its shade, I don’t want to ...
Eating chicken, drinking wine! A young couple in love. God, it’s beautiful ... His blond hair and pale skin, her big breast and perfect white smile under my tree kissing.

And me in a tent in a place I never heard of ...

His hand on her back, lifting her into the air, laughing ...

They grow old, she’ll make jam from my fruit, he comes home from work, lies under my tree, reads the paper ...

In its shade a birthday party for their eldest son. He’ll hang a swing on its branch — it’s a good branch, it’s a good tree!
Their son is sixteen, he carves his initials in the bark and a heart and a girl’s name ...

That would have made the tree happy, I know.

And slowly my tree forgets me, the smell of my breath, the sound of my tongue ...

I’m a vague memory, that’s all, in the rings at the heart of the trunk ...

That’s too much ... I won’t be a thin ring ...

Help me. It’s a long way ... if I make it.

You should go too ... Help me ...

Ali Yusuf, you help that side.

Man Be careful. You hear me? Be careful.

The Man goes.
When my best friend came to say goodbye the day before I emigrated, as we embraced thinking we would never see each other again, because I would not be allowed back into the country and she would never be allowed out — as my friend was saying goodbye, we couldn’t tear ourselves apart. She went to the door three times and each time she came back. Only after the third time did she leave, walking in a steady rhythm the length of the road. It was a straight road, so I could see her bright jacket getting smaller and smaller, and strangely enough becoming more garish as she went into the distance. I don’t know, did the winter sun shine, it was February, did my eyes shine with tears, or did the material of her jacket gleam — one thing I do know: my eyes followed my friend and, as she walked away, her back shimmered like a silver spoon. So I was able to sum up our separation intuitively in two words. I called it silver spoon. And that was the simplest, most precise way to describe the whole event.

[...]

[...]
Every winter the white seamstress came to our house. She stayed for two weeks, ate and slept with us. We called her white because she only sewed white things: shirts and undershirts and nightshirts and brassieres and suspenders and bedclothes. I spent a lot of time near the sewing machine and watched the flow of the stitches, how they formed a seam. On her last evening in our house I said to her at dinner, ‘Sew something for me to play with.’

She said, ‘What should I sew for you?’

I said, ‘Sew a piece of bread for me.’

She said, ‘Then you’ll have to eat everything you’ve played with.’

Eat everything you’ve played with. You could also describe writing that way. Who knows: what I write I must eat, what I don’t write – eats me. The fact that I eat it doesn’t make it disappear. And the fact that it eats me doesn’t make me disappear. The same thing happens when words turn into something else as you write, to be precise, when objects proclaim their independence and verbal images steal what is not theirs. Especially when writing, when words become something different, what is taking place is perhaps always the same snow and always the same uncle.

Sie sagte: »Was soll ich dir nähen?«

Ich sagte: »Näh mir ein Stück Brot.«

Sie sagte: »Dann musst du später alles, was du gespielt hast, essen.«

Alles, was man gespielt hat, essen. So könnte man auch das Schreiben definieren. Wer weiß: Was ich schreibe, muss ich essen, was ich nicht schreibe – frisst mich. Davon, dass ich es esse, verschwindet es nicht. Und davon, dass es mich frisst, verschwinde ich nicht. Es passiert immer dasselbe, wenn Worte beim Schreiben etwas anderes werden, um genau zu sein, wenn sich Gegenstände selbständig machen und Sprachbilder sich diebisch nehmen, was ihnen nicht gehört. Gerade beim Schreiben, wenn Worte etwas anderes werden, um genau zu sein, wirkt vielleicht immer derselbe Schnee und immer derselbe Onkel.
When I was young, my mother gave me a large wooden bobbin, and when the sun fell on it, its polished surface shone, while warmth radiated through its rich, dark grain. I held it out as she carefully wound woolen thread around the bobbin, layering length after length, before fastening one end to my wrist. So you can’t lose it, she told me, and I took great joy on a hot afternoon, or just before falling asleep, in spooling thread out into my open palm and then assiduously returning it to its tight coil.
Not long after my mother died, a policeman came to my door and explained quietly that I should accompany him to meet his colleagues, who — although it was already late — were still hard at work and would be obliged if I could come to help them. After dark, the streets of my hometown are empty and had this policeman not called, I would never otherwise have had the chance to see them so still: dust resting against the sides of houses as it never can during the day, crickets singing undisturbed from the middle of the road. As we walked along the deserted riverbank, fireflies beneath the Bridge of the Republic quickly dimmed their lights at the sound of our echoing footsteps.

The police station was very noisy.

When I left nine days later, I walked home, back under the same bridge, through the dust and noise of the afternoon. Beneath an oleander, a dog curled around his stomach ache. Scolding tones leaping from an upstairs window. Pain in my shoes.
A friend was waiting for me in front of the bakery at the end of my street, and sat on the bed while I cleaned my feet and changed clothes. I was washing out my eye over the sink when my friend came over to lay a hand on my back and told me, I thought we’d lost you.

That winter, I struggled down the street with the biggest bag I had. The only person who saw me as I turned the corner was the baker’s wife, awake before the sun to pile flouried loaves in the shop’s grubby window.

Whenever I think of that street today, I picture the houses, stacked one upon the other like loaves of bread. And when I think of the days that followed, I think of desert horses turned a violent hue by the screen of my grandparents’ television, leaving cinnabar smears in their wake as they galloped towards the sun.
SOURCES

- Amir Nizar Zuabi, *I Am Yusuf And This Is My Brother*, London (Methuen Drama), 2010
- Herta Müller, *Immer derselbe Schnee und immer derselbe Onkel*, Munich (Carl Hanser Verlag), 2011
- All other texts by Chris Swithinbank
- Images from Fermilab bubble chamber experiments, 1980
material environments
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THE PERFORMANCE SPACE

This work requires a stage space — unencumbered by any objects, walls, audience, etc. — of at least 6m wide by 4m deep, preferably larger, that affords the following possibilities:

- performers to be able to be on either side of the stage space and store performance materials there unseen by the audience
- performers to be able to cross behind (or beneath, or otherwise) the performance space, unseen by the audience
- if possible, for the audience to have a view from slightly higher than the stage (i.e. as in raked seating) in order to ensure good visibility for actions on the floor

LIGHTING

Something approximating the following lighting states should ideally be available:

- a warm wash covering the entire stage area (floods from upstage)
- cool spotlight, centre stage, focused on material environment

1 (see overleaf)
- basic, evenly distributed lighting
- optionally, in addition, the ability to highlight individually the various environments described below
- a more detailed lighting plan can also be worked out and is indeed encouraged

On the basis of the simple lighting set-up above, there should be at least two states:

i a combination of the warm wash at an infinitesimally low level — giving only the slightest blush to the stage — with the cool spotlight — highlighting **material environment 1**

ii a state that affords illumination of all the various areas of activity, in fact the whole stage

At the beginning of the piece the stage should be lit with the first state. Starting from cue \(04\), transition slowly to the second state, ending at cue \(07\) (see *temporal map*).
port, origin

for Daniele

MATERIALS

- flour (~5kg)
- large circular template (~1m diameter) for preparation

PREPARATION

Use the template to cover a surface on stage with a circle of flour around a centimetre deep.

The location should be central, be capable of being lit from above by a spotlight (cool white), and allow free passage in a straight line from offstage right to offstage left, passing through the circle’s centre.
[2] archive, already world

MATERIALS

- a large suitcase
- many stones (~8–14cm diameter, probably more than 60)

PREPARATION

The suitcase should be filled with the stones. It should be heavy such that the performer will have to struggle to bring it on stage. Ideally the suitcase should not have wheels. It should be left offstage right.

« La pierre n’« a » pas de sens. Mais le sens touche à la pierre : il s’y heurte même, et c’est ce que nous faisons ici. »

(Jean-Luc Nancy, Le sens du monde, p. 104)
[3] squall, vox humana

MATERIALS
- cassette deck
- cassette tape

PREPARATION
The cassette deck should be placed downstage left. It can be placed directly on the stage, not on any table, riser, stage block, chair, etc. The cassette deck should either be plugged in inconspicuously or powered by batteries. The cassette tape contains precomposed sounds and will be provided with the performance materials.
[4] sorting office, scriptorium

for Cathrin

MATERIALS

- cassette deck
- blank cassette tape
- paper & fountain pen (or some other broad-nibbed, loud writing implement)
- copy of context: texts from the performance materials
- desk & chair [optional]

PREPARATION

The cassette deck, cassette tape, paper, pen, and copy of context: texts should all be placed upstage right. If a desk and chair are being used, these should be placed upstage right and all the other items placed on the desk. The chair need not necessarily be behind the desk, facing the audience; the performers can decide which disposition of desk and chair is most appropriate. The cassette deck should ideally be powered by batteries in order to ensure freedom of movement for the performer.
[5] ward, wire, spacing

**MATERIALS**

- megaphone
- small tea cup
- reserved seat in audience

**PREPARATION**

The tea cup should be of the small, almost bowl-like type. It can also be substituted by any other kind of vessel (preferably curved, approaching parabolic) with a diameter of ~6cm, a height of around ~5cm. The tea cup and megaphone should be with **performer c**.

An easily accessible seat within the audience should be reserved and kept free for the performer. It should be easy to leave this seat and walk towards the stage; the front row or close to an aisle may be best.
burial ground

for Cathrin

**MATERIALS**

- earth (dark, loose)
- box of matches

**PREPARATION**

Create a small mound of earth (~25cm diameter, ~15cm high) upstage left of centre stage (and of *material environment 1*). Create an indentation in the centre of the earth so that it resembles the crater of a volcano or the well in a baker’s flour before eggs are added. Empty the matches from the box and place them to one side of the mound. Place the empty matchbox beside these.
[7] terrain, dwellings

for Vera

MATERIALS

- large sheet of paper
- drawing implement

PREPARATION

i Take the sheet of paper as a two-dimensional map of the performance space.

ii Think of where you are now and make a mark on the paper that corresponds.

iii Imagine a place. Make a mark on the paper that corresponds.

iv Think of a place where you have been and make a mark on the paper that corresponds.

v Make as many marks on the paper as correspond.

vi Trace a curve of any length onto the paper, connecting every mark that you have made.

vii Remember this curve and consider the marks it connects as the dwelling places that articulate it.

The sheet of paper may be placed anywhere on the stage or not at all.
[appendix] potential dispositions of material environments
[i] initial disposition of material environments

offstage right
offstage left

1
2
4
audience
free passage
5
6
3
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temporal map
preparing the material environments

The preparation of each of the material environments requires a series of tasks to be carried out. These may happen at any time as long as all tasks are completed before the start of the timeline that the following guidelines set out, which is to say, before the tasks described in the four specific books begin to be carried out.

This means that the material environments can be prepared in an empty space, in a full or filling space, during the performance of another work, following or preceding another performance, scattered across time or rapidly and in parallel, etc. They are free for appropriation and use in any way the performers see fit (or in no way).
the map

SYMBOLDY

Small all caps indicate the conditions for the cue to take place, dependencies on previous events, etc.

Large circled numbers identify main cue points.

Where included, small text between cues indicates their spacing in time.

This is shorthand for the performance of an action from a performer’s task set. In this case, performer b, task A. A subscript numeral indicates the number of an iteration (here, the first).

* Effectively, the only restriction on \( t_1 \) is that it be no longer than the duration of the cassette tape (usually 45 minutes) \([d_1]\) minus the duration of the performance measured from \( [d_2] \). In other words: \( t_1 \leq d_1 - d_2 \)
01 DURING THE SET UP OF THE MATERIAL ENVIRONMENTS

Start playing the tape player (material environment 3). Work out how long it will take between 01 and 02 ($t_1$). The blank part left at the beginning of the tape must be longer than $t_1 + 30"$. In performance, use a timer to ensure that from starting the tape, 02 happens before $t_1$ elapses. [If necessary, $t_1$ can be substantial — up to 20, even 25, minutes* — permitting playback to start (silently) long before many of the following tasks or even before the performance of another piece. In this case, adhering to a timer to ensure synchronisation becomes even more crucial.]

02 ONCE ALL THE MATERIAL ENVIRONMENTS HAVE BEEN ESTABLISHED

- c[A]

Allow for a moment of stillness to settle onstage. (With performers a, b and d offstage.)

03 ONCE STILLNESS HAS EMERGED, BEFORE $t_1 + 30"$

- b[A]_1
50–90" after b\{A\}_1

- b\{A\}_2

Repeat b\{A\}, potentially with the modifications provided for by b\{B\} and b\{C\}, until 13, beginning every 50–90 seconds. [Aim to keep this spacing as regular as possible. Once you decide on a duration, try not to stray more than 5" longer or shorter.]

AFTER b\{A\}_2

- c\{B\}_1

Perform wail, coax, dwell until you feel that you have inhabited that place and imbued it with the weight of presence.

AFTER c\{B\}_1

- c\{C\}

Perform c\{C\} transit and c\{B\} in a loop, obeying the rule listed under 05 for every instance of c\{B\}. The only exception may be a performance of c\{D\} station,
in which case c{D} should be performed under the same conditions as c{B} and upon completion should be followed by c{C}. c{D} may only be performed once.

AS b{A} begins

- a{A}

IMMEDIATELY FOLLOWING a{A}

- a{B}

IMMEDIATELY FOLLOWING a{B}

- a{C}

Open to all the variations provided for by a{D}, a{E} and a{F}.

AT ANY TIME AFTER a{A}

- d{E}
This map summarises the relationships between all the cues laid out in this book and all the performers’ tasks, as well as flow between tasks.
TASK SET D RELATIONSHIPS
**Performer d**’s world becomes possible.

This means that all tasks described in **performer d**’s task set come into play simultaneously, starting with d{E} absence.

While the duration of d{A, B, D}, variation notwithstanding, is determined by the nature of the tasks to be completed, that of d{E} is arbitrary and indeterminate. Varying through the performance, the performer can decide the duration of d{E} every time it returns.

Following performances of d{A, B, D, E}, move to perform any task other than that which you have just ceased to perform. The only exception is d{B}, which can in addition be repeated indefinitely (including all the variations made possible by d{C}).

In moving between tasks, **performer d** can adopt a variety of moods (in a similar fashion to the directions for d{B}), moving sometimes quickly, sometimes slowly, with purpose, confusion, sorrow, etc.
WHEN THE SUITCASE OF MATERIAL ENVIRONMENT 2 IS EMPTY

- a[G/H]

AT ANY TIME AFTER a[G/H]

- c{E}

You may continue with your trajectory for some time, but eventually should perform c{E}.

- d{E}

If you are not already performing d{E}, perform it and do not proceed to perform any other of your tasks.

[Performers c & d need not synchronise these actions.]

AFTER BOTH c[E] AND d[E] HAVE BEEN PERFORMED (AFTER BOTH PERFORMERS C AND D ARE OFFSTAGE)

- b{A}

Perform b{A}, at least once, continuing the same temporal spacing as before. After completing at least one last iteration of b{A}, stop.
chris swithinbank
rumour – distant land

remembrance, shelter, touch

for iñigo giner miranda
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task set

[in conjunction with material environment 2]

A - ENTRANCE

Run onto the stage backwards, dragging the suitcase with both hands, bringing it to a halt downstage right. (This motion should be a struggle. Move as fast as possible given the bulk and weight of the suitcase.)

In coming exhaustedly to a halt, collapse onto the ground, finishing with your legs either side of the suitcase, both hands still holding the suitcase handle.

B - OPENING THE ARCHIVE

Open the suitcase — unzip or unbuckle it — opening it out away from you.
C – PROCESS, LOOP

Proceed to empty the suitcase of stones, using the following as guiding instructions:

i Always remove only one stone at a time.

ii Place the stone on the stage to your sides or behind you.

iii Place stones within your reach, surrounding you.

iv The speed of your proceeding should vary. The goal is never to empty the suitcase as fast as possible, nor for your actions to become exaggeratedly deliberate.

D – MURMUR, TOUCHED

Visualise the space around you. When placing a stone to your right (away from the audience, in the field of resonance shaded below) you can decide to make a sound to yourself as if remembering what this stone contains.
Vocalise with your mouth closed, something close to humming but located further back in the throat, at times even slightly gritty in quality. This should always be quiet, it is not a projected sound, but a reflection to oneself. If it is helpful, the following can be used as a guide to the temporal character of the vocalisation (although this should never be reproduced directly) and its minimal ambitus in terms of pitch.

\[
\begin{align*}
  & \text{pp - 48; maximum range from lowest to highest pitch is a minor 3rd} \\
  & \text{ppp innerlich} \\
  & \text{pppp} 
\end{align*}
\]

E – AT ANY TIME, WHILE UNPACKING THE SUITCASE

Instead of taking one stone from the suitcase, pick up a stone that is already on the stage.

Either put it down where it was or elsewhere.

In placing the stone, observe the possibilities afforded by task D.
**F - TURNING OUTWARDS**

If performer d interferes with the process by removing one of your stones, react. Retrieve distant stones, return them and continue.

**G - IF THE SUITCASE IS LARGE ENOUGH, ONLY AFTER THE SUITCASE IS EMPTY**

Stand up. (Do not disturb the stones surrounding you.)

Step into the suitcase.

Curl up in a foetal position.

**H - IF THE SUITCASE IS NOT LARGE ENOUGH, ONLY AFTER THE SUITCASE IS EMPTY**

Close the suitcase – zip or buckle it up.

Stand up. (Do not disturb the stones surrounding you.)

Leave the stage, carrying the suitcase, diagonally, passing through material environment 1, exiting upstage left.

**NB**

Please refer to the temporal map for further details about the timing of each task in relation to its antecedent and in relation to the actions of other performers.
flight, trace, rectilinear

for daniele pintaudi
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task set

A — BASE ACTION

Complete a trajectory starting offstage right and finishing offstage left, passing through *material environment 1*.

Upon completing this trajectory, use a backstage passage to return to offstage right without being seen by an audience.

Execute this trajectory with the highest velocity possible, fleeing across the stage, throwing dust into the air as you pass through *material environment 1*.

B — ONCE OR NEVER, NOT FIRST

Upon arriving at the centre of *material environment 1* come to a sudden stop and stand completely still.

Wait for 15–25 seconds.

Walk off stage calmly and somewhat slowly.

Upon completing this trajectory, use a backstage passage to return to offstage right without being seen by an audience.
C - ONCE OR NEVER, ONLY AFTER AT LEAST 7 TRAJECTORIES

Upon arriving stage left, almost at the edge of the stage, come to a sudden stop and turn around to see the trace of your previous passages.

Pause.

Walk backwards offstage.

Upon completing this trajectory, use a backstage passage to return to offstage right without being seen by an audience.

NB

Please refer to the temporal map for further details about the timing of each trajectory in relation to its antecedent and in relation to the actions of other performers.
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gather, dowse, cradle, weld

for vera kardos
task set

[in conjunction with material environments 5 + 7]

A - ORIGIN

Sit in the reserved seat in the audience with the megaphone and tea cup in your lap. The megaphone should already be turned on, but the volume turned down to zero.

Sitting in this seat, picture yourself at the origin of your curve.

B - WAIL, COAX, DWELL

With the megaphone pointing straight down at the floor (between your knees if sitting), gently bring up the volume.

With one hand, hold the tea cup over the megaphone's mouthpiece such that it entirely covers (but does not touch) it.

Slowly move the tea cup laterally so that it begins to project over the edge of the megaphone. This should start to create a feedback loop as sound reflects off the floor, into the tea cup, and back into the megaphone mouthpiece. (There is no need to make any sound as trigger. The trick is to coax the feedback out of thin air.)
As a feedback loop emerges, manipulate the tea cup as far as possible to limit the volume of the sound (it should never become unpleasantly loud) and to sustain it in its softer dynamics.

If the feedback loop fades away, coax it back to life.

[The ecology of tea cup, megaphone, floor and feedback is both fragile and volatile. Experiment with distances, speeds, angles and movements to learn the invisible elasticity and tensions in these connections. In particular, experiment in different spaces and seating positions, all of these can impact the material relationships of these things.]

C — transit

Gently bring down the volume of the megaphone to zero.

Move from the place you are now to the next dwelling place on your curve, following that trajectory.

Upon arrival, sit or stand as you prefer.

Perform B — wait, coax, dwell.
D — STATION

Gently bring down the volume of the megaphone to zero.

Move from the place you are now to sit beside material environment 3. Ideally, sit on the edge of the stage if it is raised. Otherwise, simply sit on the ground.

Upon arrival listen for 20 seconds.

If you are overwhelmed by silence, perform B — wail, coax, dwell. Otherwise, remain silent and listen to squall, vox humana.

E — ESCAPE

Gently bring down the volume of the megaphone to zero.

Move from the place you are now. Leave your terrain behind.

Once you are offstage, perform B — wail, coax, dwell one final time. (Ideally with some acoustic damping between offstage and on.)

NB

Please refer to the temporal map for further details about the timing of each task in relation to its antecedent and in relation to the actions of other performers.
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custody, terror, crossing over

for cathrin romeis
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task set

[To be performed sitting at the desk if using, or on the floor with material environment 4.]

If it is not already inserted, insert the cassette tape into the cassette deck. If the tape is not at its beginning, rewind it completely.

Place a sheet of paper over the cassette deck, covering the built-in microphone, and prepare the fountain pen (or similar) for use.

Open the copy of context: texts to a page of your choosing. (All pages are valid choices.)

Set the cassette tape recording via the built-in microphone.

Using the fountain pen, transcribe the contents of your chosen page onto the sheet of paper. Write roughly and carelessly.

Having completed your transcription, stop the cassette, note the counter position, and rewind it completely.

With the cassette deck volume at its maximum, half depress the deck’s pause button and begin to play what you have just recorded.
Use the pause button to restrict the speed of playback but not to stop it. Find the point at which the cassette judders steadily (often very close to the point at which it stops playing entirely). As far as possible, maintain this steady juddering. If ever you lose this equilibrium in either direction, seek to reestablish it.

Continue until you have played back all the material recorded (until you have reached the counter position at which you stopped writing, and rewound), at which point, press stop.

**B - COMMUNE**

[To be performed sitting cross-legged on the ground, just upstage of *material environment 6* (facing downstage).]

Light a match and hold it up in front of your face, level with your eyes. Stare straight ahead, through the flame.

Blow out the match and put it into the well in the mound of earth.

This series of actions can be performed in a variety of ways, including but not limited to:

- hurriedly. almost irritably. lighting the match. blowing it out. tossing it down indignantly.
- calmly, businesslike, maintaining poise and concentration as you carry out a familiar and almost choreographed routine
- uncertainly, tremulously, hesitating, stumbling, looking panicked as you fumble as fast as your trembling hands permit
- changing mood midway, e.g. rushing needily to light the flame, extinguishing it and disposing of the match with great relief

The variations are effectively endless with moods, characters, affects, timing etc. all available for combination. The only restriction applies to the timing of the match held up in front of your face. This must always last at least two full seconds and present a moment of some stillness (not necessarily identical in character). It can last much longer (the only limit is the length of the match), but never shorter.

C - UTTERANCE

While performing task B, you may choose to accompany the holding of the match in front of your face by a sound. This sound should never be performative or projected, instead it should be a (very) quiet, absent-minded or physically necessary complement to this visual “pause”. It should be consistent (without dramatic changes over time) and last the whole time that the match is held up.
For example, while holding the match with one hand, the other might run slowly across the ground with its nails, causing a quiet, stable sound. Or, as if evidencing a great tension within you, a slightly more audible than usual inhalation could mete out the time of the match. Or, an infinitesimally quiet and inward groan could make a fragility or terror within you evident.

D — INTERFERENCE

Take one stone that performer a has placed on the stage from material environment 2.

Place it anywhere else on stage or back in the suitcase. (Take care not to block performer b’s passage across the stage.)

E — ABSENCE

Be offstage.

NB

Please refer to the temporal map for further details about the timing of each task in relation to its antecedent and in relation to the actions of other performers.
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local bond (2015)

for two string players and two assistants

Commissioned for Stony Brook University's 'Premieres!' concert
First performed by the Stony Brook Contemporary Chamber Players
(Lusha Anthony, Jiwon Kim, Matthew Lau, Alison Rowe)
18 November 2015
Staller Center Recital Hall, Stony Brook, NY, USA
local bond
for 4 performers
**Materials**

1 cello
1 cello bow
1 viola
1 viola bow
2 tables of similar height (~ 75–80 cm) for the viola & cello
polystyrene or padded fabric to rest the viola & cello on
cotton sewing thread (30 tex)

**Steel guitar strings** (0.012”/0.3mm)
circular paperclips
1 small vibrator capable of very low power settings and ideally with a power dial
1 hard plastic tupperware (pint size)
1 bass drum
1 superball mallet

---

**Online Resources**

**Tying a cow hitch:** [http://animatedknots.com/cow/](http://animatedknots.com/cow/)

**Sourcing the materials:** [http://j.mp/localbond](http://j.mp/localbond)

**Contact me:** swithinbank@gmail.com
Preparing the environment

The piece might ideally be presented in the round or in a space that permits audienace movement around the set-up, but if presented on a traditional stage, the audience should view the performers side-on with the suspended thread between the instruments “visible.” (The thread may well be invisible due to its thinness, but the space it traverses should not be obscured.)

Tuning

The lowest string of both cello and viola should be tuned down a perfect fourth to a low G. The other three strings as standard (A–D–G).

Steel guitar string woven between the strings so that it passes over the viola’s second and fourth strings, and under the first and third strings, roughly bisecting the space between the bridge and the end of the fingerboard.

These strings wear out and become bent fairly quickly and will need replacing regularly.

Cotton thread tied using a ‘cow’ or ‘lanyard’ hitch knot. One length of thread connects the fourth string of the viola to the fourth string of the cello, the other connects the third strings. Leave 30 cm or so of thread on the loose end, and make sure the thread between the two instruments is taut. Applying rosin to the strings before tying the knot may help keep it from slipping.

Before performance, apply rosin also to the cotton thread by moving a well-rosined bow up and down the thread, covering it thoroughly.

N.B. Never leave the instruments tied together if people might walk between the tables! The thread is thin and can be missed easily. If someone walks through the thread, they could pull the viola off its table.
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local bond

16"

II

arco
with the guitar string nestled at the centre of the bow hair

mp hollow glow

arco
with the guitar string nestled at the centre of the bow hair

II

vibrator

turn on, finding the lowest possible vibration setting

\textit{vibrator + tupperware}

find a contact point with two pitches — one from the very centre of the bottom of the tupperware, one from the edge of the surrounding surface

\textit{tupperware}

take with spare hand

p trembling stability

17"

bow changes can be taken wherever necessary
and gently but clearly articulated

bow changes can be taken wherever necessary
and gently but clearly articulated

\textit{gently gritty}
superball + bass drum
continuing as before
arco
continuing as before
p trembling stability
p brittle gloss
slightly faster bow, skating across the string
(II)

vibrator + tupperware
continuing as before
p trembling stability
vibrator + tupperware
as before
p trembling stability

superball + bass drum
continuing as before

arco
continuing as before

arco
slighty erratic bow changes
& variations of bow position

FIRST UNION
"f" steady tremor

arco
use plenty of bow to get as loud as possible
without using too much pressure, keep close to the vibrator without touching

vibrator
keep pressed against the A string, creating a purring vibration in the cello's bowed sound

iv — lead cue
ii — cue i
arco
swift & gentle
guitar string
smoothly follow the bow
towards the bridge,
causing a glissando upwards

vibrator

(I)
arco
almost being pushed
or pulled between
positions

pp soughing
don’t move

II

(II)

(I)
guitar string
smoothly follow the bow
towards the bridge,
causing a glissando upwards

(I)
lead these small
changes in position
arco continuing as before
vibrator continuing as before

arco
ppp
arco
ppp

II II
arco

move smoothly over to the threads binding cello & viola
do n't move

viola
brace the instrument to allow tension in the threads once starts playing it

viola
brace the instrument to maintain tension in the threads binding cello & viola

vibrator
very slowly moving towards the bridge

1" 5"
1" 3"
6"
13"
8"

I
II
III
IV

hollow
glacial ascent
dim.

cresc.
viola
keep instrument braced,
maintaining tension in the threads

arco
find a gently purring sound where
the threads repeatedly catch on
the bow and are released

arco
continuing as before

vibrator
continuing as before

violin
brace cello so as to maintain tension
in the thread binding cello & viola
combine the alternation between i and iii to create a continuous but articulated surface
cello
continuing as before
viola
continuing as before
p perforated creaking
arco arco
move only up or down the thread — no movement perpendicular to the thread
p luminous
arco
use a slow bow & not insubstantial pressure to bring out a glowing overtone
IV

union–seam (2016)

for four performers

First performed by the JACK Quartet
(Kevin McFarland, Christopher Otto, John Pickford Richards, Ari Streisfeld)

6 February 2016

John Knowles Paine Hall, Harvard University, Cambridge, MA, USA
union-seam
for 4 performers
**Materials**

1 violin with bow  
1 viola with bow  
1 cello with bow  
1 (violin) bow  

2 tables of similar height (~75–80cm) for the viola & cello  
polystyrene or padded fabric to rest the viola & cello on  
chair or small table for the violin when not being played

**Distribution of materials**

**Online Resources**

Audiovisual examples: http://j.mp/u-s-a-v  
Sourcing the materials: http://j.mp/u-s-mat  

Tying a cow hitch: http://animatedknots.com/cow/  
Contact me: swithinbank@gmail.com
Preparing the environment

The piece might ideally be presented in the round or in a space that permits audience movement around the set-up, but if presented on a traditional stage, the audience should view the performers side-on with the suspended thread between the instruments “visible.” (The thread may well be invisible due to its thinness, but the space it traverses should not be obscured.)

Tuning

The lowest string of the violin should be tuned down around a major ninth to F to enable the rattling paperclip preparation. The lowest string of both cello and viola should be tuned down a perfect fourth to a low G. The other three strings as standard (A–D–G).

Steeltwist string woven between the strings so that it passes over the viola’s second and fourth strings, and under the first and third strings, roughly bisecting the space between the bridge and the end of the fingerboard.

These strings wear out and become bent fairly quickly and will need replacing regularly.

Steel guitar string woven between the strings so that it passes over the viola’s second and fourth strings, and under the first and third strings, roughly bisecting the space between the bridge and the end of the fingerboard.

Never leave the instruments tied together if people might walk between the tables! The thread is thin and can be missed easily. If someone walks through the thread, they could pull the viola off its table.

Preparing the environment

The piece might ideally be presented in the round or in a space that permits audience movement around the set-up, but if presented on a traditional stage, the audience should view the performers side-on with the suspended thread between the instruments “visible.” (The thread may well be invisible due to its thinness, but the space it traverses should not be obscured.)

Tuning

The lowest string of the violin should be tuned down around a major ninth to F to enable the rattling paperclip preparation. The lowest string of both cello and viola should be tuned down a perfect fourth to a low G. The other three strings as standard (A–D–G).

Steeltwist string woven between the strings so that it passes over the viola’s second and fourth strings, and under the first and third strings, roughly bisecting the space between the bridge and the end of the fingerboard.

These strings wear out and become bent fairly quickly and will need replacing regularly.

Steel guitar string woven between the strings so that it passes over the viola’s second and fourth strings, and under the first and third strings, roughly bisecting the space between the bridge and the end of the fingerboard.

Never leave the instruments tied together if people might walk between the tables! The thread is thin and can be missed easily. If someone walks through the thread, they could pull the viola off its table.
**Reading the score**

**Staves**
Each stave represents the physical body of an instrument, but not necessarily one single performer. In many instances (starting on p.2 in the lowest stave) a single instrument is played by more than one performer. The main stave type indicates the space between tailpiece and fingerboard (or nut). In the section including pp.9–11 there is a single large stave representing the super-instrument of bound viola and cello, which all four performers are acting upon, with the main action on the binding threads.

**Timing**
Numbered brackets at the top of each page indicate loose subdivisions of the roughly proportional score. The given numbers could be counted as quarters at ~56–58BPM, but are intended as fluid guides rather than strict metrical indicators. Leaving space to work with the instruments’ responses to your actions is more important than maintaining a rigid pulse.

**Colour**
Colour is used to help distinguish actions on the same instrument by different performers. i and iii are indicated by blue continuation lines, markers, and other indications; for ii and iv these are yellow.

**The score in performance**
It is probably possible to perform with only two copies of the score — one each for the cello and viola “stations” — allowing for the most part ii and iv to turn pages. Ideally scores should not obscure an audience’s view of the performance — they might be placed flat on a table or positioned so as not to be between performers and an audience.

**Amplification**
Both the cello & the viola should be gently amplified with microphones positioned more or less directly above the instruments (taking care not to obstruct the movements of the performers). For example, a pair of Neumann KM 184 microphones could be angled over the instruments on stands, or hung from the ceiling.

The violin should also be amplified during the first section of the piece, ideally by means of a small clip-on microphone, for example using a DPA 4060.
II arco, with the guitar string nestled at the centre of the bow hair and bow changes can be taken wherever necessary and gently but clearly articulated.

mp, hollow glow.

II arco, distort with a slow bow but not so much force as to dislodge the paperclip.

p tremblant stability.

mf, gently gritty.

union—seam
15 13 9 6
p trembling stability
pp background hum
arco as before
arco
arco
continuing as before
arco
continuing as before
destabilise bow pressure
IV
IV
II
II
arco continuing as before

violin + bow
put down
vibrator
pick up
vibrator
turn on, finding the
lowest possible
vibration setting

press gently against
cello's A string

steady tremor

use plenty of bow to get as loud as possible
without using too much pressure, keep
close to the vibrator without touching

slightly erratic bow changes

variations of bow position

(II) arco

(II) vibrator

(II) vibrator

(I) vibrator

keep pressed against the A string,
creating a purring vibration
in the cello's bowed sound

steady tremor

II

(II)

arco

(I)

arco

as before

p trembling stability

as before

p trembling stability

as before

p trembling stability

as before
arco
swift & gentle
guitar string
smoothly follow the bow
towards the bridge,
causing a glissando upwards

pp
soughing

II
(I)

keep bow on string

I

arco
almost being pushed
or pulled between
positions

vibrator
(I)

walk to second position
(see notes) opposite i
Continue as before.

Move smoothly over to the threads binding cello & viola.

Don't move.

Hollow.

Glacial ascent dim.

Vibrator (I) very slowly moving towards the bridge.

Be aware that (iv) will brace the viola to maintain tension in the threads binding cello & viola.

Arco (i).

Arco (ii) continuing as before.

Be aware that (iv) will brace the viola to maintain tension in the threads binding cello & viola.

Arco (iii) continuing as before.

Arco (iv) continuing as before.
viola
keep instrument braced, maintaining tension in the threads.

pp perforated creaking
(rattling vent)

arco
find a gently purring sound where the threads repeatedly catch on the bow and are released.

vibrator
continue as before.

(dim.)

arco
find a gently purring sound where the threads repeatedly catch on the bow and are released.

$v(v)$

vibrator
continue as before.

cello
brace cello so as to maintain tension in the thread binding cello & viola.

arco
continue as before.
The image contains a musical notation page with the following sections:

- **Viola**: Bracing as before.
- **Cello**: Bracing as before.
- **Arco**: Continuing as before.

The notation includes dynamics and marking symbols such as ppp and mf (sforzando). The page layout includes musical measures, with some sections marked for specific instruments and instructions.
SECOND UNION

combine the alternation between i and iii to create a continuous but articulated surface.
cello bracing as before
viola bracing as before
cello
bracing as before

viola
bracing as before

p perforated creaking

arco
move only up or down the thread — no movement perpendicular to the thread

p luminous

arco
use a slow bow & not insubstantial pressure to bring out a glowing overtone
viola: bracing as before

viola: perforated, creaking

arco: move only up or down the thread — no movement perpendicular to the thread

pp: thinnest gloss

viola: bracing as before

cello: bracing as before

Arco II
union|haze (2016)

for ten performers, electronics and amplification

First performed by ensemble recherche
(Martin Fahlenbock, Shizuyo Oka, Barbara Maurer, Åsa Åkerberg, Melise Mellinger, Jaime González, Klaus Steffes-Holländer, Christian Dierstein, with guest performers Clara Iannotta and John Pax)

21 May 2016

John Knowles Paine Hall, Harvard University, Cambridge, MA, USA
union|haze

for 10 performers
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**materials by performer**

| i  | brush box* (onstage)  
|    | hard plastic tupperware (pint size)  
|    | small vibrator (capable of very low power settings)  
| ii | bass clarinet (with low C)  
|    | plastic laminated sheet  
|    | bulldog clip  
|    | gelnote (hazel hen) bird call  
|    | safety pins  
| iii | viola (shared with i)  
|    | viola bow  
|    | table  
|    | foam to rest the viola on  
|    | non-elastic synthetic thread (shared with iv)  
|    | steel guitar strings (0.012"/0.3mm)  
| iv | cello (shared with v & vi)  
|    | cello bow  
|    | table  
|    | foam to rest the cello on  
|    | circular paperclips  
| v  | violin  
|    | violin bow  
|    | circular paperclips  
| vi | oboe (without reed)  
|    | hard plastic tupperware (pint size)  
|    | small vibrator (capable of very low power settings)  
| vii | grand piano  
|    | blu-tack  
|    | synthetic fishing line  
|    | rosin  
|    | stiff plant fibre brush head  
|    | gelnote (hazel hen) bird call  
|    | vibrator wrapped in soft tape  
| viii | metal bristle brush  
|    | hard dish sponge  
|    | polystyrene block  
|    | ceramic dinner plate  
|    | bass drum  
|    | superball mallet  
|    | small vibrator (capable of very low power settings)  
| ix | brush box* (amongst audience)  
| x  | brush box* (amongst audience)  

* The brush boxes are constructed from large broom heads with stiff plant fibre bristles, bound together, with a weighted, illuminated box affixed on top of the brushes. A rope is attached to each brush box to allow it to be pulled from a distance.

**electronics**

| haze sheet (2x)  
| aluminium sheet (60cm × 90cm, 0.5mm thick)  
| 5–6 supports of equal height (~10cm, e.g. tupperware)  
| small transducer/vibration speaker  
| smartphone with internet connection  
| small battery-powered lights  
| performer  
| computer with internet connection  

**amplification**

The full ensemble should be amplified, and if possible the two haze sheets should also be available for amplification. See overleaf for approximate microphone positioning.

**ensemble recherche**

| i  | Martin Fahlenbock  
| ii | Shiruyo Oka  
| iii | Barbara Maurer  
| iv | Åsa Åkerberg  
| v  | Melissa Mellinger  
| vi | Jaime González  
| vii | Klaus Steffes-Holländer  
| viii | Christian Dierstein  
| ix | [guest] Clara Iannotta  
| x  | [guest] John Pax  

**lighting**

All performers should have stand lights such that the hall can be otherwise dark.
Preparing the viola and cello

**Tuning**
The lowest string of both cello and viola should be tuned down a perfect fourth to a low G. The other three strings as standard (A–D–G).

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Preparing the violin

The violin (played by iv) should be prepared with a circular paperclip on the highest string roughly halfway between bridge and fingerboard. The lowest string should be tuned down a perfect eleventh to a low D such that there is an interval of two octaves between the lowest two strings. The other three strings as standard (E–A–D).

Preparing the bass clarinet

The bass clarinet should be prepared with a laminated sheet of paper clipped to the bell. Using a bulldog clip, attach the sheet so that it sits over the bell and vibrates when the clarinet’s lowest note is played.

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Preparing the piano

The piano should be prepared with blu-tack and a “bow” made by tying around 10 lengths of synthetic fishing line together (below left). Rosin should be applied to the fishing line bow. This “bow” should be threaded underneath the C4, C4# and D4 strings of the piano, which are additionally prepared with blu-tack (below right).

The plant fibre brush should be placed on the low strings of the piano from the beginning of the piece, covering approximately the octave above the lowest C.

The piano part may be more easily performed if the lid of the grand piano is removed.

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Contact Me

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the path of the brush box, which is pulled gradually towards it, should be free of obstructions such as cables.
Reading the score

Timing

Numbered brackets at the top of each page indicate loose subdivisions of the roughly proportional score. The given numbers could be counted as quarters at ~56–58 bpm, but are intended as fluid guides rather than strict metrical indicators. Leaving space to work with the instruments' responses to your actions, and to respond to the other performers, is more important than maintaining a rigid pulse.
The haze sheets should be started before the audience starts to enter the performance space and left running. If other music is programmed immediately before, then the haze sheets can be started during applause or at another inconspicuous moment.

House lights to black

Brush box (on stage)
Pull the brush box incredibly slowly across the stage towards yourself

Bass clarinet
Pull the brush box incredibly slowly across the stage towards yourself

Substation hum

Piano (low strings) + plant fibre brush
With the pedal down: very, very slowly move the brush against the lowest strings of the piano, maintaining constant contact, allowing the bristles to catch against the edges of the wound strings

Metal brush + polystyrene
Very, very slowly move the brush against the polystyrene, producing a very fine, particulate sound

Glitter grit

Brush boxes (in audience)
Pull the brush boxes incredibly slowly through the audience towards yourself at the back of the hall

Reaction to II

Reaction to III
superball + bass drum
find a continuous, low tone

brush box
continuing as before

bass clarinet
gradually reflect pitch by covering the bell’s vent hole with your foot

bird call
blow gently through the bird call (without covering the hole) to produce a thin, very high pitch

brush box
continuing as before

bass clarinet
as before

haze sheets
continuing as before

bass clarinet
as before

p substation hum

cue: b.23
subside
poco dim.

violin
put down

ppp oxide dust

oboe (w/o reed)
as before

pp sweet wind

piano + “bow”
with the pedal down:
draw the bow side to side

bird call

ppp/distort with a slow bow but not so much force as to dislodge the paperclips

pp thinnest air

arco — I
bring out a mix of both a very high pitch and a hollow resonance

arco — I
with the guitar string nestled at the center of the bow hair

arco — I
distort with a slow bow or run semicircle form as to dislodge the paperclips

arco — I

arco — II
with the guitar string nestled at the center of the bow hair

arco — II
distort with a slow bow or run semicircle form as to dislodge the paperclips

arco — II

arco — II

violin
put down

ppp oxide dust

oboe (w/o reed)
as before

pp sweet wind

piano + “bow”
with the pedal down:
draw the bow side to side

bird call

ppp/distort with a slow bow but not so much force as to dislodge the paperclips

pp thinnest air

arco — I
bring out a mix of both a very high pitch and a hollow resonance

arco — I
with the guitar string nestled at the center of the bow hair

arco — I
distort with a slow bow or run semicircle form as to dislodge the paperclips

arco — I

arco — II
with the guitar string nestled at the center of the bow hair

arco — II
distort with a slow bow or run semicircle form as to dislodge the paperclips

arco — II

arco — II

violin
put down

ppp oxide dust

oboe (w/o reed)
as before

pp sweet wind

piano + “bow”
with the pedal down:
draw the bow side to side

bird call

ppp/distort with a slow bow but not so much force as to dislodge the paperclips

pp thinnest air

arco — I
bring out a mix of both a very high pitch and a hollow resonance

arco — I
with the guitar string nestled at the center of the bow hair

arco — I
distort with a slow bow or run semicircle form as to dislodge the paperclips

arco — I

arco — II
with the guitar string nestled at the center of the bow hair

arco — II
distort with a slow bow or run semicircle form as to dislodge the paperclips

arco — II
<table>
<thead>
<tr>
<th>5</th>
<th>3</th>
<th>3</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>brush box</strong></td>
<td>continuing as before</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>bass clarinet</strong></td>
<td>continuing as before</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(if necessary, an alternative, similar dyad multiphonic may be used)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>arco — II</strong></td>
<td>continuing as before</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>arco — II</strong></td>
<td>continuing as before</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>vibrator</strong></td>
<td>turn on, finding the lowest possible vibration setting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>vibrator + tupperware</strong></td>
<td>find a contact point producing two pitches — one from the very centre of the bottom of the tupperware, one from the edge of the surrounding surface</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>vibrator + plate</strong></td>
<td>find a point near the ridge around the base of the plate that produces two distinct pitches</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>piano + “bow”</strong></td>
<td>continuing as before</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>piano + “bow”</strong></td>
<td>continuing as before</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>dim. nothing</strong></td>
<td>(poco dim.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>brass boxes</strong></td>
<td>continuing as before</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>brass sheets</strong></td>
<td>continuing as before</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>electric guitar</strong></td>
<td>(poco dim.)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
brush box as before

bass clarinet as before

p. substation hum

arco — II continuing as before

p. trembling stability

piano (low strings) + plant fibre brush with the pedal down: very, very slowly move the brush against the lowest strings of the piano (as b.5)

trembling stability

p. trembling stability

superball + bass drum

vibrator + tupperware

vibrator + tupperware

vibrator + tupperware

vibrator + tupperware

vibrator + plate

vibrator turn off, put down

vibrator + tupperware

vibrator + tupperware

brush boxes as before

base sheets continuing as before

background hum

arco — IV turn on, finding the lowest possible vibration setting

vibrator + tupperware retrieve from the brush box

vibrator + tupperware retrieve from the brush box

brush box as before

brush box as before

brush box as before

brush box as before
Find a point close to the edge of the tupperware lid that produces a higher pitch.

Bird call: Blow gently through the bird call (without covering the hole) to produce a thin, very high pitch.

Arco — II

Continuing as before.

Bird call as before.

Piano (low strings) + plant fibre brush

As before.

Arco — III

Continuing as before.

Arco — II

Continuing as before.

Dim.

Arco — II

Slightly erratic bow changes & variations of bow position.

Superball + base drum

As before.

Brush boxes

As before.

Base sheets

As before.

Vibrator + tupperware

As before.

P piano (low strings) + plant fibre brush

As before.
move to second position
(see notes) opposite

almost being pushed or pulled between

continuing as before

continuing as before

almost being pulled between positions

small changes in position
find a gently purring sound where the threads repeatedly catch on the bow and are released

ppp glitter grit
leave brush resting on polystyrene
viola
bracing as before

arco
continuing as before

metal brush + polystyrene
as before

brush box
pull the brush box
incredibly slowly
across the stage
towards yourself

piano (low strings) + plant fibre brush
with no pedal, very very slowly move the brush
against the lowest strings of the piano

shallow trawl

metal brush + polystyrene
as before

piano (low strings) + plant fibre brush
as before

arco — IV
low pressure,
slowish bow

shimmering static

metal brush + polystyrene
as before

glitter grit

har gliss

with ear

haze edges

as before

piano (low strings)
+ plant fibre brush

as before

piano (low strings)
+ plant fibre brush

as before

as before

as before
brush box
continuing as before

viola
bracing as before

piano + plant fibre brush
continuing as before

vibrator
nodule vibrato quickly between lowest A# and B strings of the piano

generator hum

cello
bracing as before

metal brush + polystyrene
continuing as before

superball + bass drum
continuous low tone

vi
iv
ii
viii
vii
i
iii
viola bracing as before

cello bracing as before

f p

sub. pp

p pp ppp

brush box continuing as before

p luminous

metal brush + polystyrene; superball + bass drum continuing as before

piano + plant fibre brush; vibrator continuing as before

continuing as before

continuing as before

continuing as before

use a slow bow & not insubstantial pressure to bring out a glowing overtone

still m f. liga

still m f. liga

arpo — IV

arpo — II
gradually stabilise. If possible, leave haze sheets running until applause/audience leaves/the next piece starts/whatever signals the end of the performance, but as a last resort, turn off haze sheets.

HOUSE LIGHTS UP (once haze sheets have stabilised)
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always extra folds of birds of paper and you
could move your finger along the length
of them and have witnesses (2017)

for four performers, grand piano, environment, and amplification

First performed by Yarn/Wire
(Ian Antonio, Laura Barger, Russell Greenberg, Eric Wubbels)
18 March 2017
John Knowles Paine Hall, Harvard University, Cambridge, MA, USA
always extra folds of birds of paper and you could move your finger along the length of them and have witnesses
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for Yarn/Wire
with thanks to
Carolyn Chen,
Sivan Cohen Elias,
Renee Gladman,
and Clara Iannotta
from Chris Swithinbank.
Before beginning, I would love you to read Renee Gladman’s *Calamities* (Wave Books, 2016). In general because it is beautiful, but in particular pages 69–72, from which the title of these instructions is drawn.

That extract was first published in the online journal *Floor* and can be read at http://floorjournal.com/2013/07/10/calamity/
Materials

The following things are needed for a performance. Some will need preparation as described in the pages that follow. You will need four people to perform all of the actions in the instructions, and one person to run the amplification.

- 4 small tables
- EBows (at least 2)
- 2–4 string instrument bows (well-rosined, see p. 13)
- rosin
- glass marbles (a mixture of sizes, predominantly smaller)
- ball bearings (½” or larger)
- bowls and similar containers (various sizes; metal, ceramic, glass, plastic), including metal colanders
- bamboo steamer
- plates (ceramic, wood)
- corrugated conduits

Towards environment

- a grand piano
- a pencil
- thread (synthetic, non-elastic)
- tin foil
- paper clips

Towards bindings

- C-clamps (at least 6)
- adhesive felt
- guitar machine heads (at least 16)
- scrap wood

Towards amplification

- 6 condenser microphones (cardioid or supercardioid) with stands
- 4 powered monitors (small–medium, freestanding)
- 10 XLR cables
- mixing console (with at least 6 inputs and 4 outputs)
“I also wanted to find the variables of the expression as independent facts in the world, and, between them, to recognize some form of visible scarring that would indicate, not only that I’d found those facts, but their interrelation as well. The scarring would act like a body (though not mine) which one approached with a word that functioned like a name but didn’t have to be the name that necessarily belonged to that body but could be a name that the body put on for a time then took off to hand back to one. It needed to be a name that could be worn by most bodies, because the idea was that you’d find scarring everywhere, between every gesture and the space that manifested around it. I was trying to see location like I saw wind blowing the small branches of city trees.”

— Gladman, Calamities, 69–70
Environment

Renee Gladman describes trying to find “visible scarring” in the world, places where lumpy space opens between and toward bodies, where location can be seen like “wind blowing the small branches of city trees.” We will try to create some of our own “small branches” within the performance space by creating a network of threads tautened between walls, chairs, window sills, beams, balustrades, trees, pillars, pianos — anything able to bear the weight of these connections. This process necessarily requires some time to be spent in the performance space experimenting with and learning from it in order to discover which places can be successfully connected by thread and what combination of these best brings the space forward, revealing its scarring. Below are some tools that will help with the practical task of building such an environment, but also some guidance for making decisions with the space.

Bindings

In order to string thread tautly across the performance space, we will need a kind of binding technology to connect it and adjust the tension. In order to create this, use scrap wood, guitar machine heads and felt to build rudimentary moorings for the thread. Using a C-clamp, these bindings can be clamped in the performance space, providing an easy attachment for thread and allowing adjustment of the thread's tension using the tuning knobs.

Multiple machine heads can be attached to the same piece of wood to allow threads to be attached in multiple directions and independently tightened. The ‘Materials’ section above suggests having at least six bindings with approximately two to three machine heads each. This will depend on many factors, especially the space's size and performer-audience disposition. The precise number and the number of machine heads per binding can be worked out with the space, or prepared in advance to allow for flexibility. Similarly the orientation of the machine heads can be contingent on where the binding will be clamped. It may be practical to prepare the wood with holes for different machine head attachments, assuming it may not be possible to drill additional holes while working in the performance space.
BUILDING THE BINDINGS

1. **Drill holes in the wood large enough for the machine heads.** In most common machine head designs this will be a large hole allowing the tuning post to fit through the wood while the covered gearing remains on the “back” of the wood. In addition, one or more small holes may be required for smaller screws to fix the machine head in place. Make sure the holes are positioned in such a way that the tuning knob will extend beyond the wood and be able to rotate. Depending on the machine heads’ design, counterboring the holes may help their stability.

2. **Screw the machine head tight to the wood** using the provided bushing, washer, and smaller screws.

3. **Apply adhesive felt to the sides of the wood** that will come into contact with the fixtures and/or furnishings in the performance space. Depending on the space in which these bindings will be used, it may be desirable to soften them in this way so as to prevent any damage to the space.

Here is one example of putting this all together. Of course, the size and shape of the wood will probably be different and the positioning of the machine heads and the felt will also be contingent on other factors:
Preparing the piano

The piano can be thought of as a central element in the wider environment, at least in terms of force if not position. Some of the threads fastened to the bindings, should pass through its strings, creating a resonant connection between their vibration and the strings of the piano (see ‘Binding the threads’ below).

Throughout the performance, the piano's sustain pedal should be depressed. This can be achieved by pressing it down and gently inserting a pencil into the pedal mechanism to prevent it from returning to its normal position.

In addition, the piano's strings should be prepared with EBows and large marbles. This will take some experimentation to accommodate the personality of the piano in question — locating places of mutual resonance.

1. Place an EBow close to the piano hammers on the long section of the strings, centring it above one of the groups of strings.
2. Turn on the EBow and let the resonance of the string swell into presence. Try both modes of the EBow (with the switch all the way to the left or all way to the right) as some strings will respond better to one mode rather than the other.
3. Repeat this to find the strings that respond particularly well to the EBow.
4. Place large marbles towards the other end of these strings, resting between two of the group affected by the EBow.
5. Find positions for the marbles at which they will tremble in place when the EBow causes the strings to vibrate. Try this with a variety of marble sizes.

Before a performance, put the EBows and marbles in place, for example:
Building the environment

There should be four stations in the space, one for each of the performers (excluding the performer operating the amplification). One of these should be close enough to the piano to permit easy operation of the EBows. The positions of the remaining three are flexible and are dependent on — or can to some extent influence — the disposition of the threads and bindings within the space. These three stations should grant the performers access to some of the threads, such that they can bow and touch them.

In the diagram above, which is only speculative, the smaller circles represent bindings to which threads are connected. Many of these then pass through the piano's strings or to the strings and then directly back. The larger, filled circles represent potential locations for the four stations within the environment.
BINDING THE THREADS

- Threads should consist of multiple strands (4–6) such that if one of these snaps under tension, others will remain in its place.
- A thread should always start its length at one of the bindings.
- A thread should always connect with at least one of the following:
  a. another thread;
  b. a string in the piano that is not prepared with an EBow and marble.
- Having touched one or more of the above, a thread can either return to its starting binding, or continue to be fastened to a binding elsewhere in the space.
- If a thread is connected to a string in the piano, it must be connected in such a way that it does not catch on the frame of the instrument as it enters and leaves, nor should it connect to one of the extreme ends of the strings, which will not allow resonance to pass from the thread to the piano string. One of the greatest challenges may well be to find sufficient places to attach the bindings, which are high enough to create the angles necessary for the thread to pass in and out of the piano without touching its sides.

With the above in mind:

1. Decide on the location for the piano in the performance space.
2. Explore the performance space to find places to clamp the bindings.
3. Decide on which places to use by considering the possible connections between them.
4. Clamp the bindings in place.
5. Tie ends of threads to their bindings’ tuning post.
6. Run the threads around piano strings or each other.
7. Tie the loose ends to a binding that is different from or the same as the binding they started from.
8. Gradually tighten the threads at each binding by turning the tuning knobs.
9. Test the resonant qualities of the environment. If, in particular, resonance is not transferred from the threads to the piano strings, adjust and experiment, move bindings, change tensions, such that when the threads are bowed or touched, the piano is touched too.
DECORATING THE THREADS
Once the network of threads has been tautened, the threads can be decorated with tin foil.

- Decorating the threads will reduce their ability to transmit resonance. Choose to place tin foil on parts of the threads that will not block resonance passing into the piano, or are not connected directly to the piano strings. Specifically, do not decorate the threads directly between the performers' stations and the piano.

- Tin foil can be attached to threads using paperclips or, if a thread is sufficiently horizontal, can be folded over it without any fastening.

- Use variously sized pieces of foil. Some might hang serenely, while others might be shredded in upon themselves.
SETTING UP THE STATIONS

Each performer should have a station consisting of the following:

- 1 small table
- their instruments (see ‘Instruments’ below)
- 1 bow*
- 1 condenser microphone

Each station can be thought to have a notional “front” and “back,” with the fronts most likely oriented towards the central force of the piano, but most importantly such that the performers can more or less face one another.

At the station’s front, the condenser microphone should be positioned, pointing upwards such that its capsule is 6” (15cm) to 1’ (30cm) below the performer’s waist height.

At the station’s back, the small table should be placed, such that the performer can easily turn and retrieve or place objects on it away from the microphone.

* Due to the flexibility of the performance directions, in theory only two performers must have bows. However, if performers wish to have the freedom to make decisions during the performance as to who will use the bows, all performers might have a bow at their stations.
Instruments

Each performer should build their own collection of instruments drawing from the following guidelines. There is not a specific number of instruments per performer, although diversity is necessary, but the three performers not operating the EBows must all have at least one corrugated conduit. The instruments should be stored on the tables at performers’ stations.

All instruments are built from some kind of container within which marbles and/or ball bearings can move. Below are descriptions of four possible instrument types of varying specificity.

Building the instruments

■ Experiment with different marbles and ball bearings on different materials. Some bowl-like containers may respond well to a small, light marble for its ability to gently careen across their surface in tiny ricochets. Others might be most present with the weight and inertia of a large marble.

■ Consider that a ball bearing will be heavier than a marble of the same size and will therefore behave differently despite their similar appearance.

CORRUGATED CONDUIT

1. Place 1 or 2 small marbles or ball bearings into a length of corrugated conduit (ribbed plastic tubing often used for wiring).
2. Seal the two ends of the conduit, creating a continuous loop for the contained marbles or bearings to move through. (Sugru, duct tape, or a hot glue gun might be used as a sealant.)

BAMBOO STEAMER

1. Place a handful of marbles onto one level of a bamboo steamer.
2. Experiment with the mixture of marbles. The unpredictability of inertias and velocities when including several large marbles alongside smaller ones can create a dynamic performance partner.

DOUBLE PLATE

1. Place a handful of small–medium-sized marbles onto a plate and cover them with a smaller plate, creating an unpredictable and “invisible” interior motion, characterised by clusters of collisions.
**Bowl-like containers**

This is the most open instrument type and can encompass bowls, colanders, mugs, tupperware, and similar circular or elliptical containers of varying materials.

Two basic shapes will likely prove preferable:

- bowls with a curved bottom and steepish sloping sides;
- bowls with a flat bottom and vertical sides.

1. Choose containers capable of producing a continuous rotation of a marble or ball bearing over the surface of their interiors.
2. Choose a marble or ball bearing to place in the container.

**Using the instruments**

- Performers should use the distance between instruments and their amplifying microphone to balance the volume of different instruments across performers. This can also take into account not just the differences between instrument sizes and materials, but also between different speeds of motion — where faster moving marbles or ball bearings will tend to be louder, faster gestures can be performed farther away from the microphone.

When changing instruments, performers should use the distance between instruments and their amplifying microphone, gradually mov-
ing away from the microphone vertically and then slowly rotating to face
the back of their station to put down their instrument and take another,
maintaining — if potentially slowing — the movement of the instrument
throughout. Any residual motion after an instrument has been set down
can be left to run its course. When taking a new instrument, the same pro-
cess can take place in reverse.

CORRUGATED CONDUIT
1. Holding the loop parallel to the ground and using very slow tilting motions,
   cause the contained marble(s) and/or ball bearing(s) to roll continuously,
   purring across the conduit’s ribs.

DOUBLE PLATE
1. Very slowly and gradually tilt the plates until you sense motion and/or hear
   collisions within the plates.
2. Slowly, and with great care, continue to search for the movement hidden
from view.

BAMBOO STEAMER
1. Similarly to the double plates, use slow, gradual, tilting motions to cause
   the marbles to roll, rattle, across the slatted, wooden surface of the bam-
boo steamer.
2. Try to avoid sudden, heavy impacts.

BOWL-LIKE CONTAINER
1. Move the container a little in a small, circular, tilting motion.
2. Find and maintain a slow rotation that draws a continuous motion from
the contained marble or ball bearing.
   It is more common for slower rotations to hold more bodies than faster
rotations. Try to bring all possible bodies to the surface.
Amplification

MICROPHONE POSITIONING
Four of the microphones are to be positioned (as described above) at the four performer stations on low stands, pointing upwards to allow performers to use the distance of an instrument from the microphone to control loudness.

The remaining two microphones should be used to amplify the interior of the piano. Precise positioning of the microphones should take into account access to the EBows for the performer nearest the piano and the threads running in and out of the piano. As far as possible, and acknowledging the necessity of compromise, these microphones should bring out the trembling sounds of the marbles triggered by the EBows, as well as the resonance of thread vibrations in the piano strings. As such, they should be positioned once these preparations are in place.

MICROPHONE-TO-LOUDSPEAKER ROUTING
Each of the four microphones at the performer stations should be routed directly to a single loudspeaker such that each microphone has one loudspeaker of its own.

The microphones at the piano should be routed to all four loudspeakers. The exact mix of the two microphones across the loudspeakers is left to the discretion of the performer of the amplification.

LOUDSPEAKER POSITIONING
Loudspeaker positioning can be used as a creative parameter in organising the musical and sounding environment created by the networks of thread, piano, and performers, in particular by helping to bring an audience into the
environment. The four loudspeakers should be positioned so as to help immerse the audience in the amplified sounds, and their position should respond to spatial and acoustic qualities of the performance space, including considering feedback response.

If the performance space permits the audience itself to be or move within the network of threads and between the performers, the loudspeakers can be placed either in alignment with the sources they amplify — i.e. each loudspeaker directly in front of or next to the performer whose microphone signal the loudspeaker receives — or orthogonally, with the sources and amplification jumbled or non-aligned.

If the performance space enforces a separation between the audience and the performers, the loudspeakers instead should be brought into the audience space, bringing the internal sounds of the separate performance area (for example a stage) out into the rest of the space.

REHEARSING THE AMPLIFICATION

Rehearsals might include a fairly methodical practice of assessing relative dynamics of and amplification for different instruments. The performer of the amplification should work with the quartet of “instrumental” performers to provide a sense of how each instrument responds to the microphones and where physically different instruments and gestures might best be performed with respect to distance from the microphone.

This practice can combine one-on-one assessment of specific instruments with “balancing” sessions with all five performers.

PERFORMING THE AMPLIFICATION

While the performers can use distance from the microphones as the significant parameter in controlling amplification, the performer of the amplification should still play an active role in balancing the overall output.

- Try to balance the sounds of the four station microphones equally.
- Any increase in overall dynamic should flow from the instruments rather than from any absolute increase in amplification gain.
Performance

The following instructions suggest a step-by-step practice for a performance with the environment and instruments described above. Instructions indicate the number of performers who should engage in a specific action, but do not ascribe specific roles to specific performers other than those contingent on a performer’s position in the material environment.

Time should always emerge from the performance situation and not be predetermined.

1 or 2 performers

Find an opening: bow on threads that are not resonant in the piano.

1 then 2 performers

Using a small, bowl-like container, create slow rotations—a sound that can nestle in the rustling threads.

3 then 4 performers

Find your ways to all rotating one of your instruments.

4 performers

THROUGHOUT

- Take time to enjoy the simple presence of your and others' material.
- Make a change if necessary: change instrument; or change strategy; or change speed; or change...
- Weigh the forces of your instrument and respect its wishes.
- If using a double plate, gradually stop and switch to a different instrument when someone else starts using a double plate.

ELECTIVE STRATEGIES (AT ANY TIME, IN ANY ORDER)

- Slow a little.
- Find your way to all using instruments of differing materials.
- Lead us to a quieter space.
- Find your way to all using instruments of the same material.
- Change the resonance of your instrument.

3 performers (without access to the EBows)

Find your way to all three using your corrugated conduits.
When the three performers not controlling the EBows are using their corrugated conduits, set aside your instrument and turn on an EBow in the piano that is not the EBow highest in the piano's range.

Allow the string's vibration to bloom and for the associated marble to fall into its cycle of tremors.

One of the performers with a corrugated conduit may decide to increase the speed of the contained marble(s) and/or ball bearing(s) slightly at this point if it seems necessary.

Having dwelt in this situation, turn on an EBow higher in the piano's range than the one that is already on.

Allow the string's vibration to bloom and for the associated marble to fall into its cycle of tremors.

Turn off the EBow that was turned on first.

Set down your corrugated conduit and begin to move your fingers along the length of one of the nearby threads: pinch the thread between the nails of your thumb and index finger and walk slowly, following the thread and making a choice if you come to a junction of threads. If possible, start with a thread more resonant in foil than in the piano.

Carefully move the marble associated with one of the EBows that is turned off up to 2 inches (5 cm). Making sure
the marble has settled in its new position, turn on its associated EBow.

1 performer

If there are any remaining EBows that have not yet been turned on, you can gradually turn them on at any point in time from here on out.

1 performer

Set down your corrugated conduit and begin to move your fingers along the length of one of the nearby threads: take the thread between the nails of your thumb and index finger and walk slowly, following the thread and making a choice if you come to a junction of threads. If possible, start with a thread more resonant in the piano than in tin foil.

1 performer + 2 performers

- Set down your corrugated conduit.
- Come to a halt in your places along the thread.

1 performer

At any time and any number of times, choose to carefully coax a marble to a slightly different position along one of the piano strings. Very gently move it with your thumb or index finger, pushing it from one side along the string. Place whichever of your thumb and index finger is not touching the marble on the other side of the marble to prevent it from rolling out of control down the string.

2 performers

Move your fingers along the length of one of the nearby threads: pinch the thread between the nails of your thumb and index finger and follow the thread slowly, bringing out the resonances of the piano and choosing your direction when you come to a junction in the threads.
Steadily bow a nearby thread, applying enough pressure to create finely textured trembling that can be passed into the thread’s tin-foil decorations and/or the piano’s strings. Come to a halt in your places along the thread.

Recommence moving along the threads (as in 16). Stop bowing.

Choose a location to bow, bow on the threads (as in 17), then stop bowing. Repeat this, taking time between actions to assess and listen to the environment.

Continue moving along the threads as previously. Whenever the performer bowing the threads starts or stops their action, you can choose to either stop moving, start moving, continue moving, or to continue not moving.

“There were always extra folds of birds of paper and you could move your finger along the length of them and have witnesses, and do this for minutes at a time never having to explain what you were doing or the desired effect, because it was clear that these folds were the scarring that made people feel safe in public.” (Gladman, Calamities, 72)

One by one, move the marbles in the piano towards the EBows such that they stop trembling and prevent the strings from resonating. This can be achieved either in one slow continuous motion, or incrementally using the strategy described for varying the marbles’ positions in 15 above.

As the vibrations of the EBows subside, gradually come to a halt and allow the resonance in the piano to fade.
Once the EBows can no longer cause the piano strings to vibrate, quietly turn them off.
this line comes from the past (2018)

for twelve instrumentalists and conductor

Commissioned by impuls. International Ensemble and Composers Academy for Contemporary Music

First performed by Klangforum Wien with Ilan Volkov

15 February 2019

Helmut List Halle, Graz, Austria
this line comes from the past

for twelve instrumentalists and conductor
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WRITTENFORKLANGFORUMWIEN

Commissioned by
impuls. International Ensemble and Composers Academy for Contemporary Music, Graz, Austria
premiered at impuls 2019
www.impuls.cc
I would like to thank Clara Iannotta for her constant advice and assistance; Heather Roche for the generosity she shows both digitally and in person in sharing her research and to whom I owe the clarinet multiphonics found in this score; Gunnhildur Einarsdóttir, Kristjana Helgadóttir, Ingólfur Vilhálmsson, and Matthias Engler of Ensemble Adapte for creating a space for experimentation with their “Open Mic” project; and Weston Olencki for taking multiple times to explain what a trombone is.
instrumentation

**f***
- flute
- bass flute
- harmonica in A
- electric milk frother
- china mug or bowl
- switches for 2 large box fans prepared with aluminium foil

**cl***
- B♭ clarinet
- corrugated conduit loop
- switches for 4 large box fans prepared with plastic bags

**bsn***
- bassoon
- harmonica in C
- brushes with metal bristles
- polystyrene block
- electric milk frother
- china bowl or cup (different from the flautist’s)

**tp***
- spring drum (hung from a stand)
- brushes with metal bristles
- polystyrene block
- corrugated conduit loop
- electric toothbrush
- trumpet in B

**tbn***
- trombone
- bucket mute
- cassette tapes 1 + 3
- handheld clicker
- mini electric fan

**perc***
- timpani (32”) with cymbal on top
- 2 polystyrene blocks
- suspended cymbal (18”)
- bass drum
- B♭ crotale
- electric milk frother
- tin foil
- polyester thread (to prepare piano)
- soft & very soft beaters, snare stick, superball stick, bow

**hp***
- harp
- E♭ violin
- superball stick
- C♯ crotale and bow (see b.58)
- corrugated conduit loop
- electric mini fan

**pn***
- grand piano
- brush with metal bristles
- polystyrene block
- corrugated conduit loop
- electric toothbrush
- pencil
- 3 E♭ blocks
- 3 large glass marbles
- blu tack or sellotape to prepare top register

**vn i***
- violin
- rubber practice mute
- corrugated conduit loop
- circular paperclip

**vn ii***
- violin
- standard mute
- corrugated conduit loop
- jay bird call

**vc***
- cello (string IV tuned a 4th lower to G)
- wooden mute
- vibrator
- cassette tape 2

**db***
- five-string double bass

suggested stage layout

![stage layout diagram]
The corrugated conduit loop is a closed circle of corrugated plastic tubing containing one or two marbles. By holding it horizontal to the floor and gently tilting it, you can cause the marbles to slowly roll along the tube, creating a continuous, soft, purring sound.

Corrugated tubing is usually used for running electrical wiring in various architectural applications and can be bought in most home improvement or building supply stores. To construct the instruments, cut lengths of tubing so that they will form a loop of around 40–60cm diameter. Insert one or two small marbles into the tube and join the ends using strong tape, e.g. duct or gaffer tape. Make sure the join is smooth, so the marble can travel across it without getting stuck.

The two tape players should be relatively large cassette players, for example of the type that used to be used in school classrooms. Before performing the piece, all the cassette tapes should be rewound to ensure they are at the beginning of their sequence. The score indicates which cassette tape should be performed when, e.g. as “tape 2.” The tapes should always be played from Side A.

The fans should be spread out across the stage or performance space. In the diagram on the previous page, the suggested placement is in front of the performers so that they do not blow parts off music stands or otherwise interfere with the performers.

Depending on the chosen bags, it may be best to tie the bags by their handles, choosing a position where the air flows from the fan up into the bag, inflating and causing it to dance in the breeze. For the aluminium foil, tying it in diagonally opposite corners may be best.

For the harpist, the fan should ideally have fan blades that are a little softer that will produce a gentle attack when combined with the harp’s strings and won’t risk damaging the strings.

In order to give the flautist and clarinettist a single switch to activate two and four box fans respectively, connect the box fans to power strips with an on/off switch.
piano preparation

FOR PIANIST

Prepare the top 4th of the piano’s range with blu tack or sellotape to damp any resonance and produce a dry sound (see bb. 42–43).

Three of the piano’s strings should be prepared with an Ebow and a large marble. This will take some experimentation to accommodate the personality of the piano in question — locating places of mutual resonance. The following steps are a suggested method for finding the best strings:

1. Place an Ebow close to the piano hammers on the long section of the strings, centring it above one of the groups of strings.
2. Turn on the Ebow and let the resonance of the string swell into presence. Try both modes of the Ebow (with the switch all the way to the left or all way to the right) as some strings will respond better to one mode rather than the other.
3. Repeat this to find the strings that respond particularly well to the Ebow.
4. Place large marbles towards the other end of these strings, resting between two of the group affected by the Ebow.
5. Find positions for the marbles at which they will tremble in place when the Ebow causes the strings to vibrate. Try this with a variety of marble sizes.

Before a performance, put the Ebows and marbles in place. For an example of a possible disposition, see the following diagram:

FOR PERCUSSIONIST

The percussionist should also prepare two of the piano’s strings with thread. To prepare the piano string, pass a long length of polyester thread around a piano string. Do this for two strings, one in the mid range of the piano, the other in the low range. When playing them, pull the threads tight and make sure they do not touch the side of the piano (or anything else) as that will block the vibration in the threads from transferring into the piano strings.
a little slower, $\downarrow = 72$

harmonica (in A)
inhale through lowest two holes

harmonica (in C)
exhale through lowest two holes

corrugated conduit
hold the loop horizontally and slowly tilt it to allow the marbles to roll smoothly in a circle

tape player
play — tape 1
3 4 2 4 4

wait for trombonist

to play tape 3

a little slower, \( q = 66 \)

take harmonica and milk frother

tape player

stop — tape 1

eject tape 1

insert tape 3 (side A)

play tape 3

1 g a

db

3 g

niente-

pppp
trembling, intermittent

2 g b

34 2

4 4

4

... œœj‰ Œ Ó

venture

sus. cymbal w/ snare stick

apply pressure with the tip of the stick to create

an intermittent, squeaking sound; use your

free hand to damp and modulate the sound

sus. cymbal w/ snare stick

place gently against

the A-string and

turn on silently

(arco)

I

f

vibrator

place gently against

the A-string and

turn on silently

(jun)

O

O

Y ™

O O O

O O O

Y ™

Y ™

Y O O O O

œ Œ Ó

¿J ‰ Œ Ó

w

w

w

œ Œ Ó

¿J ‰ Œ Ó

w

w

w

œ Œ Ó

¿J ‰ Œ Ó

w

w

w

œ Œ Ó

¿J ‰ Œ Ó
allow the string's vibration to bloom and for the associated marbles to fall into their cycle of tremors.
bow + threads in piano

Take the end of the thread in your hand, tensing it, and bow the thread, creating resonance in the piano.
Let bloom

£

On an EBow higher than the one already turned on.

IV

w

w Ó

w<#> w w ˙ Ó
with the mouthpiece fully covered, make a granulated "ch" sound with some saliva at the back of the mouth.

Trumpet:

Polystyrene blocks:

Percussion:

Col legno tratto:

Ebow harmonic mode:

Col legno tratto:

Filtered white noise:

Vocals:

With the mouthpiece fully covered, make a granulated "ch" sound with some saliva at the back of the mouth.

Trumpet, with as little air passing through the instrument as possible.
Bass flute

breathy (as b.142)

polystyrene blocks
(as b.142)

let bloom

bow + threads in piano

as before

turn on the EBow that hasn’t been turned on yet

touch string with fingertip producing
(among other tones) the 11th harmonic

col legno tratto

col legno tratto

sim.

sim.

l.v.

l.v.

ord.

s.t.

ord.

s.t.

fan

turn on fans prepared with aluminium foil

air, flz.

polystyrene blocks
(as b.142)
broader, muttering

threads in piano
pianist moves one finger tip and pull, allowing the thumb to run through your fingers

turn on the remaining EBow

w w w w w
At any time between now and the end of b.175, any number of times, choose to carefully coax a marble to a slightly different position along one of the piano strings. Very gently move it with your thumb or index finger, pushing it from one side along the string. Place whichever of your thumb and index finger is not touching the marble on the other side of the marble to catch it in the event that it begins to roll out of control down the string.
play with very loose embouchure — mostly air — but allowing your lips to occasionally catch and create a quiet, pitched buzz

(notated pitches indicate valve positions, not sounding pitch)

play with a very loose embouchure — mostly air — but allowing your lips to occasionally catch and create a quiet, pitched buzz

(play with a very loose embouchure — mostly air — but allowing your lips to occasionally catch and create a quiet, pitched buzz)

polystyrene + bow bow + threads in piano

(as b.150)

briefly remove damping grip to reveal grace note pitches — as if blinking

briefly remove damping grip to reveal grace note pitches — as if blinking
sust. cymbal w/ snare stick

Apply pressure with the top of the stick to create an intermittent, squeaking sound; aim to keep the sound as quiet and fragile as possible.

marble and EBow

Gradually move one marble towards its EBow until the string stops vibrating. Then turn off the EBow.
piano

while keeping the pedal depressed, remove pencil and prepare to release pedal

gently but clearly
release pedal

senza dim.

£ < >
I began the day inside the world trying to look at it, but it was lying on my face, making it hard to see. (2018–20)

for variable ensemble, video and audio playback

Commissioned by Rainy Days Festival
First performed by ensemble mosaik
(Chatschatur Kanajan, Karen Lorenz, Mathis Mayr, Simon Strasser, Ernst Surberg, Arne Vierck, Christian Vogel)
25 November 2018
Philharmonie Luxembourg, Kirchberg, Luxembourg
I began the day inside the world trying to look at it, but it was lying on my face, making it hard to see.

a starting point for spatialised ensemble and video
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version for wasteLAnd
at Harvard University, May 2019
first version written for ensemble mosaik
commissioned by Philharmonie Luxembourg
WITH THANKS TO

Matt Barbier
James Bean
Renee Gladman
Clara Iannotta
Bettina Junge
Paolo Mariangeli
Weston Olencki
Lydia Rilling
Adi Snir
Zeynep Toraman
Arne Vierck
Introduction

The title for this performance is borrowed from Renee Gladman’s *Calamities* (Wave Books, 2016). “I began the day inside the world trying to look at it, but it was lying on my face, making it hard to see,” captures for me both humorously and seriously the problem of trying to understand our world — to examine it and to interrogate it. Our examination is always simultaneously too close and not close enough. Or too close to X and too far from Y and we cannot hold everything together in order to grasp their connections. Gladman continues:

> The world was made up of layers, one encompassing the other, and it smelled like onion. [...] I was happy, but if I were going to think about this world in addition to simply moving about in its folds, then I’d have to find a position from which I could do this effectively. I tried out all the levels. I could never tell if I were in time. You needed perspective to study geography. You needed an “I” to understand “we.” It was impossible.

With this performance I am trying to think about or inhabit — as Gladman’s thinking is able to inhabit — one part of this proximity to a multi-levelled, folded space. The video component is generated using an archive of more than 2,800 web pages that I read between November 2016 and May 2019. The text from these pages and the almost 6,000 images they contain are used as a material trace of my looking at the world through others’ writing, photography, and design. Often we are seeing this material from too close to understand what it is trying to say or it moves too fast or it overwhelms us with sheer quantity.

There is a superficial pessimism to this thinking: we can never know the world; we are either ignorant or overwhelmed; our efforts are doomed by mediation or framing; the isolation of data does not return the perspective needed “to study geography” or tell if we are “in time.” However, I am not interested in a rejection of documentary evidence or an exhausted assertion that all our efforts towards knowledge are futile, or even that news media — which make
up a large amount of the source material — are ultimately human and unreliable sources of knowledge. Instead, I think that inside this mediatised space something softer and more fluid can start to ooze from between the colourful folds. We are moving about within digital spaces whose construction is mutual and whose fabric is not so much the isolated points whose zoomed-in quality limits their ability to convey meaning, but the tapestry of connections gradually formed by weaving all of these strands through each other.

The aim of the material in the following pages is to provide some guidance for a group of performers on how move about within the specific environment of a concert performance with fixed video projection and audio playback, but also to hopefully give space and possibility for the creation of connections, commentary, and reframing as a communal endeavour. As much as possible this “score” is written so as to facilitate its own evaporation — a starting point, which once started from is no longer a source of truth nor a demand to be returned to.

“I began the day inside the world trying to look at it, but it was lying on my face, making it hard to see.” This is a strangely autobiographical piece in the sense that it is made from what I read and from the decisions I made about what to read. Certain things and people dominate this space and if you need “an ‘I’ to understand ‘we,'” both the eye and the “we” here are mine. I hope that autobiography in this sense does not simply hold up a mirror to my “I,” but that the onion of the world that Gladman describes instead is revealed to be full of voices and layers whose totality may be unknowable, but whose diversity is invaluable. By freeing up space for the ensemble’s intervention, I hope to provide starting points for co-compositional work that does justice to the socially constituted truths of mediatised space in ways that my singular perspective could never achieve on its own.

Gladman doesn’t mention it, but perhaps if the world is an onion, it explains why we love it and also why it makes us cry.
Technical requirements

**BASIC TECHNICAL SET-UP**

- A dark performance space
- Laptop for audiovisual playback
- HD video projector (1920×1080px)
- Projection surface (wall, screen, etc.)
- Stereo pair of powered monitors
- Smartphones with earphones
- Performers standing throughout the performance space, turned to face the video projection

**ADDITIONAL SUGGESTED SET-UP FOR PERFORMANCE WITH WASTELAND AT HG0NM**

- Amplified tabletop percussion set-up:
  - 1 overhead instrument microphone
  - Polystyrene block with embedded contact microphone
  - Dinner plate or small gong with contact microphone
  - Corrugated conduit loop containing a marble
  - Dish sponge
  - Toothbrush
  - Stiff-bristled broom head
  - Crinkly plastics
  - Bow
- “Distant” loudspeaker outside or at back of performance space
- Cello with lowest string detuned
Notes on the suggested percussion set-up

The suggested percussion set-up is tailored to facilitate the performance of small, detailed sounds: crinkles, rustles, gentle perforations, crisp surface textures, sparks and soft noise. It can be expanded or varied as the performer desires. (Both of the below will be provided by me for this performance.)

**CORRUGATED CONDUIT LOOP**

Corrugated conduits are flexible ribbed plastic tubes normally used in the walls of buildings to run wires through. To create the instrument, cut a length of conduit that is large enough to form a circle, place a small marble inside the tube and tape the two ends of the conduit together to form a smooth connection. The resulting loop should allow the marble to travel smoothly around the inside of the loop.

To perform the loop, hold it horizontally and gently tilt it in a circular fashion, causing the marble to steadily travel around the loop at a relatively consistent speed, producing a soft, purring sound.

**POLYSTYRENE WITH CONTACT MICROPHONE**

Take a block of polystyrene roughly 20–30cm square and at least 6cm thick, and cut a slit in one side just large enough to allow you to slide a contact microphone towards the centre of the interior of the polystyrene. This allows you to capture delicate sounds on the surface of the block without the noise caused by touching the microphone directly.

**AMPLIFICATION**

Use the amplification provided as a means to highlight small, tactile sounds, dealing dynamically with microphone distance and type to bring to light things that might otherwise go unheard.
Smartphones with earphones

Performers can choose to use a smartphone to load an audio track constructed from text excerpts from the same archive that was used to generate the video. Unlike the video, these audio tracks are different for every rehearsal and performance so as to retain a certain unpredictability of content and are intended for the performers to listen to privately, not for public playback.

If performing with these audio tracks, load the track before the beginning of the piece, and start listening to it as the video begins to play. You may use the audio track as an informing layer that impacts how you are playing, or as a trigger for more immediate responses. Some sections of the score suggest more specific relationships to these audio tracks.

During rehearsals and for the concert, get a fresh audio file here:
https://wasteland.ngrok.io

EXAMPLES

An example excerpt of audio track content can be found at:
This diagram offers a suggestion for how the performers might be positioned for the performance in Paine Hall at Harvard University. (Labelled by likely main instrument.)

Performers should face the surface used for video projection so that they are watching in a similar fashion to the audience.

The disposition of the performers need not be symmetrical (as shown here) and should be adapted to fit a given performance space.
Some basic guidelines

**Some things to value**

- closeness
- grain
- detail
- touch
- openness
- contact
- blend
- making space
- support
- shared listening
- generous disruption
- care
- togetherness
- softness
- coaction

**Possibilities throughout**

→ Choose one of the other performers and **decorate** their sounds with soft pulsation
→ **Eye Pulse**: find rhythm swelling your sound from swelling in the projected video
→ Be silent, **listen**, and watch

**Respond to changes in**

- hearing
- air pressure
- brightness
- speed
- colour
- understanding
- audience movement
- audience sound
you begin the day in a dark room

trying to make light
**SECTION 1A**

Performers between the audience and the projection surface

→ **low instruments**
   - Play very quiet, soft tones that shift in pitch very slowly.
   - Embrace blending with other sounds and gradual transitions.
   - At various times you may decide to swell with the video or independently from it.

→ **all instruments**
   - Make quiet noises, prioritising grain, grit, and (air)flow.
   - Think of air conditioners, fridges, dehumidifiers, but also breathing and purring.
   - Despite the quiet dynamic, start and end sounds crisply and confidently to create flat, square shapes.
   - Keep the colour of your sound consistent as long as it lasts, but vary the colour sometimes between iterations.

   At various times try to:
   - Stop or start when another performer stops or starts.
   - Co-ordinate your actions with one or more other performers.
   - Play independently. Other performers may choose to follow you.
   - Be silent for at least two changes of colour by another performer

**VIDEO DESCRIPTION**

Starting from a completely dark screen, gradually a widening and narrowing horizon line appears, as if looking out through almost closed eyelids onto indistinct fields of colour.
**SECTION 1B (EXPANSION)**

Performers playing in section 1A

→ Continue as before

Performers who are not yet playing

→ If the closest performer in front of you (between you and the screen) is making sound, you may choose to also begin making sound, following the same guidelines as in section 1A.

**VIDEO DESCRIPTION**

Continuing similarly to before: a horizon line in continuous flux.
**SECTION 1C (FADE)**

All performers making sound

→ Eventually, the audio playback cuts out, and we see small video frames projected against the horizon line. The third of these frames shows leaves moving in the breeze for seven seconds. As this appears, gradually stop playing over 2–4 seconds, revealing a quiet noise floor.

**VIDEO DESCRIPTION**

Three short video clips backed by a horizon line: tupperware (5 seconds); water glass (2 seconds); autumn leaves (7 seconds).
SECTION 2A

→ instruments within range
    Join the high A heard in the audio track and share it between each other.

    Gradually find the smallest melody you can within your sustained line.

→ other instruments
    As small melodies gradually emerge, complement them with sparks or dust motes, points of detail, illumination, punctuation. As you take your place in this cloud, respond also to sparks across the performance space, listening for distance.

Move to the next section independently, as you feel it call to you.

VIDEO DESCRIPTION
A wider strip of light, similar to the horizon line of before, which opens even further and is gradually overlaid with bursts of text.
SECTION 2B

→ low instruments
Gradually move from your previous sounds to form a strand of low, muddy sound, blending with other low instruments as they accumulate, darkening the space with thick vibrations.

→ other instruments
Choose one of the following (or switch between them at will):
• Join a small ensemble of brittle noise makers, spanning the performance space with crisp chatter, learning from each other.
• Gradually stop making sound.

SECTION 2C

Performers making sound

→ As the image cuts to black accompanied by a louder noise from the audio playback, sustain — or even increase — your sound as a projected cursor gradually closes. As the cursor arrives at its final position, cut to silence.

VIDEO DESCRIPTION
A dark image with a thin line resembling a hairpin gradually closing.
Everyone silent

A water glass.
SECTION 3A

→ instruments within range, capable of glissando

Beginning inaudibly and gradually reaching a quiet dynamic, play long soft tones in the register shown below. Allow us to hear the “skin” of the note — a tactile surface of sound — holding steady dynamics for its whole duration. Move freely between

• holding a note at the same pitch, changing in discrete steps
• sliding in pitch very slowly

\[ \text{\textmusicalnote} & \text{\textmusicalnote} \]
SECTION 3B

→ **instruments within range, capable of glissando**
  Continuing as in section 3A

→ **very high instruments**
  Contribute long, high notes to float on top of the established texture. Ebb in and out, quiet and fragile. Play isolated or connected notes — come and go as seems appropriate. Precise, diatonic tuning is not important.

→ **any instrument**
  Choose one of the other instruments and decorate their notes with soft pulsation. At any time, decide to change the instrument you are following or to stop decorating.

**VIDEO DESCRIPTION**

The darkness is gradually divided by a flickering horizontal line.
SECTION 3C

All performers

→ While continuing to follow the guidelines for the previous sections, try to find a pulse in what is happening. This might emerge from what you hear around you or movement in the video. You may use this pulse to align changes you make.

Performers continuing from 3A

→ Gradually narrow your range, hardening your sound, making its skin more brittle.
SECTION 4A

→ Continuing as before with the additional option:
  • Make detailed rustling sounds, dust, perforation, star grit, and brittle crunching.

→ very high instruments
  Gradually reduce and then stop playing.

Performers continuing from 3A

→ Gradually settle on a single static pitch and soften the skin of your sound.

An increasingly agitated cloud of words expands to fill the screen.
SECTION 4B

→ Continuing as before

Performers continuing from 3A

→ Get slightly quieter and start a very, very slow glissando upwards or downwards from your note (depending on which direction affords the most freedom).

All performers

→ Listening to the “news reader” audio track in your headset (see page 9), you will hear a voice reading (potentially fragmented) sentences to you. For each sentence you hear, say it out loud. You can speak it in a language that is comfortable for you, in fragments as you figure it out, or in one go once it has sunk in. There is no rush, and mangled sentences are to be expected and not to be afraid of.

Do this while continuing any other sound making, embedding all your voices.

VIDEO DESCRIPTION

Initially the screen fills with white light, which gradually begins to pulse and flicker. Abstract forms flash across the screen, gradually darkening, and intensifying. Finally, as if a blurry lens is falling away, these flashing columns come into focus, revealing the material much of the rest of the video draws on but abstracts.
SECTION 5A

→ Music begins playing from a distant loudspeaker and slowly seeps into the performance space in a wash of resonance from the main loudspeakers. Gradually join the harmony of the resonance, pulling the sound of the speakers out into the space, like air escaping.

As a guide, the notes below may or may not be helpful in finding yourself with the resonance.

Expanding the resonance is not only a question of pitch, but also of colour and noise. Layers of noise mixing with others’ pitches are welcome.

VIDEO DESCRIPTION
A solid blue wall gradually darkens to black.
SECTION 5B

→ As the resonance fades away, the hall will go dark. Stay on the sound you found for as long as you want — a shadow of what went before.
### Approximate Section Timings

<table>
<thead>
<tr>
<th></th>
<th>Start</th>
<th>Duration</th>
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<tbody>
<tr>
<td>1</td>
<td>A 00:00</td>
<td>1'03&quot;</td>
</tr>
<tr>
<td></td>
<td>B 01:03</td>
<td>0'54&quot;</td>
</tr>
<tr>
<td></td>
<td>C 01:57</td>
<td>0'15&quot;</td>
</tr>
<tr>
<td>2</td>
<td>A 02:12</td>
<td>3'38&quot; (includes 2B)</td>
</tr>
<tr>
<td></td>
<td>C 05:50</td>
<td>0'11&quot;</td>
</tr>
<tr>
<td></td>
<td>D 06:01</td>
<td>0'24&quot;</td>
</tr>
<tr>
<td>3</td>
<td>A 06:25</td>
<td>0'13&quot;</td>
</tr>
<tr>
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<td>B 06:38</td>
<td>0'40&quot;</td>
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<tr>
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<td>C 07:18</td>
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<tr>
<td>4</td>
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<td>B 08:16</td>
<td>2'55&quot;</td>
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<tr>
<td>5</td>
<td>A 11:11</td>
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<tr>
<td></td>
<td>B 12:08</td>
<td>0'30&quot;</td>
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</table>
List of Supplementary Materials

1. Audio recording of *Tomorrow I will build a house here, if I can hold still*, performed by Bettina Junge and Mathis Mayr (ensemble mosaik).

2. Audio recording of *union–seam*, performed by the JACK Quartet.

3. Audio recording of *union/haze*, performed by ensemble recherche.

4. Video recording of *always extra folds of birds of paper and you could move your finger along the length of them and have witnesses*, performed by Yarn/Wire.

5. Audio recording of *this line comes from the past*, performed by Klangforum Wien, conducted by Ilan Volkov.