Charlie Sdraulig

enfold

for pianist on an amplified, old upright, and audient

2019-20

For Gwen Rouger, with gratitude for all her creativity, vision, encouragement, and input throughout our collaborative workshops.

Overview (for you, not an audient)

This is an intimate, interactive performance-installation for pianist and one audience member at a time. In a small, quiet space, sit alongside the audient, as if playing together in a four hands arrangement. Share headphones. Mediated by high levels of amplification, you will lead a slow, quiet, AMSR-like tour of an old, upright piano's action—discovering creaks, resonances and other idiosyncratic sounds particular to that specific instrument, as elicited via gentle brushes, caresses, scrapes, taps, and more.

Your performance will be vitally shaped by the audient's undulating behavioral rhythms. Your proximity to the audient will allow you to observe and hear their slightest movements and sounds, as well as make inferences about the quality of their attention. You will reciprocate their heightening engagement by unfolding ever subtler microvariations within sounds, as well as translating their compatible non-verbal behaviors and ambient sounds. Alternatively, you may compensate for the audient's lowering engagement by pursuing greater sonic contrast between sounds etc. Through these efforts, aim to momentarily create individually tailored relationships between all the participating elements—interpersonal, instrumental, electronic, spatial etc. In other words, sensitively acknowledge and enfold these contingent, dynamic relations within each performance.

The performance materials that follow are also particular, since they describe an approach toward an unfolding, uncertain process in time (rather than a largely fixed symbolic representation of sounds and actions). Though there will be a similar overarching trajectory to each performance, the specific details are highly variable and open ended. After a summary of tech requirements and organizational practicalities, I start by outlining the goals and mindset to adopt while performing. Given this approach, I enumerate specific piano techniques on a section by section basis, followed by the performance instructions (~ score-like), as well as notated models to guide your practice.

This performance-installation may be presented by itself, or concurrently with other pieces for one performer and one audient.

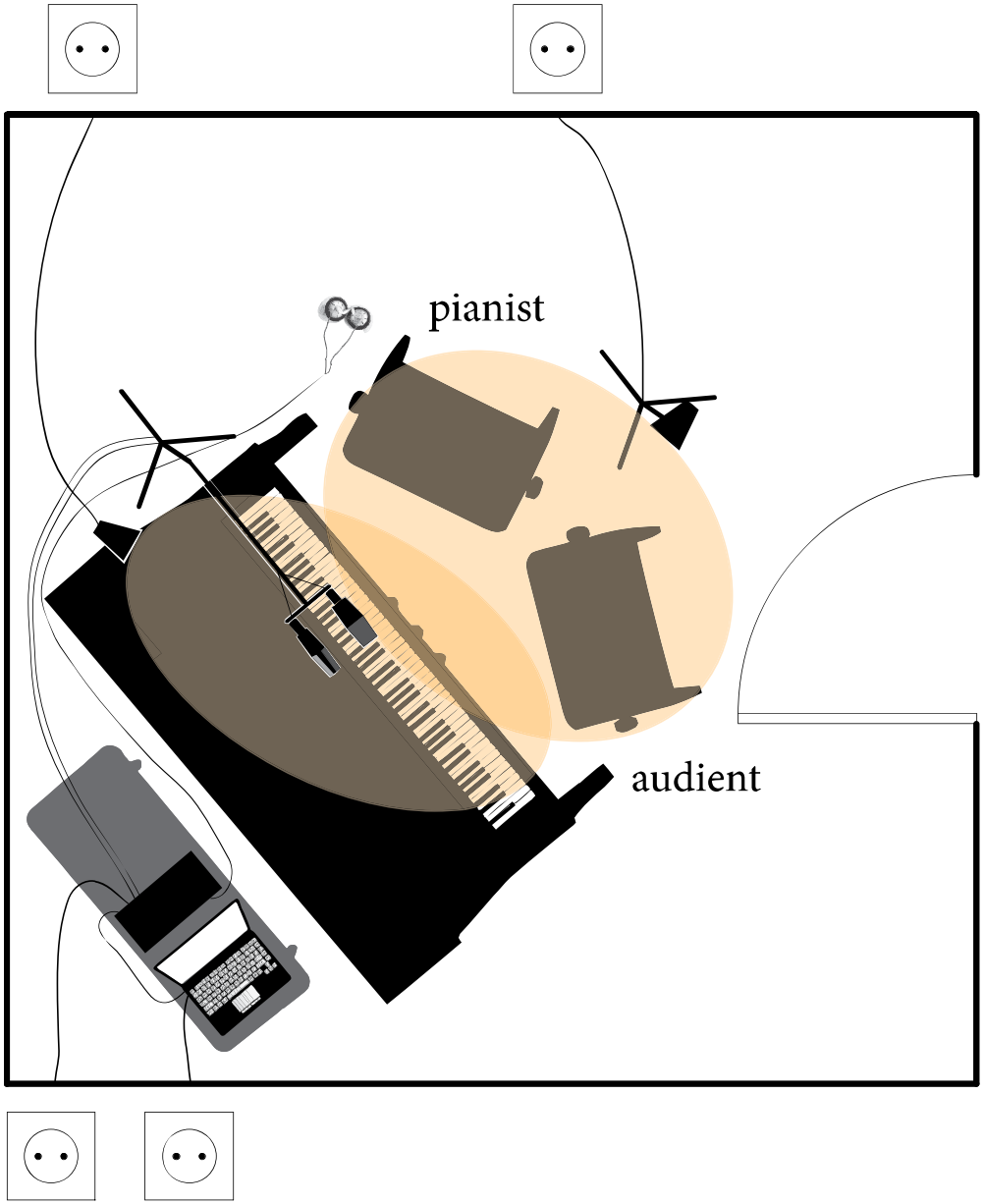
General performance directions

This piece must be performed from memory.

Please contact me to work together towards a performance (email: c-sdraulig@hotmail.com).

Samples, recordings, and video examples of prior performances are available on request.

Schematic plan



Tech requirements

- 1 old, upright piano with the upper front board and music rack/fallboard removed (the piano does not need to be in tune or well maintained)
- 1 blacked out, dark, very quiet room (minimize visual distractions with black cloth etc.); dimensions ≥ 3 x 3 m (10 x 10 feet)
    - Make every effort to reduce sources of ambient sound within the room (e.g. dampening via blankets etc.), however some distant ambient sound is desirable.
    - A gazebo with a black canopy and sidewalls (no windows) may be employed as a temporary standalone room within a larger (gallery/performance) space.
- 2 piano stools or chairs angled towards one another, arranged in a quasi-four hands performance style (pianist on the right)
- 2 side address cardioid large diaphragm condenser microphones (e.g. a pair of AKG C414s etc.) on 1 stereo bar with clips
    - Place the microphones around C5 on the keyboard. Direct one microphone at the jack and hammer butt of the piano's action (from ca. 12-15 cm or 5-6 inches away), direct the other down at the keys (from ca. 12-15 cm or 5-6 inches above i.e. enough space to accommodate your hands)
- 2 xlr cables
- 2 microphone stands (one for the amplification, and one for the lighting, if a fixture on the ceiling is not possible)
    - Counter-weights (e.g. sandbags) may be needed on the feet of the stand supporting the microphones, to prevent it from toppling over.
- 1 fan-less tablet/laptop with Max (contact me at the email address above for the patch, which automates the fade out of the amplification in the coda and other background processes) and 1 professional audio interface (with 2 microphone inputs), all hidden behind the piano, in the dark
- 1 power strip with at least 3 outlets and 1 extension cable (or more as necessary)
- 1 pair of clip on, on ear, open back headphones (no headband); Koss KSC75 headphones are recommended as a high quality, cheap option.
- 1 3.5mm male to female extension cable for the headphones ≥ 2 m (6.5 feet)
- 2 warm, dim, diffuse lamps (e.g. low wattage squirrel cage bulb, tending toward a red hue)
    - 1 very dim, very diffuse overhead lamp placed above (and a little behind) the chairs, lighting the performer and the audient
    - 1 slightly brighter, more focused lamp clipped onto the upper right of the piano, lighting its keyboard and action.

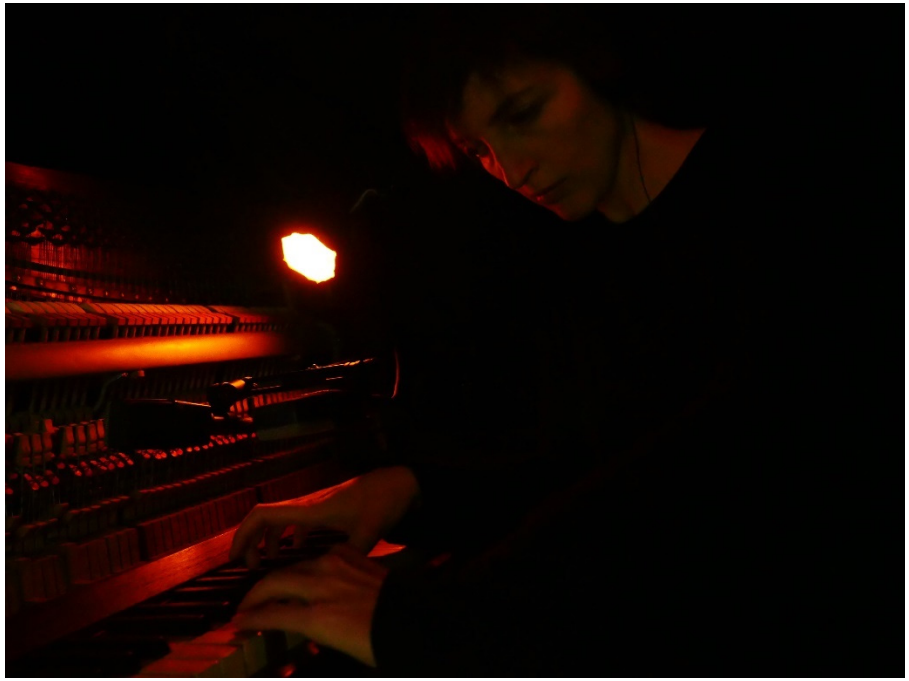
Organization

Each performance should last no longer than ca. 18 minutes. Work out a schedule (e.g. 20 or 30-minute slots, with breaks in-between) over a day or multiple days. Offer sign-ups for available slots on a first come first serve basis, or if there are few available slots, ask for expressions of interest beforehand and then conduct a lottery.

Design a quiet waiting area. Have an usher at the door to the room to check whether the performer is ready to receive audients, and ensure external noise levels are low. The usher should ask each audient to remove their coats and shoes before entering, as well as to turn off their devices. Provide a safe storage space for personal items. The usher should inform each audient that:

- The performance space is dimly lit. As they enter, they should allow time for their eyes to adjust before taking the open seat.
- The performance features high levels of amplification, but their hearing is protected at all times via a limiter which prevents sound from exceeding a safe level.
- They will sit close to the performer, but their personal space will be respected.
- The door is always open, however the performance proper ends once the pianist acknowledges you and gestures toward the door.

Potential audients should know as little as possible about the dynamic, social entrainment aspects of the performance. Promoting the event as a one-to-one intimate performance should suffice.



Gwen Rouger performing at Partisan in Manchester, UK; produced by Kinetic. Photo credit: Winnie Huang, 2020. Used with permission.

Goals

Each performance will create individually tailored relationships between all the participating elements:

- Between you and that specific piano, electronically mediated
    - Via the **sounds** and **gestures** outlined in the **techniques** and **performance materials**
- Between the above and each particular audient
- Between all the above and that specific space (ambient environmental sounds) etc.
    - Via the translations and interactions outlined in the **global modifiers** (e.g. reciprocation and compensation strategies etc.)

Over the course of a performance, at times you will emphasize or weight some of these relationships above others (though all are constantly in play, and should not be neglected). In **Section One**, primarily focus on your electronically mediated relation with the piano. In **Section Two**, primarily focus on building a non-verbal relationship with the audient. In **Section Three** and beyond, dynamically balance and shift all of these relations, while making a special effort to emphasize your connections with the ambient environment, where possible.

(The distinctions sketched above are not inviolable, but rather useful heuristics for navigating a complex of interdependent, multi-faceted, evolving network of relations.)

You will go into the performance situation with a communicative intent i.e. goals you would like to achieve, and dynamically shape your performance according to how your instrument and attending partner respond and interact with you. However, there are limits on how flexible you can be—you don't want to sabotage or undermine your underlying goals by contradiction or passivity. Each time, aim to:

- Create a sense of quietude (i.e. calm, still, concentrated quiet)
- Heighten the audient's engagement (i.e. engrossment) and positive involvement with your performance.
- Ultimately, forge a rapport, a way of non-verbally relating and adjusting to one another through sound and gesture.

Global modifiers in performance

As you perform each section of the piece, achieve the above goals by:

Projecting a relaxed, calm demeanor.

- Adopt a composed, well supported posture, communicating that you are at ease. In general, move deliberately, **taking your time**.
    - *Resist the temptation to play many, diverse sounds or dense textures constantly. You need to make and allow yourself time to listen to the idiosyncrasies of the amplified instrument, perceive audient behaviors and ambient environmental sounds. For example, you should feel welcome to allow a single gesture and/or sound to last well over a minute (or more!). Giving yourself this time will free resources to sensitively and calmly weave dynamic connections between these participating elements. As such tend towards doing less, rather than more—when you do respond to a behavioral or ambient event, this will ensure changes in your performance gain greater significance and impact.*

*Always monitoring the audient's **non-verbal behaviors**:*

- Though you should rarely look directly at the audient, you can observe them peripherally—out of the corner of your eye—as well as hear their movement and vocal behavior. Monitor:
    - **Facial and gaze behavior**: gaze direction, frequency and duration (i.e. where are they looking—at the keyboard, your hands, the mechanism, you, or elsewhere—how often and for how long? Glances? Sustained?); if you do glance in their direction, do they return (e.g. eye contact) or avert their gaze?
    - **Vocal behavior** (paralanguage): respiratory cycles (inhalation, exhalation; sighs); coughs; clearing throat; swallowing saliva
        - *It is unlikely that you will hear the breathing of the audient—monitor the rising and falling of their shoulders, the expansion and contraction of their upper bodies' silhouette, as well as the rhythmical warping of their clothes.*
    - **Kinesics** (i.e. body/limb movement): the weight, size, frequency, and speed of movements; head tilts, nods, or shakes; hand gestures; self-adaptors (i.e. self-touch e.g. clasping, grasping, rubbing hands etc.; holding, caressing, scratching, or spot touch on arms, face, legs etc.); posture (alignment of the trunk, arms, and legs—more or less open, or closed i.e. crossed legs and folded arms); trunk orientation (directly at the piano, or turned a little towards or away from you etc.); trunk lean and sway; tension or relaxation of shoulders etc.; feet movements; frequency of postural shifts (shuffling, discomfort, settled)
        - *Pay special attention to audients' hands with a view to reciprocation (see below).*
    - **Proxemics** (i.e. the perception, use, and framing of space): changes in interpersonal distance (certain limbs or trunk moving closer to you, leaning in, or backing away)
        - (N.B. the above categories represent typical areas of study (Harrigan 2011, 35-68), though there is a lot of overlap between them; this is only an *initial* list of behaviors you might pay attention to…)

*Forming expectations about each audient's typical behavioral rhythms and tendencies with this information—**their individual baseline in this situation.***

- Consider the **quantity and quality** of their non-verbal behaviors.
- Ask yourself: **how many non-verbal behaviors are observable? How often do they change? Do any repeat (periodically)?** (e.g. how often or how fast do they move, shuffle, twitch, change gaze direction, sigh etc.?) What overall patterns and rhythms characterize their non-verbal behaviors? Which behaviors stand out to you as particularly characteristic of this audient?
    - By the end of the **Section One**, you should have some sense of each audient's *settled* baseline. As you continue, revise your expectations as necessary, in light of new information.

*Making **inferences** about the audient's **attention**, from **Section Two** onward.*

- Infer that **increasing stillness** (i.e. fewer non-verbal behaviors and changes in their quality/character over time = quietude) and positive involvement (i.e. behaviors communicating attention, interest, warmth, and positivity) relative to baseline indicates **heightening engagement**.
    - Positive involvement cues may include: closer interpersonal distance (e.g. forward lean); open, composed, relaxed posture and body orientation more toward you than away; returning your gaze and eye contact; relaxed respiratory cycle (e.g. regular, slow, deep breathing through their nose; ribcage relaxed); positive facial expressions e.g. smiling etc.
- By contrast, infer that **increasing movement, sound** etc. (i.e. more non-verbal behaviors and changes in their quality/character over time) and distancing cues (i.e. leaning or looking away, tense postures etc.) relative to baseline indicates wavering, distracted attention (i.e. **lowering engagement and involvement**).

***Reciprocating** the audient's **heightening** (or unwavering) **engagement**.*

- Play **increasingly slower** and **quieter** to reciprocate the audient's heightening engagement and positive involvement; **focus on fewer techniques**—exploring **further nuances, idiosyncrasies and micro-variations** within and between them—**spending time** with those sounds and gestures which grab the audient's attention; **tune sounds together**, bringing them acoustically ever closer to one another (e.g. tuning the sound of a pedal creak with the sound of your thumb nail and pad rubbing along the tip rail of a white key)
    - Occasionally, naturalistically **look toward** the **audient** with **warmth**, when sounds or associations between sounds arise that you particularly like, or that surprise or delight you.
    - If an **audient** is **unwaveringly** highly **attentive** and positively engaged, *gradually play a single technique so extremely slow and quiet (with almost imperceptible nuances) that they become bored with what you are doing*—think of this as a kind of gentle provocation via restraint, waiting for a behavioral change to respond to, after which you may **compensate** accordingly.
- If any **incidental audient** and **ambient environment sounds** occur that are plausibly similar to (i.e. compatible with) your **techniques**, **translate** (i.e. imitate) them as accurately as you can, within a ca. 10 second window. Aim to translate not only the **frequency content** of these sounds, but also their **temporal structure** (i.e. their duration, their periodicity, if applicable etc.) and **perceived distance** from the microphones.

    - **For events you consider especially impactful, you may stop playing to listen and process for a few seconds before beginning your translation.**
- If you notice an audient **non-verbal behavior** (positive involvement cue) that could be subtly and smoothly **translated** into your current actions/techniques, posture etc., then **mirror it** (e.g. arrange your hands in a similar way, or congruently alter your posture near the beginning of the performance, as well as adjust and **entrain** similar periodic behaviors). These interactions are entirely up to you in the moment—test them out, learn how the audient responds, and adapt further.
    - Throughout the performance **you should obviously reciprocate some behaviors soon after the audient makes them** (i.e. within a ca. 10 second window). **Other behaviors may be gradually and slowly incorporated into your performance**. These interactions should hint to the audient that they are in the midst of a live, non-verbal dialogue, without mocking them or diminishing the experience into a reductive game.
        - The intent of this reciprocation is not to accurately copycat, or ridicule, but to *meet the audient on their own terms—to make them feel at ease, accepted, and accommodated while positively reinforcing behavior aligned with your goals* in this intimate, somewhat odd situation!
        - *However, please be aware that translations which seem obvious to you may not be at all obvious to the audient.* A given audient might consciously gather only the faintest hint of what you are doing and why, since their non-verbal behavior may be largely automatic and unconscious, especially if their attention is caught up in your performance. Nonetheless, it is likely your reciprocation and accommodation will be registered and felt at some level. As such, *you should feel welcome to tend towards more obvious, demonstrative translations, rather than ambiguous ones.*
- Taken together, given the constraints of the techniques available in each section of the score, all this tuning and translation should highlight some of the idiosyncrasies and small nuances both characterizing, and being shared between you, the amplified instrument, the audient, and the environment—thereby whimsically associating all these elements together.
    - E.g. in Section One, as you slowly depress a particular key, you may discover a piece of felt in the mechanism makes a crinkling sound; later in Section Two you may hear the audient make a similar sound as they move their tongue in their mouth during a saliva gulp and shift posture, and then translate the via that felt crinkling sound and change your posture in the same fashion; or in Section Three, the heating system in the room make crackle quasi-periodically, and you may again play this felt crinkling sound as a translation of that ambient event etc.

Compensating *for the audient's* ***lowering engagement****.*

- As your primary strategy, initially, play **momentarily faster** and with **greater dynamic contrast** to compensate for the audient's lowering engagement; **juxtapose more techniques**—exploring **maximal contrasts** within and between them (even though they may belong to a similar class of sounds and/or gestures); then, **settle down** and transition to **playing as if you were reciprocating**, hoping the audient's attention will follow.
- There are a variety of additional ways you can respond, according to your judgement alone, depending upon the specific situation that confronts you:
    - Persist with your current actions/techniques, stubbornly without change. **Wait and see**—perhaps the audient will settle and reengage?
    - Introduce **one-off, large, sudden changes** in technique, dynamic, posture, interpersonal distance (e.g. your left hand plays closer to the audient, and further from the microphones for a little while) etc.
    - Keep your hands on the piano, fingers barely moving in a chaotic fashion (maximum range of motion for each finger = 0.2 inch or 5 mm); as you perform this holding pattern, break, take a pause, close your eyes, rest, and gather yourself before continuing;
        - In more extreme circumstances, if the audient is acting inappropriately or in bad faith, stop, shake your head or gesture to indicate disapproval; or stand up and gesture for the audient to leave, ending the performance prematurely.

Of course, how you choose to interpret and negotiate each performance situation will be highly subjective and personal. With practice, your decisions do not need to be highly consciously or systematically judged. There are no definitively right or wrong responses here, as long as you interact in good faith, with generosity and respect. Aim to be persuasive, not manipulative. A given audient may provide too few or too many cues. Try your best, and commit to interpretations and courses of action. Do not dwell too much on potentially dubious past inferences—learn and adapt.

You will know when you have a rapport with an audient, if your performance dynamically changes over time in response to the audient's behavior, and the audient's behavior dynamically changes over time in response to your performance (likely adopting more positive involvement cues). In other words, at some level, **each audient will need to understand that you are adjusting to them, just as they are adjusting to you**. The above global modifiers aim to facilitate building this understanding. From the frequency and consistency of your interdependent interactions across different behavioral types, you can infer how closely aligned you both were over the course of a performance.

Further section-specific instructions etc. are contained in the performance instructions proper.

*In **summary**:*

- **Goals**: heighten quietude, engrossment, positive involvement, rapport
- **Perform calmly,** doing less, not more; allowing time to perceive, process and make decisions
- **Monitor** the audient's non-verbal behaviors (faze/gaze; vocal; kinesics; proxemics)
- Form a sense of the **audient's behavioral baseline** the quantity and quality of their non-verbal actions when settled in this situation.
- **Make inferences** about the audient's attention according to this baseline.
    - Increasing stillness/less activity relative to their baseline ≈ heightening engagement;
    - Increasing movement/more activity relative to their baseline ≈ lowering engagement;
- **Reciprocate** heightening engagement with slower, quieter playing of **techniques**; more fine-detailed micro-variations within fewer techniques; translations of compatible audient sounds and non-verbal behaviors, as well as ambient sound; and tune these all together.
    - Reciprocate **unwavering engagement** with unwaveringly slow and quiet exploration of nearly imperceptible nuances within a single technique, until the audient's behavior changes.
- **Compensate** lowering engagement with faster, higher contrast playing of **techniques**; coarser maximal contrast within more techniques; then, settle back into reciprocation mode
    - **Additional possibilities** include stubborn persistence, sudden one-off changes, or a break etc.
- You will know your performance is going well, when the audient is **positively involved** and **adjusting to your behaviors, as you are adjusting to them**.

Glossary

"**Entrainment** describes a process whereby two rhythmic processes interact with each other in such a way that they adjust towards and eventually 'lock in' to a common phase and/or periodicity." (Clayton, Sager, and Will 2005, 2) In other words, a process of attuning and synchronizing—or at least tending toward a consistent relationship.

Mutual entrainment may describe the situation where two or more oscillators are interdependently adjusting to one another at once. Within the realm of social interaction, one can observe mutual interpersonal entrainment in conversation: for example, empathetic conversationalists will tend toward matching their turn lengths, prosody (i.e. their patterns of intonation and stress), as well as physical gestures (Clayton, Sager and Will 2005, 11-13).

References:

Clayton, M., Sager, R., & Will., U. (2005). In time with the music: The concept of entrainment and its significance for ethnomusicology. *European Meetings in Ethnomusicology*, 11, 2–16. Accessed October 28, 2019. http://libeprints.open.ac.uk/2661/1/InTimeWithTheMusic.pdf

Harrigan, J. A. (2013). 3 Methodology: coding and studying nonverbal behavior. In M. L. Knapp & J. A. Hall. *Nonverbal Communication* (pp. 35-68). Boston: De Gruyter Mouton.

Techniques

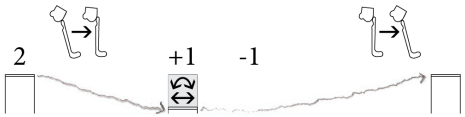
Familiarize yourself with these techniques by practicing each one singly and in combination with the electronics. Then progress to the notated models and your own realizations based upon the verbal **performance instructions** (below). If possible, practice on a range of upright pianos—the sonic results of each technique will vary depending upon the characteristics of each specific instrument. In line with the **global modifiers**: practice tuning/blending the sounds you produce; discover points of contact and similarity between techniques, as well as maximal contrast; attempt to translate ambient sounds etc. Listen, record yourself in the Max patch and evaluate your progress.

Right hand fingerings are indicated **above** the notated techniques; **left hand** fingerings are given **below**.

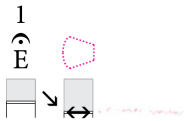
When performing these techniques, **you should not intend to produce a pitched sound** as a result of the hammers striking the strings (with one exception, which you will need to prepare and practice *before* a given run of performances, on each specific piano, see **coda**).

Feel free to incorporate similar additional techniques aligned with the goals of the piece.

<u>Section One:</u>



= **Depress a white key extremely slowly**, releasing the jack from under the hammer butt (these parts of the upright piano's action are represented by the diagram above the pencil line) without the hammer hitting the string; once the key is fully depressed, move your thumb under the key's lip, so that two fingers are gripping the one key—then simultaneously apply force both downwards and side to side, twisting and rocking the key in place (= **overpressure**); some intermittent creaking sounds should result (akin to the graphic); then, slowly release the key, **carefully cradling the jack until it quickly shifts against the hammer butt**, making a **short 'shh'-like brushing sound**, just before you complete your release and return the key to its resting position.



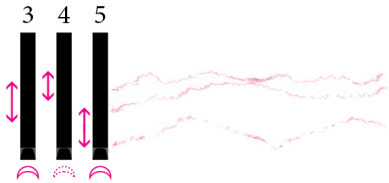
= Depress a white key moderately quickly, releasing the jack from under the hammer butt and **trigger the escapement action** (E), but without the hammer hitting the string (i.e. a much faster version of the initial step of the previous technique); then proceed to **scrape/rub the lip of the key** with some of your thumbnail and some of the fleshy part of your thumb; intermittent creaking sounds should result; **the relative lightness of the pencil line = the pressure with which you scrape/rub—this applies to all other magenta pencil line graphics** (barely visible = almost accidental contact between your finger and the key, akin to holding your thumb and index finger as close together as possible without intentionally touching).

= Slowly **scrape your fingernail vertically up the face** (front) **of the key**.

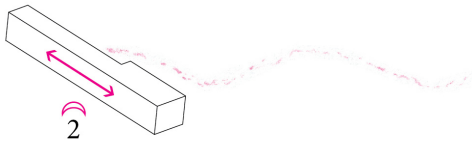
Section Two (clicks, creaks, flicks, rubs, scrapes, taps, and thuds)**:**


= Quickly **release** a white key so that the **hammer shank bounces twice** against the hammer rail cloth (thuds).


= Slowly **shift on your stool** to produce intermittent creaks.



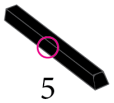
= Within the ranges defined by the arrows, **slowly scrape back and forth** (/rub, indicated by the dotted nail symbol) along the tops of all three keys simultaneously (do not depress any of the keys).



= As above, but slowly **scrape the exposed wood on the side of the key**.

= Firmly press your finger pad on to the face (front) of the key; while maintaining contact quickly **push/lift the key upward** to create a **thud**-like sound (on some pianos you may need to slightly depress the key before pushing/lifting it up).


= Very delicate **tongue clicks** (i.e. barely touching your palate with different parts of your tongue).



= Quickly **strike the side of the key** with your finger pad to create a dull, **thud**-like sound.

= Delicately **tap the key with your fingernail** in the indicated area.

= Hold the key between your second and third fingers and **wiggle** it once to the right and once to the left (quasi-mordant).

= Delicately **tap the face (front) of the key with your fingernail**.

= Depress a black key moderately quickly, releasing the jack from under the hammer butt and **trigger the escapement action** (E), but without the hammer hitting the string.


= Quickly **release** a black key so that the **hammer shank bounces twice** against the hammer rail cloth (**thuds**).

Pedals 
= graphic represents microvariations in slowly **depressing two pedals quasi-simultaneously**, testing and discovering creaks and other idiosyncratic sounds that may emerge from the pedal mechanisms.


= **Move your hands** a little away from the keyboard, and **bring them together** so they are gently touching one another.

<u>Section Three</u> <u>(brushes and breaths)</u>**:**

1 = Moderately quickly, **brush your thumb pad horizontally along the face** (front) **of the key**.

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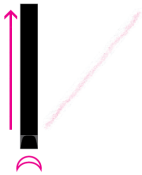

= Moderately quickly, lightly **scrape your fingernail along the top of the key** to create a continuous, **breath-like** sound.

= A very soft, short **voiceless breath through your barely open mouth** (never louder than any other piano technique in this section); this may be executed on a breath in or out.

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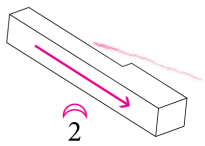
= Moderately quickly, lightly **scrape your fingernail along the face** (front) **of the key** in the direction indicated by the arrow; create a continuous, **breath-like** sound.

= A very soft, short **breath through your nose** (never louder than any other piano technique in this section); this may be executed on a breath in or out.

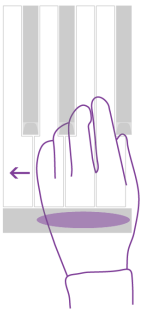
= A small **shift in foot position** to create a very soft, short **breath-like** sound (never louder than any other piano technique in this section).

= Within one breath out, **voicelessly tune your breath** to **match the timbre of a piano technique**; your breath should initially act like a sustain pedal, 'extending' the resonance of the piano technique beyond its typical duration, **before gradually darkening the timbre**, like a slight downward glissando; you may add some very soft, diffuse whistle (e.g. by bringing your tongue close to your palate)/fricative elements to reinforce this timbral descent.



= Moderately quickly, **scrape the exposed wood** on the side of the key to create a continuous, **breath-like** sound.

= A very soft, short **tuned voiceless breath** (e.g. colored by a hint of a vowel); never louder than any other piano technique in this section; may be executed on a breath in or out.



= **Slide your palm** (or shirt sleeve) **along the front board** beneath the white keys to create a short, continuous, breath-like sound (never louder than any other piano technique in this section).

Coda (as in Section Three, but with pitch, as well as some elements from Section Two)

A **pre-prepared pitched translation**, **which you will need to practice on each specific piano before a run of performances**. In the octave (to an octave and a half) range under the microphone directed at the keyboard, brush horizontally along the front of a black key (wood resonance). Find a pitch nearby (conventionally played, hammer striking its string, but as soft as possible), which approximates the pitch/timbre of this brushed black key.

mm In the **coda**, **hum** this pre-prepared pitch in a comfortable part of your vocal range as soft as possible.

Performance instructions and notated models

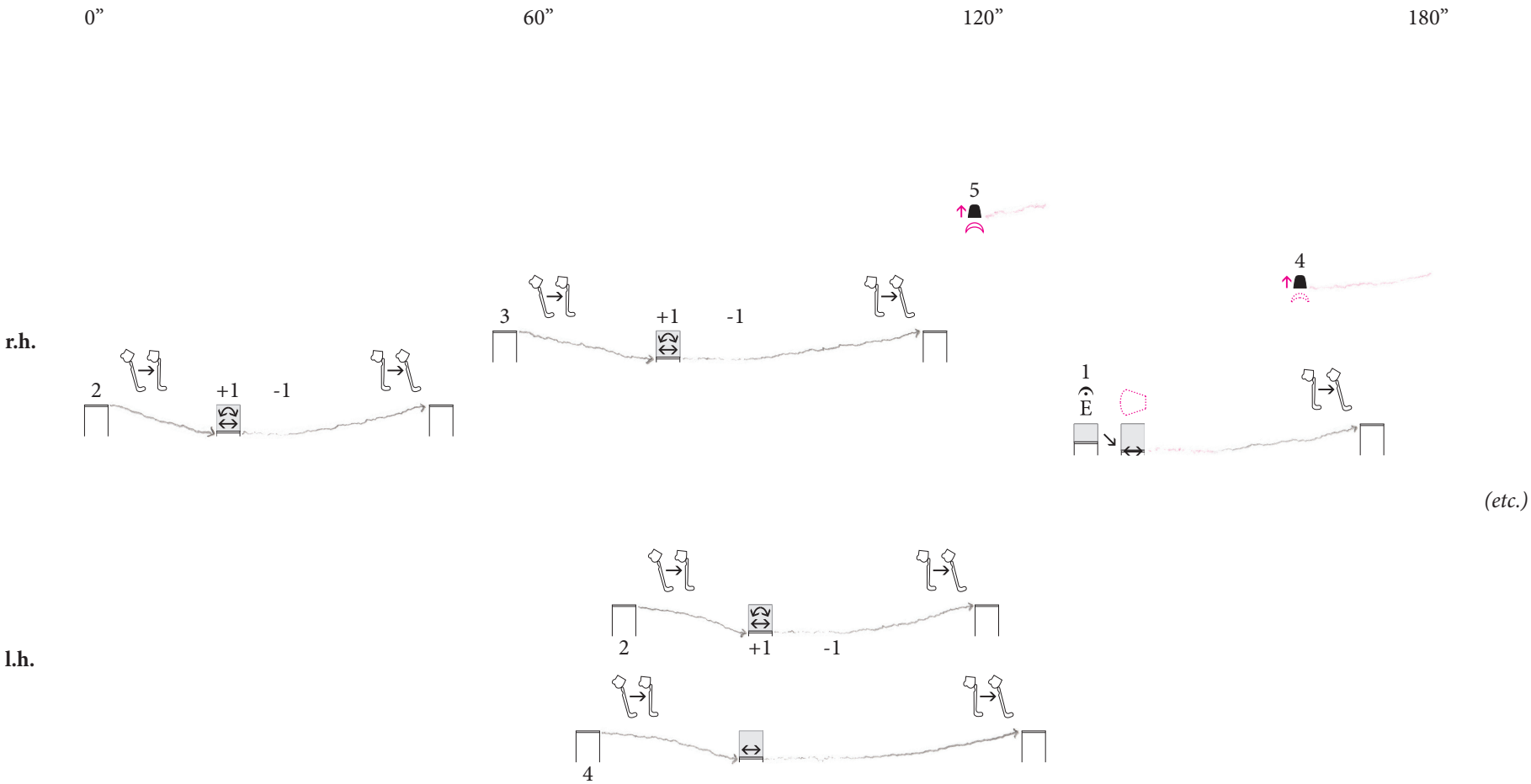
Introduction

Just before the audient enters, trigger the max patch and take your seat. When the audient enters, non-verbally welcome them with warmth and generosity. After they sit down, allow them time to settle and quiet themselves. If there are ambient sounds, wait and listen together (ca. 10-30”). Then, hand the audient their headphone and put on yours, demonstrating how to wear it, if necessary. Wait and listen again, allow the audient time to familiarize themselves with the amplified sound.

Section One

- Place both hands in the octave (to an octave and a half) range under the microphone directed at the keyboard.
- Within this section, **prioritize testing sounds and gestures**, exploring interactions with the amplified upright piano, while **tacitly building** your sense of the audient’s settled, **behavioral baseline** (do not respond to them yet).
    1. Start with an **extremely slow depression** of a single white key (ca. 10-15”), followed by overpressure (ca. 5-10”), and then a slow release (ca. 15” or more)—carefully cradling the jack until it quickly shifts against the hammer butt, making a short ‘shh’-like brushing sound, just before you complete your release and return the key to its resting position.
    2. With both hands, **try this procedure out with more white keys** under the microphone, up to 4-5 at one time, asynchronously overlapping (depressing and releasing each key at different points in time).
        - Directly after a release, sometimes append slow fingernail scrapes up the front of black keys (and/or tiny taps or rubs/slides along the keys without any downward force *ad lib.*)
        - Rarely, depress a key moderately quickly to release the jack from under the hammer butt, but without the hammer hitting the string—then, proceed to overpressure and a slow release.
        - Generally smooth movements between all events, throughout the entirety of your performance (akin to gestural slurring). Share your performance as if warmly confiding in your audient—dreamily searching out the sounds (an improvisatory nocturne?).
    3. Listen to the resulting sounds (possibly noting the crinkling of the backcheck felt, creaks or imperfections in the action, reliably sounding jack shifts etc.) and **remember which keys produce compelling sonic results**.
        - If overpressure elicits in no audible sound, substitute scrapes/rubs along the lip of white keys
    4. **Move on** to the next section **when you have a few favorite keys**, or when you have explored most of the white keys under the microphone.
- The notated models given for the beginning of this section and those that follow are *guides* and *orienting practice exercises* only. Pitches *ad lib.* within the initial specified range—each individual finger need not play the same key each time. *Never play these notated models in performance*. Just as each piano, audient, and space will be irreducibly specific and particular, so will each of your performances. You should always flexibly adapt your performance, responding to the contingencies of the instrumental situation, social interaction, and ambient environment.

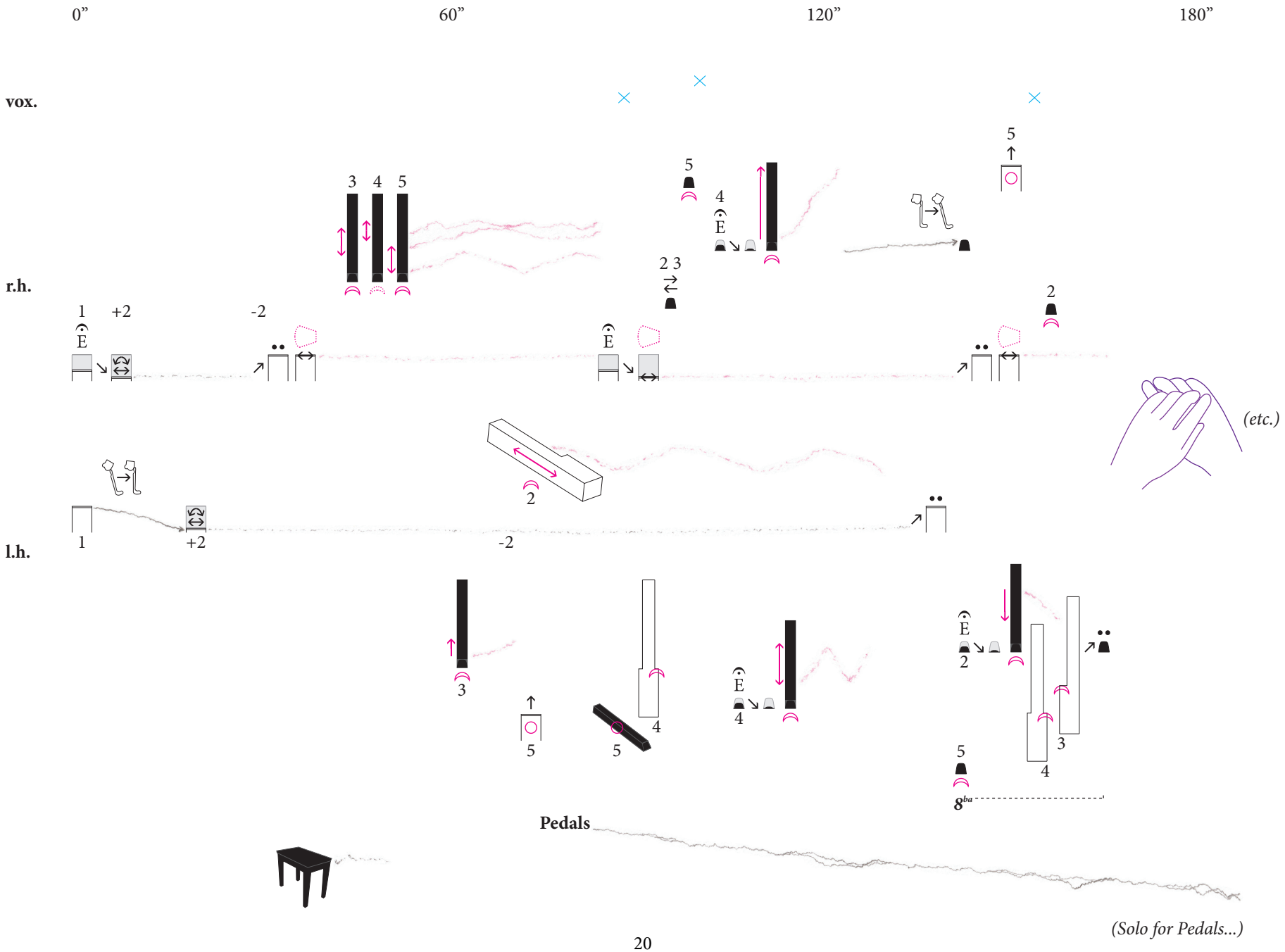
One



Section Two

- Within this section, **prioritize adding sonic/gestural techniques** (clicks, creaks, flicks, rubs, scrapes, taps, and thuds—perceived as largely one-off or **aperiodic events**), as well as **interacting with the audient** (and occasionally the ambient environment) via **reciprocation** (translating, imitating, mirroring) and **compensation** (see **global modifiers**).
- Keep your hands within the aforementioned range under the microphones (except when you are reciprocally translating (e.g. the perceived distance of an ambient environmental sound) or compensating (e.g. moving your left hand closer to the audient to reengage their attention)).
    1. Choose two white keys which produce **compelling overpressure sounds** (or scrapes/rubs along the keys' lips)
        - Fingers 1 and 2 of both hands play overpressure and key lip scrapes/rubs, as well as fingernail scrapes along the wood of keys exposed when adjacent keys are depressed (i.e. on the side of white keys and lower front of black keys). In this section, these techniques should create a sort of **intermittent drone**.
        - Fingers 3, 4 & 5 of both hands play various clicks, creaks, flicks, taps, and thuds *ad lib.* (see **techniques**) as well as lightly scraping asynchronously along the tops of black keys (or fronts or upper right/left edges). In this section, these techniques should alternately blend with (e.g. timbrally tuning sounds together when reciprocating heightened audient attention) and punctuate the above drone (e.g. with rare flurries of flicks, taps, and thuds—quasi-hocket—when compensating).
    2. Once you have settled into this section's **techniques**, start making inferences based on your sense of the audient's baseline—**reciprocating** and **compensating** as their engagement undulates (see **global modifiers**) i.e. primarily **focus on building a dynamic, non-verbal rapport with the audient**. From here until the end of the performance, you may translate (imitate) any audient and ambient environmental sounds with any of the **techniques**, singly or in combination. Equally, you may translate (imitate, mirror) any audient non-verbal behaviors aligned with your **goals**.
        - However, given a choice, focus on translating aperiodic sonic and behavioral events (one-off events, or event with low rhythmic coherence or predictability)—in other words, sounds that resemble the predominating techniques in this section.
    3. After a time, very slowly and **gradually depress two pedals** (it should take ca. 2' before either pedal is fully depressed), testing and discovering creaks and other idiosyncratic sounds that may emerge from the pedal mechanisms.
    4. When the pedals are about halfway depressed, fade out all other techniques to begin a **solo for the pedals alone**. Move your hands a little away from the keyboard. Then bring your hands together so they are gently touching one another. Very slowly depress and raise the pedals *ad lib.*
    5. After a couple of minutes, perhaps cued by an audient behavior, **approach the keyboard with your hands again**, and reintroduce all the previous techniques outlined in step 1. Gradually return the pedals to their resting position.
        - By this point in the performance, the **audient should be beginning to adjust to your behaviors, as you are adjusting to them**. If this interdependent interaction is infrequent and inconsistent, remember to take your time, do less, gently provoke, and/or wait for changes in audient behaviors, try out different strategies etc.
    6. **Compensate**, when you sense the audient's engagement waning, by momentarily playing some fingernail scrapes a little faster (as if beginning to take on, or foreshadow, the character of a breath or brush sound). **Move on** to the next section **when you have compensated a few times** in this manner, or when you feel you have explored most of the sound possible in this section.
- N.B. The notated model for this section gives an example of a realization from step 1 to the beginning of step 4 only.

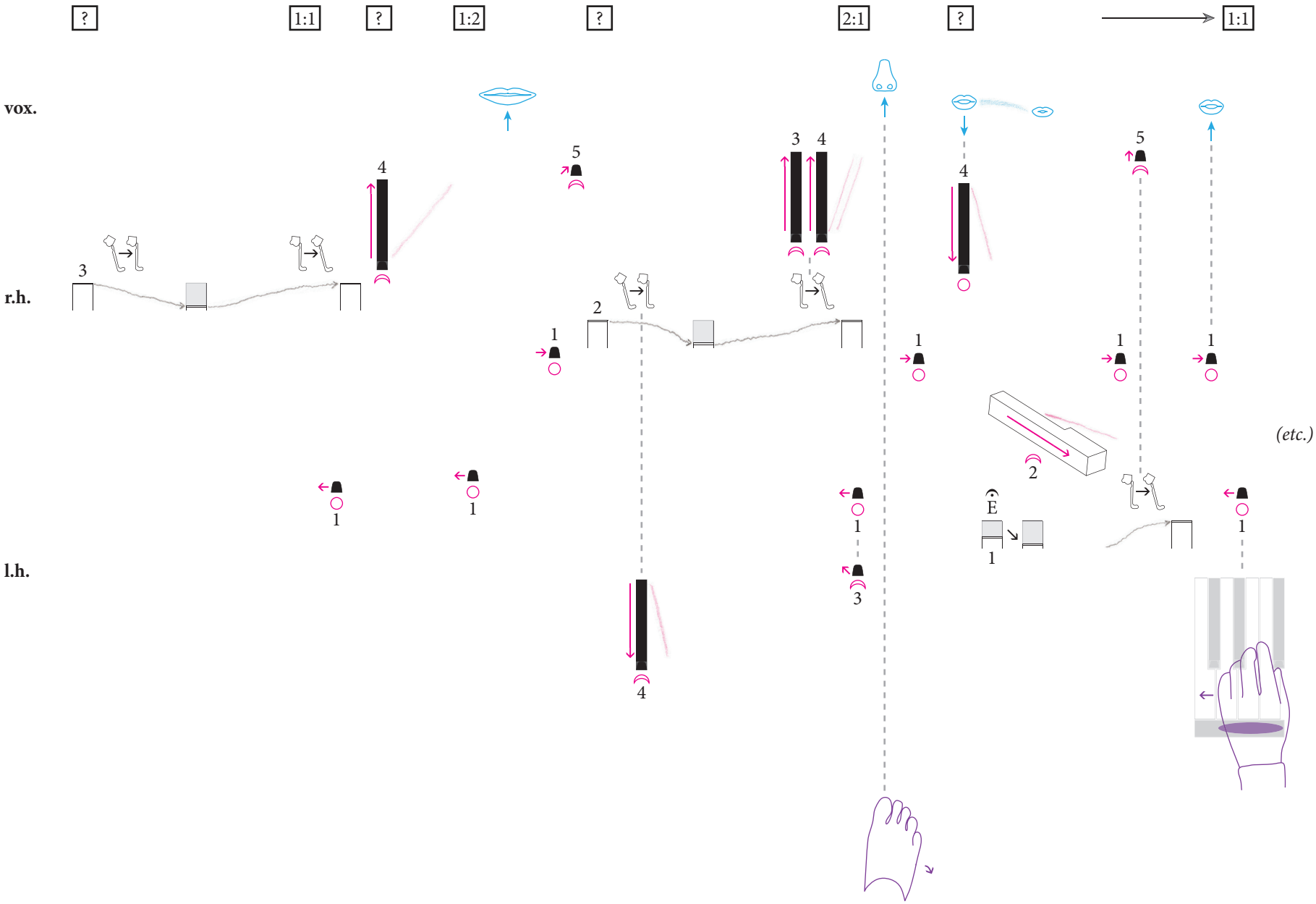
Two



Section Three

- Within this section, **prioritize transforming prior sonic/gestural materials**—gently speeding up those movements that produced creaking and scraping sounds earlier, so they become **brushing** and **breath-like sounds**, **blending with** additional, **complimentary vocal/limb movement sounds**—forming these brush/breath sounds into **periodic sequences**, as well as continuing to interact with the audient and ambient environment via reciprocation (translating, imitating, mirroring) and compensation. *Dynamically, balance and shift all of these relations, but ensure you don't neglect to emphasize connections with ambient environmental sounds*.
    - As before, you may use any of the techniques in your translations, including the pedals. However, given a choice, focus on translating periodic sonic and behavioral events (regularly repeating events with high rhythmic coherence or predictability)—in other words, sounds that resemble the predominating techniques in this section.
- Keep your hands within the aforementioned range under the microphones (except when you are reciprocally translating (e.g. the perceived distance of an ambient environmental sound) or compensating (e.g. moving your left hand closer to the audient to reengage their attention)).
    1. With any finger, start this section with an **extremely slow depression** of a single white key (ca. 10-15"), followed by overpressure (ca. 5-10"), and then a slow release (ca. 15" or more)—carefully cradling the jack until it quickly shifts against the hammer butt, making a quick 'shh'-like brushing sound, just before you finish your release. Directly afterwards, append a horizontal brush with one of your thumb pads (1) along the front of a black key.
    2. Calmly perform a **sequence** of 2-7 different brush/breath events, each with a similar duration, followed by a longer pause or technique (e.g. the procedure outline in step 1 etc.)
        - Multiple techniques can be simultaneously combined and overlaid to form a single event within a brush/breath sequence
        - If periodic audient behaviors or ambient environmental events catch your attention, entrain (gradually synchronize) event onsets in your sequence to a whole number ratio (e.g. 1:1, 1:2, 1:4, 4:1, 2:1 etc. *ad lib.*) with the onsets of the external periodic source (e.g. 1:2 = 1 brush/breath event at the start of every 2 audient respiratory cycles etc.; 2:1 = 2 brush/breath events for every 1 audient respiratory cycle)
            - Examples of possible periodic audient behaviors include: rubbing their hands together, scratching their thighs; respiratory cycles (look peripherally at the rising and falling of their arms or shoulders, the expansion and contraction of their upper bodies' silhouette, as well as the rhythmical warping of their clothes); postural shifts or sway (possibly altering interpersonal distance) etc. N.B. Behaviors such as scratching and rubbing self-touch will likely oscillate quickly within a relatively short episode, suggesting ratios such as 4:1 etc.; postural shifts will likely occur at long intervals, suggesting ratios such as 1:4 etc.
            - Examples of possible periodic environmental events include: the rumble of passing cars in the distance, ventilation or heating cycles, wind, a person walking, repeating animal calls etc.
    3. **Repeat** the previous step, several times, **varying techniques**, **ratios**, as well as the number and order of events each time.
        - However, increasingly prioritize horizontal and vertical brushes with your thumb pads along the front of black keys. Tune your own voiceless breath (via mouth shape and tongue movement etc.), as well as adjacent events in a given sequence, to blend with and extend the resonance of the brushed wood.
        - Gradually hone in on the black key, brushed wood resonance for which you pre-prepared a pitched translation.
    4. Move on to the **coda when** you sense the amplification beginning to **fade out**.

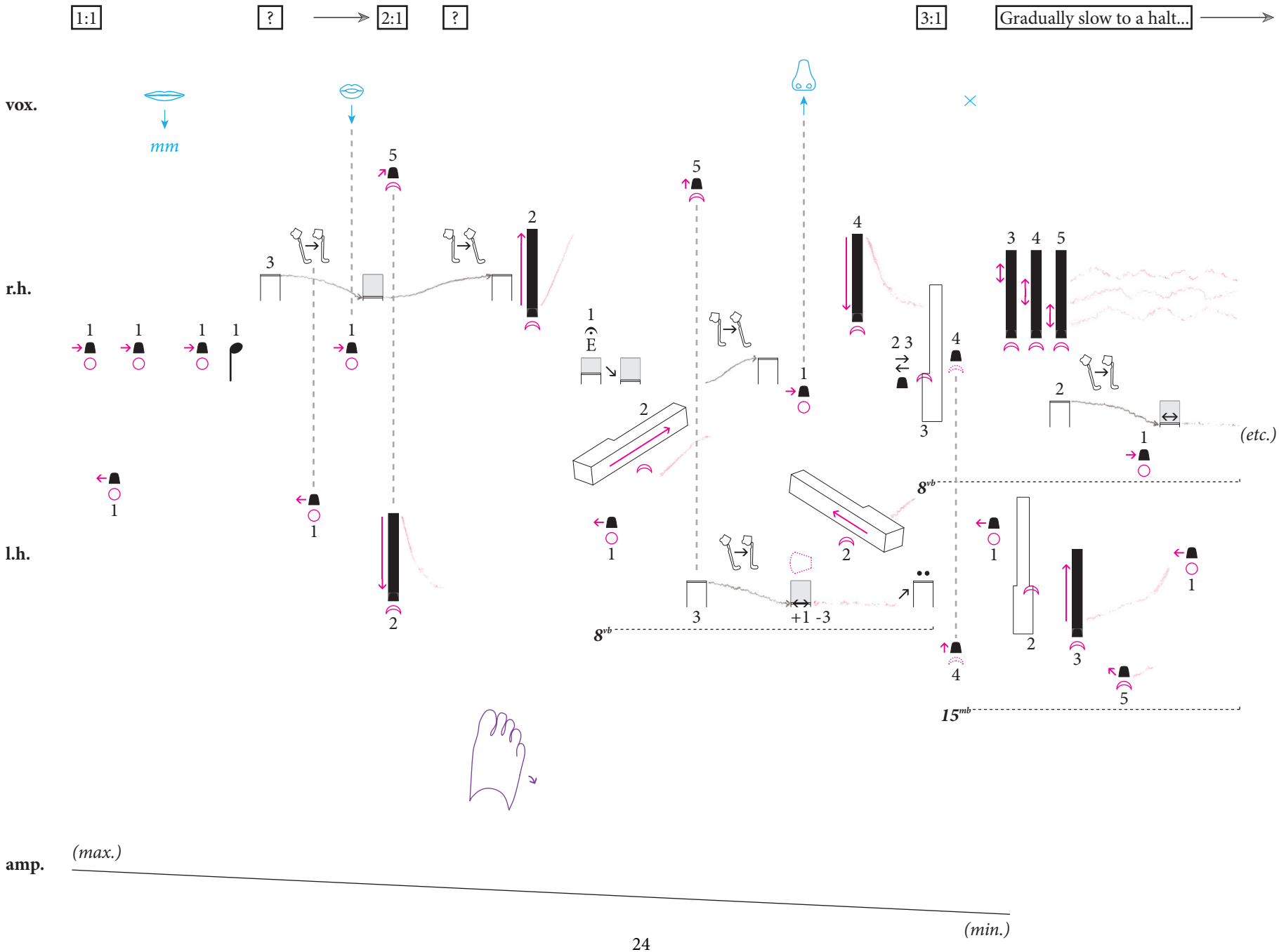
Three



Coda

- The amplification will fade out over the course of ca. 2'; **prioritize completing the pitch translation procedure** (see below), gradually **closing the interpersonal distance between you and the audient**, and revealing just how tenuously your techniques sound as the amplification fades out entirely. Continue to interact with the audient and ambient environment via reciprocation (translating, imitating, mirroring) and compensation—however, do not allow either activity to interrupt or deform the overall shape of this conclusion.
    1. Continue performing as in Step 3 of Section Three, increasingly **repeating the black key, brushed wood resonance** for which you pre-prepared a pitched translation.
    2. Within a sequence, minimally engage your vocal cords and **barely audibly hum the pre-prepared pitch**. Directly afterwards, repeat the black key brushed wood resonance, then play the pre-prepared pitch translation on the piano as quietly as possible.
    3. Thereafter, **calmly perform varied sequences** of 2-7 different brush/breath events as before, but **gradually move** your left hand **down the keyboard**, away from the microphones and toward the audient—your right hand should follow your left at a short delay (as if in canon).
        - Occasionally, gently slow down those movements that produced brushing and breath-like sounds, so they become creaking and scraping sounds as in Section Two.
        - Ensure the audient has the opportunity to compare increasingly less amplified versions of your techniques, through repetition as the amplification fades.
    4. By the time the amplification fades out entirely, **aim to reach the portion of the keyboard directly in front of the audient's body**.
    5. Continue playing for a time, inaudibly (or barely so, depending on the techniques), before **gradually slowing your movements to a halt**, and calmly ending the performance.

Coda


1:1
?
2:1
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Gradually slow to a halt...
vox.
mm
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