For Zubin Kanga

To Zubin Kanga, Michael Baldwin and Elo Masing

**Note**

An individual in a physical environment; an individual re-enacting an exploratory process, staged in pre-defined territories; an individual performing a choreography; an individual’s touch mediated by their listening.

This is the second work is a series of pieces, collectively known as *individuals in environments*.

I would like to give a very special thanks to Zubin Kanga for his advice, support and encouragement throughout the compositional process.
Performance directions

Place the piano in a way that enables all (or most) of the audience to see your hands. The audience should be as close to you as possible.

Close the lid of the piano. Do not use any of the pedals.

In large performance spaces, the keyboard of the piano may be discreetly amplified using miniature omnidirectional microphones placed either side of the maker’s name and just above the keyboard. Place speakers as close to the instrument as possible. The audience should still have to strain to hear the quietest sounds, such as those produced at the beginning of the piece. This particular version of the piece should be retitled collector (amplified).

When performing, keep physical movement to a minimum. Try to only perform the actions that are absolutely necessary for a realisation of the piece.

Performance material: general considerations

During a performance of the piece, you should never execute page turns yourself. If possible, read the performance material off an iPad, with a Bluetooth pedal (or similar) for page turns. However, you will need to print out pages 6 (A) and (B); place them next to the iPad on the music stand. As a last resort, a page turner may be employed.

Ideally, memorise the piece.

There is no score for the piece. Rather, the notated actions on each page of the performance material are presented in a scale-like manner. These notated actions are provided both in ascending and descending form. Each action must be performed with the indicated finger only. Notice that the actions will not necessarily occur in the notated order, depending on the width of your hand. The actions are notated in this manner as it is the most neutral presentation that I could devise. There are numerous relationships that are possible between the actions; these will emerge as you become familiar with each section.

The written instructions will indicate how to navigate and realise each section. Always aim to respond to the slightest micro-variations in the relationships you perceive between sounds. Rely on your aural perception alone. Some of the instructions lead to performance situations that are intentionally ambiguous and require active decision making on your part.

Many moments of indecision will occur when listening to, and navigating through, each section of the piece. At times, undertaking a realisation of this piece will be astoundingly difficult. However, recognise that it is ultimately necessary to make each decision as best as you can and live with the consequences. Keep on going. All responses will necessarily be highly subjective, the work is conceived in a manner that aims to explicitly take advantage of and encourage this subjectivity. Aim to listen as actively and as sensitively as possible. You may make ‘mistakes’, though if each and every decision is undertaken in an informed, thoughtful and critical manner it is not possible to perceive incorrectly. You may occasionally miss some actions or potential aggregates of these actions—do not worry unduly, just try your best. I have intentionally written the piece in a way that aims to provide a safe context for these moments of vulnerability and that does not allow others to judge the decisions you make in a negative light. Each performance will chart its own somewhat unique journey through the piece.

Accidental only apply to the note they precede. However, occasionally courtesy natural signs are given.
**Variable: Hand Speed**

Hand speed encompasses the speed at which you scan back and forth within the indicated ranges of each section (i.e. horizontal movement), as well as the speed at which you perform the notated actions (i.e. predominantly vertical movement).

At any given moment, all the movements required to perform the notated actions should occur at about the same speed as your horizontal movement at that time (i.e. your speed when scanning back and forth). Therefore, if you increase the speed at which you scan back and forth, you should also increase the speed at which you perform the notated actions by the same amount etc.

When you reach one of this variable’s extremes (e.g. your hand speed is as slow as possible) and the instructions require you to go even further (e.g. slow down your hand speed even further), simply maintain your current variable state.

Each section of the piece goes immediately and smoothly to the next. Your last hand positions in one section become the first hand positions for the next. Therefore, your hands should scan back and forth continuously and without pause throughout the piece (except during the final section).

**Variable: Hand Width**

$+W$ = incrementally increase your hand width, by roughly one white key width (or a little less).

$-W$ = incrementally decrease your hand width, by roughly one white key width (or a little more).

**Occasionally hand width is notated in grey** in the score. The grey noteheads indicate the position of your 1st and 5th fingers for each hand; only white notes are notated (i.e. accidentals never apply to grey noteheads).

When you reach one of this variable’s extremes (e.g. your hand width is as large as possible) and the instructions require you to go even further (e.g. increase your hand width even further), simply maintain your current variable state.

**Variable: Hand Tension**

$+T$ = incrementally increase your hand tension.

$-T$ = incrementally decrease your hand tension.

A high hand tension does not mean injuring yourself or causing yourself harm. Your highest hand tension should be visibly distinct from your normal hand tension when playing the piano, but able to be maintained without discomfort for a time.

When you reach one of this variable’s extremes (e.g. your hand tension is as high as possible) and the instructions require you to go even further (e.g. increase your hand tension even further), simply maintain your current variable state.
Notated actions

Generally, when performing notated actions, you should not intend to produce a pitched sound as a result of the hammers striking the strings. However, a pitched sound may result if your hand speed is fast enough, for example. Most of the sounds generated by your actions will be sounds from the piano’s mechanism.

Right hand fingerings are indicated above the notated actions. Left hand fingerings are indicated below the notated actions.

The bold bracket above the staff indicates your right hand’s range. The bold bracket below the staff indicates your left hand’s range.

Generally, symbols that define the notated action are placed above the staff. These symbols apply to both your right and left hands. Occasionally however, symbols are placed below the staff. This particular placement occurs when the left hand performs a different action to the right hand, or when the notated action is only played by the left hand.

Where to strike keys:

▲ = strike the top of the key, as normal.
■ = strike the front of the key.
◄ or ► = strike the side of the black key (e.g. left side or right side).
↑ = put your thumb under the lip of the white key and lift the key up as far as it can go, before releasing it.
▼ = in one continuous movement: put your thumb under the lip of the white key and lift the key up as far as it can go; continue your upward movement and allow your thumb nail to flick the lip of the key (a percussive snap-like sound should result); in the process of performing this action, release the key.

► or ◄ = the wide end indicates the end of the key that is closest to you; the narrow end indicates the end of the key that is furthest from you (e.g. start playing at the end of the key that is closest to you and gradually transition to the end that is furthest from you etc.). Occasionally, this sign may indicate that you stop somewhere between these extremes. If no indication is given, strike the key at the normal position.
How to strike keys:

= strike the key with your fingernail only. If no indication is given, strike the key with your finger pad, as normal.

= strike the key with some of your fingernail and some of your finger pad. If no indication is given, strike the key with your finger pad, as normal.

= strike the key with your thumbnail only. If no indication is given, strike the key with the fleshy part of your thumb, as normal.

= strike the key with some of your thumbnail and some of the fleshy part of your thumb. If no indication is given, strike the key with the fleshy part of your thumb, as normal.

Depressing keys:

= indicate how far you should intend to depress a key (e.g. barely depressed, mostly depressed, or fully depressed). If no indication is given, you should not intend to depress the key at all (i.e. tap lightly without depressing the key).

Actions with longer durations:

The following actions require you to perform multiple movements in a row. All these movements should occur at about the same speed as your horizontal movement (i.e. your speed when scanning back and forth). The whole notated action must be performed in the 'window' when your indicated fingers are nearby.

= carefully depress the key until the escapement action triggers. Then proceed to fully depress the key.

= carefully depress the key until the escapement action triggers. Then proceed to fully depress the key. Finally, slide your finger towards and off the end of the key that is closest to you.
= depress and release the key a number of times in succession. The exact number of depressions and releases will be determined by your hand speed, and how long the indicated finger is near the key, as you scan back and forth across the keyboard. Modifications to where or how you play the key may apply.

= firmly grip the key with your 2nd finger above the lip and your thumb below the lip. Wiggle the key up and down a number of times in succession. The exact number of wiggles up and down will be determined by your hand speed, and how long the indicated fingers are near the key as you scan back and forth across the keyboard.

= in one continuous movement: from the middle of the key, scrape with a fingernail along the top of the B flat; when you reach the closest end of the top of the B flat key, scrape down along its front; continue to scrape along the top of the A key until you reach the end that is closest to you.

= firmly grip the key on either side with your thumb and 3rd finger, in a pincer-like manner. Wiggle the key from left to right a number of times in succession. The exact number of wiggles left and right will be determined by your hand speed, and how long the indicated fingers are near the key as you scan back and forth across the keyboard. Just as you stop wiggling, pull the key up as far as it will go and strike the top of the key as indicated.
= in one continuous movement: from the furthest end of the key, scrape with a fingernail along the top of the D flat; when you reach the closest end of the top of the D flat key, scrape down along its front; continue to scrape along the top of the C key until you reach the end that is closest to you; then put your thumb under the lip of the C and B keys and lift them up as far as they can go; strike the keys in the indicated manners with your 2nd and 3rd fingers; continue your upward movement and allow your thumb nail to flick the lip of the B (a percussive snap-like sound should result); in the process of performing this action, release the key.

= in one continuous movement: from the closest end of the key, scrape with a fingernail along the top of the G; when you reach the closest end of the F sharp key, scrape up along its front; continue to scrape along the top of the F sharp key until you reach the end that is furthest from you; then scrape towards the end that is closest to you; when you reach the closest end of the top of the F sharp key, scrape down along its front; fully depress the F natural with your thumb; continue to scrape with your 2nd finger’s nail along the side of E key, on the exposed wood; scrape until you reach the end of the side of the E key that is closest to you.

= in one continuous movement: firmly grip the key on either side with your thumb and 3rd finger, in a pincer-like manner; pull the key up and slide your fingers up off the key (a percussive snap-like sound should result).

= in one continuous movement: firmly grip the keys on the indicated sides with the indicated fingers, in a pincer-like manner; pull the keys up and slide your fingers up off the keys (a percussive snap-like sound should result).
fully depress the key. Then apply even more downwards pressure to the key (this movement is primarily choreographic). Finally, slide your finger towards
and off the end of the key that is closest to you, whilst maintaining a very high downwards pressure.

See the Appendix for the full collection of actions employed in this piece.
1.

Relax your hands; hold your hands in position with as little tension as possible.

Move your hands horizontally; scan across the keyboard at a moderately slow speed.

All other movements (e.g. vertical movements when performing actions) should occur at about the same speed as your horizontal movement.

Then immediately begin the next section.
Carry over your hand width and tension states from the previous section, as well as your hand speed at first. Scan back and forth with your hands within the indicated ranges; always perform the notated actions when the indicated finger is close by, at about the same speed as your horizontal movement.

Always change the speed of both hands at the same time, in the same manner and by the same amount (unless otherwise indicated).

As you play, listen and compare the volume levels of the sound you just made with the sound that directly preceded it.

If the sound you just made is softer than the sound that preceded it, slow down. If the sound you just made is louder than the sound that preceded it, speed up. If the difference between the sound you just made and the sound that preceded it is large, change your speed by a similarly large amount. If the difference between the sound you just made and the sound that preceded it is small, change your speed by a similarly small amount. If the sound you just made is at the same volume level as the sound that preceded it, do not change your speed.

If your hands meet at any point, recall the volume levels of the sounds each hand most recently made. If the volume levels were different, allow the hand that made the softer sound to move in the same direction as the other hand (i.e., in similar motion). If the volume levels were the same, allow both hands to move in opposite directions (i.e., in contrary motion). When you reach an extreme of a hand’s indicated range, head back in the opposite direction.

When you have performed all of a hand’s available actions at least once, move that hand as far as possible from the other hand within the indicated range, while continuing to perform actions at the appropriate speed. Once you have reached the appropriate extreme of that hand’s range, rest motionless until the end of the section.

When you have performed all of the available actions in both hands at least once, move your hands as far as possible from each other within the indicated range, at the appropriate speed. Then immediately begin the next section.
Carry over your hand width from the previous section, as well as your hand speed at first. Slightly increase your hand tension at the beginning of this section. Maintain this tension until otherwise indicated.

Move both hands closer together at first.

All other performance directions from the previous section apply.

The aggregates below must be performed before this section can end. This list is not exhaustive; other aggregates are possible and may be explored.
Carry over your hand width and tension states from the previous section. At the beginning of this section, immediately adopt the slowest possible hand speed; your hands should appear to be almost motionless. Then apply the same method for determining your hand speed as before.

All other performance directions from the previous section apply.

The aggregates below must be performed before this section can end. This list is not exhaustive; other aggregates are possible and may be explored.

When you have performed all of the available actions in both hands at least once, and your hands are as far as possible from each other within the indicated range, move your right hand into position over the action marked (*), while continuing to perform actions at the appropriate speed. Then immediately begin the next section.
5.

Relax your hands; hold your hands in position with as little tension as possible at first. Carry over your hand speed from the previous section at first; all changes to your hand speed are then notated via the spacing of notated actions only. Note that each hand may have a different speed at times, but only during this section.
Carry over your hand width and tension states from the previous section. Your initial speed for both hands should be the same as your right hand speed at the end of the previous section.

The aggregates below must be performed before this section can end. This list is not exhaustive; other aggregates are possible and may be explored.
All other performance directions from sections 1 to 4 apply.

When you have performed all of the available actions in both hands at least once, and your hands are as far as possible from each other within the indicated range, move both your hands into position over the actions marked (*), while continuing to perform actions at the appropriate speed. Then immediately begin the next section.
Carry over your hand speed, width and tension states from the previous section. Your hand speed should not consciously change during this and all remaining sections (except the last). No longer use the method for determining your hand speed.

All other performance directions from the previous section apply.

The aggregates below must be performed before this section can end. This list is not exhaustive; other aggregates are possible and may be explored.
Carry over your hand speed, width and tension states from the previous section.

Always change the tension of both your hands at the same time, in the same manner and by the same amount.
As you play and compare the volume levels of the sound you just made with the sound that directly preceded it.

If the sound you just made is softer than the sound that preceded it, decrease your hand tension.
If the sound you just made is louder than the sound that preceded it, increase your hand tension.
If the difference between the sound you just made and the sound that preceded it is large, change your hand tension by a similarly large amount.
If the difference between the sound you just made and the sound that preceded it is small, change your hand tension by a similarly small amount.
If the sound you just made is at the same volume level as the sound that preceded it, do not change your hand tension.

At high hand tensions, ever so slightly press down the keys while you scan back and forth; provide resistance and allow your fingers to become momentarily caught on or in between keys at times.

All other performance directions from the previous section apply.

Once your hand tension is as high as possible (do not injure yourself), no longer use the above method. Your hand tension should not consciously change during this and all remaining sections.

If you do not attain your highest possible hand tension before you have performed all of the available actions at least once, continue scanning back and forth within the indicated ranges, until your highest possible hand tension is reached.

? indicates that not all of these actions may be available, depending on your hand width. Such actions do not need to be performed in order to continue to the next section.
Carry over your hand speed from the previous section; your hand speed, width and tension should not consciously change during this section. The exact number of depressions and releases of the right hand D key will be determined by your hand speed.
Carry over your hand speed, width and tension states from the previous section.
No longer scan back and forth with your hands; anchor your hands on the following keys: right hand: \( \begin{array}{c} 
\text{3} \\
\text{E} \\
\text{3}
\end{array} \) left hand: \( \begin{array}{c} 
\text{3} \\
\text{E} \\
\text{3}
\end{array} \)

Only vary your hand width. Begin by gradually decreasing your hand width at the same speed as your hand speed from the previous section.
Always change the width of both hands at the same time and by the same amount.
When you reach an extreme of your hand's width (e.g. fully contracted), head back in the opposite direction (e.g. towards fully expanded).
Perform the notated actions when the indicated finger is close by, at about the same speed as you are changing your hand width.
As you play, listen and compare the volume levels of the sound you just made with the sound that directly preceded it.

If the sound you just made is softer than the sound that preceded it, decrease the speed at which you alter your hand width.
If the sound you just made is louder than the sound that preceded it, increase the speed at which you alter your hand width.
If the difference between the sound you just made and the sound that preceded it is large, change the speed at which you alter your hand width by a similarly large amount.
If the difference between the sound you just made and the sound that preceded it is small, change the speed at which you alter your hand width by a similarly small amount.
If the sound you just made is at the same volume level as the sound that preceded it, do not change the speed at which you alter your hand width.

All other performance directions from sections 1 to 4, and 6 to 8 apply.

When you have performed all of the available action at least once, continue changing your hands' widths until your hands are fully contracted. Then end the piece immediately.
Appendix

As mentioned in the performance directions, a scale-like collection of notated actions constitutes the entirety of the material employed in the piece. Each section is drawn from a single large collection of these actions. The number of accessible actions and the rules by which you navigate through the collection may change from section to section, but the actions themselves remain unaltered.

The full collection of actions is provided overleaf. This collection may be used as a means of memorising the piece.