Charlie Sdraulig

one and another

for two voices (and electronics)

2015

For the Quince Contemporary Vocal Ensemble

Note

One becoming another; one following another.

Acknowledgements

General performance directions

This piece must be performed from memory.

Any two voice types with similar ranges may perform this piece together.

Your eyes will be closed for much of the first half of the piece as you imitate the other performer's sounds (i.e. imitate your auditory scene). Your eyes will be open for much of the second half of the piece as you imitate/mirror the other performer's facial/bodily movements (mouth shapes etc.), as well as their sounds (i.e. imitate both your auditory *and* visual scenes).

As your perceptual focus will be directed elsewhere, there is no written score for this piece. Rather, the following pages outline a sonic, behavioural and processual identity/territory. However, via imitation of various kinds, you will both become one another's aural and visual 'score' in performance. As a result, do not employ any written memory aids etc. in performance that may distract you from the task of imitation—**the piece must be memorised**.

When performing, **try to keep your voluntary physical movement to a minimum**. Try to only perform the actions that are absolutely necessary for the piece's realisation.

Attend to the slightest micro-variations in the sounds and facial/bodily movements of the other performer. Equally, attempt to make variations within your own sounds and expressions as highly differentiated and as subtle as possible. Cultivate a hyper-sensitivity to detail. However, despite this piece's emphasis on exact mirroring and the accuracy of your imitation, your interactions with the other performer will be necessarily contingent, negotiated and highly subjective.
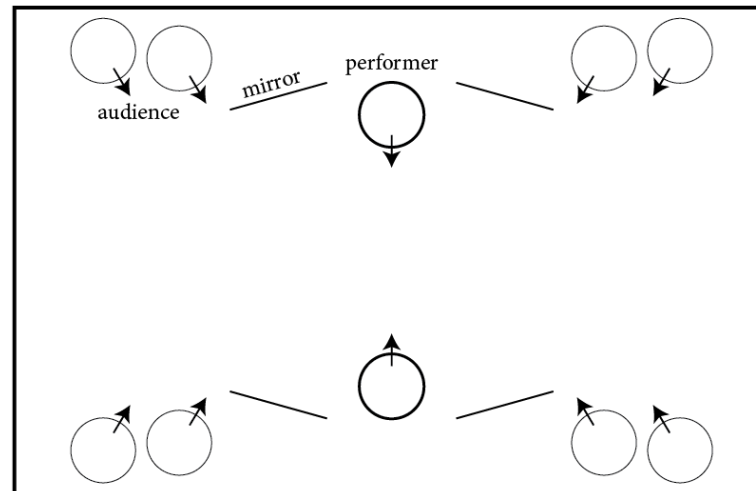
Staging

Perform the piece facing one another.

One or two small hidden speakers (such as a phone or a portable Bluetooth speaker in your pocket, for example) will suffice for the electronic cues—a simple Max/MSP patch running off of an out-of-view laptop/device in either mono or stereo.

A number of staging options are possible. Here are some suggestions:

1) In a small, quiet room: perform the piece standing up. A small audience should be directed by a third party to stand behind each performer and be as close to you both as possible. Arrange mirrors on either side of each performer so that all the audience members can see the face of one live performer and one reflected performer at the same time. See the diagram below.


Outside of a conventional concert setting, this staging could be presented as a durational performance where one group of audience members at a time would enter the performance space and experience the piece. As the audience enters, the performers would wait frozen for their first electronic cue, with their eyes and mouths closed. Once the piece is finished, the performers would then wait frozen with their eyes open, breathing inaudibly as the audience leaves.

2) Employ zero-latency closed circuit cameras routed via quiet short throw projectors to screens, in order to ensure that every audience member can see your faces. If the performance space is large, employ two microphones and two speakers for very subtle amplification of the vocal sounds—the audience should still have to strain to hear the quieter sounds. Perform the piece standing up. See the diagram below:
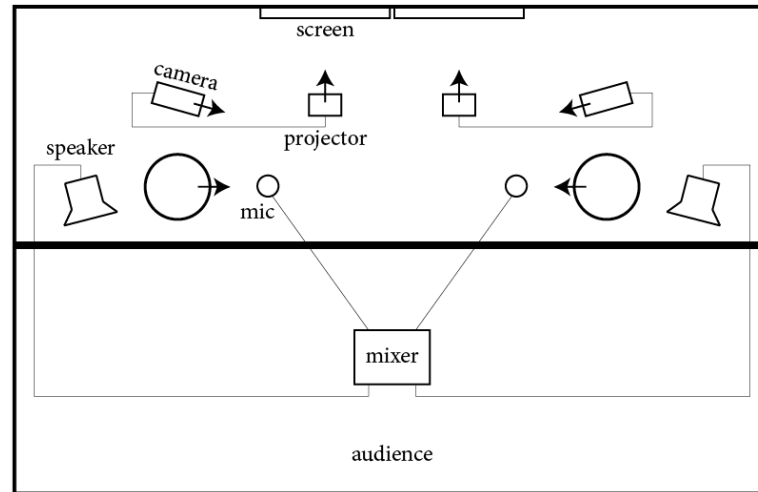
3) If zero-latency is unachievable via cameras or mirrors, send video via webcams to desktop monitors raised by plinths or stands to the head height of the seated performers. The performers' heads and faces should be completely obscured by the monitors. Employ two microphones and two speakers for amplification of the vocal sounds—delay the audio to match the video latency (a Max/MSP patch can be provided on request: http://www.charliesdraulig.com/contact.htm). Seat the audience at a distance, so that the un-mediated acoustic sounds of the performers' voices are inaudible. See the diagram below:
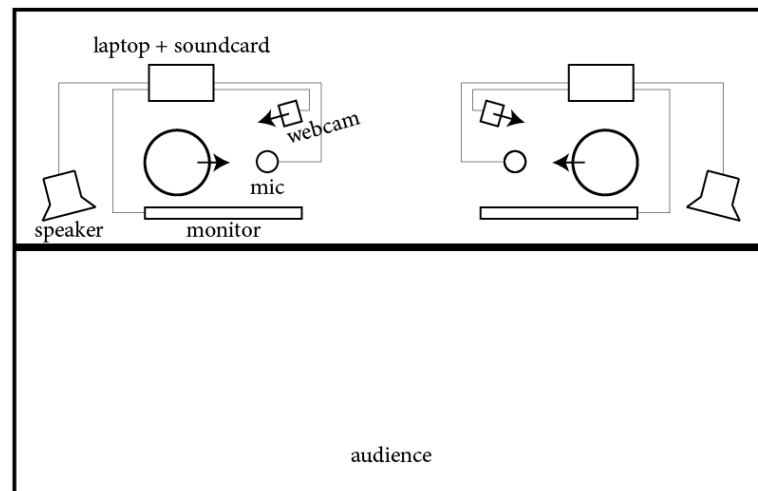
Variables

Unless otherwise indicated, **transitions between variable states within sections should always be as smooth and as seamless as possible**.

<u>Rate of change</u>

The rate of change of all variables ranges between the following:

(1) **Fast**: change in a variable should occur at a hurried pace.
(2) **Medium**: change in a variable should occur at a measured, deliberate and comfortably perceptible pace.
(3) **Slow**: change in a variable should be only just perceptible.

The ambiguity of the definitions given above is intentional. However, both performers should agree between themselves on a consistent realisation of each term.

It may be helpful to think of the rate of change as analogous to tempo.

<u>Loudness</u>

The range of loudness in this piece occurs between the following extremes:

(1) Your sounds are **clearly audible** to the other performer, but remain as soft as possible given this condition.
(2) Your sounds are **barely audible** to the other performer; there should be a risk that any given attempt to produce sound fails to sound at all. Do not make any attempt to project your sounds; they should exist at the threshold of audibility, perhaps as barely externalised traces of the intent to sound.

<u>Breath length</u>

Breaths in should always be as short and as quiet as humanely possible—aim to make your breaths in inaudible.

The length of **breaths out** ranges between the following:

(1) **Short**: hurried, much shorter than a comfortable breath out; ca. 3 to 7 seconds.
(2) **Medium**: similar to an ordinary, comfortable breath out, or the length of a sentence or two when speaking; ca. 7 to 15 seconds.
(3) **Long**: uncomfortably long; somewhat strained towards the end of the breath; ca. 15 to 30 seconds.

Try to keep your breath length consistent within each category, unless you are imitating the other performer's breath length. Breath lengths may also be adjusted if the sound produced, or vocal technique employed, demands it.
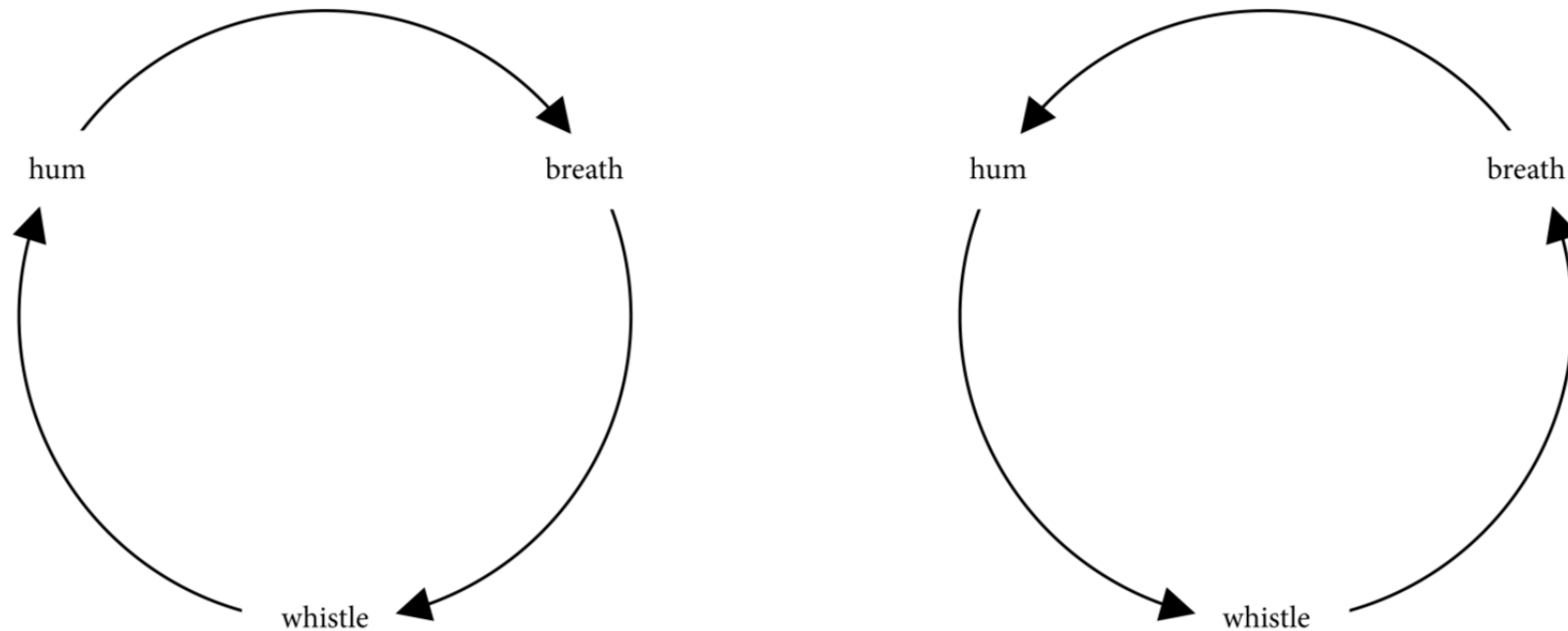
Sound categories

Hum: a pitched hum, often sung with an open mouth, like 'ng'.

Breath: blow air voicelessly, with only the slightest suggestion of a vowel.

(Palette-tongue) Whistle: raise your slightly rolled tongue close to the roof of your mouth to produce a faint, breathy whistle.

As smoothly and seamlessly as possible, gradually transition between these categories. As the diagrams below indicate, you may transition in either a clockwise or anti-clockwise direction. For example, if you are attempting to gradually imitate the other performer, and you are making a *breath* sound whilst the other performer is making a *whistle* sound, head in a clockwise direction. If you are making a *breath* sound whilst the other performer is making a *hum* sound, head in an anti-clockwise direction etc.

When you are half way between sound categories, there should be an equal mixture of the sounds (or an equal chance of both sounds occurring). When you are closer to one sound category as opposed to another, there should be an unequal mixture of both sounds in which the closer sound category predominates (or a higher chance of the closer sound category occurring). Occasionally these unequal mixtures of categories will be specified. For example, *hum-breath* suggests that the hum sound will predominate, whereas *breath-hum* suggests that the breath sound will predominate; the vocal techniques for executing these 'in-between' categories will be distinctly different.

Try to ensure that you are both matching the character and quality of each other's sound categories as closely as possible, when all other variable states are identical.

Mouth shapes

As smoothly and seamlessly as possible, gradually transition between the following shapes.

        : mouth closed, face relaxed.

        : lower your jaw slightly so that your lips are just barely apart; there should be a risk of your upper and lower lips occasionally touching.

        : lower your jaw further so that there is no risk of your upper and lower lips touching.

        : lower your jaw further so that your lips are comfortably apart.

        : whilst lowering your jaw further, ever so slightly tense your cheeks in the direction of a smile

        : whilst lowering your jaw further, tense your cheeks into a comfortable smile shape

        : whilst lowering your jaw further, tense your cheeks as much as possible in order to achieve the widest mouth shape you can produce.

        : continue to lower your jaw, whilst allowing the width of your mouth shape to contract a little, if necessary.

        : lower your jaw as far as you can, whilst still being able to produce the *whistle* sound, if necessary (i.e. your tongue should always be able to reach the roof of your mouth).

Change in mouth shapes should be accompanied by only the slightest suggestion of a vowel; this will alter the timbre of *breath* sounds (larger shapes equal a brighter sound), as well as *hums* more subtly. In addition, the pitch of *whistles* may rise as your mouth shape gets larger.

When your **eyes are open** and you are imitating the other performer's mouth shapes, also attempt to **imitate/mirror all of their other facial and bodily movements**. When applicable, try to maintain eye contact with the other performer.

Pitch

Your *hum* sound should imitate the pitch/frequency of the other performer's *hum*. Your *whistle* should imitate to the pitch/frequency of the other performer's *whistle*, or at least attempt to get as close as possible. If you are imitating the pitch of a sound containing elements of both the *hum* and *whistle* categories, treat each category as distinct—imitate the pitch of both categories simultaneously, but as separate layers (a harmony of sorts).

It should always be possible for you to execute any and every state of all of the other variables, at any time; therefore, avoid the extremely high and low parts of your range, if necessary.

Imitative behaviours

Throughout this piece you will imitate variables in the other performer's sounds and facial/bodily movements, including: loudness, breath length, sound category, mouth shapes, pitch, the rate/speed at which a variable changes etc. (all defined later.) When imitating any one or a combination of these variables, use the following behavioural schemes illustrated in the graphs below.

Graph 1: both performers (one represented by green = the leader, the other by blue = the follower) are continuously and simultaneously imitating one another, **together at the same time** (i.e. the only breaks in your sound will be your short **breaths in**). The y-axis represents the state of any variable or variables.
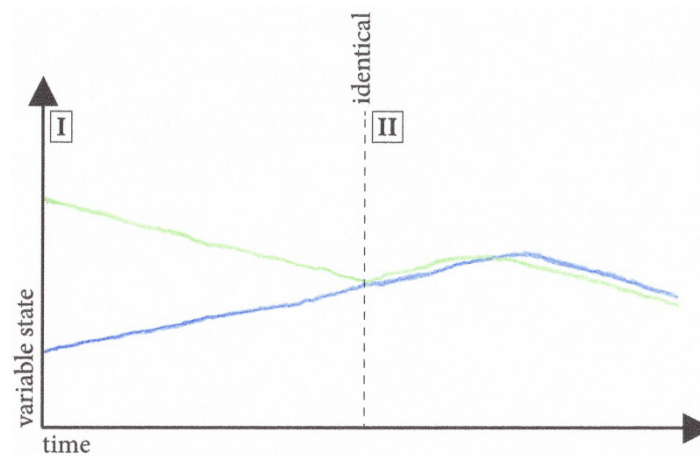
Graph 2: each performer is imitating the other **in alternation** (i.e. one performer performs for a breath length; as soon as they finish, the other performs for a breath length etc.). Note that at the beginning of each new breath in *Graph 2*, **you pick up your variable state from wherever you last left off**.
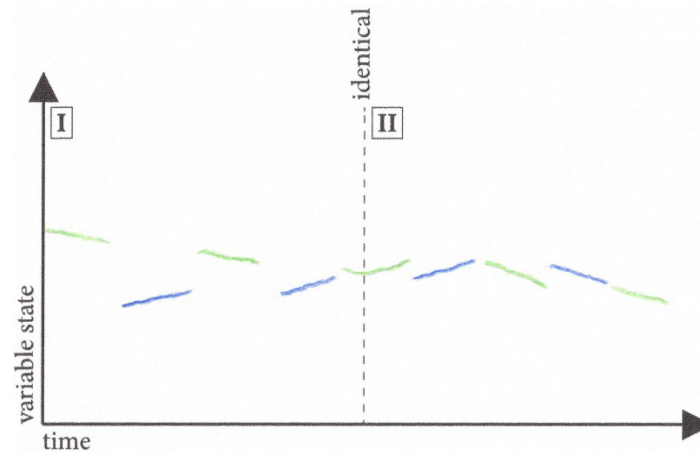
Variants of the **in alternation** scheme include overlap:

(1) **Small overlap** indicates that each performer should begin their breath outs *just* before the other performer reaches the end of their breath outs.
(2) **Large overlap** indicates that each performer should begin their breath outs *well* before the other performer reaches the end of their breath outs.

The ambiguity of the use of 'just' and 'well' is intentional. However, both performers should agree between themselves on a consistent realisation of each term.

In part I of the behavioural scheme (equal power dynamic):

Gradually alter your open variables (highlighted in the parts in **red**) at the given rate of change until they are identical to the other performer's variable states.

If multiple variables are open to be imitated, they must all be altered simultaneously at the same rate of change, until all variable states are identical. If one or more variables are already identical, only alter the variables that remain in different states.

If a section of the piece only indicates part I of the behavioural scheme (e.g. sections 1, 2, 4, 11 and 12) and you both reach identical variable states, maintain these states until the end of the section.

If a section of the piece indicates both parts I & II of the behavioural scheme (e.g. sections 3, 5, 6, and 9), gradually alter your open variables and then immediately transition to part II as soon as you first achieve identical variable states.

In part II of the behavioural scheme (unequal power dynamic):

If multiple variables are open to be imitated (highlighted in the parts in **red**), they must all be altered simultaneously at the same rate of change.

The leader is repelled by the follower, i.e. the leader should change their variables to try to maintain the greatest distance possible from the follower in variable states, given the rate of change. When leading, you will consequently have a degree of improvisatory freedom. *(Note that the examples given in the graphs above are speculative examples; in reality, your realisation may take a very different course.)*

The follower is attracted by the leader, i.e. the follower should attempt to imitate and match the leader as closely as possible, given the rate of change.

If you reach an extreme of a variable, head back in the other direction towards the other extreme.

If the follower happens to catch the leader by matching them exactly, the leader must change the direction in which they are altering their variables.

Electronics

The Max/MSP patch for the piece is available at www.charliesdraulig.com/music.htm and consists entirely of high frequency tones which occur at somewhat randomised points. Alternatively, contact me via my website for a randomised audio file version of the electronics, if you do not have access to Max/MSP.

These tones cue the beginning/end of each section. Set the levels so that the tones are audible but extremely soft for the performers, but *barely audible* for the audience, if possible.

The laptop/device running the patch should be placed out of the audience's vision or hidden entirely. Apart from the triggering the start of the patch, no other human input is required. If possible, the audience should not see when the patch has been triggered. The patch will run and then turn itself off after its final cue.

Once you have settled into position for performance, close your eyes and stay as still and as silent as possible. Wait for the first electronic cue, and then begin the first section of the piece.

Regardless of where you happen to be in a section, **as soon as you hear an electronic cue, immediately begin the next section and adopt the new variable states**—do not wait for the electronic cue to end.

After the final cue, close your mouths (——) and stay as still and as silent as possible for a time, whilst maintaining eye contact with each other. Then relax and end the performance.

Parts

The following pages contain the parts for both performers, A and B, which designate the initial variable states for each section in the piece. It may be helpful to think of these initial states as presets or starting points. If variables are open to be imitated, they are highlighted in the parts in **red**. All other variable states are fixed for the duration of the section. Initial variable states that are different to the previous section's variable states are <u>underlined</u>.

The following version of the parts **only indicates those variables that change or reset from section to section**. If a variable state isn't given, it is assumed that it is either unchanged or that you begin at the previous section's end state.

Please see the *appendix* for an **exhaustive** version of the parts, which indicate all of the initial variable states for every section of the piece.

A | B

1.

Eyes closed (until otherwise stated)

Imitative behaviour: ⬜I⬜ ; in alternation (you start)

Rate of change: Medium

    Loudness: Clearly audible

    Breath length: Medium

    Sound category: Hum

    Mouth Shape: ⬯

    Pitch: A sixth higher than **B**; in a comfortable range.
       (Your pitch should not change during your first breath out.)

2.

Imitative behaviour: ⬜I⬜ ; in alternation (you start)

    imitate **Sound category** and **Pitch**

1.

Eyes closed (until otherwise stated)

Imitative behaviour: ⬜I⬜ ; in alternation (**A** starts)

Rate of change: Medium

    Loudness: Clearly audible

    Breath length: Medium

    Sound category: Hum

    Mouth Shape: ⬯

    Pitch: A sixth lower than **A**; in a comfortable range.

2.

Imitative behaviour: ⬜I⬜ ; in alternation (**A** starts)

    Sound category: <u>Breath-hum</u>

    (Also imitate **Pitch**)

[ELECTRONIC CUE]

3.

Imitative behaviour: ⊞ I & ⊞ II lead **B**; in alternation; small overlap (you start)

    Sound category: Hum-breath

    (Also imitate ***Loudness*** and ***Pitch***)

[ELECTRONIC CUE]

3.

Imitative behaviour: ⊞ I & ⊞ II follow **A**; in alternation; small overlap (**A** starts)

    Loudness: Barely audible

    Sound category: Breath

    (Also imitate ***Pitch***)

[ELECTRONIC CUE]

4.

Imitative behaviour: ⊞ I ; in alternation; large overlap (you start)

    Loudness: Barely audible

    Sound category: Breath-hum

    Mouth Shape:

    (Also imitate ***Pitch***)

[ELECTRONIC CUE]

4.

Imitative behaviour: ⊞ I ; in alternation; large overlap (**A** starts)

    Loudness: Clearly audible

    Sound category: Breath

    Mouth Shape:

    (Also imitate ***Pitch***)

[ELECTRONIC CUE]

5.

Imitative behaviour: $\boxed{\text{I}}$ & $\boxed{\text{II}}$ lead **B**; in alternation (you start)

Rate of change: Slow

    Sound category*:* Breath

    (Also imitate ***Loudness***, ***Mouth Shape*** and ***Pitch***)

[ELECTRONIC CUE]

5.

Imitative behaviour: $\boxed{\text{I}}$ & $\boxed{\text{II}}$ follow **A**; in alternation (**A** starts)

Rate of change: Slow

    Sound category*:* Breath-whistle

    (Also imitate ***Loudness***, ***Mouth Shape*** and ***Pitch***)

[ELECTRONIC CUE]

6.

Imitative behaviour: $\boxed{\text{I}}$ & $\boxed{\text{II}}$ follow **B**; together at the same time

Rate of change: Slow

    Sound category*:* Hum

    (Also imitate ***everything else***)

[ELECTRONIC CUE]

6.

Eyes open (until the end of the piece)

Imitative behaviour: $\boxed{\text{I}}$ & $\boxed{\text{II}}$ lead **A**; together at the same time

Rate of change: Fast

    Loudness*:* Barely audible

    Breath length*:* Long

    Sound category*:* Breath

    Mouth Shape*:* ⌣

    Pitch*:* A sixth lower than **A**, if able; if not, as low as possible.

7.

Imitative behaviour: | **II** | follow **B**; in alternation; large overlap (**B** starts)

Rate of change: Medium

 Breath length: Short

 Sound category: Hum-breath

 (Also imitate *everything else*)

7.

Imitative behaviour: | **II** | lead **A**; in alternation; large overlap (you start)

Rate of change: Fast

 Sound category: Whistle-hum

 (Also imitate *everything else*)

8.

Eyes open (until the end of the piece)

Imitative behaviour: | **II** | lead **B**; in alternation (you start)

Rate of change: Fast

 Breath length: Medium

 Sound category: Hum

 (Also imitate *everything else*)

8.

Imitative behaviour: | **II** | follow **A**; in alternation (**A** starts)

Rate of change: Fast

 Breath length: Medium

 Sound category: Whistle

 (Also imitate *everything else*)

9.

Imitative behaviour: **I** & **II** lead **B**; together at the same time
(aim for 1:1 imitation)

Rate of change: Medium

    Loudness: Barely audible

    Sound category: Whistle-Hum

    Mouth Shape:

    (Also imitate *everything else*)

9.

Imitative behaviour: **I** & **II** follow **A**; together at the same time
(aim for 1:1 imitation)

Rate of change: Medium

    Breath length: Long

    Sound category: Breath-whistle

    Mouth Shape:

    (Also imitate *everything else*)

10.

Imitative behaviour: **II** follow **B**; together at the same time
(aim for 1:1 imitation)

Rate of change: Medium

    Sound category: Hum-breath

    (Also imitate *everything else*)

10.

Imitative behaviour: **II** lead **A**; together at the same time

Rate of change: Medium

    Sound category: Whistle-breath

    (Also imitate *everything else*)

[ELECTRONIC CUE]

11.

Imitative behaviour: **I** ; together at the same time (aim for 1:1 imitation)

Rate of change*:* Medium

    Loudness*:* Barely audible

    Sound category*:* Breath

    Mouth Shape*:* 👄

    (Also imitate ***everything else***)

[ELECTRONIC CUE]

12.

Imitative behaviour: **I** ; together at the same time (aim for 1:1 imitation)

    Mouth Shape*:* 👄

    (Also imitate ***everything else***)

[ELECTRONIC CUE (END)]

[ELECTRONIC CUE]

11.

Imitative behaviour: **I** ; together at the same time (aim for 1:1 imitation)

Rate of change*:* Slow

    Loudness*:* Barely audible

    Sound category*:* Breath

    Mouth Shape*:* 👄

    (Also imitate ***everything else***)

[ELECTRONIC CUE]

12.

Imitative behaviour: **I** ; together at the same time (aim for 1:1 imitation)

    Mouth Shape*:* 👄

    (Also imitate ***everything else***)

[ELECTRONIC CUE (END)]

Appendix

The following exercises may be helpful when preparing a performance of this piece. All of these exercises are merely initial suggestions that you may take or leave as you wish. Feel free to create further exercises in order to address specific issues that may arise in the course of practice.

- Individually explore the range of each variable (especially the sound categories, mouth shapes and pitch variables) via improvisation at different rates of change.
- Combine two variables together (e.g. sound categories and loudness, or mouth shapes and breath length etc.), improvise and alter them simultaneously, starting at different initial states or presets each time.
- Try the exercise above at different rates of change.
- Combine more than two variables together, alter them simultaneously, and try this exercise at different rates of change.
- With the other performer, choose one variable to practice. Start at different variable states and gradually imitate one another until you both agree that your sounds or expressions are as identical as possible.
- Repeat the above exercise with multiple open variables and at different rates of change.
- With the other performer, choose one variable to practice. Decide who will be the leader and who will be the follower. State at different initial variable states.
- Repeat the above exercise with multiple open variables and at different rates of change.
- Etc.
- To assist with memorising the initial states of each section of the piece, try developing mnemonic devices (e.g. a picture, symbol or phrase) that you think sum up the character of your experience when performing each section. Also consider doing truncated run-throughs where you top and tail the beginning and (speculative) end of each section in quick succession.

An exhaustive version of the parts follows on the next page, which indicates all of the initial variable states for every section of the piece.

[ELECTRONIC CUE]

1.

Eyes closed (until otherwise stated)

Imitative behaviour: ⟦I⟧; in alternation (you start)

Rate of change: Medium

    Loudness: Clearly audible

    Breath length: Medium

    Sound category: Hum

    Mouth Shape: ⬡

    Pitch: A sixth higher than **B**; in a comfortable range.
        (Your pitch should not change during your first breath out.)

[ELECTRONIC CUE]

2.

Imitative behaviour: ⟦I⟧; in alternation (you start)

Rate of change: Medium

    Loudness: Clearly audible

    Breath length: Medium

    Sound category: Hum

    Mouth Shape: ⬡

    Pitch: Begin at previous section's end state.

[ELECTRONIC CUE]

1.

Eyes closed (until otherwise stated)

Imitative behaviour: ⟦I⟧; in alternation (**A** starts)

Rate of change: Medium

    Loudness: Clearly audible

    Breath length: Medium

    Sound category: Hum

    Mouth Shape: ⬡

    Pitch: A sixth lower than **A**; in a comfortable range.

[ELECTRONIC CUE]

2.

Imitative behaviour: ⟦I⟧; in alternation (**A** starts)

Rate of change: Medium

    Loudness: Clearly audible

    Breath length: Medium

    Sound category: Breath-hum

    Mouth Shape: ⬡

    Pitch: Begin at previous section's end state.

3.

Imitative behaviour: I & II lead **B**; in alternation; small overlap (you start)

Rate of change: Medium

Loudness: Clearly audible

Breath length: Medium

Sound category: Hum-breath

Mouth Shape: ⌒

Pitch: Begin at previous section's end state.

3.

Imitative behaviour: I & II follow **A**; in alternation; small overlap (**A** starts)

Rate of change: Medium

Loudness: Barely audible

Breath length: Medium

Sound category: Breath

Mouth Shape: ⌒

Pitch: Begin at previous section's end state.

4.

Imitative behaviour: I ; in alternation; large overlap (you start)

Rate of change: Medium

Loudness: Barely audible

Breath length: Medium

Sound category: Breath-hum

Mouth Shape: ⬭

Pitch: Begin at previous section's end state.

4.

Imitative behaviour: I ; in alternation; large overlap (**A** starts)

Rate of change: Medium

Loudness: Clearly audible

Breath length: Medium

Sound category: Breath

Mouth Shape: ▱

Pitch: Begin at previous section's end state.

5.

Imitative behaviour: I & II lead **B**; in alternation (you start)

Rate of change: Slow

    Loudness: Begin at previous section's end state.

    Breath length: Medium

    Sound category: Breath

    Mouth Shape: Begin at previous section's end state.

    Pitch: Begin at previous section's end state.

5.

Imitative behaviour: I & II follow **A**; in alternation (**A** starts)

Rate of change: Slow

    Loudness: Begin at previous section's end state.

    Breath length: Medium

    Sound category: Breath-whistle

    Mouth Shape: Begin at previous section's end state.

    Pitch: Begin at previous section's end state.

6.

Imitative behaviour: I & II follow **B**; together at the same time

Rate of change: Slow

    Loudness: Begin at previous section's end state.

    Breath length: Medium

    Sound category: Hum

    Mouth Shape: Begin at previous section's end state.

    Pitch: Begin at previous section's end state.

6.

Eyes open (until the end of the piece)

Imitative behaviour: I & II lead **A**; together at the same time

Rate of change: Fast

    Loudness: Barely audible

    Breath length: Long

    Sound category: Breath

    Mouth Shape: ⌣

    Pitch: A sixth lower than **A**, if able; if not, as low as possible.

[ELECTRONIC CUE]

7.

Imitative behaviour: **II** follow **B**; in alternation; large overlap (**B** starts)

Rate of change: Medium

    Loudness: Begin at previous section's end state.

    Breath length: Short

    Sound category: Hum-breath

    Mouth Shape: Begin at previous section's end state.

    Pitch: Begin at previous section's end state.

[ELECTRONIC CUE]

8.

Eyes open (until the end of the piece)

Imitative behaviour: **II** lead **B**; in alternation (you start)

Rate of change: Fast

    Loudness: Begin at previous section's end state.

    Breath length: Medium

    Sound category: Hum

    Mouth Shape: Begin at previous section's end state.

    Pitch: Begin at previous section's end state.

[ELECTRONIC CUE]

7.

Imitative behaviour: **II** lead **A**; in alternation; large overlap (you start)

Rate of change: Fast

    Loudness: Begin at previous section's end state.

    Breath length: Begin at previous section's end state.

    Sound category: Whistle-hum

    Mouth Shape: Begin at previous section's end state.

    Pitch: Begin at previous section's end state.

[ELECTRONIC CUE]

8.

Imitative behaviour: **II** follow **A**; in alternation (**A** starts)

Rate of change: Fast

    Loudness: Begin at previous section's end state.

    Breath length: Medium

    Sound category: Whistle

    Mouth Shape: Begin at previous section's end state.

    Pitch: Begin at previous section's end state.

9.

Imitative behaviour: **I** & **II** lead **B**; together at the same time
(aim for 1:1 imitation)

Rate of change: Medium

    Loudness: Barely audible

    Breath length: Medium

    Sound category: Whistle-Hum

    Mouth Shape: ⌣

    Pitch: Begin at previous section's end state.

9.

Imitative behaviour: **I** & **II** follow **A**; together at the same time
(aim for 1:1 imitation)

Rate of change: Medium

    Loudness: Begin at previous section's end state.

    Breath length: Long

    Sound category: Breath-whistle

    Mouth Shape: ⌣

    Pitch: Begin at previous section's end state.

10.

Imitative behaviour: **II** follow **B**; together at the same time
(aim for 1:1 imitation)

Rate of change: Medium

    Loudness: Begin at previous section's end state.

    Breath length: Begin at previous section's end state.

    Sound category: Hum-breath

    Mouth Shape: Begin at previous section's end state.

    Pitch: Begin at previous section's end state.

10.

Imitative behaviour: **II** lead **A**; together at the same time
(aim for 1:1 imitation)

Rate of change: Medium

    Loudness: Begin at previous section's end state.

    Breath length: Begin at previous section's end state.

    Sound category: Whistle-breath

    Mouth Shape: Begin at previous section's end state.

    Pitch: Begin at previous section's end state.

11.

Imitative behaviour: $\boxed{\text{I}}$; together at the same time (aim for 1:1 imitation)

Rate of change: Medium

    Loudness: Barely audible

    Breath length: Begin at previous section's end state.

    Sound category: Breath

    Mouth Shape:

    Pitch: (Begin at previous section's end state.)

12.

Imitative behaviour: $\boxed{\text{I}}$; together at the same time (aim for 1:1 imitation)

Rate of change: Slow

    Loudness: Barely audible

    Breath length: Begin at previous section's end state.

    Sound category: Breath

    Mouth Shape:

    Pitch: (Begin at previous section's end state.)

11.

Imitative behaviour: $\boxed{\text{I}}$; together at the same time (aim for 1:1 imitation)

Rate of change: Slow

    Loudness: Barely audible

    Breath length: Begin at previous section's end state.

    Sound category: Breath

    Mouth Shape:

    Pitch: (Begin at previous section's end state.)

12.

Imitative behaviour: $\boxed{\text{I}}$; together at the same time (aim for 1:1 imitation)

Rate of change: Slow

    Loudness: Barely audible

    Breath length: Begin at previous section's end state.

    Sound category: Breath

    Mouth Shape:

    Pitch: (Begin at previous section's end state.)