



# Artistic Research Report

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**Title of the research:** The percussive world of the saxophone

**Artistic Research Question:**

How can key clicks be used to expand the sonic possibilities of my own solo saxophone composition?

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Extended techniques, key clicks, new music, improvisation, multiphonics.

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# 1 Abstract

This research investigates the acoustic potential of key clicks and key slaps on the saxophone, exploring their role in shaping texture, rhythmic drive, and overall musical expression. While these extended techniques are often used sparingly or as novelty effects, this study proposes a more integrated approach by treating them as core musical elements within a compositional framework. By combining key clicks with slap tongue and multiphonics, I explore how these sounds can function not merely as special effects, but as primary tools in my music.

Drawing on both analytical and compositional processes, this project includes the development of an original solo saxophone work that blends these techniques in ways that are musically coherent and performatively engaging. A detailed analysis of how key clicks function acoustically serves as the basis for their structured use within the piece. This categorisation helps clarify the contexts in which these sounds are most effective, offering a practical framework for other performers and composers interested in incorporating the use of this technique.

The outcomes of this research also provide a springboard for further exploration, especially in contexts that involve electronics and real-time sound manipulation. By grounding the study in acoustic experimentation and performative application, this research contributes to the broader discourse on extended techniques for saxophone and contemporary performance practice.

## 2 Introduction

### 2.1 Motivation and goal

I think the function of the saxophone as a percussive instrument is something that has interested me from very early on in my tertiary studies. My teacher in Brisbane always used to talk about the mechanics of the saxophone being an integral part of the sound. In his recordings, he places microphones strategically to pick up various ambient sounds like his breath, hand movements, and even the qualities of his reed. Inspired by this, in my second year Bachelor's recital, I performed [Balafon](#)<sup>1</sup> by Christian Lauba and the set of three [Improvisations](#)<sup>2</sup> by Ryo Noda. The reason I initially selected these pieces to play was to explore the percussive sounds and timbres of the instrument. But after even a small exploration into these techniques, a whole new expressive pathway opened up for me. From that point onwards I began to explore more repertoire, curious about how composers integrated these techniques into their music.

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<sup>1</sup> Chi-Chun Chen, [Balafon](#). Published on: 2017/06/14.

<sup>2</sup> Joshua Hyde, [Improvisation 1](#). Published on: 2018/12/04.

I chose to play [Star Bits](#)<sup>3</sup> by Corey Dundee as it utilises a variety of techniques to evoke vivid imagery and imitations of video game music. He used vocalisations to create a gritty texture in the sound, multiphonics to accent the phrase line, slap tongue to imitate game effects and key clicks as a way to build a sense of atmosphere. [Ku Ku](#)<sup>4</sup> by Barry Cockcroft used slap tongue and multiphonics to imitate the sounds of a chicken and rhythmic groove. I discovered that extended techniques can be used in so many different ways to create so many different characters and colours in the music, and I found significant reward in developing my understanding in this field.

The next step, the next challenge for me, is to use the practical knowledge I have gained from playing this music and blend that into my own artistic practice. I want to do this by composing a solo saxophone piece that incorporates the idea of the saxophone used as a percussive instrument. I hope that this research will contribute to the existing repertoire of saxophone music and will shine light on the largely untapped potential that key clicks and key slaps offer. I want to push the limits of what is capable of my instrument, and create a piece of music that is a reflection of my development as a musician. Furthermore, I hope to create a catalogue describing what key click sounds are possible on the instrument in hopes that future composers and saxophonists can use these techniques more in their own music.

## 2.2 Contextualization

### 2.2.1 Current Practice in Saxophone Performance with Extended Techniques

Saxophone performance, much like any other brass or woodwind instrument, comes from a tradition of melodic and harmonic music. Its recent invention and adoption as a mainstream instrument however, has meant that its popularity has grown alongside the development of more contemporary styles, and new streams of explorative avant-garde thinking. As a result, there exists a large selection of repertoire exploring extended techniques that is available to the modern saxophonist. Early discussion focussing on the use of extended techniques across woodwind instruments can be traced to Florentine composer and researcher Bruno Bartolozzi's *New Sounds for Woodwind*<sup>5</sup>. In this text, ideas of microtonality, timbral shifts and multiphonics are all introduced in a useful resource for composers and performers looking to discover the full capabilities and fingering patterns for their instruments. Unfortunately, the saxophone is not mentioned in this text, as it was deemed better to "deal with the main representatives of each group - flute, oboe, clarinet, and bassoon."

Vaudeville saxophonists were some of the first few performers to incorporate techniques such as flutter and slap tonguing to produce interesting and new sound effects.<sup>6</sup> French saxophonists eventually began to incorporate these techniques into the classical saxophone tradition. Notably, Jean-Marie Londeix made significant inroads to formalise these techniques, inspiring performers and composers like Ryo Noda to write music that evokes the sounds and styles of Eastern musical instruments as seen in his piece *Improvisation 1*.

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<sup>3</sup> Bob Eason. [Star Bits](#). Published on: 2020/06/27.

<sup>4</sup> Taimur Sullivan, [Ku Ku](#). Published on: 2010/05/14.

<sup>5</sup> Bruno Bartolozzi, *New Sounds for Woodwind*, ed. and trans.. Reginald Smith Brindle (London: Oxford University Press, 1967) 1-2.

<sup>6</sup> Christopher Rennie, "The Pedagogy and Practice of Extended Saxophone Technique Within Solo Saxophone Performance" (PhD thesis, Humber College, accessed 20th November 2023), 2-8.

Key clicks:

While not as prevalent as other extended techniques for the saxophone, percussive effects like key clicks have started to be more commonly seen in contemporary music. One notable composer is Christian Lauba, a Tunisian born-Bordeaux saxophonist, composes music which utilises a wide range of extended techniques to evoke cultural rhythms, and even to imitate pre-existing percussive instruments. One such piece is *Balafon*, from his *Neuf Etudes*, which is based on the sounds of a gourd-resonated xylophone from West Africa from which the piece gets its name. The imitation of this instrument comes not from the percussive effects from the saxophone but the melodic and timbral qualities of the saxophone's subtone, accented with use of multiphonics.

Slap tongue:

Lauba has also experimented significantly with different articulations for the saxophone, writing pieces like *Samba*<sup>7</sup>, and *Jungle*<sup>8</sup> with challenging slap tongues passages. These two compositions demonstrate the varying ways in which slap tongue can be utilised. *Jungle* uses this technique to accentuate select parts of very long subtone phrases, whereas *Samba* demonstrates a more melodic approach, as the articulations are used to replicate the sounds of steel pans and the rhythmic style of the samba.<sup>9</sup>

Multiphonics:

The first notable composition for the saxophone which used simultaneous sounds or multiphonics is the *Denisov Sonata* for alto saxophone and piano written in 1970.<sup>10</sup> The use of multiphonics as a tool for musical expression has since widened significantly, appearing in pieces such as Ryo Noda's *Mai*<sup>11</sup>, Bendik Giske's *Start*<sup>12</sup>. Requiring alternate fingerings, adjustments of the oral cavity and embouchure to achieve, multiphonics can have significant purity in sound in the softer dynamic range and quite dissonant and harsher qualities when played loudly.<sup>13</sup>

## 2.3 Research question

How can key clicks be used to expand the sonic possibilities of my own solo saxophone composition?

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<sup>7</sup> Simon Diricq, *Samba*. Published on: 2016/03/07.

<sup>8</sup> Doug O'Connor, *Jungle*. Published on: 2009/02/12

<sup>9</sup> Iain Harrison, "An exploration into the uses of extended techniques in works for the saxophone, and how their application may be informed by a contextual understanding of the works themselves." (PhD theses, University of Huddersfield, 2012) 58-59.

<sup>10</sup> Jean-Marie Londeix, *Hello! Mr Sax or Parameters of the Saxophone* (Paris: Alphonse Leduc, 1989) 31.

<sup>11</sup> Ncsax, *Mai*. Published on: 2008/01/28.

<sup>12</sup> Bendik Giske, *Start*. Published on: 2023/06/08.

<sup>13</sup> Jean-Marie Londeix, *Hello! Mr Sax or Parameters of the Saxophone* (Paris: Alphonse Leduc, 1989) 16.

## 2.4 Specific audiences and readers addressed

This research is directed primarily for other saxophonists and other composers looking to play or compose music for the saxophone that involve various extended techniques. I will be pushing the limits of what is capable of this instrument, which hopefully will be useful in informing composers of how to write for the saxophone and the various sounds that this instrument can make.

## 3 Research Process

### 3.1 First research cycle

#### 3.1.1 Overview of first research cycle

The goal of this first cycle is to begin developing an improvisational language with extended techniques and to find as many possible sounds I can create with key clicks. I believe that it is necessary to fully understand the possibilities and limitations of key clicks on the saxophone before continuing into further cycles. There are limited examples of key clicks used as the main melodic and rhythmic component in compositions, and any literature around all the possible sounds using key clicks just does not exist. Therefore creating my own library of sounds that I can use and also a list of repertoire that uses key clicks will be useful in moving forward in my own improvisations.

Taking advice from my network interviews, I will begin with aiming to replicate a tabla solo on the saxophone, recreating the sounds as best I can. Alongside this, I will use the library of key click sounds as a way to build a language that I can utilise in my improvisations. I will then record these various improvisations, taking inspiration from existing repertoire from composers like Barry Cockcroft, Christian Lauba and Ned McGowan, to see if I can use similar ideas in my own work. At the end of this cycle I will have a reference recording of my own improvisation focusing on percussive keyed sounds on the saxophone, with a desire to use this technique to establish a rhythmic groove. With very little existing research in key clicks on the saxophone, I am eager to discover what is truly possible with this extended technique, and whether it can function as the main focal point of my own composition.

### 3.1.2 Reference recording

[01 First reference recording 01](#) - *Samba* by Christian Lauba

[02 Second reference recording 02](#)- *BO* by Barry Cockcroft

### 3.1.3 Feedback and reflection

The main purpose of my reference recordings was to discover the most effective way of performing extended techniques. I positioned my questions for this from both a musical and practical standpoint. I first asked for advice regarding how to evoke the moods and sounds of the piece more effectively through the extended techniques. Then I asked for ideas on how best to perform and record in a live setting as a result of the limitations of these techniques acoustically.

The feedback I received from Dr. Martin Kay, my saxophone teacher during my Bachelor's Degree in Australia, centred around my replication of the groove in *Samba*. He mentioned that the music stands may have been a hindrance as it felt as though I was hiding behind the stands at times. He suggested that potentially performing from memory might help me engage more to the music and to the audience.<sup>14</sup> I agree with this as I felt that I got so focused at playing all of the techniques together correctly that I forgot to phrase and emulate more of the “samba” style. Additionally, he critiqued my dynamic contrasts, noticing certain parts had far too little push in the dynamics and it often felt stagnant especially when it did not make as much of a difference when I played the interjecting rhythmic countermelodies. For *BO*, the main points Dr Kay provided were to consider the clarity of the techniques and what sounds am I trying to emphasise. Furthermore, he urged me to think about how and where I will record this music, making sure that the qualities of the multiphonics and key clicks are balanced well in the recording. He gave reference to his own solo album, the various microphones placed around his saxophone and used that as a starting point for where I might want to go with my own recordings.

I think this feedback is useful as it makes me reflect on how as a performer, you have to be committed to the story and style when playing extended techniques otherwise it can sound inauthentic very quickly. The ideas I have taken from this feedback are what I have left to discover with what sounds I can create on the saxophone.<sup>15</sup>

I received some useful feedback from my main subject teacher Femke IJlstra about the instructions and notations of *BO*. She brought up an idea which I had not considered, which is the fact that Barry Cockcroft is quite sparse with his instructions in his music. This allows for a much wider space for interpretation than Christian Lauba's music, who tends to be very detailed and precise in how he notates. The balance of giving instructions and allowing for other artist's to have their own creative license in my own composition is going to be an important thought process in this research. Femke also stressed the importance of phrasing and always having a musical line. The most important aspect to playing extended

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<sup>14</sup> Feedback from Dr. Martin Kay. See Appendix 7.3.

<sup>15</sup> Feedback from Dr. Martin Kay. See Appendix 7.3.

techniques well is authenticity, and making sure that these techniques serve a purpose within the music. They have to justifiably serve the music and if I am not committed to playing this kind of music, it can fall short, sounding sometimes confusing and imprecise.<sup>16</sup>

From this, I have learned the importance of playing extended techniques with musicality in order to make a convincing performance. I have also come away from this process with questions that I think are leading me down the right path. What are the limits when it comes to playing with key clicks? Have I reached the limit of what is possible? How can I use techniques more of an expressive tool rather than a challenging exercise?

Moving forward in this cycle, I will be focusing on just getting my hands on the instrument and experimenting with all the sounds I can come up with. As my feedback for my first presentation was to just explore my instrument, I will record, reflect and adjust constantly throughout this cycle. As there is very little theoretical information about key clicks in research, and limited use in saxophone performance as the main focus of the piece, I feel as though I have to start from the ground up and build my own knowledge base just from experimenting with the sounds that I can create.

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<sup>16</sup> Feedback from Femke IJlstra. See Appendix 7.3.

### 3.1.4 Data collection & data analysis: my findings

To kick off my research cycle, I decided to try and replicate a tabla solo on the saxophone, as in my interview with Dr Martin Kay, he mentioned to me to investigate tabla music, as he feels as though the way we could use the hands to create key click sounds is similar to how tabla musicians use their fingers and hands to manipulate the drums.

I then decided to have my [first recording](#)<sup>17</sup> for this cycle, a small section of the [solo](#)<sup>18</sup> by Zakir Hussain performed at the Berklee College of Music in 2021. I chose to use the first section of this performance to transcribe as I felt it explored a large variety of sounds and attacks but at a slower tempo which at the beginning of this process allowed me to focus on replicating the sounds of the tabla using key clicks.

I transcribed the solo by ear, aiming to match the tonality and resonance of the tabla using my third finger, as it creates a much longer duration to the note than the other left hand fingers. This allowed me to then simultaneously use the right hand to create more of the unpitched key noises to replicate whenever Hussain struck the rim of the tabla. Immediately, I felt some aspects of the saxophone key clicks translated well in sounding like this percussive solo, but I found it difficult to create the variety of sounds and the dexterity of the rhythmic ideas. Furthermore, whenever Hussain played a low note bend, due to the nature of the instrument and pressing into the drum, the note would bend upwards. I found that key clicks on the saxophone cannot bend up in pitch, due to the nature of closing a tone-hole to create a pitch rather than striking and pressing into the head of the drum. The only way I managed to overcome this limitation was to strike the key of the note I was playing and then as smoothly as I could, lift the finger to raise the note upwards. This works best on the low Bb finger as this is the most resonant note key click. Unfortunately, performing this resulted in sacrificing the duration of the note.

I sent my recording of this section of the solo to Dr. Martin Kay for feedback. He told me that he was happy with some of the results and encouraged me to further explore all of the potential key click sounds on the saxophone individually as he felt there were some tones that were lost in translation. He said that maybe he was not convinced that the saxophone could capture the qualities of the tabla, but the mechanics of using the fingers worked well.<sup>19</sup> I agree with this, as I felt by the end of transcribing this solo I was viewing it more so what the saxophone could not do rather than all the potential sounds I can do that the tabla cannot. I felt a bit off track and a bit hindered as I was trying to simultaneously build dexterity and coordination with my fingers with very foreign movements and trying to sound as similar to tabla as possible. I felt that the next step was to notate the various sounds and qualities of each key click before moving forward to my next recording.

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<sup>17</sup> [03 Tabla improvisation](#). See Appendix 7.1.

<sup>18</sup> Berklee College of Music, [Ustad Zakir Hussain Tabla Solo](#). Published on: 2020/07/22.

<sup>19</sup> Feedback from Dr. Martin Kay. See Appendix 7.3.2.

French Conservatory Key Naming System

X = Front or "Fork" F

P = bis

C1 = High D

C2 = High E flat

C3 = High E

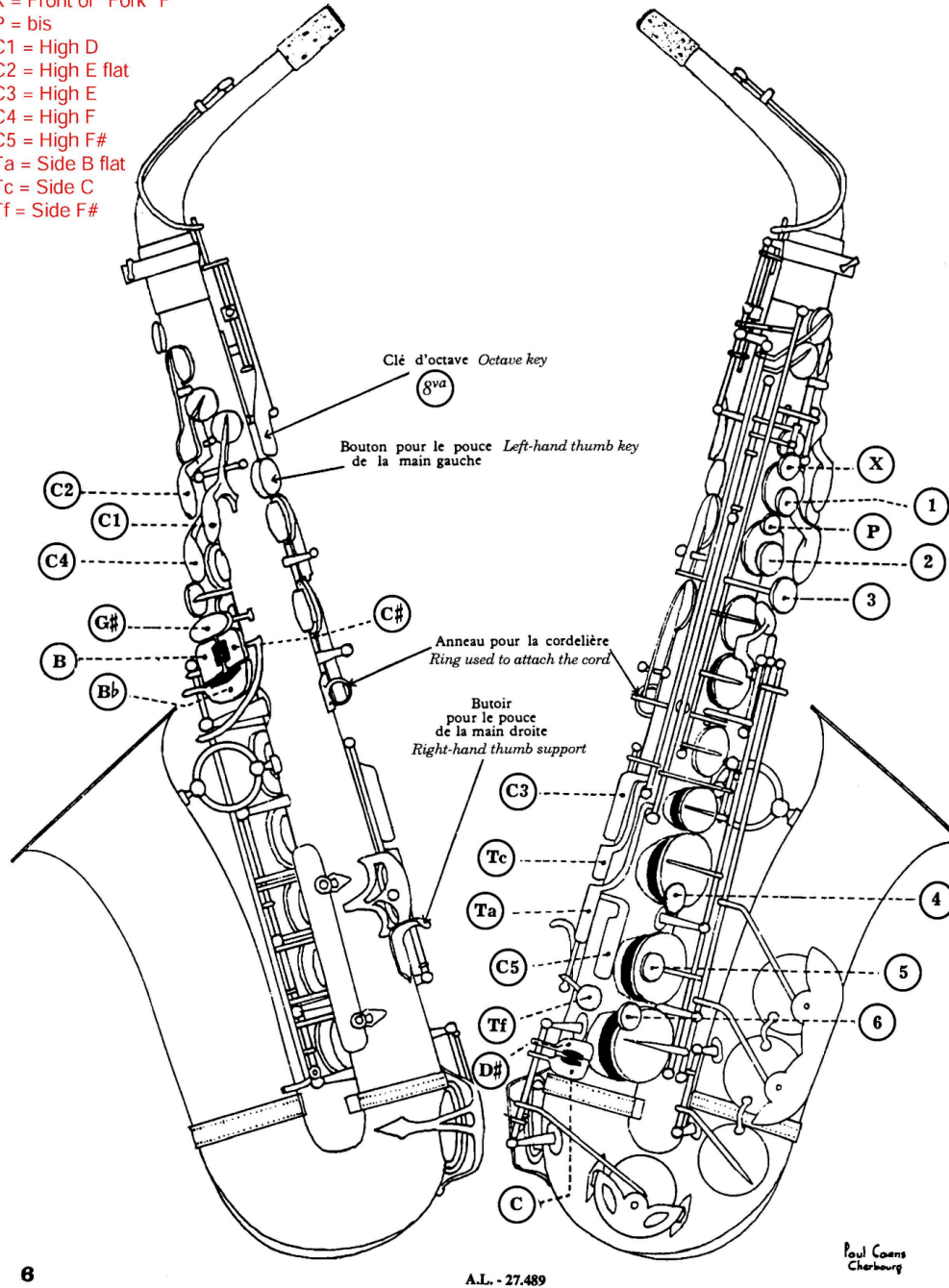
C4 = High F

C5 = High F#

Ta = Side B flat

Tc = Side C

Tf = Side F#



This image from Londeix's *Hello Mr. Sax*<sup>20</sup>, outlines the french system for naming the keys. This is the system I will use in writing my own discoveries for key clicks.

<sup>20</sup> Londeix, Jean-Marie. *Hello! Mr. Sax, or, Parameters of the Saxophone*. (Paris Alphonse Leduc & Cie 2-66, 1989), 6.

Notes low-high	Qualities	Additional notes
A#/Bb	<ul style="list-style-type: none"> <li>• Has the most resonance out of all other fingerings</li> <li>• Right hand fingers create a louder attack and more audible tone.</li> <li>• Left hand fingers can create a softer tone, but when lifted the upstroke sounds an octave higher.</li> <li>• Upstroke using right hand fingers creates a very soft interval of a 7th</li> </ul>	<ul style="list-style-type: none"> <li>• All fingers work in creating a nice sound</li> </ul>
B	<ul style="list-style-type: none"> <li>• Similar resonance to Bb</li> <li>• 4th finger creates the most audible tone</li> <li>• 5th finger can create a note sounding an octave higher if you use this finger to play the B without 4 held down, however it is very soft.</li> </ul>	
C	<ul style="list-style-type: none"> <li>• Good resonance with 4th finger</li> <li>• Left hand fingers can create a note at a softer dynamic</li> </ul>	<ul style="list-style-type: none"> <li>• Use 5, 6, and low C and it creates a soft multiphonic</li> </ul>
C#/Db	<ul style="list-style-type: none"> <li>• Less audible tone than other low fingerings.</li> <li>• All three fingers on right hand create similar attack and resonance</li> <li>• Left hand has a lot of mechanical noise</li> </ul>	
D	<ul style="list-style-type: none"> <li>• Limited tone, 4th finger creates best attack</li> <li>• 6th finger on the upstroke creates a mechanical vibrating sound which is</li> </ul>	

	<ul style="list-style-type: none"> <li>distracting</li> <li>5th finger is best for softer dynamics</li> <li>Far less resonance than lower notes, short duration to the tone</li> </ul>	
D#/Eb	<ul style="list-style-type: none"> <li>Similar tone quality to D</li> <li>5th finger creates most duration to the note</li> <li>3rd finger also creates a nice tone</li> </ul>	<ul style="list-style-type: none"> <li>Lift up 4 and use 5, 6, and D# key and you can create a nice multiphonic</li> </ul>
E	<ul style="list-style-type: none"> <li>3rd finger best for lower dynamics</li> <li>5th finger is best on the right hand, but on the upstroke, it raises the tone up a semitone</li> <li>4th finger upstroke creates a third above, albeit very soft</li> </ul>	
F	<ul style="list-style-type: none"> <li>3rd finger best</li> <li>Raising 3rd finger and striking with 4th finger creates a note a 5th above, however it is quite soft</li> </ul>	
F#/Gb	<ul style="list-style-type: none"> <li>Same characteristics as F</li> </ul>	
G	<ul style="list-style-type: none"> <li>3rd finger creates loudest and cleanest sound (minimal mechanical noise)</li> <li>1st and 2nd finger also create audible tone, but not as audible</li> <li>Using 2nd finger to strike bis Bb key</li> </ul>	<ul style="list-style-type: none"> <li>Hold C3 down and it creates a nice sounding G#</li> </ul>
G#/Ab	<ul style="list-style-type: none"> <li>3rd finger also best</li> <li>Using 3rd finger to strike the note, pressing down low C# key instead also works</li> <li>Same method as above but with low Bb key works</li> <li>If you use low Bb to strike it creates a G</li> </ul>	<ul style="list-style-type: none"> <li>Hold down C3 and you create a nice sounding A</li> </ul>

	<ul style="list-style-type: none"> <li>instead</li> <li>Both 3rd and Bb striking together creates a soft G/G# multiphonic</li> </ul>	
A	<ul style="list-style-type: none"> <li>1st works best, although almost no tone</li> <li>2nd finger is very mechanical</li> </ul>	<ul style="list-style-type: none"> <li>Hold down C3 and you create a note a 3rd above</li> </ul>
A#/Bb	<ul style="list-style-type: none"> <li>Holding down C1 is best although almost no tone</li> <li>Can hold down 1st finger and use 2nd to strike bis Bb</li> </ul>	
Palm keys	<ul style="list-style-type: none"> <li>Creates a clicking noise with no tone</li> <li>May be used for texture but not great for tonal purposes</li> </ul>	

Broader notes:

Covering and uncovering the mouthpiece results in a different pitch. This gives two pitch options for 1 fingering essentially.

Pressing C2, and C3 also results in a changing of the pitch upwards. The interval changes between each note, typically 2nd, 3rd, 5th or octave.

Upper stack click tone can be impacted by pressing the low B and Bb table notes. As this requires a higher velocity of attack, I have to use my right hand to supplement as my left hand cannot create the force needed to make the note. This limitation can be improved by using both hands on the upper stack to allow myself to create more rhythmic diversity.

I will also create a difference moving forward between “key clicks” and “key slaps”. The first being more soft and textural, and the other having a resonating tone behind it.

In my feedback, I was also encouraged to try to create some [basic grooves](#)<sup>21</sup> to build coordination with my hand. I then used this chart as reference which was helpful as often I would forget a note that could work in a situation that fit. Furthermore, I would like to analyse music that uses key clicks on saxophone or other keyed instruments in order to broaden my knowledge and to see if there are more possibilities I may have missed. Martin suggested looking at his piece [Tardigrades in Space](#)<sup>22</sup> in his album *Solos* which has a groove-like approach to key clicks, which I will use to create my next recording in this cycle.

<sup>21</sup> [05 Basic Groove](#). See Appendix 7.1.

<sup>22</sup> Martin Kay, [Tardigrades in Space](#). Published on: 2021/05/28

Taking inspiration from *Tardigrades in Space*, I started by experimenting with mixing a held low tone with my finger movements in my [second main recording](#)<sup>23</sup> for this cycle. Although I was pleased with the result, I felt as though I was missing variance and dexterity in this part. I experimented with utilising harmonics as well as during this period, I was focusing just on the right hand notes in the lower register. Because of this, I realised if I were to blow at certain times through the instrument, I could pop out certain harmonics, which alongside the key clicks added a nice mix of texture. I noticed however, that sealing and unsealing the mouthpiece resulted in a change of pitch of the key clicks, and this coordination at this stage was a bit difficult so early on, but it is useful knowledge to have moving towards the final product at the end of my research.

I was curious about the possibilities of removing the mouthpiece provided and consequently discovered that if the mouthpiece is sealed, the tone sounds like the keyed note, and without any pressure, it raises each key by a third. Intrigued by this, I experimented playing first without the mouthpiece and then without the neck. With just the neck on the saxophone, there are the same characteristics, but it is easier to close the opening to lower the tone with the tongue or lips. There is then also the possibility of using tongue ram into the opening of the neck to create a pop sound, lip buzz, and vocalisations to add to the texture. Key slaps with just the body of the saxophone all have the same resonance, but far less opportunity for variance as it is very awkward to add any vocalisations into the body of the saxophone. With the end plug in place, the tone can get muffled. I felt that the sound quality of the key slaps was the same regardless, and since there are more opportunities and variations in sound with the neck and mouthpiece on, I decided to move forward with this set up.

At this point, I began to think about how I might notate my rhythmic grooves for future exercises and maybe in my own composition. Because much of the key slap fingerings differ from normal playing, I spent some time thinking about how to possibly notate these grooves. I decided then to ask this in my next interview with my coach Ned McGowan as he has a wealth of experience in this field. The first piece of advice he gave me was to focus on the music and the artistic concept rather than thinking notation at this stage. I am at a very experimental stage in my research so I should just think about what I think sounds good and not the practical aspect. He sent a copy of his piece *Moonrise* which includes a key slap solo (small excerpt below) which I found useful in giving me an idea of how these notations might look in the future. However, like he said, this is not a notation research so I will take inspiration from this and use a similar template for writing the various saxophone fingerings in my program notes moving forward.

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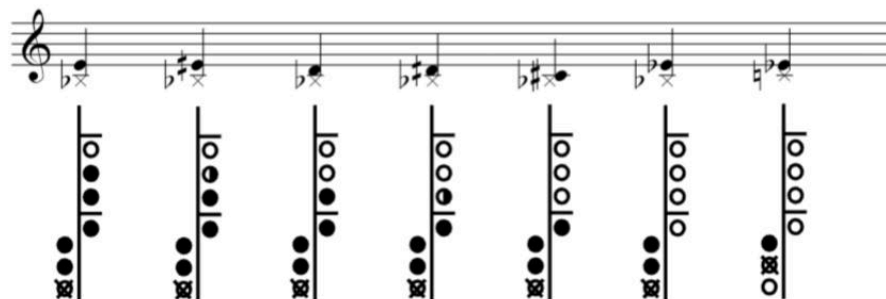
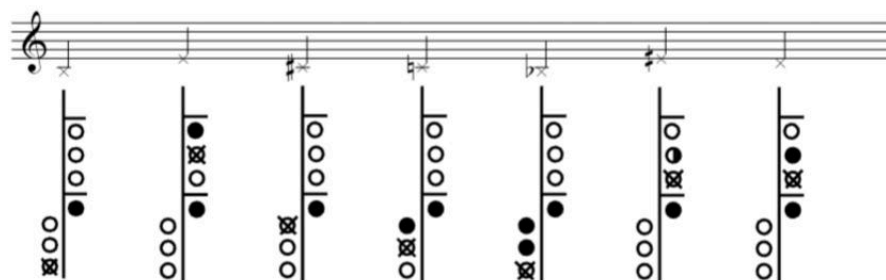
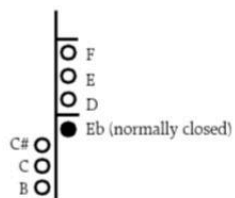
<sup>23</sup> [04 Lower register improvisation](#). See Appendix 7.1.



Key Slap Fingering Chart  
Section E

This diagram represents the bottom 2 / 3 of the flute:

- Slap key
- ⊠ Press ring of key
- Hold key closed



I then looked at the piece [BO](#)<sup>24</sup> by Barry Cockcroft, as I thought that this may help me conceptually with some ideas of grooves. In my analysis though, the key clicks are more of a textural aspect and the only similarities in what I aim to do is the separate rhythms of each hand. As you are still required to blow through the instrument, you lose a lot of the acoustic properties of the key slaps, and instead hear the changes in timbre of each note. What I found interesting however, is that although I find the rhythmic pulse interesting and fun to listen to, the rhythm is actually quite simple with duplets in the left and triplets in the right hand. I always feel as though my improvisations lack a rhythmic complexity, and although that I believe is true for certain parts, I think listeners can appreciate the varying textures in simple polyrhythms.

The image shows a musical score for a piece by Barry Cockcroft. It consists of two staves. The top staff is labeled 'Top Staff - Fingerings for left hand' and the bottom staff is labeled 'Bottom Staff - Articulations and fingerings for right hand'. The score is in 3/4 time and features a complex rhythmic pattern with many triplets and duplets. The key signature is one flat (B-flat). The score is numbered 55 in the top left corner and 3 in the top right corner. The bottom staff includes articulations like 'f' and 'ta'.

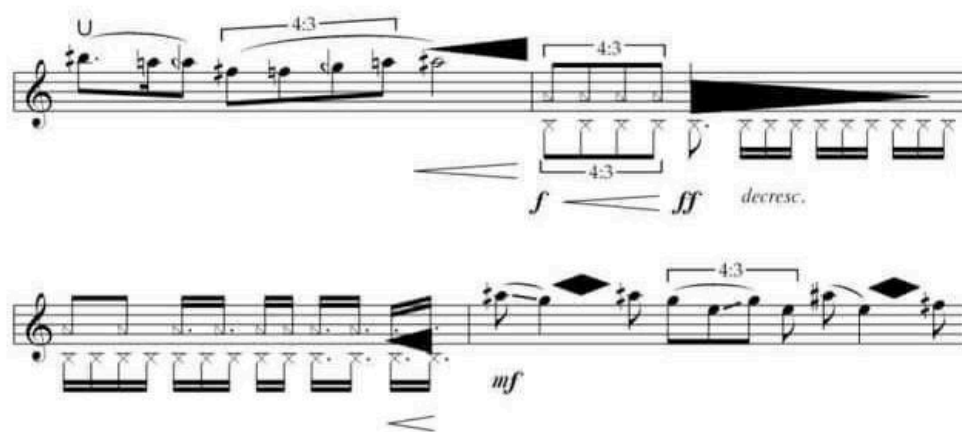
At this point, I asked for feedback from my colleague Isaac Reed, a saxophonist who I have performed with extensively in Brisbane. I also gave him some context from what I was drawing inspiration from, and if he had any ideas to help me move forward. The main point of his feedback was to look at seeing if I could implement more variance in note colour side by side. He mentioned that a lot of my movements were very scalic and if I tried to create almost two drum sounds just like *Moonrise* it would be more effective to him.<sup>25</sup>

I agree with this comment as I feel that it is difficult to break out of the routine of these scale patterns you traditionally use when playing the saxophone. I think by creating some exercises to help break up my hand movements, and to practise transitioning from abnormal fingerings I can improve in this aspect. The plan for my next recording is to try to see if I can create two separate tones with key slaps, and to play them simultaneously.

<sup>24</sup> James Nightingale, [BO](#). Published on: 2011/11/26.

<sup>25</sup> Feedback from Isaac Reed. See Appendix 7.3.2

*Moonrise* by Ned McGowan uses two prominent key slaps in one of the solos in this piece. There are two sounds that can be heard, one upper and one lower that can be played at the same time. I was eager to try to see if the same thing was possible on the saxophone.



I quickly found that this simply is not possible on the saxophone, at least to my knowledge. It could be because of the conical tube, or the fact that the upper tone holes are all sealed by default and therefore it cannot create the upper tone while also playing the lower note, but regardless, you cannot create both at the same time. This at first was a very disappointing discovery for me as I felt that the solo in *Moonrise* was really interesting for me to listen to and I wanted to try and replicate it on the saxophone. Moving forward, I had to think of the rhythms more linear, similar to the piece by Christian Lauba *Jungle*<sup>26</sup> where the running lines create varying texture. Blending this idea with more rhythmic diversity and pulse I moved forward with my improvisations, aiming to mix the two registers of the instrument together.

A piece of feedback I received from Dr. Martin Kay about my recording, was that conceptually I had good ideas but it never felt cohesive<sup>27</sup>. He encouraged me to explore further into improvisational technique and to plan out my final recording with proper structure. A useful idea in my research into improvisational technique is the model described by Horowitz (1995), of creating musical “chunks” that can be activated like a chain depending on the key, range, and position in the music.<sup>28</sup> Taking this into my own practice, I started by gathering three musical fragments that I planned to use in my improvisation. Then I assigned a specific “trigger” that would allow me to play the musical fragment. I chose these to be either depending on the improvised dynamic, or pitch. Then whenever I rose in dynamic, I then included fragment one for example, or in the low register I played fragment two.

I then developed three working ideas to stitch together into my final recording of this cycle. I found this process useful as creating new ideas on the spot caused me to get out of rhythm or for the improvisation

<sup>26</sup> Doug O'Connor, *Jungle*. Published on: 2009/02/12

<sup>27</sup> Feedback from Dr. Martin Kay. See Appendix 7.3.3.

<sup>28</sup> Horowitz, Damon Matthew. "Representing musical knowledge." PhD diss., Massachusetts Institute of Technology, 1995.

to sound a bit off kilter at times, but relying on practised hand movements allowed me to have greater control over what I was playing. Furthermore, at this stage I felt as though I was trying a bit too hard to vary the rhythms and sounds. A piece of advice I got from one of my colleagues in my quintet, Stephanie Tan, was that accents are a major part of percussive music. Creating accented lines will create a lot more contrast and it is not the differences in tone that can create interesting lines.

I wholeheartedly agree with this advice and for my final recording I will try and stick to my practised grooves, and experiment more with where to accent in the lines and keeping a consistent pattern.

### 3.1.5 Interventions / practical application

To help me ground my improvisations, I have created three small groove patterns which will act as starting points or a motif that I can use to structure my music. I have used some basic polyrhythms at this stage as I am still experimenting with finger combinations and adding complex rhythmic patterns on top of that was a bit too demanding. The patterns show a progression in difficulty, and provide space to add additional rhythmical hits and fills. All patterns are played with the low Bb fingering, with the note heads indicating the finger used for the downstroke. For example, B on the staff correlates to the first finger.

For a video explaining my choices of fingerings, sound qualities and how I interpret the notations, look [here](#).<sup>29</sup>



The first groove pattern is a simple two against three, with the note-heads indicating a downstroke of the key slap. Once I establish the pattern two or three times, I take the opportunity to explore other finger combinations on beats two and three, whilst keeping the first beat intact to keep the grouping sounding consistent.



This second pattern allows me to add a different rhythmical element to the second half of the bar, which to me helps with the energy of the pattern itself. This groove in particular was made to allow me to explore how I can add accents and vary the pitch of the quaver notes, within a relatively simple pattern. This helped me focus to not try and over play with a large variety of notes, but more on establishing the groove itself using musical elements.

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<sup>29</sup> [07 Basic grooves discussion](#). See Appendix 7.1



Much like the second pattern, this last groove is based on a simple polyrhythm that acts as a starting point for improvising fills and other accented notes. I personally liked this groove as the D/E quavers create a soft multiphonic which adds an interesting tone colour to the notes, and can be used alongside accents to create even more diversity of sound.

I found that notating these patterns was useful to think about how I might write my own music with these effects in the future. I think that it is still not as clear as I would like it to be, as I state that you are supposed to finger a low Bb for all of the patterns but I think that will be too much information for someone else reading the music. I think moving forward I will try and use something similar to guitar tab, in that the notes will be positioned on the staff but the note heads will be numbered. This is so that the positioning on the staff indicates the fingered note, and the number on the note head indicates the finger that is used to strike the key.

I personally like the sound qualities of the key slaps that I used, but I still think I can connect more varying note sounds together. These patterns all stay around a similar register of the instrument, I would like to explore adding some other higher pitched percussive key slaps to vary the timbre of the groove a little bit more. Nonetheless, I will use these grooves in my final reference recording of this cycle and will try to implement some varying attacks, dynamics and mixed registers to create some more diversity in the sound.

### 3.1.6 Outcomes

In my [final reference recording](#)<sup>30</sup> for this cycle, I aim to demonstrate the development of my understanding of key clicks used as a rhythmic device and my own improvisational technique. I took a few rhythmic motifs - each a few bars in length - that I worked on throughout the cycle which were also created as a tool to develop my fluency over the various alternate finger-movements and positions, and used these motifs to ground my improvisation.

### 3.1.7 Feedback, reflection and conclusion

I had a discussion with Isaac Reed about my final result of this cycle. He thought that it felt like I had created my own artistic product and that the sounds I was creating were interesting and diverse. He did say that at points it felt a little bit “lost” and that the rhythmic integrity was not there whenever I was transitioning between sections or just due to a slip up in fingers.<sup>31</sup>

<sup>30</sup> [06 Third reference recording\\_03](#) - Solo improvisation by Sean Thompson. See Appendix 7.1

<sup>31</sup> Feedback from Isaac Reed. See Appendix 7.3.3.

I agree with this as I felt that at points the tempo was not steady, and that the pacing in developing ideas and transitioning between patterns sometimes was a bit clunky. I also felt that I chose some keyed sounds that were a bit messy in sound quality. I think playing fast notes with the right hand is more textural and not great for creating crisp fast rhythmical ideas.

I feel that I still have a bit of development in my skills to go before I am satisfied with my work. I still think I am only scratching the surface of what is possible just with key clicks and slaps. I want to create more short studies, but with a greater exploration into mixing varying finger combinations and not sticking with scalar movements which I am doing the majority of the time. I think by slowing down and planning my grooves very carefully and developing my skill that way, I will be able to develop a much better control over this technique. That being said, I believe that mixing in additional extended techniques like slap tongue and multiphonics, will give me more tools to add this sort of variance moving forward.

In conclusion, I am pleased with the development I have made with percussive key effects on the saxophone. It has been an interesting experience as I have not encountered much, or any music/ research that dives deep into this technique. Much of this cycle I have spent just seeing what is possible on the saxophone as it is very difficult to consult literature sources for contextualisation. As this technique includes a lot of skills I believe I am still a beginner in - mainly dexterity in non-traditional fingerings - I look forward to developing these skills alongside my improvisational ideas and creating more solid rhythmic patterns and grooves in the next cycle.

## 3.2 Second research cycle

### 3.2.1 Overview of second research cycle

In continuation with my development of finger dexterity and improvisational technique, my focus for this next cycle is to develop more complex rhythmic movements with key slaps, clicks in my improvisation. Also learning from my exploration with tabla music in my previous cycle, I will transcribe a solo by the kotsuzumi - a Japanese hand drum - using key slaps to emulate the source material to as high a degree as possible. The process of transcription will further grow my knowledge of useful fingerings, tendencies with resonance and sound regarding these fingerings, and also my understanding of form and how I can work through the limitations of using the saxophone to create these percussive sounds. I will also take motifs from percussive solos and write studies with the aim to incrementally improve my skill over this technique. I feel that in my improvisations, I would get stuck on the same repeated motif, and it was difficult to organically switch between ideas. These studies will help maximise the potential of the discoveries I have made melodically and rhythmically, particularly as I find it difficult to recall all the different fingering combinations for notes at this early stage of development.

In addition to this, I will investigate existing improvisations which focus on key clicks and slaps. I will analyse the way motifs, structure, dynamics and texture all interplay to create interesting improvisations of this technique. Using the transcriptions, studies and improvisational analysis as a foundation, I will then record my own improvisation based upon my own written material as the next step towards forming a piece for solo saxophone.

### 3.2.2 Reference recording

Moving into this second cycle, I will use the [first cycle final recording](#)<sup>32</sup> as a starting point. As the trajectory for this research project is linear with each cycle leading to the next, using this recording as a foundation will allow me to critically analyse the progress made, identify areas for refinement, and build upon existing ideas to deepen the inquiry in each following cycle. By engaging with this recording, I can ensure continuity, integrate feedback, and evolve the project's direction in alignment with the overarching research goals.

### 3.2.3 Feedback and reflection

The main points I would like to address this cycle are tempo inconsistencies, increasing variations of key slap sounds and improving the structure of my solos. Building on my goals of addressing tempo inconsistencies, increasing variations of key slap sounds, and improving the structure of my solos, I will integrate the ideas of rhythmic complexity, transcription, and focused studies to make meaningful progress. By developing more intricate rhythmic movements with key slaps and clicks, I aim to create a

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<sup>32</sup> [06 Third Reference Recording\\_03](#). See Appendix 7.1.

more dynamic and textured approach to improvisation, which will directly address the need for greater variation in key slap sounds.

Transcribing a solo by the kotsuzumi will not only deepen my understanding of fingerings and resonance but will also provide a framework for developing innovative rhythmic motifs. These insights will help me refine my solo structures by introducing new, contextually appropriate elements inspired by traditional percussion. Writing targeted studies based on percussive motifs will also assist me in overcoming the repetition of ideas during improvisation, enabling smoother transitions and more organic development of themes.

Furthermore, analysing existing improvisations that emphasise key clicks and slaps will provide valuable models for integrating dynamics, structure, and texture into my own work. This analytical process, combined with my studies and transcriptions, will culminate in a recorded improvisation that reflects my progress while serving as a stepping stone toward composing a cohesive solo saxophone piece.

For feedback on my development this cycle, I will seek guidance from my fellow peers at Codarts: Martina Madini, Jemma Bartlett, and other saxophonists I have discussed my project with such as Isaac Reed. I will acquire feedback from experts in this field including Ned McGowan, Dr Martin Kay and Femke IJlstra, all of whom have contributed to my development with my improvisations and use of key clicks/slaps.

### 3.2.4 Cycle 2 data collection & data analysis: my findings

Finding inspiration for my studies and own improvisations was the first focus point of this cycle. I still felt as though my technique was lacking and that I needed to first identify what I felt were the key aspects of performing improvised material, as well as the different ways other musicians utilise key clicks in their music.

I found that the [solo improvisation](#)<sup>33</sup> by Ned McGowan would be the best place to start. I have chosen this recording because it is one of the very few solo improvisations where key clicks play a large focus throughout. The development of themes, and use of this extended technique aligns with my own creative process greatly and by deeply analysing this improvisation I will be able to gain a much deeper understanding on key clicks used in improvisation.

This process was a localised analysis of McGowan's improvisation as I only investigated his artistic choices within the context of this one performance, not using additional contextualisation through interview or with cross-analysis of his other improvisations. My analysis consists of grouping phrases, patterns and motifs into timed segments, where I will note what is happening in that particular part of the recording. Then I will write my own thoughts based upon what I hear, linking back to these core musical devices.

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<sup>33</sup> Ned McGowan, [Contrabass Flute Improvisation \(Roode Bioscoop 2018\)](#). Published on: 2018/08/23

Time	What is happening	Reflection
0:00 - 0:36	Interspersed key slaps around the notes G, A, B and C.	I find this a nice opening to the piece. There is atmosphere and intrigue about what comes next. Simple material keeps it straightforward to follow.
0:36 - 1:15	Development of sound using a microphone placed inside the flute to create overtone decay after each key slap.	New sound technique develops the improvisation nicely. The duration of the note lasts a lot longer and gives the piece more texture.
1:15 - 1:50	More complex rhythmic ideas start to become established, with breaks between the phrases. In between these more complex lines, McGowan goes back and references the opening material.	Using the melodic ideas established in the opening with more varying/complex rhythmic ideas creates structure and more cohesion in the music. This gives the impression that there is a story or a purpose to the music, and that it is going somewhere.
1:50 - 2:30	Exploration of the note G key slap. He plays varying rhythms and accents just on this note.	New section allows the audience's held for longer. The priority goes from melodic to more rhythmical and allows for a nice groove to be established.
2:30 - 3:29	Interrupts the phrase with a new note. Then adds descending lines so he is able to use both hands, but also using similar rhythmic passages as the opening.	Nice way to open up the possibilities of using both hands. More range and texture is now possible. References to the previous sections keeps everything within the same realm which is pleasing to hear.
3:29 - 3:55	Use of a new tonality, using less resonant keys but using the harmonic decay as a way to add texture.	This is my favourite section as he blends the use of technology with his key slaps to create more of a polyphonic texture. The audience can hear the rhythmical percussive sounds and the tonality of the overtone decay. This enforces the rhythmic meter to a greater effect.
3:55 - 4:00	Key clicks are used to create more a 'wash' of sound rather than rhythmical drive.	The change in use of key clicks to vary the sound gives the piece a wide variance of texture. This allows for perceived increase in energy

		and momentum toward the climax.
4:00 - 4:25	Repeat of opening but with less resonant key slaps.	Alternate version of the opening section gives the music a nice callback without repeating the same things too much.
4:25 - 5:00	Loudest section of the piece. Very loud key slaps, very rhythmical, leading towards the climax.	I really feel a nice drive and direction to the piece with the increase in dynamic levels.
5:00 - 5:22	Rhythmic ostinato on F.	
5:22 - 5:45	Introduction of flute playing taking over from the key slaps to play the rhythmic ostinato.	Nice change in colour and focus shifts towards longer phrases and more musical lines.
5:45 - 5:58	Exploration of air sounds	
5:58 - 9:50	More of a melodic approach to the music. Very atmospheric lines in between rhythmical phrases all around the same key center.	
9:50 - 10:15	McGowan plays a high note melody but uses the tonality and sound of the lower register to transition back into the use of key slaps.	This is a nice way to maintain the use of key clicks and various motifs that were previously used but also maintaining the flow of the music. The contrast between registers of the instruments tricks the ear into thinking there are two instruments. I like this effect of maintaining the section's purpose while still referencing the previous improvised material.

#### Reflections on the improvisation:

McGowan's approach to improvisation is a great example of how creating a clear form and repeating motifs can make a piece feel more connected and intentional. It's like, by keeping some kind of structure, the music holds together better, even when it's all spontaneous. He also uses some interesting techniques, like changing the way key clicks are used to create a wash of sound. Contrast like this keeps the audience entertained, and never makes the music feel stagnant. I like the feeling of forward motion that the piece has to me in the middle section.

Silence is another big part of his style—leaving space can really shift the atmosphere and give everything more weight. I also assume it gives him more time to rest, think of what to play next and really control the performance rather than let the notes control him. I also noticed how he anchors the switch between pitched and unpitched sounds with a rhythmic fragment. It makes those transitions smoother and keeps things grounded, even when the sounds themselves are totally different.

The experiments with microphones and speakers is also very interesting and effectively brings out a lot more expressive qualities with key clicks as for example the overtone decay allows McGowan to play around with note duration which he would not be able to do with just an acoustic performance.. It opens up a lot of sound possibilities and adds depth you wouldn't get otherwise.

How can I implement these findings in my own practice?

1. Start with form and motifs: I need to think about setting a loose “form” or outline for the improvisation sessions. I do not need to plan everything, but maybe define a few guiding motifs or rhythms to return to throughout. Having these anchor points would give me something to fall back on if I feel stuck and also creates a sense of cohesion, so that the improvisation feels like a unified piece rather than just a series of random ideas.
2. Incorporate key clicks and percussive elements: I should try experimenting with key clicks and other percussive sounds, especially if I am aiming for contrast. These sounds add texture and can give the improvisation a more organic or timeless feel. Maybe start a phrase with traditional notes and then break it up with some clicks or percussive breaths. This can make the improvisation feel like it's building layers instead of just moving from note to note.
3. Use silence to shape the mood: Don't be afraid of leaving space - silence can be a powerful tool to shift the vibe and create moments of tension. I could try adding some pauses at unexpected times, or stretch out a moment before resolving a phrase. Silence also lets the other sounds breathe, and could allow for the listeners to focus on the different textures that I'm exploring.
4. Explore pitched and unpitched transitions: Practicing smooth transitions between pitched and unpitched sounds can open up a whole new layer to the improvisations. Maybe using a specific rhythm to act as a “bridge” between the two types of sounds. That way, even when I would be switching from notes to clicks or airy sounds, there's a rhythm tying everything together.

Beginning my own improvisations:

Using some motifs taken from McGowan's performance, I will create a series of very short improvisations. These are just a way to get my fingers moving over the instrument and to find out what I like in preparation for my final cycle. I have cut up some short motifs as an example of what I have created, they can be found below. This material has been used in my final improvisation of this cycle. Refer to my final reference recording of this cycle if you are interested in seeing the end product of these short improvisations.

[Example 1](#) - Recorded 02/11/2024

[Example 2](#) - Recorded 27/09/2024

[Example 3](#) - Recorded 10/09/2024

Reflections on improvisations:

Starting an improvisation without any clear idea is something that I realised what I was doing. This led to me often repeating the same phrase or sticking to one area of the sax because it feels "safe". But when I push myself to try new techniques, I can break out of that loop and find more interesting directions.

One trick that's been working: using the third finger with the low Bb key, plus venting TC and TA. Somehow, this combination gives the sound a different texture, kind of gritty but controlled. It's cool because I can mix pitched notes with these more percussive or airy sounds, which makes the improvisation less predictable and keeps things moving. Instead of getting stuck in one idea, blending these sounds helps me connect different sections smoothly and adds contrast which gives each phrase its own colour. Playing around with these variations makes it feel less like I'm "stuck" and more like I'm building something unique in real-time.

Sound quality is also difficult to get right. Experimenting with the instrument set up I have found that using the saxophone without the neck is the best way of enhancing the sound output. However if I aim to perform with sound, I will need to perform with the fully assembled instrument.

Kotsuzumi solo

At this point, I felt comfortable with formulating an idea, improvising a short passage of music and reflecting on them. To develop this skill even further, I felt that I now needed to approach from the angle of building hand dexterity and understanding of linking different hand patterns together. This is because I felt as though I needed to break away from repeating the same finger movements and using relatively similar fingerings. The best way to do this was to transcribe a piece of music for percussion and assign key slaps to the various pitches I felt best emulated the sound.

I chose the Japanese hand drum, the kotsuzumi, as I felt the range was similar to the saxophone I was using, and the way it was played could transfer well. The reason my experiment with tabla music did not go as planned was the fact that the sound qualities were so different and the method of playing complex rhythms with two hands would be far too difficult to translate across instruments. With the kotsuzumi however, there is one hand that plays a rhythm and another that controls the pitched notes. I then chose

this [duet](#)<sup>34</sup> to use as reference and to transcribe for this cycle.

The image displays a musical score for a flute solo, spanning measures 1 to 41. The notation is in treble clef with a key signature of one sharp (F#). The score includes various dynamic markings: *f* (forte), *mf* (mezzo-forte), *p* (piano), and *mp* (mezzo-piano). There are also crescendo and decrescendo hairpins. The piece features several rapid sixteenth-note passages, particularly in measures 1-4, 21-24, and 41. A trill is marked in measure 15. The score concludes with a final *mf* marking in measure 41.

In practice I was able to create this [recording](#)<sup>35</sup> of this solo, blending both key slaps and regular pitches playing together to capture some of the melodic lines performed by the flute. To create the downward fall in pitch I held down C1 and C3, struck a low Bb fingering and lifted these side fingerings which resulted in a similar sound. I found that this however was difficult to hear on the recording which was a shame but live and amplified it comes across clearer.

<sup>34</sup> Embajada del Japón en España. [Interpretación Kotsuzumi y flautas en "Takamura no Shizuku" - Verano Cultural Japonés](#). Published on 2020/08/22

<sup>35</sup> [10 Kotsuzumi solo](#). See Appendix 7.1.

I was pleased with some aspects of this transcription. I felt that after practising and translating the various sounds of the drum to the saxophone, that my technical ability improved. I felt a lot more confident transitioning between regular hand placements, and using both hands on one particular section of the instrument. Also creating different ways to change the pitch by a tone or semitone without lifting certain fingers was a great way of further familiarising myself with key slaps.

Thinking critically of this performance, I feel as though I am not happy with the clarity of notes while just performing with key slaps. Although isolating this technique is a great way of increasing skill level, while playing this transcription I feel as though I wanted more varying material. Femke in her feedback also mentioned that because the difference in sound volume between the drum and the key slaps is so great, it does not have the same weight if it is just only the acoustic slaps. Just like in Ned McGowan's improvisation, I feel as though I needed more contrast in sound quality which I just cannot achieve just performing key slaps.

Moving forward, I then utilised this development of my technique together with additional techniques to create the variation in sound I was looking for. This led me to create this example of an [improvisation](#)<sup>36</sup> that I feel as though utilises many more strengths of the saxophone in general.

### 3.2.5 Interventions / practical application

In conjunction with my improvisations, I would like to develop some of the ideas I found in the kotsuzumi solo in small etudes to keep pushing my technical abilities further. Using small fragments from my transcription I have expanded on rhythmical motifs into short 18 bar passages utilising a range of different fingerings across the instrument. As these notes aren't played using traditional methods, I have had to annotate the score to show how I play this etude. The note head displayed shows the sounding tone on the saxophone, while the number correlates to the finger that is striking the key.

This [etude](#)<sup>37</sup> is inspired by bars 22-34 of the kotsuzumi solo. It uses two fundamental notes as its focus, the high F and Bb. There is also the use of a tone up tone down pattern in bar 8 that occurs in bar 3-4 of the kotsuzumi solo.

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<sup>36</sup> [08 Cycle 2 Improvisation](#). See Appendix 7.1.

<sup>37</sup> [09 Cycle 2 Study](#). See Appendix 7.1.

Handwritten annotations in red ink:

- Bar 1: *Bb off*
- Bar 2: *4*
- Bar 3: *4 + Bb*
- Bar 4: *4*
- Bar 5: *4*
- Bar 6: *4 + C#*
- Bar 7: *4 - C#*
- Bar 8: *4*
- Bar 9: *4*
- Bar 10: *1*
- Bar 11: *4 + Bb*

This etude is a combination of the beginning of the kotsuzumi solo and bars 38-40. I really liked the single note textural effect that happens at the beginning as a way to create atmosphere.

Handwritten annotations in red ink:

- Bar 1: *4*
- Bar 2: *C#*
- Bar 3: *4 on 3 key*
- Bar 4: *4*
- Bar 5: *4*
- Bar 6: *5*
- Bar 7: *6*
- Bar 8: *7*
- Bar 9: *4*
- Bar 10: *4 5 6 4 5 4 4 4*

I found that these etudes were a nice introduction to writing my own material with key clicks. I think what will be an issue moving forward is that I hope to use additional sounds using regular notes, slap tongue and multiphonics. With the addition of these techniques I have to pay attention to how I notate as clearly as possible. I would like to use these additional effects as after recording myself performing these etudes, I felt as though I could not achieve much more variation in dynamics. The contrast in sound is

really important for me in creating atmosphere, and even with the use of amplification, I think using just key clicks would not be effective in a longer piece of music.

I will then use these fingerings in writing another etude that incorporates a bit more ideas than just key clicks. Blending more sound and slap tongue to accentuate the key clicks I am using. This is what I have created:



I have used the same opening as the kotsuzumi solo as I like this as an establishment of a piece. Then I use slap tongue intermittently with the keys to create a bit more accented notes, which achieves the variation in dynamics I was hoping for after my first two etudes. I also have recorded a rhythmic groove using these techniques, in my next cycle I will like to transcribe this pattern and include it as a motif in my final piece.

### 3.2.6 Outcomes

The culmination of my research this cycle has led to the recording of etudes that I have written, a transcription of a percussion solo and my own improvisation. These three link together the growth of my practical understanding and technical development throughout this cycle with the theoretical development gained through the analysis of Ned McGowan's improvisation solo.

[Etude recording](#) - Recorded 15/11/2024

[Kotsuzumi Solo](#) - Recorded 15/11/2024

[Cycle 2 Reference Recording](#) - Recorded 05/12/2024

### 3.2.7 Feedback, reflection and conclusion

I consulted Isaac Reed as he has worked with me in the past working on some pieces with extended techniques, he knows my research well and provides valuable insight into my playing. He commented on

the lack of discernible sounds in the kotsuzumi solo in agreement with my conclusion that having just a piece with key clicks would be more limiting than explorative. He liked the progress that my reference recording showed and felt that the linkages between watch 'section' were more fluid and organic. Something to note is the excess articulation noises and reed sounds.<sup>38</sup> I agree with this, as hearing back from my recording, towards the end a lot of water noise was present. I might then try to use plastic reeds as this airy stuffy sound is much less apparent on synthetic reeds.

Martina Madini, one of my peers in the saxophone class at Codarts really liked the sounds I was creating and the direction of my improvisations. She noted however that maybe some moments of surprise or spontaneity would create more contrasts and not feel like the piece is just moving from groove to groove.<sup>39</sup> I really like this idea and will try in the next cycle to add more space, silence and 'circuit breakers' to the music.

Femke IJlstra, my main subject teacher, particularly appreciated the rhythmic variety in my work, describing it as engaging and enjoyable to listen to. However, she suggested that I could experiment with different approaches to key clicks, moving beyond purely rhythmic interpretations. For example, she encourages me to think of key clicks in a more conceptual way—like raindrops or a cloud—to introduce a lyrical flow. This could lead to the development of contrasting sections, such as a "B" section, to enhance my work. Overall, she feels that I am on track and that the innovative ideas and techniques I'm exploring could benefit both saxophonists and composers.<sup>40</sup>

Overall I am quite pleased with the end result of this cycle. It is much more in line with the music that I hear in my head, unlike the previous cycle which felt a bit flat to me. I am satisfied with the incorporations of the other extended techniques in my improvisations which create nice contrast throughout. I still think I can incorporate more lyrical ideas in my improvisations as an added layer, not just thinking rhythmically to build grooves but using the rhythms as texture as well to help create more varying moments.

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<sup>38</sup> Feedback from Isaac Reed. See Appendix 7.3.4.

<sup>39</sup> Feedback from Martina Madini. See Appendix 7.3.4.

<sup>40</sup> Feedback from Femke IJlstra. See Appendix 7.3.5.

## 3.3 Third research cycle

### 3.3.1 Overview of third research cycle

In this final cycle for my research, my outcome is to have a completed original composition which will be formulated from my previous work with improvisations and self-made studies. Essentially, the final work will be an expanded semi-improvised performance that utilises the sounds and techniques that I have developed throughout this research process. I will use an auto ethnographic approach, documenting each step of the compositional process with self reflecting practice journaling, in combination with expert feedback and interviews with composers and improvisers. Based upon the second cycle studies, I will use similar notating techniques, and will try to also balance this notation with sections that will allow some improvisational aspects to still take some precedence in the final product.

### 3.3.2 Reference recording

[12 Cycle 2 Reference Recording 04](#) - Solo improvisation by Sean Thompson

I will use this recording as the base material to begin implementing the various key click techniques that I have developed during this research into a finalised composition. In conjunction with this, I will also take inspiration from [10 Kotsuzumi Solo](#)<sup>41</sup>, and [08 Improvisation](#)<sup>42</sup>, using the different textural aspects of the technique to create a diverse display of key clicks in the final composition.

### 3.3.3 Feedback and reflection

The feedback from the previous cycle in regards to the reference recording was positive, and gave me a lot to think about in terms of changing texture and rhythmic ideas. Femke IJlstra, my main subject teacher, enjoyed the rhythmic diversity and the engaging groove, but encouraged me to think more about other methods of creating texture. I agree with this, I feel as though the groove pattern, while interesting to listen to, could potentially stagnate, and I need to think of other ways to create diverse sounds.<sup>43</sup>

A fellow peer in the saxophone class Martina Madini, thought that creating more space in the music, and finding contrast in the spaces would be a nice idea to try.<sup>44</sup> I think this is a great idea to create more atmosphere and musicality to the music. Maybe by using the groove pattern as an opening to the piece or the section would be a good way of establishing the music, while textural key clicks and finding space through dynamic changes and variations in sound will add musicality to the performance.

To consistently ground my compositional process, I will use a practice journal, which will document the compositional choices and the reasoning behind these choices throughout this cycle. Creating this cyclical approach will consistently allow me to reflect, reassess and then fine tune each aspect of the final piece. As creating this piece is based upon my own personal preferences for how I want the music

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<sup>41</sup> [10 Kotsuzumi solo](#). See Appendix 7.1.

<sup>42</sup> [08 Improvisation](#). See Appendix 7.1.

<sup>43</sup> Feedback from Femke IJlstra. See Appendix 7.3.5.

<sup>44</sup> Feedback from Martina Madini. See Appendix 7.3.4.

to sound, constantly asking for feedback is useful, but to me does not need to have as much importance as previous cycles. At this point, I have found what sounds myself and other musicians think sound nice, I am now just organising these sounds in my own way. My next steps are to think about the form and structure of the music, connecting sections, and finding various ways to implement the key clicks to create rhythmic drive.

### 3.3.4 Cycle 3 data collection & data analysis: my findings

In this last cycle, I interviewed improvisers, composers and saxophone players to help gain a clearer understanding of how to transition from improvising to writing my own composition. I kept a practice journal throughout this process to establish consistent objectives and to note how and why I made each compositional choice. I sought advice from my main subject teacher Femke IJlstra, alongside my peers: Martina Madini, Jem Bartlett and Socrates Kaplanoglou, on advice regarding clarity of key clicks and slaps, and on the effectiveness of my compositional ideas.

I conducted an interview with Dr. Josué Amador, who lectures improvisation at Codarts, and is an experienced composer to see how best I could organise my own compositional process based upon improvisation. In the interview, he mentioned that this could manifest itself in a multitude of ways. Identifying a set piece duration, melodic ideas or sections could be methods to begin with. I also asked for advice regarding notation and how detailed to write the score. He said that he finds it difficult to use notation sometimes based off of improvised performances as sometimes it can “get lost in translation”, and doesn’t capture the exact sounds that you want live when on paper.<sup>45</sup> He offered some suggestions regarding alternate ways to notate music to give the performer more space. One of which was Anthony Braxton’s, *Synaesthetic Ideal Notations For Improvisers*.<sup>46</sup> Looking at this article, there is an entirely different way to produce music utilising graphic notation. In the confines of this research however, because I do want to create a piece that is very rhythmical, I need the functionality of western notation to help create clear rhythms that would be understood if other performers were to read my score. I would, however, like to implement his idea of creating freedom in some ways in his music. I do like the idea Amador mentioned to start a motif and to allow my creativity to expand on a basic phrase. In my piece, it would be nice to give myself space in order to allow for this creativity in performance rather than trying to notate everything down.

Furthermore, when I asked Amador about his starting point is whenever he composes music. He said that he thinks purely harmonically first before adding other details to his music. Given that a lot of my research revolves around the rhythmical aspect of key clicks, I did not think about thinking of harmonic ideas before anything else. This caused me to think of ways to incorporate more tonality within the music itself and then adding my rhythmic ideas on top. Additionally, I decided that in terms of structure, I would think of writing the piece in three parts. This is to create defined sections without the piece being too verbose, and allows enough space for different aspects of key clicks to hopefully come to the fore within each. I also felt as though the information regarding notation was very interesting but in the case of my piece, is difficult to fully implement, as there are important rhythmical patterns that I need to write and

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<sup>45</sup> Interview with Dr. Josué Amador. 17/02/2025.

<sup>46</sup> Lock, Graham, “[“What I Call a Sound”: Anthony Braxton’s Synaesthetic Ideal and Notations for Improvisers](#)” Vol.4 No. 1.. *Critical Studies in Improvisation*. Last updated October 10, 2021.

cannot do with graphic notation. However, I will follow Amador's suggestions to think harmonically first before continuing on.

#### First Section:

Using the table I created in cycle one, which cataloged the sound quality of key clicks between notes, I thought that using Bb would be the best, as it is the key of my second cycle reference recording, therefore it would be easy to take what I did in that recording and insert it into this piece. Furthermore, this note, when struck using finger four or five, produces the most resonant key slap.

Thinking more harmonically however, if I was to use D or Eb in addition to the low Bb, these would limit the options I have for key click rhythms using both pinky fingers of each hand. This is because if I play the note D, using finger seven would result in the pitch going down to C. Playing the note Eb is not effective as well, as this is a close-open tone hole rather than an open-close. Then if I was to use F to G, I could not use any of the left hand table to create key clicks as on the G it would raise the pitch by a semitone.

This basically leaves me with E and F as the two best notes to work from, as then I can use both pinky fingers to create rhythmical key slaps, with only a very minor change in pitch as a result. These notes also work well with the note B, which according to my chart also has a very good key slap resonance. Playing E or F, while using my fifth finger keys to create key clicks allows for two textures and types of sounds which I think is quite nice and gives me a simple motif that I can start my piece with.

As shown in the image below, the E is the note being played, while the notes below are the keys that are struck using the left and right hand fifth fingers. In practice, interestingly this does not sound as it is written. For example, the eighth note rest on beat two of the first bar is an audible note. This is because the fifth finger needs to lift up from the key in order to strike on beat three.

[16 First section improvisation](#)<sup>47</sup> - Solo improvisation which I used to base the opening theme.



Overall I like how this section starts the piece, as it establishes a nice opening that creates a sense of calm with a bit of tension under the surface. I based this section on simple techniques, which I derived from my first cycle discoveries, which results in an opening that has multiple layers and a rhythmic groove.

Very quickly into writing this piece, I am realising that composing first on paper is far more difficult, as the intended sounds and rhythms of the key clicks vary so much depending on factors such as the tonality of the key slap and the various upstroke and downstrokes playing a part in the overall sounding rhythms.

<sup>47</sup> [16 First section improvisation](#). See Appendix 7.1.

Therefore, I will go from writing ideas down first, to experimenting on my saxophone before writing down what I like best onto paper.

In order to progress this section and make it not stagnate, I need to develop ways that I can keep adding or varying the techniques that I am employing in this section. In this early recording, I found that using C1 while playing both E and F, caused the pitch to go to a C. Add slap tongue to it and it creates a little pop of texture that contrasts with the click of the keys. Furthermore, using the low Bb key on E and F, not only creates a better click sound, but also results in a nice multiphonic. This gives me two additional sound possibilities to implement. Putting in these additional textural features keeps the piece flowing and moving forwards.

[17 First section development](#) - Improvisation implementing multiphonics and slap tongue.

The image displays a musical score for saxophone, spanning measures 9 to 24. The notation is written on a single staff in treble clef, with a key signature of one flat (Bb) and a 4/4 time signature. The score is divided into four systems of five measures each. Measure numbers 9, 13, 17, and 21 are indicated at the start of their respective systems. The music features a complex, rhythmic pattern of eighth and sixteenth notes, often beamed together. Dynamic markings include *mp* (mezzo-piano) at measure 9 and *mf* (mezzo-forte) at measure 21. There are several slurs over the notes, and some measures contain triplets (indicated by a '3') and quintuplets (indicated by a '5'). Above the staff, there are markings for 'C1' and '+' signs. The piece concludes with a double bar line and a repeat sign at the end of measure 24.

Connecting this section to the next was difficult to problem solve, as there is no break in sound throughout. This makes it difficult for it to resolve without it sounding like it is the end of a movement or the piece itself. I tried first by playing bars 17-24 louder and then slowly decreasing in volume, and then stopping on a slap tongue note.

To get some understanding on how this sounds for the audience, I performed the entire first section for the saxophone class in a group lesson at Codarts. The feedback I got was that it felt abrupt in comparison to what had happened before. Femke IJlstra, told me to try the opposite, to try to hold the note and fade the key clicks out. I felt this was a nice idea as then this section would end how it started.

With this ending, I feel as though it rounds out the section effectively, creating a full circle but ending how it starts. It sounds organic to the music and not as abrupt as it did before which I am happy with. Moving forwards however, Femke mentioned that I need to bring out the groupings of five more as it sounds a bit clunky. Using the C key and hitting the first note would emphasise the beat and give more clarity.

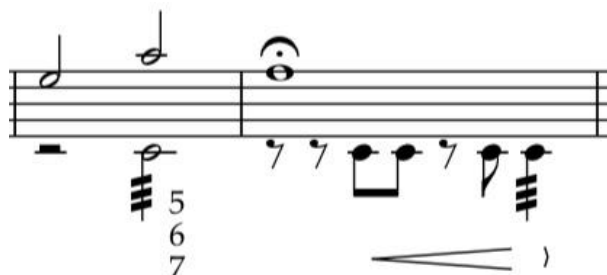
Second section:

I know that I have the Bb groove I created as the reference recording of the second cycle that I would like to include somewhere in this piece. At first I thought the second section would consist of this groove pattern, but from feedback from Femke and one of my saxophone classmates Jem Bartlett, I think the first section leading to a passage with some textural key clicks would be a nice idea. We agreed that the middle should be more reserved, and have a good arrival point as a means to lead into the third section. This gives the piece a logical “story and flow” - a rise and then fall.

I would also like to include some melodic lines and phrasing, similar to McGowan's piece *Moonrise*, which would pair well with some textural key clicks. I should focus less on rhythm and more on the

atmosphere I can create by using key clicks to bring out “rain sounds” as Femke mentioned in her feedback to me for the last reference recording.

Based on the notes B, E, F, A, and C, I started doing small improvisations using some of the rhythms from the previous sections. Implementing more textural key clicks with high A, using fingers five, six and seven created a nice textural effect alongside a microtonal trill.



I found that to create the best sound with the low C clicks, I needed to use my thumb of the right hand to hold the F (finger 4 position) while using 4 and 5 to hit the arm of the C key. This gave a much louder key slap. Femke in her feedback in my lesson told me specifically that this phrase was marked with a crescendo, and therefore needed to connect with the subsequent bar. Because the next bar had a D, E, D in quick succession, it was difficult to find a way to go from the thumb holding the F, to the traditional D fingering. I found that using C2, and 2 to play the D, then using the thumb to hit C3 to go to E, was a much easier way of connecting the two bars together. I recorded an example [here](#)<sup>48</sup>.



I decided to include a bit of the kotsuzumi solo from the previous cycle. Using the motif where the drummer slowly increased the speed of the hits and slowed down again. I tried to implement some other more active parts from the solo, but I felt because this section was so melodic, the key slaps were a bit too soft compared to how I wanted the melody to sound.



I played this section in a lesson with Femke and she advised me that the phrasing felt too stop and start, and it needed some longer phrases to make the Kotsuzumi references more impactful. Based on the harmonic notes, and the key click textural theme of this section, I added some more melodic material. To

<sup>48</sup> [18 Alternate fingerings](#). See Appendix 7.1.

create this, I used some advice from Francesca Fatini, an improviser and saxophonist, who shared with me the idea of analysing my own tendencies in improvisation in order to write material. I noticed that I tend to start phrases in the low register, move upwards in pitch and then go back down again. Given that the first section featured a lot of this cyclical movement, ending where I started, I think it would be nice to implement this in the melodic material.

#### [19 Second section experimentation with textural key clicks](#)<sup>49</sup> - Solo improvisation by Sean Thompson

A common struggle throughout my compositional process was finding the best ways to connect sections together. In my interview with Francesca, she also suggested crossfading between musical ideas or motifs to get from one point to the next. I like this as it gives me the opportunity to freely expand on the thematic material while also incorporating bits of the next section slowly into the music. This matches well with what I did in the first section as I started with a simple held note and key clicks, and slowly added more and more harmonic and textural material. I think blending this crossfading technique with the advice Josué gave to me about thinking more freely after establishing basic melodies or rhythms, that I can create a small improvised section with the purpose of crossfading the material into each other to seamlessly get from the second section to the third.

In my reference recording, I did this by transitioning from the textural key clicks, slowly to the rhythmical key clicks, bringing back the first section theme. Then I quickly added more and more texture in, and added short melodic fragments of the following phrase into it as a way to go from E to F. This replaced the use of the C1 slap tongue idea that I used previously. Then I slowly increased the amount that I repeated incorporating this melodic phrase before playing the written line. Playing this for Femke, she told me to really emphasise the change in dynamics, and make the rhythms as concrete as possible to contrast with the freedom of the second section. She liked the addition of the extended phrases in the melodic lines and the gradual implementation of the material from the next phrase.

Overall I like how this section slows the piece and gives it a bit of tranquility before the final section. I think if I were to edit this piece further, I would however add a bit more character and inspiration from the kotsuzumi solo. I would like to implement more drum-like sounds, pitch bending and intermittent rhythmic phrases which I think would make it have a bit more contrast.

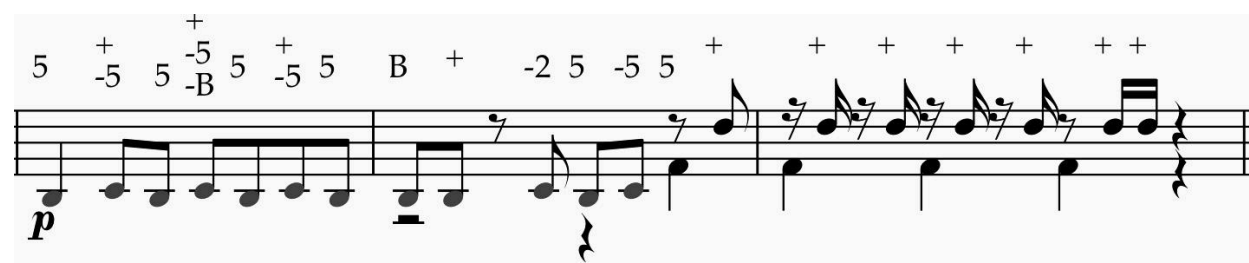
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<sup>49</sup> [19 Second section experimentation](#). See Appendix 7.1.



Third section:

The final section was relatively simple to put together. This was directly inspired from the [previous cycle reference recording](#)<sup>50</sup> and was to be transposed to work with the B key instead of the Bb. I found that by lifting the B key to the C key, and striking with finger 5, it created the same simple semitone note change motif of the opening section, and that by using the key slap to create a foundational rhythm, I could then use slap tongue to create additional texture on top.



Furthermore, playing low B but without 2, using 5 to strike the key created a nice multiphonic that worked well, giving me three notes to choose from. I notated each groove pattern with a repeat, signaling that on the repeat, I can expand on the material, change and improvise further on the spot. Because this was the most rhythmical portion of the piece, I wanted to give myself freedom as I was advised by José

<sup>50</sup> [12 Cycle 2 Reference Recording 04](#). See Appendix 7.1.

At first I thought that the ending would only be key slaps and would fade away, but after a few times running through I just was not satisfied with it ending softly. Performing the piece in my group lesson the feedback was the same - that it would be nice to try and write an ending line to conclude the piece as a final flourish. I took inspiration from Vincent David's [Pulse](#)<sup>51</sup>, as I enjoy this ending and the piece features similar themes as my own. Using the same notes as the melodic section, I created a simple run, with one last textural key clicks at the end.

The process of creating this piece was a challenging but extremely rewarding experience. Utilising peer and professional feedback was extremely helpful in streamlining the development of this piece. Constantly reflecting critically on my recordings and fine tuning ideas, making sure that I was satisfied with the results also meant that I never settled and wrote music that I am now proud of and excited to perform.

### 3.3.5 Interventions / practical application

Create an objective for the session to create limitations for the improvisation ———> start on a simple rhythmic or melodic motif ———> record and reflect ———> implement changes

43

I interviewed Dr. Josué Amador in order to discuss different ways in order to go from purely improvising music to notating it down. He mentioned that improvisation can also be seen as the end product, which I agree with, but I am very interested in having a physical notation of my own melodic, harmonic, and rhythmical choices. An interesting point he made was that in his compositional process, he thinks harmonically before anything else.<sup>52</sup> I was so focused on writing rhythms and creating this rhythmic groove, that I did not really think harmonically. At this point I had my first section relatively complete, but in my second section, I really tried to think of the harmony first before choosing the melodic notes. The rhythms were just a by-product of the melody coming together which was interesting for me because previously whenever I was to create a melodic line, I would come up with a rhythm before finding a melody to suit.

As mentioned earlier, I had difficulty finding ways to connect my improvisations to written material. I interviewed Francesca Fatini, a saxophonist and improviser based in Italy in order to find some professional advice on how to proceed. I really liked the idea of crossfading material in order to transition between sections and found it a very useful part in my own piece. Another bit of advice I would like to implement moving forwards is to improvise the basic sounds of a piece, analyse my tendencies and then compose using those tendencies. Francesca said that there is a lot that we do that we do not realise we do until we really critically analyse in recordings.<sup>53</sup> In my own practice journal, I did a lot of real time analysis not through recordings, therefore I think if I was to re-do this section of my research again, I would do this from the outset. Giving space for freedom in the music was another suggestion that she gave to me which I felt was a really good addition in reflection. I planned to notate as much as possible, but Fatini recommended giving some space for improvised elements to come to the fore. There are a lot of subtleties that I felt were so difficult to notate, such as changing in fingers for certain rhythms, bringing out multiphonics, and emphasising the melodic notes within the phrase. From this advice, I decided to instead just compose a basic bare bones rhythmic groove, and then allow for my experience in improvising these grooves to take over in the second half of the section.

Throughout this entire cycle I routinely sought feedback from peers from my saxophone class at Codarts: Jemma Bartlett, Martina Madini, Socrates Kaplanoglou, and my main subject teacher Femke IJlstra. I decided to seek feedback from those closest in my circle of contacts as I felt that by reaching out to those I could not meet in person, it would slow down the whole process. Furthermore, I needed advice on how the key clicks and slaps sounded live acoustically and therefore my classmates were very helpful in providing me with feedback on this. One of the main points that translated to my final performance was the positioning of the saxophone while I played. Those in line with the keys could hear the clarity in the rhythms much better than those directly in front of me. Therefore in my performance of this piece, I faced the keys as much as possible to the audience without standing completely parallel to the seats.

I did not invest much time in seeking feedback about my decisions regarding notation, as my main focus was on making the music as clear to understand for me at this stage. I do have ideas about how I would improve the notation in the future, however, for the purposes of this research, I was more interested in the effectiveness of the technique coming across from performer to audience, rather than the ability for people to easily read the score.

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<sup>52</sup> Interview with Dr. Josué Amador. 17/02/2025.

<sup>53</sup> Interview with Francesca Fatini. 13/02/2025.

### 3.3.6 Outcomes

The outcome of this cycle is a completed composition and recording for solo saxophone. Not only this, but through the process of interviewing experts, I am now more comfortable in taking my own improvisations and translating them into written works.

[20 Cycle 3 reference recording 05](#) - Recorded 15/05/2025

5 *p*

9 *mp* C1

13 C1

17 *mf*

21 *mf*

25 C / Bb +

28 + + C / Bb *f* + +

31 C / Bb + +

35 C / Bb Fade away clicks *p* *mf* V.S.

# Alto Saxophone

40

43

47

52

57

62

67

71

75

78

82

Improvisation - expand on motif

Improvisation - expand on motif

*f*

*p*

*f*

5 + -5 5 -5 5 + -5 5 B + -2 5 -5

5 + + + + + + + + -4 -B 4 -4 B 4 -4 4 -4 4 -4

+ + -4 -B 4 -4 B 4 -4 4 -4 4 + -4

Alto Saxophone

3

86

The musical score for the Alto Saxophone part consists of three measures. Measure 86 begins with a treble clef and a key signature of one flat (B-flat). The melody is composed of eighth notes, starting on G4 and ascending stepwise to D5. Measure 87 continues the ascending eighth-note pattern, reaching E5. Measure 88 features a final ascending eighth-note (F#5) followed by a half note G5, which is marked with a '+' sign. The piece concludes with a double bar line. Below the staff, there are two empty staves. To the right of the first empty staff, there is a fingering chart for the right hand, showing the positions for fingers 5, 6, and 7. The dynamic marking 'ff' (fortissimo) is placed below the first empty staff.

ff 5 6 7

### 3.3.7 Feedback, reflection

Throughout this cycle, my piece took many different forms, shaped by my own reflections and the feedback from my peers, main subject teacher and experts in the field. A struggle I had in writing this piece was connecting sections together, which was noted by Jemma Bartlett in my first performance for the saxophone class at Codarts. Utilising Francesca Fatini's advice to try cross fading sections was key in helping me navigate this difficulty.

Femke IJlstra, my main subject teacher, was pleased with the overall development of the technique and the piece itself. She said I have a talent for composing and using key clicks which I appreciated and was relieved to hear because I was a lot more nervous about performing and sharing the piece with people than I expected to be.

After my premiere performance which ended up being my reference recording for this cycle, I was given a lot of positive feedback about the composition. Gathering from the comments, the key clicks in the first section projected a lot more than I expected in a bigger room. Furthermore the groove pattern in the last section was interesting to a lot of people and the rhythmic drive of this section translated well through to the audience. The connection between sections was also mentioned by Jemma Bartlett who said that the overall structure sounded much more secure than it did previously, which I was happy to hear.

While I am happy with the overall piece, I do believe that I could have incorporated more textural key clicks in the second section. I took a fairly simple motif from the kotsuzumi solo, so I would like to extend the second movement with more microtonality and textural key clicks to really emphasise the contrast between the second and third sections.

## 4 Research findings and outcomes

### 4.1 Documentation and explanation of the research outcomes

The work I have spent discovering the different possibilities of key clicks and the various sounds and rhythmic grooves has resulted in my own composition for solo saxophone. I have decided to title this piece *Undercurrent*, as I feel that the sustained note and the key clicks underneath creates a tension under the surface feel. The release in tension is brought out by the rhythmical groove of the key slaps in the last section which I feel makes the piece contrast between sections which I did as a way to not let the music stagnate and to keep the audience invested as much as possible.

Furthermore, my investigation into key click sounds on each key on the saxophone in my first cycle has given me a chart that hopefully could be used by other composers and saxophonists who are investigating key clicks in their own music. In my first cycle feedback I was given a suggestion to try to organise the chart by sound type rather than by the note key. I have decided to keep it as is, because every other extended technique chart is organised in a similar way to mine. Multiphonics, altissimo, and microtones are all organised by pitch, therefore to me it makes sense to keep this continuity and organise it the same.

### 4.2 Self-assessment of the research outcomes and expert feedback

Overall I am very happy with the artistic result of the piece. The final reference recording is a performance in a class concert, where I received a lot of positive reception from the audience. Although it was not the best run through of the piece, I still felt that I achieved a nice variation of the qualities of the key clicks and slaps in particular which was the main focus of this research. I have also created a chart which I think is a useful compositional tool for those looking to incorporate key clicks into their music. In my own experience, key clicks are far more often used texturally, so this investigation into the rhythmical capabilities of this technique hopefully allows for more compositions to follow suit in the future.

## 4.3 Conclusion

In conclusion, key clicks and key slaps on the saxophone can be used to create varying texture and rhythmic drive. In conjunction with other additional extended techniques such as slap tongue and multiphonics, I am able to blend together these techniques in my own composition to not just act as a throw-in device, but as a means to enhance the music itself. This research could also potentially serve as a basis for those looking to investigate other avenues of key clicks or extended techniques. For example, those looking at using electronics such as contact microphones or live looping. The categorisation and analysis of the effectiveness of how this technique works acoustically establishes a fundamental understanding from which I hope others can develop and add their own creative ideas onto.

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Taimur Sullivan, [Ku Ku](#). Published on: 2010/05/14.

## 6 Network

### 6.1 Network List

Femke Ijlstra:

My main subject teacher, soloist and artistic director. She is a founding member of the Syrene saxophone quartet, Jeux d'anches, and soprano saxophonist in the Aurelia saxophone quartet.

Dr. Martin Kay:

Saxophonist and composer with a Doctorate in Music specialising in improvisation. Released an album dedicated to the discovery of the limitations of certain aspects of the saxophone.

Dr. Joshua Hyde:

Saxophone lecturer at HEM in Geneva. Numerous projects in Switzerland and France specialising in new music.

Dr. Nick Zoulek:

Creative performer with a DMA in Contemporary music. Recently had a residency at The School of Music at Western Michigan University, performing with prepared saxophone, pedals and multidisciplinary performance.

Vincent David:

Saxophonist and composer. Written for and performed as a guest soloist for various saxophone competitions across France.

Dr. Nick Russonlieno:

Sydney-based saxophonist with expertise with live looping stations, contemporary music, and solo performance.

Dr. Ned McGowan:

My research coach, flautist and composer with experience with key clicks and other percussive effects in his music.

Viet Cuong:

Vietnamese/American composer with works for chamber saxophone, solo saxophone and quartet which contain microtonality, slap tongue and altissimo.

Dr. Corey Dundee:

Los Angeles-based saxophonist and composer. Tenor saxophonist in Kenari Quartet, undertaken an Artist Residence at the Kimmel Harding Center for the Arts. Doctor of Musical Arts in Composition.

Isaac Reed

Saxophonist and former quartet member in my saxophone ensemble.

Andrew Ball

Brisbane-based saxophonist with several compositions exploring extended techniques. Useful for bringing practical saxophone ideas and compositional thoughts.

Dr. Josué Amador

Guitarist, improviser and composer. Lecturer at Codarts teaching improvisation.

Francesca Fatini

Italian-based saxophonist and improviser. Previously worked and studied in the Netherlands investigating improvisational technique.

## 7 Appendices

### Appendix 1: List of all self-produced AV media included in report

[01 First reference recording 01](#) - *Samba* by Christian Lauba

[02 Second reference recording 02](#) - *BO* by Barry Cockcroft

[03 Tabla improvisation](#)

[04 Lower register improvisation](#)

[05 Basic Groove](#)

[06 Third reference recording 03](#) - Solo improvisation by Sean Thompson

[07 Basic grooves discussion](#)

[08 Cycle 2 Improvisation](#)

[09 Cycle 2 Study 1](#)

[10 Kotsuzumi solo](#)

[11 Cycle 2 pitch](#)

[12 Cycle 2 Reference Recording 04](#) - Solo improvisation by Sean Thompson

[13 First example of early improv](#)

[14 Second example of improv](#)

[15 Third example of improv](#)

[16 First section Improvisation](#)

[17 First section development](#)

[18 Alternate Fingerings](#)

[19 Second section experimentation](#)

[20 Third section transposition](#)

[21 Third section transposition](#)

[22 Cycle 3 Reference Recording 05](#) - Solo performance of *Undercurrent* by Sean Thompson

## Appendix 2: Critical media review

Christian Lauba

- Simon Diricq, [Samba](#). Published on: 2016/03/07.

This virtuosic piece subtitled “Etude for the mastery of multiphonics and cultural rhythms”, pushes the limits of the performer's technical capabilities. Multiphonics are used throughout, causing the performer to have to switch between non-traditional and traditional hand/finger placement on the instrument. These multiphonics highlight the Latin syncopated style, accentuates the exciting rhythm and brings texture to the music. In a similar style, at 2:10, there is use of a sub-tone accompaniment line with the melody popping out of the texture. Although my research will focus on the use of key clicks, I feel like this concept can be utilised in my own composition to give variance, more melody and tone to my music.

- Chi-Chun Chen, [Balafon](#). Published on: 2017/06/14.

Another piece by Christian Lauba, *Balafon* has its title in reference to the West African gourd resonated xylophone. In this Etude, Lauba uses subtone with soft multiphonics to replicate the sounds of the instrument. Discovering this piece was eye-opening for me, as this almost felt like it was an arrangement of a piece for the balafon rather than a piece inspired by it. To have the sounds so well replicated on the saxophone inspired me to look at potentially taking a piece for a percussive instrument and arranging that for saxophone, paying attention to how best to replicate the sounds on my instrument. However, I think this strays away from the outcome I want from this research. I personally want to have my own composition at the end of this research, and I feel that going through this process will provide me with far more skills and experience as a performer and composer.

Barry Cockcroft

- Taimur Sullivan, [Ku Ku](#). Published on: 2010/05/14.

This quirky and fun piece *Ku Ku* was inspired by the imagery of a headless chicken running in distress. Barry Cockcroft first establishes the theme, with a tranquil and uplifting opening, evoking the imagery of a beautiful morning. Then the frantic nature of the piece begins to unfold, with long phrases of quick arpeggios followed by the use of pitched slap tongue to replicate clucking and multiphonics to create the crowing sound of the chicken. Cockcroft then masterfully blends all of these sounds together in a samba-like style, in a sense remixing all of the themes together in the final section. This piece is a fantastic compositional tool for me, as this piece has a really well thought out and logical structure. There is establishment of the theme, introduction of extended techniques and then a creative ending combining all of the previous ideas. I feel that often I ask myself the justification around using techniques and whether they actually add anything to the music. This piece for me is a good example of how these techniques can be used in a musical sense that is also engaging for the audience that contributes to the story of the music.

- James Nightingale, [BO](#). Published on: 2011/11/26.

Written in 1999 for James Nightingale by Barry Cockcroft, *BO* is a solo tenor saxophone piece that includes an interesting new notation that I have not seen before. As said in his program notes, the piece

has an idea that requires two hands playing separate rhythms. “Two patterns are established, the left hand playing a duple rhythm and the right playing a triple rhythm. The ‘in-between’ notes that are created as a result create a 3rd part.” I am very curious to see how Barry Cockcroft notated this piece, as he is very good at making seemingly complex sounding ideas easy to read off of the score. The rhythmic separation of the hands is a technique I would like to explore in my own compositions, so I would like to perform and analyse this piece in the future.

Bendik Giske, [Start](#). Published on: 2023/06/08.

This new work by Norwegian saxophonist Bendik Giske, is a meditative and pulsating piece which highlights the sounds of the saxophone’s keys mixed with vocalisations. The recording is obviously mixed to highlight the percussive sounds of the saxophone’s keys, and the ambient sounds of the space. This is a fantastic example of exploration into key clicks used as a rhythmic device, an idea I will try to implement in my own performance. As this piece was released this year, and there is no score available, I can only analyse this one recording. If I were to select this as my main focal point for reference, I believe I would not gain as much theoretical understanding in comparison to the more established works by Christian Lauba. This however, remains a very useful document in displaying the capabilities of key clicks and a source of inspiration in writing my own music.

#### Literature sources:

Murphy, Patrick. 2013. “Extended Techniques for Saxophone. An Approach Through Musical Examples” *Arizona State University* 2-31. <https://core.ac.uk/download/pdf/79566582.pdf>

This PhD thesis formulates a practical approach to extended techniques, provided with self composed etudes for saxophonists to use. It provides me with a brief history of extended techniques and an overview of what exists and where it stems from, followed by examples of how to develop these techniques. I will use the summary of these techniques as a source in my own contextualisation as well as use similar strategies that Murphy used in creating etudes in my own research cycle.

Londeix, Jean-Marie. *Hello! Mr. Sax, or, Parameters of the Saxophone*. Paris Alphonse Leduc & Cie 2-66, 1989.

One of the first texts outlining extended techniques in saxophone practice, this book by French-saxophonist Jean-Marie Londeix covers the full range of sounds and expressive devices available to the modern saxophonist. This text remains primarily a compositional tool rather than a detailed analysis of repertoire, which is understandable given this was written when there were very few compositions with extended techniques. From this book, I have gathered information about effects notation, various concepts and lessons about duration and attacks, as well as understanding of how extended techniques translate across the saxophone family.

## Appendix 3: Full feedback on reference recordings

### 7.3.1 [01 First reference recording 01](#) - *Samba* by Christian Lauba

#### [02 Second reference recording 02](#)- *BO* by Barry Cockcroft

Listening back to these recordings, I can see that the extended techniques got in the way of my own musical expression. I feel that I let the music control me and I couldn't emulate the style of the music as effectively as I have heard before. A question I got from this was whether performing from memory would improve my performance at all. In *BO* it was hard creating any mood when the music was very repetitive. A lot of work went into trying my best to play the techniques consistently. Maybe I could create more of a musical phrase and highlight when the fingerings change between polyrhythms.

Questions:

How can I use techniques more of an expressive tool rather than a challenging exercise? How can I best record music so that the desired effects are at the foreground?

Dr Martin Kay:

I would like to see a better replication of the groove in *Samba*. Try to play without the stands, or rely on them less, maybe by worrying about the notes less you can create more of that dance style?

When you have those rhythmic interjections almost like snare hits, bring those dynamics out. They are there for a reason and need to contrast more.

In *BO*, think about the limitations of sound with key clicks. You might have to hit them harder to create more of a sound or record them better in the future. Create more of a difference between those techniques. In my own album I had contact microphones placed around my hands and my throat. That might be something worth looking into? Experiment more with polyrhythmic shapes, maybe you can use some microtonality in your own compositions?

Femke Ijlstra:

Good performance of *Samba*. I can see that you put a lot of work into it and I think overall you managed to play a lot of these techniques at a good level. For *BO*, I don't know the score so you might have to send it to me. For example, take points to make direction. The technique is not done by itself. The technique is a part of playing the phrase. So in the end it's all about direction and relaxation in the music. Think about contrasts and phrasing. In the Cockcroft you can make this much more. Lauba there's a lot of things written, everything is fixed in a sense. Cockcroft I think you can do something yourself, because he doesn't write with a lot of things in it, so you can experiment more with it.

### 7.3.2 Feedback on [03 Tabla improvisation](#)

Hi Sean,

Lovely to see the work that you have done! I am a bit unsure of the effectiveness of these sounds. Although I think the mechanism for playing with two hands is the same, maybe viewing key clicks as a little more abstract may be beneficial for you moving forward. What I mean by this is for example, the low note bends that you play is very difficult to replicate in the saxophone, particularly with the range and particularly with how the notes bend up which as you know is very difficult. Maybe explore all the possible sounds first before moving forward. Create a chart to jot down all your thoughts about each finger perhaps.

Your other improvisation is getting there. I think it still needs to be grounded by a main motif as it sounds a little like you're throwing ideas out there. Probably where you're at right now I understand but moving forward think about how to structure your improvisations to have more of that idea-development-conclusion.

Hope this helps!  
Martin

Hey Sean,

Super cool things you're doing! I think changing up the pattern by using less scales it might make things a bit more interesting? Right now there are a lot of running notes but I think if you switch between registers or something that might sound nice as well. Is it at all possible to make two notes at the same time? I saw the recording you sent and I like how it sounds almost like two separate instruments. I would try doing something like this as well. Let me know how it goes!

Kind regards,  
Isaac

### 7.3.3 Feedback on [06 Third reference recording 03](#)- Solo improvisation by Sean Thompson

Hi Sean,

I really like where you've taken your project! I think it is starting to sound like its own piece which is super nice. A lot of the pitches come through well, and I like how varying you can make the sounds which is great. I think more from a technical point of view, I found that whenever there was a slip up in rhythm or notes that it was more noticeable than normal. I think the things you are doing are only really effective if you ground it with a steady pulse and controlled movements. Sometimes I felt that the tempo changed a bit too much, or there was an added beat here and there which threw off the groove, so maybe writing a lot more music down will help you stabilise things a lot more moving forward. Hope it goes well!

Kind regards,

Isaac

#### 7.3.4 Feedback on [12 Cycle 2 Reference Recording 04](#)

Martina Madini:

Hey Sean,

I really like it! I think you could try add some moments of break or spontaneity into the performance to create more difference in the music. Maybe try and experiment of the different ranges of the saxophone?

Martina

Femke IJlstra:

Nice work Sean! I like the groove and I think the key sounds are all quite effective. I think it is missing a bit of variation in the type of key clicks you are using though. I would like to hear more key clicks that tells the story, like using the clicks to create rain sound effects, something like that. This will create more of a flow or a lyrical aspect which I think will be nice to work on later. I think what you are doing will no doubt benefit other saxophonists and composers so well done on this research.

Isaac Reed:

I like the sounds coming through from this one, it sounds easier than what you did last time with the tabla stuff. What I think is hard to pick up is the change in pitch, like the little fall at the end of some notes. Pay attention to the reed noises and extra sounds coming across as well, its all so soft so anything can be heard. I think it would be nice to incorporate some tonal aspects because it worked in the solo a lot more than just the key clicks.

#### 7.3.5 Feedback on [22 Cycle 3 Reference Recording 05](#)

Jemma Bartlett:

The connection felt a bit abrupt in the first section, like the music just stopped so maybe you can try and find a better way to connect the phrase, or take more time between sections so that it works better.

Socrates Kaplanoglou:

The key clicks work really well, but I think the connections as well could work better. Also there are a lot of stop start phrases in the second bit I think it gets a bit repetitive so maybe elongate these parts.

Femke IJlstra:

The notated parts have to be more concrete when played. Connect the second section bars together because right now you are taking a comma here and you should be playing through. Also these phrases are too short and quite repetitive so maybe adding more melody or longer phrases will help. You have a

talent for this kind of composing so well done! Stand a bit to the side so that the clicks go straight to the audience. Also the sets of 5 need to be a bit more clear, so find a way to really bring that out more.

## Appendix 4: Transcription of interviews

### 7.4.1 Interview with Dr. Martin Kay

Interview with Dr. Martin Kay conducted on 27/01/2024

00:00:00:11 - 00:00:29:19

Sean

Yeah. So I guess my I have a couple of questions here that I can I can start off, um, and I, yeah, I was starting a quite broad. How, how would you view the current landscape for extended techniques in general for saxophone, and who are some current practitioners that, that you know of that that might be interesting to, to investigate.

00:00:29:21 - 00:00:51:28

Martin

Oh God. You might be best to put that one in a email or get back to you on that. Sure. Um, just my mind is just dead at the moment. Yeah. Oh, what, like actually one thing that's, um, like one thing recently that came to my attention that I don't. If you met Tim Munro last year.

00:00:52:05 - 00:00:55:00

Sean

Not I've seen him around, but I haven't met him personally.

00:00:55:03 - 00:01:19:06

Martin

Yeah. So he's playing a piece by a sax player, Dave Remnick, who's also a composer, clearly. But. But it's like lots of key clicks on the flute. Yeah. And oh, like he's integrated in within that he his wife's, sleep talk. So it's the solo flute essentially by like some sort of Tim, sort of like, you know, it's all groove with the key clicks.

00:01:19:06 - 00:01:39:03

Martin

But in his words, you know as well. Uh huh. Yeah. That's, that's quite, it's quite cool actually. It's quite interesting. Yeah. Yeah, I'm. Who's that? So sorry. I'm just having, drawing a blank on like who's who's the really famous guy, the bass sax.

00:01:39:03 - 00:01:40:29

Sean

Oh.

00:01:41:01 - 00:01:45:04

Martin

Is from the States and he played with Tom Waits.

00:01:45:07 - 00:01:48:19

Sean

Is his name really like, uh.

00:01:48:22 - 00:02:33:29

Martin

Hey, I'm going to hang on this guy. He's like, He's awesome. Um, I'm sure you've heard. It's like, I'm sax player. I'll type in all the key words. Okay. Um, are across or out. Okay. I'll definitely send you this stuff. You would know it, right? Yeah, It's is kind of like plays bass sax. Barry Any kind of, like, mikes on these three D mikes.

00:02:33:29 - 00:02:36:11

Martin

Like, everything's super effective.

00:02:36:12 - 00:02:51:25

Sean

I only know is his name. I know American. He fits that profile. His name's Nick Zoellick or. No, no, dude, I know, But that guy does a very similar.

00:02:51:28 - 00:02:54:20

Martin

Oh, okay.

00:02:54:22 - 00:02:59:21

Sean

No, no, that's okay. If you got, like I can send the question in an email then and then maybe.

00:02:59:23 - 00:03:03:22

Martin

They would do that. Do that? Yeah. Sorry. It's just driving me slow.

00:03:03:25 - 00:03:23:20

Sean

No, no, no. That's okay. Yeah, I just thought I'd start off very broad. Yeah. And I guess in your own compositions, is there anything that you've utilized key clicks as a main focus or something that's been integral to your own composition?

00:03:23:22 - 00:03:48:03

Martin

Um, not with a foregrounded, you know, like, um, but yeah, I'm quite interested in doing it and, and making it up, you know? Yeah, but it's up. Yeah. Because I've done a lot of practice like that because I like seeing saxophone as a drum almost, you know, just like kind of in the rhythms you can get between the two hands.

00:03:48:09 - 00:03:59:13

Martin

Yeah. So it's like a tabla. So like on that solo album, like it didn't come out as clearly as I would have actually liked shot of that stuff.

00:03:59:15 - 00:04:11:01

Sean

So is there any like pieces that you want to highlight in your album that I can reference that that might be like something to kick start me off or.

00:04:11:04 - 00:04:13:25

Martin

I'll send you. Okay. Yeah.

00:04:13:27 - 00:04:32:28

Sean

Well, okay. You know, so I'm I guess I just wanted to ask, is there any reason why you haven't thought about. Or haven't done it like as a foreground, or is it just because you've, you've found other things interesting up to this point?

00:04:33:01 - 00:04:53:22

Martin

No, no. I think the only reason I haven't is because I don't I just don't have like a nice PA set up and and that I can just really work on it. Yeah, I just go with, um. So, um, yeah, like, because I see it very much as something that I think should be my top. Yeah, my view.

00:04:53:25 - 00:04:57:28

Martin

So it's been really effective. So, so.

00:04:58:01 - 00:04:58:17

Sean

Yeah, I guess.

00:04:58:20 - 00:05:00:06

Martin

It.

00:05:00:09 - 00:05:02:08

Sean

You can please.

00:05:02:10 - 00:05:15:28

Martin

Um, yeah. And even, even like, I mean many, many years ago, like I saw something like, which I saw Barry Sanders play and, um, you know, Barry Sanders work.

00:05:16:01 - 00:05:19:16

Sean

I listened to a couple not, Yeah.

00:05:19:19 - 00:05:43:00

Martin

So I mean, he was quite a key player with Coltrane back in the day, but he kind of continued on with his own stuff. But he came to Sydney and, and I mean, he just what he was doing, he was like kind of like playing with the micings and the bell and he was almost triggering like, feedback. Yeah, using the key clicks and things like this.

00:05:43:02 - 00:06:07:13

Martin

So and the bell like set he was accompanying or something like that. Yeah. And that was a cool thing, you know. So, um, like, like, and, I mean these sort of things like, influenced me and I guess stuck with me and, and I could kind of like, like for that my album launch, I actually like did it in the dark with a lot really light stuff.

00:06:07:15 - 00:06:22:10

Martin

And so, like, the idea was that and again, it was very DIY. Um, like the idea that like the rhythmic opening of, of the keys would like give rhythmic shards of like coming out of the inside of the saxophone.

00:06:22:11 - 00:06:24:11

Sean

Oh yeah.

00:06:24:13 - 00:06:50:24

Martin

Yeah. So, um, you know, like, like one idea that I would like to do a like, that's funny because I'm actually like, I've been looking in the last couple of weeks at a, like a Bose P.A. system, which is record player, but also just to kind of work on some shit like some Microsoft sounds and things that like don't work without PA I think.

00:06:50:24 - 00:06:51:15

Sean

Yeah. Okay.

00:06:51:18 - 00:07:12:05

Martin

But, um, but like also to like what? Like the key clicks could be an amazing trigger for, for other elements as well. Like light. Yeah. You know left you know less D.I.Y. way than like, like LED lights down the balcony because that or down the shop I had a down the shaft of the saxophone.

00:07:12:11 - 00:07:13:00

Sean

Yeah.

00:07:13:02 - 00:07:25:22

Martin

You know it was like pretty, pretty dodgy really, you know, but like sticking out of the neck, you know, it's something that, that can, you know. Yeah. And impact to have on the sound but that's cool.

00:07:25:22 - 00:07:27:04

Sean

Yeah. No I like.

00:07:27:04 - 00:07:33:26

Martin

I think Yeah. A lot, a lot about that. A lot of possibilities. So yeah.

00:07:33:29 - 00:07:57:16

Sean

No because I've never kind of ties into it. I was going to ask next if what like and what were the challenges or what are some challenges you might think of about like recording or performing live. The sounds of key clicks and, and I guess that ties into like having a good PA system, right?

00:07:57:18 - 00:08:17:10

Martin

Yeah, for sure. And then a sort of like kind of what you need contact mikes or but I don't think so, so much. If you've got a good PA and you got a nice pickup mic, you can just have a couple of mikes I think would be quite effective. Yeah. So but I mean, you know, if you're in a studio, like, is it just like, see, I like when I was in the studio.

00:08:17:11 - 00:08:45:28

Martin

Yeah, sure. I had mikes everywhere but you know, would contact mikes be more effective in some? So that's certainly if you're not blowing because then you'd actually get the resonance through the metal of the saxophone. Yeah. So yeah. So I think that'd be something to think about. It depends on whether you're combining it with actual actually blowing or not, or whether it's just going to be like, Hey, this is a drum piece, you know, like, yeah, with his arms.

00:08:46:01 - 00:09:10:16

Sean

Like a something my, my, my coach like, suggested me to investigate was like transcribing a pitch to a non pitched percussive instrument and having like that transcription as part of like my main focus for the Masters. Like, how effective would the saxophone sound as a replication of the percussive instrument?

00:09:10:19 - 00:09:12:29

Martin

Um, yeah.

00:09:13:02 - 00:09:21:05

Sean

But I kind of wanted to like think about like, I don't know, I just wanted to think about the saxophone is this whole individual instrument to percussively

00:09:21:07 - 00:09:44:19

Martin

But yeah, yeah, I think so. That's, I mean, that's a tough call. I mean, I guess it's a nice idea like that. I mean, the closest that I can call it, like if I'm thinking of it in terms of it, I might think about like a tabla or something like that. And you know, top players, they kinda like, use their fingers, you know, and they can get all the different pitches.

00:09:44:24 - 00:10:02:13

Martin

Yeah. You know, so yes, I like that. But it's, yeah. Transcribing, you know, that's, that's a real nice challenge. What. But you, but you're thinking like not, not to go that way but.

00:10:02:18 - 00:10:15:05

Sean

Yeah, I'm thinking of, of at the end, like having a look at my own composition or a co-composed piece that sort of like has these key clicks at the foreground.

00:10:15:08 - 00:10:17:07

Martin

Yeah. And Yeah.

00:10:17:09 - 00:10:33:07

Sean

Yeah. Well, I guess I just wanted to see how effective it is. Maybe at the end of it I'll just be like, Nah, this is not good. Like, oh, like maybe just a learning process of just how to compose with these kind of extended techniques. I think that'd be cool to learn about.

00:10:33:10 - 00:10:57:03

Martin

Um, yeah. So and then, and probably all like the secondary benefits of it as well, like, which probably aren't really a concern for your studies. I just like getting super deep into rhythm and like kind of doing that stuff. Yeah, you know, I think it'd be really cool I learning how to write because that's a key challenge. Like how, how the hell are you gonna write.

00:10:58:08 - 00:11:24:13

Martin

Like, record? No, take really. It gets very complicated to notate the ups, you know, And the ups have a bearing on the actual grooves of the thing. You know, if you're playing straight papers and the ups are on the, on the, on the semi quaver. Yeah, that is different do if it's on the quaver or like, you know if you're subdividing and into semiquavers depending on where you lift your fingers just affects the actual grooves.

00:11:24:20 - 00:11:49:19

Martin

Yeah all of the bass you can't take that stuff or maybe you can but like it starts to look very complicated. Yeah which is why, which is why I don't notate it because I can't be arsed you know, it's like, you know, like. But, but like. Like if it's just for me, why would I do it? And if you notate it its harder for someone else, then it's just going to take them forever to learn.

00:11:49:19 - 00:11:57:28

Martin

And perhaps it's counterproductive. And that's my view on it. Like to me, like, yeah, so who's going to spend that time, you know? Yeah.

00:11:58:00 - 00:12:24:00

Sean

Yeah, yeah, yeah. So it's because I don't know if I should present like, like a written out notated piece at the end of it or if a recording of it is sufficient enough. But I guess is the, I guess that that could be an argument to have just a recording of it. It just is like similar to how you did your album and how we worked through your piece together.

00:12:24:02 - 00:12:39:15

Martin

Yeah, but, but you know, maybe. Yeah, exactly. Like a more like a simple sketch in an open form thing or, you know, like, maybe, maybe those things are solved with a verbal idea or saying, oh, you know, lift fingers on the semi quaver, you know?

00:12:39:20 - 00:12:40:02

Sean

Yeah.

00:12:40:08 - 00:13:04:01

Martin

Oh, you know, I don't know. But it's like, yeah, what about, like, you know, kind of an added bonus when I was like recording as well was like the squishiness of the pad you know, it's like that that kind of made the lift really effective having squishy pads. Right, Right. Yes. But I was like, Oh, no. Because actually the plugs might be getting that from the sugar, you know?

00:13:04:01 - 00:13:14:28

Sean

Yeah, yeah, yeah. I was I was thinking about like doing it maybe for a tenor or Barry because you get a little bit more tone from when you actually do the, the downs um.

00:13:15:01 - 00:13:15:11

Martin

You're like.

00:13:15:17 - 00:13:35:09

Sean

Yeah, I have to investigate that. I guess that also ties into my next questions about like the limitations around key clicks. Like I don't know if you've pushed the bill too much regarding it, but can you think of any kind of challenges with it apart like, apart from of course, what we just talked about.

00:13:35:09 - 00:13:57:21

Martin

But yeah, well, you can get like really cool descending lines, but you can't really get the ascending lines, you know? So I mean, you can kind of like you can counterpoint the, like the left and right hands pretty

well and thumbs, you know, like just your left and right hands and your thumbs like your best thumb can be doing, like beside keys.

00:13:57:21 - 00:14:29:08

Martin

So you can get kind of like different sound areas and get like kind of almost polyrhythmic grooves by councilperson can't opposing those things. Yeah, but then you can obviously be getting descendings things to them, but then you can't lift and get that right. So that's the people that are right there, you know, if you want it. Yeah. So, so like if you wanted to do sort of like really fast, sort of like sets of 5, they always have to be descending, you know, but you wouldn't be as effective ascending.

00:14:29:10 - 00:14:35:07

Martin

Sure. Yeah. That's probably the biggest limitation on record.

00:14:35:09 - 00:14:39:24

Sean

Yeah. Yeah, that's true. I didn't, I didn't thought about that. But it's so obvious now that you mention it.

00:14:39:26 - 00:14:41:09

Martin

Yeah, yeah, yeah.

00:14:41:11 - 00:15:10:16

Sean

Yeah. That. Yeah. My last question was about the compositional process, but I feel like you already talked about that with the arguing of the notating it and that kind of thing. So I'm happy leaving it there. That okay. Yeah. It's a I have to also do like a reference recording of like where I'm at in terms of like my current state within this project.

00:15:10:18 - 00:15:17:27

Sean

Um, yeah, I was just going to use a recording of Samba and I also found a Barry Cockcroft, you know, his piece.

00:15:17:28 - 00:15:20:04

Martin

BO Yes.

00:15:20:05 - 00:15:29:24

Sean

Yeah, Yeah. Because I was the first time that I saw the two hands notated separately on the same stuff. Yeah. So I was just going to use that as an example.

00:15:29:27 - 00:15:32:13

Martin

That's a nice idea. Yeah. Yeah.

00:15:32:15 - 00:15:34:24

Sean

But like, I didn't. Do you know that piece.

00:15:34:24 - 00:15:44:07

Martin

Well, or I've only heard Jim Nightingale play it a few times, but I haven't really. Yeah. Okay. No, I haven't looked like.

00:15:44:09 - 00:15:47:10

Sean

How do you, what do you think of the piece I mean.

00:15:47:12 - 00:15:53:21

Martin

Is it, is it the right one? It's just like slow, slow notes with multiple points coming in and out. Is that the right one?

00:15:53:21 - 00:16:00:10

Sean

Yeah. Yeah. And at the beginning, it just sat in the middle. It goes into like a two against three where you go to the door but a button.

00:16:00:14 - 00:16:15:07

Martin

But I'm talking about. Oh yeah, yeah, yeah, yeah, yeah. That's cool. I mean but Barry's very stuff like, I think it's really, it's kind of cool. Like it's growing on me a lot over the years. I'd have to listen to that again to make a judgment on it. Yeah.

00:16:15:07 - 00:16:25:26

Sean

So I can. I can just send you a link. Um, that old. Yeah, yeah, yeah, yeah. And then follow up in the email. Thanks again for doing all this. I appreciate it so much.

00:16:25:29 - 00:16:28:13

Martin

Not Oh that's alright. That's. Yeah.

00:16:28:15 - 00:16:41:06

Sean

Yeah, yeah. Um, so I guess yeah, from this it's just like I'm just gonna use your responses in sort of justifying why I need I can do this research that.

00:16:41:08 - 00:16:53:27

Martin

Yeah, yeah, yeah, for sure. Yeah, yeah, yeah. Um, yeah, well, let me know like, yeah. Anything else, just shoot us email or, you know, give us a call. Yeah, we'd be totally.

00:16:54:00 - 00:16:57:22

Sean

Oh, yeah, I yeah, I appreciate the generosity. That's. That's really nice.

00:16:57:22 - 00:17:03:00

Martin

You know, that's all. I mean, we love to chat and hear more about new stuff at some point.

00:17:03:03 - 00:17:13:00

Sean

So yeah, yeah, yeah. I like, I really hope to, like, have something like physical to have that's not just like my master's degree or have like an actual piece of music to have regardless.

00:17:13:00 - 00:17:25:14

Martin

Yeah, yeah, yeah, yeah. I think it's a great idea. Yeah. Yeah I, I reckon, I reckon like a solid sonic document would be kind of better.

00:17:25:17 - 00:17:26:07

Sean

Yeah. Okay.

00:17:26:08 - 00:17:29:05

Martin

And then the thing like, personally.

00:17:29:07 - 00:17:36:11

Sean

Yeah. Yeah. Is have you done that before? Like, I mean like in your research.

00:17:36:13 - 00:17:38:16

Martin

Um, just a sonic document.

00:17:38:21 - 00:17:40:11

Sean

Yeah.

00:17:40:13 - 00:17:44:12

Martin

No, no, no, no, no. Not for, like, any of any. Any degree. Yeah.

00:17:44:14 - 00:17:53:12

Sean

Yeah. Oh, just, just like, as a side project, like, have just a record of something that I've personally done.

00:17:53:15 - 00:18:18:02

Martin

Oh. Oh, yeah. I just think just in terms of like, getting the most out of it artistically to have the sonic document. Yeah. And then that good of the things. Yeah. So yeah, just you never know like Yeah. What

will, what will emerge out of making that sonic document or anything. So yeah. Hey any time you got bringing some new stuff with it.

00:18:18:04 - 00:18:39:21

Martin

Yeah. But yeah. Yeah. Well a lot to be said to try to notate it too. That's it. That's and make it neat and learn the notation program and yeah, I want you to like, visualize, visualize all the polyrhythms and visualize and actually how to translate the actual choreographed motions on saxophone to a page. Right.

00:18:39:24 - 00:18:40:22

Sean

Yeah.

00:18:40:24 - 00:18:44:25

Martin

Yeah. That's a good it's, that's also very valuable I think. Yeah.

00:18:44:26 - 00:18:47:00

Sean

So yeah. And yeah.

00:18:47:02 - 00:19:08:07

Martin

It's a this is, this is the cattiness of Barry Cockcroft because he, he does it, he makes that's very simple ways to do that and, and the stuff it sounds cool but it's actually really simple you know and he No takes it he's he's very tricky like that so like my appreciation is growing over like how he's made it so simple.

00:19:08:07 - 00:19:17:20

Martin

Yeah. Yeah. So, um. Yeah my wants is to make things more complex. It's right.

00:19:17:23 - 00:19:29:28

Sean

But because I have so many cool ideas in my head, but like, I didn't know how to, like, make them, like, crystal clear in a piece of paper. That's like, the biggest issue for me right now.

00:19:30:00 - 00:19:55:04

Martin

Yeah, well, I think. I think certainly, um. Yeah, like, just you're writing a little etudes Very, like, simple etudes Like, how do you write polyrhythms? You know, on the page? Yeah. Just build it up simply, you know, little blocks. So before you know it and you've got something more complex. Yeah, Yeah. Which is obvious, but it's.

00:19:55:06 - 00:20:02:24

Sean

Yeah, yeah, yeah. Awesome. Well, I am I a you got to teach now.

00:20:02:27 - 00:20:08:09

Martin

I must go. Yeah, I've got to teach. There might be someone it up at the front door so you.

00:20:08:09 - 00:20:13:18

Sean

Know that probably it's good timing that we wrapping up. Yeah.

00:20:13:20 - 00:20:31:10

Martin

Yeah. But I'll. Yeah. Just shoot an email and I will like for the life of me, remember that name and send it through. Yeah. No thanks. I think it'd be nice interviews with him as well about how he develops, how he developed totally stuff. He's got his own studio and I think you'd find a really valuable site.

00:20:31:12 - 00:20:32:09

Sean

Okay, cool.

00:20:32:12 - 00:20:32:22

Martin

Yeah.

00:20:32:29 - 00:20:38:00

Sean

Awesome. Well, I appreciate everything, Martin.

00:20:38:03 - 00:20:42:14

Martin

No worries. Yeah. Yeah. Good luck with everything. Yeah. Catch up soon.

00:20:42:17 - 00:20:42:26

Sean

Yeah.

## 7.4.2 Interview with Ned McGowan

Interview with Dr. Ned McGowan conducted on the 15/03/2024

00:00:00:00 - 00:00:18:22

Sean

Yeah. Yeah. Okay. Yeah, yeah. I guess I'd like to know a bit a broader idea of maybe the kind of projects that you've completed in the past. well, I guess maybe primarily focusing on key clicks, maybe where your inspiration first came from.

00:00:23:00 - 00:00:55:02

Ned

well, I've always been into rhythm. And, so, yeah, when I came to the Netherlands, I started to become a composer, and then I started exploring, key clicks on the flute, and they had my flute maker, Brannan, They had, they had some experimental pad material, like a saxophone. You have these leather pads, right?

00:00:55:05 - 00:01:22:18

Ned

And the flute pads are made out of a really thin animal, like carbon testing or something like that. And if you hit them too much, they break. So they had this like, silicon experimental material and they said, you do a lot of extended techniques. Why don't you try this stuff out? So they put those on there and I still have it actually about 20 years or whatever, and I can whack the hell out of my keys and then they don't ever break.

00:01:22:20 - 00:01:51:09

Ned

So the pads don't break. So. So I kind of went to town in one point. I composed this big solo piece that has a whole percussion solo where I it's a sort of choreography of finger movements and pitches and rhythms. And I'll give you the score and you can have a look at it and hear, hear the recording.

00:01:51:09 - 00:02:00:10

Ned

And so basically using it as a drum sound. Yeah. And then, then at one point it turns into a whole solo, right?

00:02:00:12 - 00:02:14:17

Sean

So then when you, when you like, say that you're emulating like these drum sounds like picture it, it's like a different facet of flute playing. Or do you think, okay, I'm more of a percussive instrument in that sense?

00:02:14:19 - 00:02:44:11

Ned

Well, I mean, yeah, you used to think of it as imitation of a drum sound, but it's not really the flute. There's also percussion instrument, actually. You mean I can also play percussive sounds on it. And so. So maybe this touches me. Then you start to ask, well, what is what is a percussive instrument? What is not a percussive instrument?

00:02:44:14 - 00:03:19:26

Ned

Maybe we play melodic instruments, but they can also be percussive instruments. And so when I do like Improvization concerts, I like to play rhythmic patterns, like, you know, just take one note to the dee dee dee dee dee, something like that. And then even though I'm playing pitches, it still sounds like a drum pattern. So because I listen to all that stuff and I love those lines, the cowbell line is really great.

00:03:20:04 - 00:03:32:05

Ned

So or triangle or something. So so we can imitate those. If you have it in your ear and you have some technique, then then you can kind of play it actually right?

00:03:32:08 - 00:03:57:04

Sean

I guess like that brings me to like, how have you incorporated this if, if at all with other instruments in like an ensemble setting, Have you, have you had like a group performance where you've like done these things as part of the piece, or do you think it's like a primarily a solo kind of a project?

00:03:57:06 - 00:04:47:06

Ned

That's a really good question. because there are I'm trying to think, where have I used it in an ensemble pieces? I didn't know there's a sometimes I'll have the, like a melodic line in unison with percussion so that it's kind of it sounds like a pitched percussion. Like, like having the piccolo play with percussion to have that have that in a few pieces.

00:04:47:12 - 00:04:56:21

Ned

Yeah. What I was thinking, there's okay, there are two pieces you should check out. One is this split solo moonrise.

00:04:56:21 - 00:05:00:06

Sean

Yeah. Yeah. I had to listen to it. Yeah. Okay. Yeah, yeah, yeah.

00:05:00:07 - 00:05:02:00

Ned

Okay. So that's the one with the percussion solo.

00:05:02:00 - 00:05:03:09

Sean

Yeah, yeah, yeah.

00:05:03:12 - 00:05:20:26

Ned

And if you want, I can share the score sheet and look at how I. I mean, that choreography. Yeah. Yeah. I even have a video somewhere where I teach someone how to play it. So I explain how the finger movements work. Yeah, If you want to see that, send me an email and I'll find it.

00:05:20:26 - 00:05:22:13

Sean

Okay? Yeah. Well.

00:05:22:15 - 00:05:47:25

Ned

And then there's another piece which I think is interesting for this called Ricochet. And that is originally for a contrabass, flute and percussion. And it's a piece where they they never play together. There's not a single note in the whole piece where we started out together. So does that go back, back, back, back, back, back, back, back, going back.

00:05:47:28 - 00:06:16:04

Ned

But no, it's well, essentially the flute is a is a percussion instrument and I can change pitches, too. So it's real percussive. It's mostly a percussive line. But then I use pitch change and then I have a version of that where which is contrabass and piano. I take the percussion part, and I just made a piano part where I also chose pieces for the piano.

00:06:16:07 - 00:06:32:27

Ned

And and then it kind of taught me that, that, you know, we have two things. We have we have percussive sounds and we have pitch and they can be melded together or they can be separate.

00:06:33:00 - 00:06:46:14

Sean

Yeah. In that, because obviously there'd be a bit the sound different between this contrabass and the percussion. How did you overcome, like the limitations of the sound? Did you like have to make make it up in a certain way?

00:06:46:16 - 00:06:53:05

Ned

Yeah. I amplified the hell out and I play hard and aggressive.

00:06:53:11 - 00:07:00:02

Sean

Right? So like, how did you like, strategically put the microphones around your instrument?

00:07:00:27 - 00:07:09:07

Ned

Well, I mean, it's just different for all the wind instruments, but with the flute, you put it near the head, the mouthpiece.

00:07:09:07 - 00:07:12:00

Sean

Okay.

00:07:12:02 - 00:07:15:10

Ned

I think saxophone, usually you put it next to the bell, right?

00:07:15:12 - 00:07:20:01

Sean

Yeah. Yeah. I think around the fingers and stuff, I think as well.

00:07:20:03 - 00:07:27:13

Ned

Just like bass clarinet, you have something comes out of end, but a lot of it comes out of the middle of the instrument.

00:07:27:13 - 00:07:28:27

Sean

Yeah. Yeah.

00:07:29:00 - 00:07:32:21

Ned

It's tricky to amplify.

00:07:32:24 - 00:07:33:09

Sean

Yeah.

00:07:33:12 - 00:08:01:04

Ned

But then there's a third thing where I do percussive improvisations and I think I. Maybe I showed you a link of that, right? Yeah, right. We have, like, this feedback thing. I put the microphone in the, in the, in the, the inside the tube of the flute, and then you get to get into the control (Does beats)

00:08:03:11 - 00:08:51:17

Ned

you can do all these kinds of percussive things which is like awesome. Yeah. Love that. Yeah. And, and, and I always do those improvisations as a sort of as sort of quest to find new patterns and new sounds. So it's really a searching improvisation, which could be one nice way for you to develop your piece is to start out with some improvisations and say, okay, I'm going to improvise key clicks for for a minute and then and then see how you see its kind of ideas come out of it and we'll kind of just explore the different fingering combinations, maybe get your fingers off of the keys where they're normally are and you know, you can put two two hands at the bottom of the instrument and start going because I've got to get it right.

00:08:59:00 - 00:09:01:13

Sean

Yeah, yeah, yeah, yeah. I get you mean I get me.

00:09:01:16 - 00:09:15:11

Ned

Yeah. That'll have to. But you know what I mean. Yeah. So and that's kind of what I did with the, with the moonrise is, is I, I looked at a whole new way to finger it.

00:09:15:13 - 00:09:44:02

Sean

Yeah. Okay, cool. I guess the next sort of thing I wanted to ask was more about like, philosophical, a bit more philosophical, maybe like the musical justification around using these techniques. Why do you think it speaks to you musically? What what justification do you have to, like, write this kind of music? Just like to just sound as though, Well.

00:09:44:04 - 00:09:48:00

Ned

I'm tempted to ask you what yours is.

00:09:48:02 - 00:09:52:24

Sean

Yeah, no, I haven't really thought about it, but I think because mean.

00:09:52:27 - 00:09:57:00

Ned

You are here. But you're right here jumping into a big research of that.

00:09:57:06 - 00:09:58:05

Sean

Yeah. Yeah.

00:09:58:07 - 00:10:02:16

Ned

It's like some sort of. You're excited about it for some reason, right?

00:10:02:18 - 00:10:33:26

Sean

Yeah. Yeah, for sure. I think it's. I think that's almost as well a kind of a thing I want to and so with this is because I haven't actually created something of my own, I've just replicated other performances and stuff, so maybe I haven't dive deep into the question of why as much as I should have. I just maybe, maybe would like to get your thoughts on like why you do these things, even if it's as simple as I just love the melodies and the rhythms of Yeah.

00:10:33:28 - 00:11:09:14

Ned

Okay. Okay, let me tell you how. Yeah. For me, absolutely. I was always a rhythm person. Yeah, I always have rhythm. I always love the rhythm exercises. Like, I'm kind of the math head. So it all kind of, I don't

know. I like to move. Yeah. Dance. So the physicality of all these was attractive to me and, and probably more attractive to me than the singing part of playing flute.

00:11:09:16 - 00:11:40:03

Ned

It was only later on that I really got into how to sing a line right? Which is a little bit ironic for flutes, but okay. And then, but like, what do you 2322 Yeah, Yeah. So like, when I was your age, I was just trying to start with doing, you know, I was just playing the pieces I like, Yeah.

00:11:40:06 - 00:12:04:24

Ned

And trying out things. And look, I was into Steve Reich and got into new music and I listen to a lot of rock and, you know, jazz. I was playing and stuff. And so I was, I was I really like groove music and then I play this, like, totally not groovy instrument, you know? So, yeah, yeah. You know, for me, I kind of hate the flute, right?

00:12:04:27 - 00:12:28:16

Ned

Sure. Which is probably really easy to understand, but I felt like it was like you could say that's ironic that they still play the flute, but then in a way, it's like a good starting point to be a flute player by hearing what it normally does. And then there's this sort of perspective like, Hey, let's see what it can do different.

00:12:29:21 - 00:12:49:03

Ned

And so that's kind of been my attitude. And in not because I have a wide range of influences and different stylistic things that I grew up doing. I found that I have a different way of looking at it than a lot of classical players. Sure.

00:12:49:05 - 00:12:51:02

Sean

So in sorry, sorry.

00:12:51:06 - 00:13:18:16

Ned

You got something to say? One other point. Like So from when I was your age, I also didn't know what or why or what the purpose was. I was just following my intuition. And only after doing that for 1015, 20, 25 years, I look back and I can I can speak to you about who I am and what I stand for and what my music is about.

00:13:18:18 - 00:13:53:20

Ned

Yeah, but when I was just like in my I mean, I was just starting to get creative in my masters and I didn't become a composer until, you know, after the Masters. So. So I mean, I knew what I wasn't and I knew it wasn't like an orchestral flute player or like a early music player, you know, I knew I was going for new things, but exactly what form that was going to take, I didn't know.

00:13:53:20 - 00:14:16:01

Ned

And and I don't I don't think you know that. I think you only enter it in your actions in each action builds of one facet of what that meaning is. And only after you've built a whole bunch of those facets can you look back and say, okay, that adds up to, you know, Yeah.

00:14:16:03 - 00:14:32:24

Sean

Yeah, that's fair enough. So you talking about your inspirations and people that you obviously referenced, who who is some people that have inspired you or maybe you have helped shaped your journey.

00:14:35:03 - 00:14:36:18

Ned

You mean in like a rhythmic.

00:14:36:25 - 00:14:44:23

Sean

I guess so, yeah. Yeah. Are there any like flute players who kind of dabble in what you do or.

00:14:44:26 - 00:15:21:20

Ned

Well, I mean, Robert Dick was a big influence for new techniques, but I never he's not particularly a rhythmic musician. He's more of a color extended techniques kind of player, but I don't know. I like to so many musicians I, I always liked like guitar players, piano players and you know, I also love like Cannonball and John Coltrane.

00:15:21:27 - 00:15:30:16

Ned

You know, I can't tell you a single classical saxophone player is not something I listen to.

00:15:30:16 - 00:15:31:12

Sean

Fair enough.

00:15:31:14 - 00:15:32:21

Ned

Fair enough.

00:15:32:23 - 00:15:33:25

Sean

Yeah.

00:15:33:27 - 00:16:03:13

Ned

But but, you know, they're bass players and viola player. I mean, you know, any instrument. I can always think of a couple who I love. Of course, a lot of composers, you know Zappa really rhythmic stuff. And I really got into Indian music so love of the Indian rhythm. And I, you know, I teach bass rhythm course, my Ph.D. is all about rhythm.

00:16:03:16 - 00:16:27:26

Ned

So, you know, the contemporary music is, of course, always really great because you have you have really interesting people pushing the envelope of creativity and possibilities. And and that was always exciting for me to have a sort of vision of moving the art form forward.

00:16:29:07 - 00:16:54:00

Ned

It's a sort of essence of value, which is different. Then I just want to make beautiful music that people love, you know, or I'm going to play music, you know, I want to play in an ensemble or a functional thing. Yeah. You know? Yeah. Or like, playing like I did all these parties and background music. There's like, functional music.

00:16:54:00 - 00:17:14:19

Ned

And that's why I left the United States, because it was going to I was going to die a musical death playing stupid gigs. So I needed to be creative in individual and then that. And that's when all the problems start because you have to ask all the questions. Well, who is that? Who am I? What do I want in my.

00:17:14:19 - 00:17:24:09

Ned

This is my that's can I do this? And, you know, I have journals full of all these of identity. Yeah.

00:17:24:11 - 00:17:30:26

Sean

And a crisis of identity. I feel that's the entirety of your twenties.

00:17:30:28 - 00:17:33:00

Ned

Well, man. And you're just getting started.

00:17:33:00 - 00:17:51:13

Sean

You already started. Yeah, I guess. Finally. I guess I would like to maybe discuss your compositional process if you have one. Maybe it's like from where you go from idea to actually fully formed based yet. Do you follow a process?

00:17:51:15 - 00:18:27:26

Ned

Yeah. I really, I think I have a lecture about that. on Zoom, I put that in the email and I was do I think I have a, I think I made a video of I talk about how I compose. I probably share that with you. It's from my composition class. But yes, but in general, you start with one idea.

00:18:27:28 - 00:19:06:07

Ned

Can be anything, can be a sound, can be a rhythm, could be a key, a combination, a groove could be a poem, a picture, whatever you know, and you have to have. Or I always start with one thing that I that I like, that I know is good. Yeah, I want to do something with this. and once I have that thing, then I, I start to try to figure out what goes before it goes after it.

00:19:06:09 - 00:19:46:17

Ned

So, I mean, the image I always gave is it's like, like a composition is like a cloudy picture. And if I have that one thing, then the cloud is cleared away and you can see part of the picture there and then my process is to start clearing out around it. So what goes before? Because after, you know, try to make the phrase longer or to repeat it or do the second part of the phrase whatever, or if it's a rhythm thing, what goes on top of it, this kind of once you have one thing, then immediately you start to ask what goes with what, what can go around it.

00:19:46:17 - 00:20:12:09

Ned

And then little by little, like clear it away until that spark gets bigger. Sometimes I'm clearing away a second spot up there and maybe one up there, and then those start to get bigger. And then I might start to say, okay, well, how can I connect these in one piece? And then I start looking for that. So and those are always like little puzzles, little challenges.

00:20:12:12 - 00:20:35:07

Ned

And then it's a lot of experimentation, It's a lot of trying out and and then sometimes that moment doesn't fit in the piece and then you take it out and sometimes you find that, yeah, this could be the A, this could be the introduction. Go to that section and yeah, it'll be great. It'll work perfect. And those are the moments I get really excited.

00:20:35:07 - 00:20:49:24

Ned

So you have these ecstasies of logic where you have a puzzle composition, a puzzle, and then you just start working on it. And, and when you solve it, it's really exciting.

00:20:49:27 - 00:20:50:24

Sean

Yeah.

00:20:50:27 - 00:21:06:28

Ned

Yeah, yeah. And then it's also nice to have a teacher who can give you suggestions like that. Yeah. So at some point, if you're writing a piece, you should consult some composers about the piece.

00:21:06:28 - 00:21:17:04

Sean

Yeah. Yeah, sure. Cool. I think that was pretty much my questions that I have for you. I just had some remaining stuff about

00:00:00:00 - 00:00:25:12

Sean

All right. So after all that, I, I started just, like, experimenting with the sounds. So I just sort of went back to the drawing board to see, okay. What's possible. Like, composition, I guess. How would you describe it? And I came up with the few things, so I, I started experimenting whether or not the sound changes with the mouthpiece or with that. But there was something that I found really cool. So, I'll just use, the low B-flat, which is the lowest note you can play. and because I find that has the most resonance as a tone, I'm sure if you can hear. yeah. And I took off the mouthpiece, and then I realized that the pitch that you play, just, it resonating by itself is not actually. The note, it's a low B-flat. But if I was to cover this neck, it changes pitch, right?

00:03:03:03 - 00:03:37:15

Ned

The pitch changes, I know when the flute, if you do, it's like a major seventh. When you do tongue, ram, it sounds a major seventh below the the fingered pitch. Yeah, it's really interesting. I thought. I thought it opened up like, like the ability to, like, do the same motion, but then have two different pitches for it.

00:03:37:17 - 00:04:05:11

Sean

And so with that, I can go, like here. I don't know if I yeah. I don't know if you can hear too much, but I heard that one. Yeah. So with that, there was also another discovery where it's a minor one, but like, I realized that I was free to use whatever finger I wanted on the low B-flat or so. Depending on each note I play, I can lift up any of the notes with the finger that I'm pressing down, and it still resonates as that same note. That's clear. So I can play a low B-flat. I can lift up this one. That's the same note. I can lift up this one. That's the same note. So like that means I can play with these two fingers. So like I can do the same low B-flat regardless.

00:04:49:07 - 00:04:53:06

But some of, some of them are more resonant than others, right?

00:04:53:07 - 00:05:19:11

Sean

Absolutely, absolutely. So then you can make a decision based how if you want it accented or more resonant sets, that kind of thing. So I found that really awesome. Now the any limitation with the more resonances, obviously you're limited to only doing key clicks without the mouthpiece.

So it does have an effect, but I'm still like working it out. I'm, I'm still just like trying this because I like these sounds and I'm, I'm enjoying this process. Yeah. so that sort of leads me to where I was like this week where I was thinking about how to notate, oh, this. so originally I, I can share my screen, if that's okay.

00:05:19:11 - 00:06:24:16

Sean

So. Yeah. So as you can see here, there's, two different types of, notation. So he's got the on pitch key clicks.

And then on the fourth bar he's got like a tonal pitch. that he's composed into it. So I was thinking maybe I could try something like that, but then I was thinking, wait, that doesn't really make sense, because how can you, notate all the different fingers that you're opening and closing? Because, yeah, I could be

playing that note, but I'm lifting up my third finger and I think it becomes too cluttered if I was to write like that.

00:06:24:18 - 00:06:48:15

Sean

So then I also had a look at this. So as you can see here, there's two separate lines. And it's very clear. You can see what he's done with each hand. So you can see and that looks good. Yeah. So I was thinking maybe that would be a cool option, but then I was thinking, okay, but I might be doing something a little bit more complex.

00:06:48:15 - 00:07:13:08

Sean

So what would happen if I was doing something a bit more complex? I might just stop sharing. So now. And I was thinking, like two nights ago, I was thinking, oh, this. Will be back. Okay, cool. I was thinking, how about guitar tab? Something similar to guitar tab, where it was like, you have the different numbers for the fingers.

00:07:13:10 - 00:07:43:21

Sean

So if I was to do that with a normal stave, stave staff stave and have the pitches of the notes, but then have a number and that number correlates to the fingers because as saxophonist, I guess every instrument you have a number already assigned to the instrument. So I could use that language in the stave itself. So say I'm playing a low B-flat and so I write the pitch for that B-flat, but then I'd say three as the note head.

00:07:43:23 - 00:08:07:09

Sean

Then. Then I know that is the finger that I used to play that note, if that makes sense. Yeah. So I'm going to try and see if that's possible. And then maybe I can just send that score a little huge to some colleagues to see if, they, like it if it makes sense to them. But yeah.

00:08:07:11 - 00:08:38:02

Ned

that's well, let me just. Yeah. Let me give you feedback. as a composer. Yeah. number one, I think you should, make the music you want to make it first and then figure out how to notate that. so I think this is great. You're already thinking notation, but to try to create music without thinking about notation and just.

00:08:38:03 - 00:09:01:15

Ned

I mean, I think you're already doing it, but continue that. Yes, the concept should have a pure artistic concept. And then later we look at notational strategies because I think there are a lot of different options. Yeah. And how to say there's not one right answer. And I think it depends on what it is you want. Just to give you an example, in this flute piece.

00:09:01:16 - 00:09:32:24

Ned

Okay. So, so here I have the low V is the clicking and the B. So here what I did is I basically I always did the, the key where I wanted the click to happen. I, I notated with the x. and so here we have low B's and an E and stuff like that. So those are literally the x flute.

00:09:33:01 - 00:09:57:18

Ned

And yeah that's one thing. And then later on here I have a double notation, which is where the B's the one that's being clicked. And then the E and the clear sharp and d that's all being fingered. Right. So it's you have a sometimes those kinds of combinations. at this for this piece I wanted to do that.

00:09:57:18 - 00:10:24:24

Ned

So, so that was one that's how I notated it. Number two. at one point I made a video for where I just, I showed what I did, something far, and then and then I, you can see the fingering combinations. because, you know, also trying to reverse engineer, a notation to think, even if it's correct and it's all fine, it's still hard.

00:10:24:24 - 00:10:53:02

Ned

And sometimes you can just see someone do it. Oh you got it. So I think that's also a really good tool for bringing over your ideas. Bottom line will figure out the notation how to do that. But first the top line should be what is it that you want.

00:10:53:04 - 00:11:16:15

Ned

Yeah, and I figured that out okay. Yeah I, I think I really yeah I think it was like the process with going hand in hand, and then I just got it sort of got caught up with how, hey, how do I read this? How how would I read this? And I think that just took my attention. But like, no, I've been definitely, like, playing around with, the grooves that I can sort of get out of it, but it's hard. It's hard coming up with something that like, I like, but then all the ideas that connect, you know.

00:11:16:17 - 00:11:44:15

Ned

Yeah, yeah, yeah. It's a it's a little clunky, the saxophone for this kind of stuff. Yeah. It's more mechanistic. that's bigger somehow. Like, somehow the flute is a little more cleaner with, some percussion sounds. But you have this, I think the, the, the saxophone without the mouthpiece is also a really great thing. So because you could blow through it, you could sing through it.

00:11:44:15 - 00:12:10:17

Ned

There's all kinds of things you could do when you've opened up that, that hole, actually. So that might also lead to some new ideas. Yeah, yeah, yeah.

00:12:10:17 - 00:12:33:08

Sean

Do you have any advice as a compositional process? Do you just experiment and come up with these things and connect them all together, or. Well, I mean, I think you're, you're you're right on with this idea of like, do I like it or not?

00:12:33:12 - 00:13:01:24

Ned

So just try to make things you like and then, you know, if there's, if there's a thousand things possible, but you only like, three of them, that's fine. And then make your peace with those three things, and then, and then see how you can make a logic out of it, like, musical logic. Yeah...and maybe you need to develop some exercises in order to control the technique.

00:13:02:01 - 00:13:27:07

Sean

Yeah, I, I did that a little bit. And that's when I started thinking about the notation because I was like, how do I write these, write little etudes? Because I did it by, like, using a percussion system and sort of like how you have your entire drum set up. And then each of the lines was associated to a finger. So I go, this finger, this finger, this finger. Yeah. Right. Yeah. Then then I was like, oh, that's yeah. Well, you know, yeah.

00:13:27:07 - 00:13:45:17

Ned

That's tricky. It's just a, it's not, not a notation research. So that's for sure. Unless you want it to be. And then then we change the research. So then, you know, then we might have to go more in-depth into that process. Right. like not, Yeah. I think I wanted to be more like the actual music. And then I think I would like to, like, come up with, like, a fair idea of, okay, if I want to do this more in the future, this is how I write it down.

00:13:45:17 - 00:14:16:05

Sean

Yeah. Shall. Okay. Yeah, yeah, yeah. Okay.. So I'm getting in contact with a couple of composer saxophonist people, and there will be my interviews in the next week or so.

00:14:16:05 - 00:14:41:03

Sean

Andrew Ball. He's written a few solo saxophone pieces, and then I've reached out to Barry Cockcroft as well. The. Yeah, the original guy, he wrote the piece I just showed you as well. yeah. But if it's okay, I might use this interview as well as part of, for sure. Okay. Absolutely. Yeah. Yeah yeah, yeah, it's. definitely.

00:14:41:05 - 00:15:06:15

Ned

Yeah, definitely. And, you know, I'm one of your experts. Yeah. Yeah, I think so. As being your, your research coach, as a composer, as a wind player and having made, you know, percussive technique, solo stuff, that's, that's, and also, you know, thought about the notation a lot.

00:15:30:03 - 00:15:44:09

Ned

And, let's see if I can find that video. I made it in India like, a bunch of years ago. Yeah.

00:15:48:11 - 00:16:24:24

Sean

I think it's, well, since I'm having a good time with just this one technique, I might reduce my research question to just pretty much focus on the key clicks. Yeah. I think it's been it's giving me enough. so I did

mention like three of the extended techniques in the question itself. I think I might use those in a final product, but I don't think that's necessary to focus on any my actual research, if that makes sense.

00:17:09:08 - 00:17:30:19

Ned

Okay. I'll send this to you. It's, it's a video I made for a friend of mine who played it. this moonrise is a note that literally one one other person has ever played it because it's too hard. But, so I made a video for her to learn it, so it's, I don't know, it's maybe a little personal, but yeah, it's it's pretty informal, but I do kind of go through and demonstrate. so let me see here.

00:17:42:01 - 00:17:56:24

Ned

Are you can you come so you could see and see if that's interesting? You'll see a younger. Me too. We have.

00:17:57:01 - 00:18:27:21

Sean

Lovely. Thank you so much. What was your question? no, I was just saying, I think I might, because I'm having a good amount of fun, and there's a lot of challenge with just the key clicks with my. Yeah, research question. I think I might just sort of narrow a bit because I did have like four co-composed piece for solo saxophone, one of the various ways that it used to create some additional, right.

00:18:27:23 - 00:18:45:04

Ned

yeah. So how would you how would you envision like three different research cycles on the topic of key clicks? I think.

00:18:45:06 - 00:19:17:03

Sean

That is tough. I guess. but I mean, I think it's possible. I just have to think about it. Maybe it's because right now, I think I'm just starting out with, possible sounds and maybe, like, basic improvizations and the exercises to get control over it. And I think maybe in this. Well, I think obviously the third one would be getting my ideas, notating it, creating a piece.

00:19:17:03 - 00:19:40:22

Ned

I think that's what I want in the third cycle is just maybe the second cycle is a little bit vague at the moment, but, well, let's anyway, you don't have to decide that now, but, and it's absolutely possible just to do your first cycle on the key clicks and, see how far you go.

00:19:40:24 - 00:20:14:21

Ned

And if you feel like you're just getting started and you. There's more to do then do that. so, yeah, it's no problem to do that. I mean, you're absolutely right. If you want to cut out multiple I slapped on my curtains and, then that'll be great because those are also huge topics. so my recommendation is, yeah, I think it's a great idea at least to, to focus on the key clicks.

00:20:14:23 - 00:20:48:22

Ned

But what I would really like to see is, some music. So, the improvisations are great. So I haven't seen them, but like, let's say you've made like 3 or 4 improvisations. Yeah, 9 or 10 or whatever. Okay. And then let's say you reflect upon those, you choose some sounds or some combinations which you like, and then you start exploring already in this cycle how to mix. So and then you'll have to go into like, okay, what is it you look what is he want to say with that? Is it is there a motive? Is it a groove? Is it a top of the song? I mean, you know, now you come into a lot of compositional decisions and then it it kind of explodes.

00:21:10:03 - 00:21:36:03

Ned

So I, I'm really curious to already get to, look, looking at how you want to deal with that question. because that's what you say here. Co-composed what was the deal with, I, we remove that last session. oh. Okay. Yeah. Now you're just going to make your own piece. Yes. Pretty much. Because I think you said the working like, how does that work?

00:21:36:03 - 00:22:02:15

Sean

And I think I would just like to do it by myself. I was just a bit afraid to compose something because I've never done it before. Yeah, well, it could be that you still don't want to do it. And then you make an Improvisation.

00:22:02:15 - 00:22:35:09

Sean

Right. So then, right. I made a lot of improvisations on key clicks and and, it's a great way to do it because it's in a way, it's much easier than composing it. Because if you get so specific with the composition. Yeah, but the conversation, can be more of, yes. You talk. What is that in English? It's like, exploration. And then that be the way you put together the piece. So like, you could maybe say, improvise, say, okay, I've got these five or 3 or 5 different combinations of side, which I like, and then I'm going to put them in order.

00:22:35:11 - 00:22:58:16

Ned

And the one that I know makes a great ending that will put that last. And then I have, I'm going to be. So the content of the improvisation is a sort of experimentation with that pattern and sort of small variations of it. and then when you get to feeling like, oh, I've done getting about tired of this, then you move on to the next one.

00:22:58:16 - 00:23:30:14

Ned

Right. So, so this would be a strategy. And the way you could structure Improvisation you have like different combinations and a couple of fixed points that, you know, like how you might start and how you might end. And then you, you, you start to explore how you connect those in real time. so that could also be one way to, to develop, you know, performance with this, as opposed to pausing this.

00:23:30:16 - 00:23:57:04

Ned

So I, you know, I think you should try them both out. So, so do some improvisations and then, you know, compose, compose 8 or 16 bars, music you got, you know, and, and then try to write it down. Yeah. And,

and then and then boom. We've, we've covered like, the main topics. Yeah. That's improvization the composition and the notation.

00:23:57:07 - 00:24:25:02

Ned

Yeah. Okay. Keep it small and limited so that we, we, you know, we can get right to the point. Okay. Yeah. Yeah. You can do that sense. Yeah I'm happy with that okay. Awesome. Yeah. All right. What else. Yeah. Questions? No, I don't really I just have to write it all down. I, I think about it a lot, and I do a lot of practice.

00:24:25:02 - 00:24:49:12

Sean

And I really love the practical aspect of it. And I feel like I'm like up to here with that. And then I'm super down here with all the, the bookwork and stuff. So it's just a matter of catching up. But have you made some videos, about the Improvisations? Yeah, yeah, yeah, yeah, they're on my I've had to upload them to my Dropbox, so I can't really share them now.

00:24:49:18 - 00:25:14:16

Ned

Yeah, yeah. Well, and, reflect upon them. That's already a big part of your data collection, which should be easy to do. Yeah, yeah, yeah. Okay. All right, well, anyway, we're out of time, so, well, I'm always, available for feedback or questions. Yeah, yeah. Sure. Stuff. Yeah. I'll reach out to you. Definitely. Awesome. Thanks so much for your help.

### 7.4.3 Interview with Francesca Fatini

Research interview Francesca Fatini 13/02/2025:

00:00 - 01:31

Sean

Um, so essentially, my research, like the end product, is that I'm composing a piece of music, and that's also focused around the use of key clicks as the main focal point of the piece. So I'm using like, extended techniques, essentially to create my own piece of music. But I specifically wanted to use key clicks as, like, my main method of creating this piece. So, like, in my like this, the cycles that we do in this research, the first one I did, like, basically, like writing down all my discoveries of like the key click sounds. So like, what, what sound does like a low B, flat, with a certain key create, what's the best fingering to create like this, nice duration of a key click, or what works like texturally, what works to create more of like the like the trickle light sound. And what creates like that really like, kind of like, boom, boom sound. You know. Then my second cycle, I started doing improvisations as in way to, like, sort of create ideas using these key clicks. And then this third cycle, I'm just trying to find ways to bridge the gap between improvised music and, like writing it down. So yeah, if you have any like, kind of experience, maybe with that, I'd be interested to hear, yeah.

01:31 - 01:34

Francesca

And do you want to write the solo piece or, yeah?

01:34 - 02:28

Sean

So I'm in the process of writing the solo piece, so I have, like, a basic idea of how I want it to sound. And I've so far written like, I'm not focused on like notation at this stage because, like, I feel like that's a completely like, it's not, it's related, but it's not integral to what I'm researching. So I have like established some like sections and some ideas of structurally, how I want it to sound overall. So I know that I want to have like three, three sections to the music, and then I have, like basic, like kids, like limitations for each section that I want to focus on,

02:28 - 04:09

Francesca

Yeah, okay. I mean key clicks, I think they're really interesting, of course, because it gives percussive it brings out kind of a percussive layer, and sometimes it cuts off also the essence of our instrument, which is the air. So I think it's always interesting to experiment with it. What I found out while I was improvising with key clicks like Malia's texture, yes, but I mean, in general, like improvising is like that you have a lot focus than on your fingers. So if you're like thinking about that the key clicks are an extended technique. It's like the extension, I think it should come from the way you use the fingers. So I've started also improvising a lot like, not like with regular saxophone positions, fingerings or regular also grip that you usually have to have to have on the saxophone, but also, like, I don't know, like having my hands, like one maybe going keeping rhythm, and one just going down and experimenting the sound of the keys, like outside my normal embodiment, let's say I don't know if you're also doing this, or you're just staying more in the in the focused on budget.

04:09 - 04:53

Sean

Yes, I'd say I'm doing I started off doing like, just on like, the how I usually hold it. But then I've just started to find ways to, like, make it easier for myself to create certain sounds. So like using different hand positions to make to use like a stronger sound, or like I hold a note, and then I can use the upper notes on my right hand to then, like play a note, while also doing like, like textural sounds with the clicks as well. But that's an interesting idea. I haven't actually thought about like doing that kind of like, yeah, combined thing,

04:53 - 08:28

Francesca

Yeah. It works a lot like, just to experiment with your hands on it really like gestures of letters. So this is without air, of course, Bucha workers will be there, of course, but it's not there. You should always try both, but without air and really using your hands with a gesture that is really full of semiotic meaning, in the sense that the listener will see this, and we recognize also a gesture that means something, you know. This is kind of a gravitational thing that is, bring, I don't know, you bring away something, you let some weight go, yeah, so it's always, if you don't have sound, you know, and you're kind of limited in your instrument, you I think, as I mean what I think when I play clicks that I still want to transfer all that energy that I usually convey into sound and all that meaning into the gesture I'm doing. So my hands

became a certain point. That's why I write to these using more these extended palms, fingers and hands, because they were helping me, in this way, to really convey the message I would have used with the socks, with the sound, with the air then. And another thing that I found myself doing a lot while improvising with key clicks is usually really start like faking and playing so with a really effective, maybe rhythmical reef or pattern, and sticking on it so much that becomes almost a kind of a bass plaque, you know, effect, not really sound wise, But the intention, you know, of having this constant rhythm and slowly introducing air. And I found out, I find, I have found out that actually it works to give a lot of coherence to the material you are improvising with. Because with your body, it's you are putting, like this effort on the successful on the keys, and the intention is so much there, you know, of this rhythmical pattern, or even of a phrase, you know could be like, and then you slowly introduce air, or maybe you give air, and then you go back. So this is also a really nice way I like to use the key clicks. And then I do remember once, really nice. This wasn't mine, but during improvisation, my colleague, Grisha, he's also saxophone player. He just put, you know, his saxophone on the legs, and started playing, like this key, the keys. And that gives you a totally other mindset, because then you can combine different sounds better. So maybe you can have more focus on the C3, TA, you know, like this, and then you have, kind of gives another image, and it's, it sounds like really childish somehow. But if you play your instrument like you have never done, you always discover new stuff. That's true. So putting it horizontal, which is just, you know, a shift of 90 degrees, it can give you a lot of space to even create. And yes, I think it's, I mean, it just also, at a certain point, it becomes a bit of performative also, somehow,

08:28 - 08:49

Sean

Do you have, just speaking in, like, a general sense, like improvisationally, do you do you have a particular Like process in which you do it generally. Do you have, like, do you start with an idea, or do you have, like, a length of time, something like that?

08:49 - 10:42

Francesca

It really depends on what you need to do. Usually, I mean what I understood from myself after listening back to my improvisation, and what I know well is that I have a really, if I don't force myself, I have a really slow development. So I do really like to start with, like, some material, playing around with it a lot, not that becomes repetitive, but really exploring it, know its way, and then coming up with the idea. So a lot of time I'm that one player that is staying there in the group, like just, you know, contributing with a texture, and then I develop the texture into the most meaningful of the of the section. That's the way that I think it's really effective and it's really nice. Gives me a lot of time to think and to keep everything cohesive, let's say, but otherwise, there are many, many ways it really depends on what you want to achieve. Like since I know that my tendency is to have this slow development. Moment. Sometimes, if I am exercising improvisation, if I play with someone, I try to do the opposite, so that I really start strong on something already, and I deconstruct it and see where it goes. So they start like with an object, that I think it's okay, this is my object, and I go really sure for it, not even caring on what the others are playing and then slowly adapting and deconstructing. So basically, it's the opposite of what I'm usually doing. So I think what is useful is to recognize in what patterns are you usually following when you're improvising? That's, yeah, yeah,

10:42 - 11:04

Sean

Yeah, okay, yeah. I've got, because I yeah, I've got some, like, audio files with everything that I've been doing slowly. So I guess it'd be really good idea to, like, kind of see what my tendencies are and then push that forward. Yeah, that's a really good idea. Um, have you ever like, gone from like, improvising your own music and actually trying to, like, write that down in some way.

11:04 - 16:19

Francesca

Yeah, I always had, like, because I started improvising, because I wanted to start composing, but they always had a block with the paper somehow, yeah, because I really, like, I mean, it just that writing, it's really different than I discovered later, but it's really different. I think what was blocking me it was the meaning of my music, like I like to do music in the moment, because it's kind of connecting with my need of expressing and describing maybe what I'm feeling, or really give my my body the space to to discover. So it's really music that I don't mind. I don't mind it to be recorded. Let's say it's not music thought for the future. You know, when you compose actually your components something that it's for the future. Because you want it, you have to write it down in such a way that your friend will play it, understand it. The students of him will play understand it, the other colleague will play it, understanding and it will go in generations. That's the goal, actually, when you are composing, I think so, and for me, that actually, I discovered it was not my main tendency, what I wanted so what? When I tried to write down, maybe because I liked an improvisation, or I want to guide an improvisation, I usually do a graphics course, like with that language, I much prefer, and with some notes, because, for music maps, because then the, I mean, the material can change, or maybe I decide sometimes about the form and the material, or just the form, or so depending really. So I think it's really I do agree, and I don't understand that improvisation is and can be a passage to composition. But also for me, it's kind of enough. Yeah, yeah, improvising, not in a way that I don't want to go, go behind, beyond it. It's just that for me, it feels enough. But I do depend that the fact that, as you say, improvisation is a really good way to get to composition, especially because it makes you discovering a lot of things. But yeah, I wouldn't. Sometimes it gets a bit overwhelming, because it depends if you really want, because sometimes you improvise and something is really good, but it was good in that moment maybe, and it was really good, like for even for mistake or whatever. So writing it down, then it's losing its freshness, yeah, somehow. So I think that the passage, then from from improvisation and composition, is really this thinking, this mindset of thinking that what you're gonna compose is gonna be printed there and should go over a lot of yeah, go over time. Yeah. Well, when you advise, the most important thing is to deliver something in that moment. Is like this urge, this desperate need of doing that moment, and it's super clear, yeah. So I think that when it comes to write it down, if you maybe find some difficulties, I think that the ontological philosophical problem underneath is that technical wise, I wouldn't know how to approach it, but I think there are many ways, like really trying to go in different mindsets, maybe when you're composing and when you're improvising, or. Or try to improvise something like, Okay, I really want to actually do some instant composing. So I already maybe you start like you decide the structure of your piece can be your ABA or ABC. You had in mind not three parts, and you really stick to that. Maybe you even decide it's gonna be three minutes of a, three minutes of B and four of C, whatever. Really stay strict in that and see what what you have, and maybe slowly adding more and more parameters so that you are kind of conveying improvisation towards a composition. So really start out from broad, from a broad perspective, like giving only form, then maybe a bit of content, some techniques, and then you can, you can see, but also there are many ways of composing and notating. Like maybe for this piece, you will actually prefer graphic notation, or you can prefer a text score, even or a concept score. Or can be a hybrid between the the actual, the actual pentagram and graphic score.

16:19 - 16:53

Sean

I think, yeah, like, I like, I fully agree that like, the improvisation would be like enough in like, as as a as a product. I think the only reason that I that I really wanted to do it for this research, like, I think I want to do this as an improvisational thing at some point moving forward. But for this research, I wanted to, like, write it down. It's just because I'd like to have, like, something notated, something I can, like, physically say, like, this is what I made, not just like this recording. You know, I don't know, um, it makes sense,

16:53 - 17:34

Francesca

Makes sense, but it really is. You see, you have some you're driven by this, wanting to, to have it on paper. So actually, your mindset is much more there for me, that even that, you know, it wasn't there at all. I was like, Yeah, I'll call a composer for me that wasn't there. So if you have the need, you'll find your way for sure, okay, because that's what is guiding you. I think we can. I know it sounds a bit kind of romantic, but that's true. It's about your need. Otherwise you didn't do it, I guess. Yeah, yeah,

17:34 - 18:31

Sean

Yeah. Well, I mean, and then of continuing on as well. So like, I found that, like, I did some like, small little excerpts of of my improvisations, just as a just as a way to like, write things down in my last cycle. And I found a couple of things, but I found it really difficult to like stick to it when I played it, like reading it. And so I'm thinking about, like, just like, creating, like, a base, say, say, I'm thinking very rhythmically, and I want to create, like, a rhythmic groove pattern with my hands, thinking about writing like a very like bare bones, like four bar, like riff, and then just, sort of like, say, like, experiment on this, like, like, kind of just like, leave it a little bit more open ended than, like, writing out every single detail. I don't know. Do you feel like that might be a nice balance or, yeah.

18:31 - 20:42

Francesca

Yeah, I think so. I mean, I was thinking it came to my mind immediately. Like, if you check, like, jazz composition, big band, like, really high, the highest level you go the little, the ah, more little is notated. You know, because the list is notated. Sorry, because, if you really, if you have, like a beginner, just piece, you will see that all the bass walking bass is notated. But if you go to professional big band score, it's written for four the chord and then in those notes that are not even rounded like a rhythmical pattern. That means this is it. You have your ears. I trust you. I trust you, because you're a better musician than I am. This is what the composer is thinking. Yeah, yeah. That's why it's so bare in really high professional situation. So actually makes sense that you give like a strict pattern maybe, and you want them to have it develop. Actually, it's kind of a contribution on what what jazz is, or better said, just found it first, a way to merge improvisation and merge also the the a part of the interpreter, like just really recognized the skills and the intelligence of the interpreter, because I. Mean, don't take me wrong, of course, but yeah, they write everything for us in classical music, because this shifted so much. It was like, Okay, there's the composer and then there's the interpreter, and we have freedom in other meanings like that are really subtle, but in just composition, there is improvisation is so prominent, and they found, first, you know, this

way of having, having it mixed. So maybe it can be also an idea to check some, some big band scores, or even Yeah, that maybe they can, you can find some ideas about how to develop from that, you know, yeah,

20:42 - 20:45

Sean

Yeah, yeah, okay. I'll have a look. I'll see if that's possible.

20:45 - 20:51

Francesca

Yeah. Not much about the language, of course, but about the idea of notation, like,

20:51 - 21:02

Sean

Yeah, okay, yeah. It's like the complexity and seeing if there's any like things that they take for granted, kind of like, Bach.

21:02 - 21:58

Francesca

Exactly. Bach, yeah, yeah. Okay, that was there for us in Baroque and Renaissance music, when they just had, you know this, and they were saying, So, you actually constructing your your environment, so, so maybe what is going to be needed? Because, if you think that you want to provide another player with your score, and they should be able to play. It should be nice to have a nice legend and introduction, like, I don't know if you've seen John Cage scores, they have like, two pages or super sick introduction, usually not, not every but yes, because they have to give the context, because in contemporary music, or modern music, or post modern, whatever, it was really changing based on the composer, the states you were from,

21:58 - 22:57

Sean

I also have a question. Maybe it might be difficult, because I feel like the answer could be changing depending on situation as well. But say that you have like, a piece that is what's like, semi improvised, or it's a piece that is entirely improvised, I assume, like, say, in this example, that, like, you've decided that the pieces based on like little motifs. I'm just taking, like my how I'm doing it, just for an example for you, so you have like little, small little motifs, or slow that you plan to use in that full improvisation to create those small little motifs. Do you focus entirely on what you think sounds good, or do you go off of some other like, what are some other ways that you kind of judge whether or not it should be a motif or something that you want to include in the music?

22:57 - 23:01

Francesca

That's a tough question. Sounds good is already like, I mean, we know that when something is sounds good, it's just not because it's pretty there are, I mean, sounds good can be also it's because it counts in the right moment. That's why it sounds good, actually. So for me, like we played in recently, in February,

we played with like big band, three improvised orchestra, and we had this kind of magic cards. And on each card there was a motive indeed, or some concept depending on it, but mainly motive. And they had really different, really different vibe. So some motives were much more rhythmical, some motives more melodic, so they could fit different situation. And the magic of it was to use the one in the right moment. You know that it was needed. Yeah, so. But when by myself from thinking about about motives, I think I have a I mean, I have been told this, that I have a really melodic way of playing, but that's, I think it's inside every classical player somehow, or if you spend a lot of time on melodies, and we did, will spend a lot of time on melodies, Starting from failing, ending up with everything else. So you have it. You know, what a motive, how motive should sound. It should be really clear, repeatable and and then you should be it's not always easy. Sometimes I want to maybe give a motive that is kind of open in the way that it's easy to develop, because there are those kind of motives that are really easy to develop. Some motives are so closed, they work so well in in it like, like a reef or whatever. And then maybe I find myself a bit stuck. Work so, but that's, I mean, that's not bad. So I really think about motive, and I think it's better this. It's function. And there are two functions that are predominance, let's say music. One is development, and one is sticking around the material or having, maybe using it as a kind of light motif. So motive that comes back, but it's so strong that it's just that so. So I think when I choose motifs, I must think about this rather than sounds good or not, unless I'm highlighting whatever moment or something that was set. So maybe I wanted to make it sound even better. But yeah, I think with motives, the most most important thing, at least for me, is to know where I want to go after if I want to like a moment that is this, motive is the main thing, and every thing will be about this, or I want to use the motive to go further.

26:09 - 26:48

Sean

Okay, yeah, yeah, that's a good point. I always thought about where, what I'm going to start with, the never like, where I'm going to that's a that's an interesting thought. Yeah, okay, I just have to check this one thing, because I have to make sure that I asked all my questions. I might have just one more, but I feel like you may have already answered it a bit earlier.

Oh, okay, okay, yes, so this came from one of my reflections on an improvisation. So I started with like it was basically pretty much where you what you were just talking about, like, like, not losing yourself too much in going into the next section, or finding a goal for where you're going, I found that I I got A little bit lost whenever I was doing something for like, an extended amount of time, and I found it difficult whenever I was going, like improvised to written material. This is, I guess, this is can be answered in so many different ways. But do you have kind of some kind of tips to kind of not get too lost in the music, or, like finding ways back to some sort of familiar material,

27:49 - 32:34

Francesca

Like for my master's thesis, I had this topic about shifting between, you know, interpretation and improvisation, and how in contemporary interpretation and contemporary improvisation could actually help each other. And my final concert, I played Denisov Sonata, but I have improvised the second movement with the pianist, and then I attached the last movement, taking the remember that, I mean the repetition I have in my repetition of the last course of the third but that take taking that I had, I attached it to Fontana mix by Cage, which is a totally open score by John Cage, which is basically actually kind of guiding you somehow into free improvisation. And Fontana mix was played by me and two guys, one on percussions, one of the on the one on next seat, yeah. No, but the vibraphone, she was playing my microphone, and they took over, you know, that last bar of of days off, but it was something completely

different, because they didn't even use the same notes or anything. And from that we departed into something new. And then, after the pre improvisation, I attached the study by my god Simon Steen-Anderson for saxophone and percussion. And my skill was in the end of the improvisation, the skill I had to develop, it was to slowly put more and more material of the beginning of the study, too slowly, effectively coming into the start of it. And I remember at the beginning it was a bit, everything was really the same, like I thought that, you know, I had this, and then this, and then that. And it was nice at all. But keep on keeping on trying it. It was becoming easier and easier. So it's really a matter of practice, also that. So for me, I had this and I couldn't get lost in the music in that moment, because otherwise I'm then I wouldn't have been able to connect, to Anderson, for example. And now it's a bit confusing. So so in that case it was really about trying to, yeah, the beginning was put inside the material, also revoking the the atmosphere. So it's not a lot about the notes sometimes. So the study, it starts with a really nervous drill that is in Omori, omorithmical, kind of with the percussion on the boot block and the saxophone in the high register of the F, E and F. And it was this tension and this really minimal, minimal sound. So I was looking much more for that. I. And also adding some of the notes of the of the main scale that was coming after. But it's all about developing. So improvisation is nice because you can get you can really get lost, and when you get lost is where you find new things, which is the nice paradox of it. But if you treat it, if you want to exercise it, it's a lot about thinking how to develop. So you can think about development like Crossfade. So you have your A, that's, I don't know, easy example A, it's staccato, and you want to get to some legato. And so you start more slowly, you know, until something of a is going less and less prominent and B is coming. So really cross fading the two. Yeah, and these are really easy, is it not? Is a clear exercise that actually can bring you a lot of things. So cross fading, then you have, you can develop like, from some, from something this kind of little, you can go just into bigger. So like, and it's the most difficult to explain, indeed. But yeah, yeah, sorry,

32:34 - 32:46

Sean

Sorry, I didn't mean to interrupt you, but I like the idea of, like finding the kind of, like blending, Crossing Paths idea, I think, I think I'll try that.

32:46 - 35:04

Francesca

Crossover is interesting and it's kind of really technical also, because it's as an idea, it's kind of, it's not real, that it's coming directly from technology, but it has a strong impact, that reference that we have on technology, really thinking, and then, yeah, developments. I mean, you know, all the it is not that you have to know how to develop a motive like in whatever style or what you need to trust that you have it embodied, that you know how to do it. Because you have been listening to a lot of classical music, you have played a lot of music. You have actually developed a lot of things, you know, I mean, you, you, you kind of, know, even take crests on first movement, like how it goes from the theme a to the beautiful B theme. So actually, you have it in your in your sensibility, organization. And what helped me also, I mean, sometimes development can be also thought as not development at all. So just just a position, you know that you strongly do this, and then suddenly you just change, like you're tapping, you know? I mean now that you need also to consider, I think also, especially in contemporary music, all those new ways of seeing things that are brought to us by technology. Or if you think about electronic music, for them, also, there is a lot of just a position because they have a channel, they have another and they just switch on one and switch off the other. And for them, it's okay. Or also thinking about, yeah, something about the atmosphere of the piece, so don't be stuck too much on the notes themselves, okay, but yeah, it's just,

it's really about not to get lost is, is giving you a task? Mainly, yeah, okay. And in development, to is the, is the key to to develop is the key to train and practice when you are improvising? Yeah? In feel.

35:04 - 35:14

Okay, yeah, awesome. Um, that's pretty much all my questions. That's given me a lot of stuff to think about. So.

#### 7.4.4 Interview with Dr. Josué Amador

Josué Amador interview 17/02/2025

00:00 - 0:09

Sean

A little bit about yourself and your arts practice, what kind of things you're involved with, just to get a little base understanding.

00:09 - 05:29

Josué

Well, I can see in my blue background, I have some guitars. So my first bachelor was in jazz guitar, then I moved to composition. The reason was that at some moment I felt that I was starting making, in jazz practice as in other musics, the performer and the composer are always the same person, not like in the Western classical music. So I was always making my own music. I was never really interested in the traditional jazz, but more into making music. It's not really jazz, I thought, but studying jazz gave me the tools to make music. And at some moment I thought, I felt like I reached a limit in which I could not, I was imagining music that the jazz tools wouldn't help me to produce. So I got curious, I'm a very curious person, so I studied classical composition, and this completely changed my music, of course, and the way I understood music. It gave me a lot of new influences, new sounds, new harmonies, new ways of writing, etc. So I started with jazz guitar, then I moved to classical music. So I started with jazz guitar, then I moved to classical music, and this completely changed my music, of course, in the way I understood music. It gave me a lot of new influences, new sounds, new harmonies, new ways of writing, etc. So I started with jazz guitar, then I moved to classical music, then I moved to classical music, and this completely changed my music, of course, in the way I understood music. It gave me a lot of new influences, new harmonies, new ways of writing, etc. Eventually I stopped playing jazz and I got more interested in improvised music.

I studied master's at Codarts in composition. I never really saw myself as a conventional composer. I studied master's at Codarts. I also a PhD in Kraków in composition as well. well, mixing or trying to combine these two aspects. I remember, for example, one of my first experiences making a composition as a composer to a performer. It was very frustrating because I need to communicate in a different way that I was not used to. And the music could not be alive as I want it to be because I had to communicate to a paper to these people instead of making it as I was used to. As a jazz performer, for instance, you make the music together all the time. So it's not a thing in which I bring the score and I pass it. The protocol is different. So I was expecting something like that and I was frustrated when I couldn't have it. And then in my master's and PhD mostly, what I wanted to do was try to find a way in which I could

communicate. I would call it a process. So I had to incorporate these different ways of making or understanding music into my own work. Then I also got very interested in not only improvisation, but also sound studies, like listening and sounding practices and so on. So I also ended up making music that is somewhere in between all these, for example, pieces for public spaces or pieces that are not for musicians, but just for performers, for people. Pieces that are not really producing sound, but maybe producing actions. I tried to incorporate this into, combine it also with different types of research. For example, I made a piece that we use as a research methodology to go in a research project about smart technologies using the scene. city of Rotterdam in public spaces. So it's something really far from writing for a piano concerto, whatever. But to me, it was also a way of making music because I conceived this as a piece and I made a piece that had a kind of score type, which was a document basically that the performers or the people could perform. And with this we would get the data for the research, for instance. And it also involves performativity and so on and so on. And now I teach at Kodárs, I make music that is... I got very interested in the last couple of years in something that is called sonic journalism, which is kind of a sound art practice that involves documenting through sound and representation. And I work now at Kodárs and also the Wiedemdekoning Museum. Which is also to me interesting because this way of understanding music opens to different possibilities. And also I work a lot with people from different disciplines and practices, not only musicians or not only artists as well, you know, like academics or researchers and so on. And I see it all as making music, even if sometimes it doesn't sound. Yeah.

05:29 - 05:43

Sean

And so do you, do you have, like a specific process in which you tend to go about a typical composition? I know things change depending on the project, but do you have like a step by step thing that you do or?

05:43 - 06:44

Josué

It really depends on the, on the project. But I also, the reason why I got very interested in improvised music is because I like music in general that was not fixed, but something that was fixed. Yeah. That was flexible. That could take different shapes or that it could sound or look different depending on the situation, could be adapted to different contexts and so on and so on. So, I don't know. I think I get bored when things repeat too much themselves. So every time I do something, I try to try out something that might work or not. And every part, for instance, once I made this, I wanted to make this sound installation. Do you know next to the central station there is this tunnel for the bikes?

06:44 - 06:51

Sean

Yeah. The red thing? Yeah. Is it the red thing at the moment or something else?

06:51 - 06:55

Josué

No, no, no. Next to the tunnel, next to the station, there is a tunnel for the bikes.

06:55 - 06:57

Sean

Yes, Yeah.

06:57 - 9:33

Josué

Yeah, that part, they renewed the station not long time ago, a few years ago. So this thing was new. The United States. Yeah. Yeah. It was the same in the United States. Yeah. And the sound there is quite interesting because it's a tunnel that is closed. So it's interesting. So I thought this thing is new, which means if I make a piece, I would be the first person ever who composed a piece for this thing. I'm going to do something. This was my initial motivation, to be honest. And then I got the, I developed a project and I got a grant to make it. to make a my idea was to make a sound installation that could stay for a month in the tunnel people like it i got the money to make it and so on and after that i realized that it was impossible you cannot use it you cannot drill the tunnel because you cannot place things in the tunnel it's very low also so whatever you put there people could just destroy it which happened also once yeah so that's one and then i found a solution in the end but it was i was struggling a lot so it's one of the examples of something that was an experimentation that didn't go well i had to solve it in the end it went fine but yeah experimenting and so on so you tend to like kind of just to see if it doesn't kind of reel it back and then try a different route but i also do a lot of research to try to ensure that things work the way i expect them but i have a lot of fun doing things that i never did before this for sure or at least to experiment with something i think i like the also improvised music is something that i find fascinating and very attractive that is is music that is very fragile that it can fall apart at any moment you know it's something that is being born in the moment that doesn't exist that you don't know where is it going so at any moment can collapse yeah yeah and this i find it uh super interesting and and attractive and yeah encouraging also this is one of the most interesting to me you know like the possibility of failure yeah yeah to be navigating in this thin line i find it especially interesting.

09:33 - 10:37

Sean

Yeah absolutely um I think the the the thing that i'm working on right now with my own research is like i've the last like two cycles that i've been doing have been kind of like building up a kind of a base understanding of key clicks or the extended techniques on the saxophone and so i'm kind of like uh limiting myself deliberately to just focusing on this one technique as like the focal point of this one composition and I thought it would be nice to use improvisations as a way to to create this final composition because i feel like um it's a lot of the process is creativity and i like that process of starting from like nothing and very like the fragile concept of is like of making the music is very true um I I just don't know if there's any other ways that i can kind of go about just like making up some random things on the saxophone and then translating that into a composed piece.

10:37 - 11:21

Josué

Um well first of all to me improvisation can be different things one is like you described a process that leads you to something you know this is also i'm pretty much invested in education also and in developing methods or something in which improvisation could be tool to achieve something else but also improvisation can be the outcome so it's not the process to reach somewhere else to go somewhere else but it can be also that place where you arrive yeah you know what i mean so i think interesting to to first find that in your case if it is a process or it's an outcome,

11:21 - 11:51

Sean

Yeah i wanted it to be the process like i was considering i was balancing whether or not i wanted the the outcome or the process i just feel like it was just at the time i wanted like a piece of paper that i could say like was my music that i would have definitely like um i could see what i had done i know that there's not so much a difference um but for me i i like the idea of like holding my music like a physical copy of it you know yeah.

11:51 - 19:44

Josué

Um then i teach an improvisation course for the bachelor performers classical performers um well they call it improvisation to me it's more about making music that can include improvisation or composition or notation and so on and so on to me one of the biggest problems in understanding composition as we understand it now is the notation like this because notation is a translation of something it becomes of course a second or a third artifact like an object but um it is built on translation it's a way to translate the abstraction of sound into something that is tangible it can be repeated in any format so i find it very interesting because this happens also to composition students or to composers in general when you try to translate an abstract idea which is sound we cannot see it we cannot touch it we cannot smell it and it exists only in this moment in vanishes and time when you try to translate that on paper there is something there is very often some misunderstandings in this translation and a lot of struggles and it has to do for example also with the software that we use if you use if you use the software of that software the software for example Sibelius builds a framework and then whatever you compose exists only within this framework so that means you end up composing what the software can compose instead of what you imagine you know what i mean anyway so what i want to say is that you could also start from the not only from the improvisation but also from the notation or a combination of both what i advise always to think about is that you are not a performer so musicians who are not so experienced in composition because it happens very very often very easily that you will get lost in this translation and then you will end up with a paper that doesn't really sound to what you expected to sound yeah or that you end up with a score that doesn't really represent that your artistic view and you're just replicating something else anyway so also to think of the of the notation how do you notate something do you use the conventional more classical ways of notation or do you do some hybrid formats or for example um another tool that could be useful is recording to use recording as a compositional tool so that means you create an idea maybe through composition or whatever and then you explore it through recording and then you record it and then you can listen back to it from the outside not while performing goes the way we listen is also completely different not listening while playing it listening after so it's a different temporality as well and then instead of notating it editing this recording or saying okay i like this part i don't like that part i remove it now i like this part maybe i'm gonna repeat it or maybe i'm gonna extend it or maybe i'm gonna change this and that so i make a new recording in which i change these things and this new recording is my new score and so on and so on and you repeat this and you can edit it and you can mix it to me that i i do that i did that the first time i composed a piece for electric guitar because it's my instrument and it was very difficult for me to compose something for my own instrument because my connection to the instrument is through my hands and through my performance so it was very difficult to come up with an idea that were outside of my own play and the way that i did it was a two recording i thought instead of escaping my performativity i make it a part of the compositional process and another all these because i wanted to maybe you know it but do you know um the music of anthony braxton yeah a little bit um just uh some like a basic research but nothing nothing more where can i share something here is there a chat um yes

yeah on the bottom there's a there's a chat can you see this link that i sent yes me anthony braxton is a unique entity it's like an incredible musician who create music that a new music you know it's a different thing what he creates and the way he does it um there is some video youtube that i recommend you to look at that is a concert of him with his band in the beam house in amsterdam a couple of years ago a few years ago maybe five six uh because then you can also see how the music is made yeah because they are conducting it and he's indicating things and so on and they are also reading a score so anthony braxton has this system called um language music this is a system called um language music this is a system called um language music text that i shared with you is a little bit about that yeah but you can also find it so basically he develops or he creates these symbols that have a musical meaning very very simple and concrete eventually he created like a hand he has more than 100 different symbols but there are the basic ones that he that are explaining this in this text um so it's a very easy way of trying to organize music visually too because you can think um well i'm gonna use i'm gonna combine this symbol and that symbol so that means i'm gonna use this and that parameter only and then you can display it over time on a paper and and so on and so on i use this a lot with the students who are not composition students because it's very easy to understand uh how symbols can be translated into sound and vice versa and then it goes into notation this is a very basic system that you can also um change or combine with anything else just use as a starting point and he has an album i think it is called uh solo alto i think it's an album for solo saxophone in which he's actually performing uh only using the the symbols i don't remember now he's using like one track per symbol or a combination a few and that's it so that's uh uh uh an interesting for alto it is called the album

19:44 - 19:53

Sean

Um could be an interesting uh thing to explore yeah yeah absolutely i'll have a read of that as soon as we're done.

19:53 - 22:39

Josué

And there is another example this composer called anestes locotethes super interesting also this guy also is a different completely different music but he also developed his own graphic notation system and he did some research on that and this link that i'm sharing with you you can see his system is explained i use this a lot on the lessons so he has a system explained like um there are different symbols that that have a very concrete meaning so you see in this way how he explains how he notates pitches or notes how he notates articulations and then how he built shape or form which shapes the music and then in the end at the bottom a combination of all the symbols into an actual score that is for flute i think this is very easy to understand and very easy to perform also which is amazing i do this with the second year students and when they get lost and they don't know how to make music because that happens very often after this they can make music this is the thing if it is good music or bad music that's a different conversation at least to make music annotated as well yeah so i would recommend you also to take a look at this and to try to pair to play the piece in the bottom okay yeah where it's a condition of all symbols this is for flute but the saxophone can be adapted to easily and this is an actual score so it's not an exercise it's an actual piece yeah yeah the idea of that is that yeah he questions the role of the notation in the music composition process and comes up with an alternative all his scores are built in the same way and then what he says is that because we use this conventional system we produce only this type of music and there are no ways of creating different music if we continue using the same system so he creates a different system that as a consequence produces different type of music yeah

22:39 - 23:07

Sean

Okay yeah thanks for that i'll definitely read up yeah i'm definitely having trouble like whenever i'm writing down everything that i want to write down um it's like i get stuck like like what i want to do and what i want to write down sometimes i kind of want to end up writing down two different things.

23:07 - 23:55

Josué

So yeah yeah and the thing is like you could also do a combination of this all this for instance if you you say i notate something and then when i does the sound as i wanted it would be interesting to question why like what is what is missing you know maybe to record it and to listen back and to think yeah it sounds in this way when i wanted to sound in that way why why you know what is it missing see the harmony you see the rhythm is it the articulation is it the form and so on and so on

23:55 - 24:10

Sean

Yeah yeah yeah yeah i like that that idea um i said i had a question when you were talking earlier about um the when you were talking with people about and you had that like kind of block um between how you wanted it to sound and how they wanted or how they ended up playing it yeah how did you overcome or like get by or kind of get through that

24:10 - 28:30

Josué

Well first of all first of all i was thinking that from the perspective of a conventional composer performers are a tool performers are the instrument you know i mean i'm just it's very general what i'm saying but an understanding to me was important to understand that is not actually the case that performers are also different so i thought why i need to what i need to do is not to make music for flute or for piano music for this flutist and for that pianist. So that's a different way of understanding. So that's one thing, to work with people with whom I could do different ways of understanding music. That's one thing. Another is, I thought that my experience as a performer allows me to understand the music in a different way, because I was inside the music. As a performer you are inside, and as a composer you are outside. I mean performers are a tool, performers are the instrument, you know, I mean, I'm just it's very general what I'm saying, but an understanding to me was important to understand that is not actually the case, that performers are also different. So I thought why I need to what I need to do is not to make music for flute or for piano, but maybe music for this flutist. And for that pianist. So that's a different way of understanding. So that's one thing to work with people with whom for with whom I could do different ways of understanding music, you know, that's one thing. Another is I thought that my experience as a performer allows me to understand the music in a different way because I was inside the music as a performer. You are inside. Not. I. I. As a composer, you are outside. It's a different role. So understanding that my experience by being inside could also be translated to my role as a composer. So I got, for example, part of my experimentation getting very involved with the with the performers. That is not only passing the score to them, but start making music with them. For instance, I made a piece for a group of bass. It's playing it's playing the players in which I believe I go the score is also an experimental score that could only make sense if I'm there to explain it and to play with them. So I'm there. I'm part of the ensemble. I'm not playing, but I'm there just listening. I will record the piece, send it back to them, discuss it with them. Next rehearsal with repeat the same thing. We played, we listened, we discussed

and so on and so on. So through this process, the piece comes alive instead of me being at home, notating in detail, note by note in that case was that was a solution in other example, but that's quite an extreme in other cases, depending on the I always take into account that the performers were going to play the music if it is something more a more conventional ensemble. I try to. I try to do things that are more conventional, but that are still flexible in a way, you know, that I play still with something that I still keep this possibility of unexpected outcomes or things like that. So there are different techniques that can also use this also wanting simplification and other things in determinacy, which is in which there are certain parameters that are. Fixed and there are other parameters that are decided by the performers, so it's something in between.

28:30 - 30:02

Sean

Yeah, no, like, yeah, this is really good. I have a lot a lot to think about now because I like the different processes. I feel like I'm kind of stuck in the same loop doing the same things and I would like to try things. So this is very good information. Do you have any like maybe some advice or some ideas for like coming up like this at the starting point of any particular composition or improvisation for that matter, like how do you like do you come up with things that sort of narrow your focus or a particular melody or rhythm or something like that?

30:02 - 33:49

Josué

Personally. I mean, because it's how I like the music and focus, my main focus is the harmony more than the rhythm or the melody or anything else is like the color that I want to hear, you know, so I'm always start with that. Doesn't matter what if I'm going to make a piece for piano or for saxophone or whatever, I start I'm not a piano player, but it's easier for me to work on this on the piano than a guitar, because if I use a guitar, I go back to my performance performance thing, and if I will do it with the piano, it's also more visual. So one of the first things that I do, I go to the piano and I find chords, I have my preferred intervals, so I always try to go for those. Also, I visualize, is it closed, is it open? And so on. And I make a few chords. This is a nice exercise also to start with harmony, make four chords, for example, that can be combined, you know, that they are not very far from each other, or maybe they are, but they can still be one after the other. You have these four chords or five, and then you play them in different order. Choose an order, can be randomly also. And then. With the saxophone, for instance, what would be interesting is to do, to build these chords in a register that can be played in the saxophone. Then you have these chords, let's say chord one, two, three, four, you already play them in different order, and then you choose this one, no? And then try to make melodies that go from chord one to chord two to chord three, maybe to chord one again, and then goes like this, progresses and so on. Then maybe take only the. Highest note of each chord to make a new melody, and then the second note of each chord to build another melody, is just to create material, as I call it, for free. And then from there you can go somewhere else. Because of the way I, the music I make, I always take freedom into consideration just way later in the process. Okay. I play things fast also, because I have the idea and I'm playing with something, I just not take the notes without freedom, just proportional notation, and later I decide on the precise rhythm.

33:49 - 34:04

Sean

Yeah, yeah, yeah, yeah, I like that. Do you think there are any like, I don't want to say like mistakes, but like pitfalls or something that, that you would say to like people who are just starting to develop this process?

34:04 - 34:30

Josué

Mm-hmm. I think getting stuck can be a very bad thing, you know, because you, when you don't know how to continue, which is one of the main things, and then you just stop with the piece and then let it die, and I think it's just important to continue until it ends, you know, like, okay, whatever it is, it's not going to be the best piece, maybe, but it has to end. It has I have to complete the cycle. Because then you can revise it.

34:30 - 34:32

Sean

Yeah.

34:32 - 34:50

Josué

Otherwise, it gets just as an exploration that doesn't really become knowledge. Yeah. Or experience, you know?

## Appendix 5: Transcriptions, (annotated) scores, analyses

### 7.5.1 *BO* by Barry Cockcroft

2

29  $\bullet = 80$

*p*

alternate between the two fingerings

*mp*

*mf*

The musical score consists of seven staves of music in B-flat major. The first staff begins with a tempo marking of 80 and a dynamic of *p*. It features a series of eighth notes with fingerings for C, B-flat, and B-natural. The second and third staves continue this pattern. The fourth staff introduces a fingering instruction: 'alternate between the two fingerings' for B-flat and B-natural. The fifth and sixth staves feature a series of eighth notes with fingerings for C, B-flat, and B-natural, and a dynamic of *mp*. The seventh staff features a series of eighth notes with fingerings for C, B-flat, and B-natural, and a dynamic of *mf*. The score includes various articulations and fingerings throughout.

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55

Top Staff - Fingerings for left hand  
Bottom Staff - Articulations and fingerings for right hand

4

74

distorted sound  
(overblow harmonics)

*f*

3

6

12

84

*ff*

*ta* *ta*

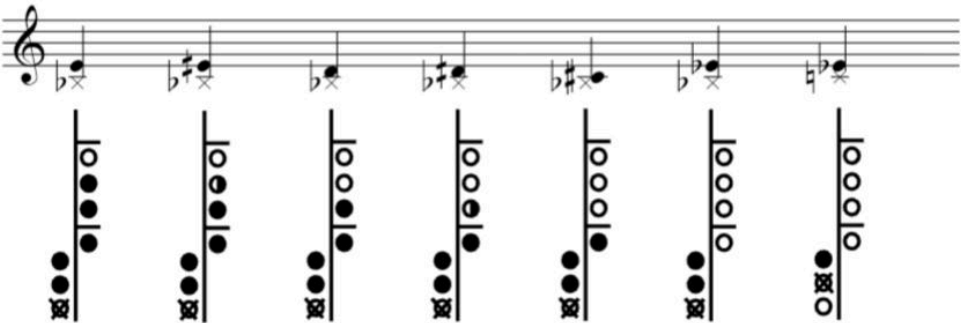
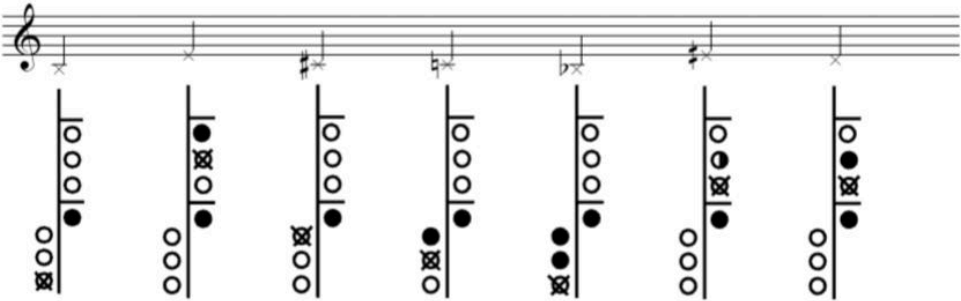
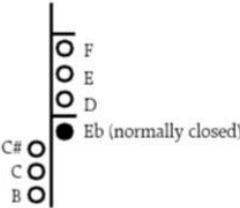
*very long*

*fff* *p*

Key Slap Fingering Chart  
Section E

This diagram represents the bottom 2 / 3 of the flute:

- Slap key
- ⊠ Press ring of key
- Hold key closed



### 7.5.2 Moonrise by Dr. Ned McGowan

# Moonrise

for solo flute

Ned McGowan

A

$\text{♩} = 60$  haunted

non vibrato

The musical score for "Moonrise" is written for solo flute in treble clef with a key signature of one sharp (F#). The tempo is marked as  $\text{♩} = 60$  and the mood is "haunted". The score consists of seven staves of music. The first staff begins with a *mf* dynamic and a series of eighth notes, followed by a *p* dynamic section marked "non vibrato". The second staff features a *mf* dynamic with a wavy line above the staff. The third staff starts with a *p* dynamic and includes a *cresc.* marking. The fourth staff contains two *4:3* triplet markings, with dynamics ranging from *mp* to *f*. The fifth staff begins with a *p* dynamic and includes a *4:3* triplet. The sixth staff starts with a *mp* dynamic, followed by a *p* dynamic and a *cresc.* marking. The seventh staff begins with a *mf* dynamic and a *decresc.* marking, followed by a *4:3* triplet and a series of sixteenth notes.

# Moonrise

**B** poco vibrato non vib.

*mf* *smp*

poco vibrato

*mf*

4:3 4:3 4:3

U

4:3

*f* *ff* decresc.

*mf*

4:3

4:3 4:3 4:3 4:3

cresc. *f* *mf*

4:3 4:3

U

*mp*

C

3

# Moonrise

The musical score for "Moonrise" consists of seven staves of music. The notation includes various rhythmic patterns, including triplets and 4:3 ratios, and dynamic markings such as *mf* and *f*. A wavy line indicates a tremolo effect, and a diamond shape indicates a crescendo. The score is written in a single melodic line on a treble clef staff.

Staff 1: Melodic line with a wavy line above the staff. A "U" is written above the staff.

Staff 2: Melodic line with a wavy line above the staff.

Staff 3: Melodic line with triplets (3) and a diamond shape above the staff. Dynamic markings *mf* and *ff* are present.

Staff 4: Melodic line with a 4:3 ratio and a wavy line above the staff. Dynamic marking *mf* is present.

Staff 5: Melodic line with triplets (3) and a wavy line above the staff.

Staff 6: Melodic line with triplets (3) and a 4:3 ratio. Dynamic marking *f* is present.

Staff 7: Melodic line with a wavy line above the staff.

## Moonrise

**E**  $\text{♩} = \text{♩}$

ff  $\text{f}$

4:3 4:3

4:3 4:3

3 3 3 3

4:3 4:3

Moonrise

The musical score for 'Moonrise' is written in treble clef and consists of seven staves. The notation includes various rhythmic values, accidentals, and specific performance markings. The first staff contains a series of eighth and sixteenth notes with slurs. The second staff features triplet markings (indicated by a '3' over a bracket) and slurs. The third staff includes 4:3 ratio markings (indicated by '4:3' over a bracket) and slurs. The fourth staff continues with eighth and sixteenth notes. The fifth staff has triplet markings and slurs. The sixth staff also includes triplet markings and slurs. The seventh staff concludes the piece with a final series of notes and slurs.

### 7.5.3 Practice journal

#### Practice Journal

13th January - First section improvisation

- Objectives:

Develop some ideas for opening the piece. Themes of the opening: mysterious, tension, ever increasing in tempo.

- Process:

I wanted to use the low Bb key as this has a really nice resonance. I started with a simple motif, seeing how I could contrast but also blend slap tongue with key slaps. I used fingers 4 and 5 to create an ostinato using the slap tongue to create some differing sounds and to highlight different metre changes and rhythms.

- Reflection:

I feel as this is a nice groove pattern, but it doesn't fit the "mysterious" or tension-building opening I want to have for the piece. I feel as though I should experiment with quiet, sustained long notes as the anchor in the opening with the key slaps creating an underlying texture or pulse.

- Next Steps:

Use a key that incorporates the low Bb key. Choose one or two notes as a starting point. Use soft key clicks underneath and see how it develops.

20th January - First section improvisation

- Objectives:

Explore if using key clicks with a sustained note creates a better "mysterious" opening.

- Process:

I started finding a suitable note to sustain while I used my pinky keys to create click sounds. I found that going between notes E and F as a tension and release was the best, as this allowed me to use the right hand. If I were to have played D, I could have only used the Eb key to create key noises, and since this is a close-to-open tone hole (pressing the key opens the pad), there is a bit of a difference in sound which I don't think is as effective.

- Reflection:

I really like this opening as it allows me to keep things simple and establish the themes of the piece. In comparison to my final improvisation in cycle 2, where I used a lot more silence between the notes, I think this opening is more interesting and allows me to potentially do a lot more in terms of leading to

other melodic and rhythmic ideas. This is because the 'free' tempo doesn't lock me into any sort of ostinato or solidified motif, so it gives me more space to develop ideas.

- Next Steps:

Find how to transition between the E and the F towards lower notes. I have a phrase that I want to include in this piece using the low Bb keys, so I need to find a logical way to connect these two ideas.

24th January - Finding ways to connect first section to the next

- Objectives:

Exploring the possibilities on E and F is satisfying, but in order to not stagnate, I need to find ways to bridge the first and second sections.

- Process:

I started by finding melodic notes that helped me move from E to eventually Bb. Then I tried a few times to find different ways to 'connect these dots,' challenging myself to find as many different possibilities, eventually finding that E, F and B are better notes to start on. Keeping in mind the rhythmic motif I wanted to transition to next, I tried seeing how I could incorporate slap tongue and foreshadowing of the material to come.

- Reflection:

I like this method of finding as many ways as I can to bridge the two ideas. It makes the process a lot more streamlined and overall more efficient for me. I am no longer focused on creating a perfect version as quickly as I can. By treating it like an evolutionary process where I am not afraid to create 'bad' ideas, it allows me to explore as many options as possible.

I decided that B is the better key to aim towards rather than the Bb. This is because I would have to incorporate more of the Eb key if my target note was Bb, which does not have an ideal key slap sound as it is a close-open rather than an open-close tone hole. If I were to instead head towards the note B, I think it would be better given that there is a minimal difference in the duration of sound of the key slap compared to the Bb key.

1st February - Rhythmic ideas for second section

- Objectives:

Experiment with different rhythmic patterns for the second section to contrast or complement the first section. Figure out target notes for developing material. It is not a goal to find a way to connect the two sections together just yet, just find ways to incorporate more key click sounds.

- Process:

I first tested how slap tongue could play a role in setting up a groove based on the E and F keys. Then I tried to adapt the second research cycle recording improvisation to use in the second section using B instead of Bb.

- Reflection:

I liked the groove that I was able to make in the new key. However, thinking about connecting the two ideas in the future, I feel that this will be quite hard to connect naturally. What if I left it very open and melodic? Then put this rhythmic second cycle groove as the ending of the piece.

- Next Steps:

If I try a melodic section similar to how Ned McGowan write Moonrise, that would create a nice contrast to the piece.

14th February - Solidifying second section/blending section 1 and 2 together.

- Objectives:

Based on the notes of B, E, and F, how can I create a melodic section that starts spacious and mysterious? What are some ways that I can bridge the previous section with this new section.

- Process:

I first created a melodic fragment and then explored some melodic ideas based on this. This then led me towards speeding up, adding more notes, ending in a high tension note giving a real climax to this section. I then created ideas for how to connect the first section to the second. I found that incorporating having a pause would be a nice way of breaking the long continuous first section with the more rhythmic and melodious second and third sections. Highlighting the main notes B and E at the end of section one, simplifying the key clicks decreases the amount of texture, then pausing on E.

- Reflection:

I found that because the first section is so sustained and continuous having no rests, it was difficult to come up with a logical way to connect both sections. I like this melodic passage in the middle of the piece, but I think it would be a good idea to implement some other key clicks as I don't want to stray too far away from the focus of this piece. In my feedback from Femke, she suggested using textural key clicks without rhythm. Maybe using this idea with inspiration from the Kotsuzumi solo would work?

- Next Steps:

Try play through first and second sections, experiment with textural key clicks.

28th February - Playing first and second section combined

- Objectives:

Practice playing both sections together to see how they flow.

- Process:

Ran from beginning to the end of the second section a few times to see how it felt in the moment. Tried to use some textural keys in the second section.

- Reflection:

I think the first section needs some more material build up. I think it can get boring after a while of the same thing. I found that using C1 while playing E and F caused a C to sound without having to move any other fingers and without breaking continuity of sound. I then found that if I use the low Bb key to do key clicks while playing E and F, a nice multiphonic occurs with both notes. It would be nice to try bring this out more in the piece. I think some ideas from the Kotsuzumi solo would work in this second section. Maybe try to sustain a note and slap a key slow to fast. Then on A use the right-hand stack to create a 'rain' type sound.

- Next Steps:

Expand more and see what other possibilities there are within these sections.

29th February - Implementing changes based on self-reflection of 1st/2nd section combined

- Objectives:

Refine the combined sections based on observations from the previous session.

- Process:

I liked the idea of slowly bringing out the multiphonics as part of the "gaining complexity" aspect of the opening section, so I tried exploring this more.

- Reflection:

I like the end between these two sections, as the ever increasing complexity of the first section reaches an end, there is silence, then a nice melodic and sparse continuation.

- Next Steps:

Begin working on the final section using inspiration from second cycle improvisation.

10th March - Ideas for 3rd section

- Objectives:

Begin brainstorming the third section's development. How much tonal things do I want? How does the piece end? High or low, soft or loud?

- Process:

I started by playing this section a few times in isolation, starting by limiting myself by using only one finger to do key slap. Then I created a way to use slap tongue while key slapping to create two separate sounds that sounds like a rhythmic pulse and then tonal accents. I then switched between the notes B and C and used a multiphonic fingering to create a third sound. This then created a basic groove pattern as the basis of this third section.

- Reflection:

I really like this section and think it leads from the material and techniques from last cycle. I still need time to flush out the different variations of this groove to then explore in my improvisations. Ending the piece, I tried first ending it like how it began, with the end going from single key clicks using the right hand pinky on the note E to blending it with vibrato, so that the timbre changes are there, but not the key sound. Next session try to find a way to end it loud and fast - completely opposite to this.

- Next Steps:

How does this transition into the end? Does the pause between the first and second section make the breaks between sections repetitive? Does it end up sounding like 3 different movements?

14th March - Finalising the ending/New first section ending?

- Objectives:

Clear up how to end the piece. More specifically, decide if it is better to end soft or loud.

- Process:

I started just by creating a single melodic line of a nice way I could end it. I drew inspiration from "Impulse" by Vincent David, by ending in a high altissimo note down to an accented low note. Then I tried different ways of going from the rhythmic motif through to this melodic phrase. I adapted the ending of the first section to see if this would work and it did, so then I reworked the ending of the first section essentially swapping what I was doing for both sections.

- Reflection:

I really like the ending, however, I am not sure if taking a longer breath between the final section and the very last phrase breaks some of the tension in the music. I like the rework of the first and last section endings. It makes the piece feel less blocky, less up down up down and more connected.

- Next Steps:

Try develop more ideas in the first and third sections. I feel as though there is a bit more complexity to be discovered at these points.

20th March - 1st and 3rd sections: starting simple and adding

- Objectives:

Investigate more ways to expand upon current ideas. Are there different ways of going about it?

- Process:

I started with the first section, and changed up how I was using the fingers to create different pitches and rhythmic groups. Playing C1 and B with slap tongue created a nice contrast to the key clicks, and bringing out more of the multiphonics was a lot easier when using certain keys. When playing E and F, I should use the low Bb key on the key slaps. This is because it creates more overtones sounding on the

notes than the B key and works better with these two notes. It does this without impacting the tonality which is nice.

For the third section, I found that if I open the B key and use 4 to strike the note C, this had a better resonance overall. However, when I go back to the B I have to switch to using 5 as this doesn't impact the tone of the note when lifted as much as 4. Then if I lift 2 while fingering B and using 5 to strike the key, it creates a nice multiphonic. Then using slap tongue on the off beats, I can create a nice groove. Blending this together using the C1, Low B, C and then lifting 1 on these notes, I can create 5 different pitches with additional percussive key slaps possible in addition this.

- Reflection:

I like the additions of the multiphonics in the first section and the different groove patterns in the third. I feel as though it creates more difference in each section, and links back on material from other cycles more. I feel as though by showcasing different key clicks in different forms, I have built upon the work from my previous cycles into this piece which is satisfying.

- Next Steps:

I now need to keep refining and working on making the rhythmic groups smooth and in time, the melodic section have the right character and to make the whole piece overall more polished. I feel as though I have so many ideas I want to incorporate but I do not know if i can do it all within the one piece. Maybe with the notation I should keep it more open ended and keep it mostly structural to keep more of the elements of improvisation into it.

