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Turning the Odds in My Favor

Exploring Non-Isochronous Meters Through Composition and Practice

Written reflection within an independent, artistic work

This independent, artistic work is documented in KMH's digital archive.

Abstract

This thesis discloses my exploration of non-isochronous meters through composition and practice.

During my two-year studies at the Royal College of Music in Stockholm, I explored different unevenly divided time signatures by practicing them in various ways, producing transcriptions, compositions and arrangements.

The main purpose of this project was to further my knowledge and skills within these time signatures and thereby expand my horizon on perceiving, conceptualizing, composing and playing them.

My endeavors culminated in seven original compositions, arranged for a jazz sextet, which I rehearsed and performed with an ensemble. During the process of composing, arranging, practicing and rehearsing, I gained a lot of articulated knowledge as well as embodied knowledge of the idiosyncrasies of various non-isochronous meters and different ways to perceive and play them.

Keywords: non-isochronous meters, irregular meters, odd meters, time signatures, jazz, composition, arranging, improvisation

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Introduction

Using the method of autoethnography, this thesis discloses my process of exploring non-isochronous meters through composition and practice. During my two-year studies at the Royal College of Music in Stockholm (henceforth KMH), I explored different unevenly divided time signatures in a jazz context by practicing them in various ways and producing transcriptions, compositions and arrangements. I chose to go about this in an idiosyncratic and heuristic approach, induced by the notion that this field could not be covered exhaustively within a timespan of two years anyways. I did not examine all non-isochronous meters and my research was mainly guided by my own interests. My studies culminated in seven original compositions, arranged for a jazz sextet consisting of vocals, alto saxophone, electric guitar, piano, double bass and drums. I rehearsed these pieces with an ensemble and we performed them at my exam concert on April 9, 2021. Recordings from the concert are accessible through KMH's digital archive (DiVA).

This thesis consists of four chapters: In Chapter One, *Non-Isochronous Meters in Jazz*, I give a definition of and some historical background on non-isochronous meters in jazz and I discuss three recordings that got me interested in the topic. In Chapter Two, *Preparations*, I present different aspects of the preparations for my master's project, including practicing, ensemble work, transcriptions and other research. In Chapter Three, *Master's Project*, I disclose the course of my master's project, from choosing the instrumentation and band members, over composing, practicing and rehearsing to the exam concert. In Chapter Four, *Conclusions*, I discuss my insights, skills and knowledge gained from this project, from the perspective of an improviser, composer, researcher and bandleader.

Non-isochronous meters, more popularly known as *odd meters*, *irregular meters* or *complex meters*, are meters that consist of "cycles of a prime number [e.g., 5, 7, 11] or uneven divisions of non-prime cycles [e.g., 9 divided as 2+2+2+3]" (Saull, 2014: ii). These meters have interested me for a long time. I always felt that they take me out of my listening and playing comfort zone just the right amount, where I do not feel overwhelmed or unsettled by the unknown, but instead intrigued enough to want to learn more about it. They open many new perspectives on familiar musical material, whether it is on a rhythmic, harmonic or melodic level. That is why I decided to focus on non-isochronous meters for my master's studies at

KMH. I set out to explore what these time signatures have to offer and what kind of material I can find within them. I wanted to further my knowledge and skills in perceiving, composing and playing in them.

The following questions helped me to guide my explorative work on non-isochronous meters:

- How does composing and playing in non-isochronous meters affect my perception and compositional use of musical elements (such as melodies, harmonies, riffs, basslines, forms, etc.)?
- How can I reach a point when improvising, where I start to sense a new and unfamiliar meter rather than intellectually conceive it? How can I achieve relying upon my embodied knowledge instead of having to actively count the meter?
- How can I feature a non-isochronous time signature in a composition without making the uneven rhythmic cycle the focal point? How can I incorporate the meter's idiosyncrasies without making it sound too repetitive?
- How can I work with a limited set of instrumentation to create polyphonic lines in non-isochronous meter compositions?

Over the course of this project, I have explored how to incorporate different musical elements in my non-isochronous meter compositions and have found ways of avoiding the feeling of repetitiveness (but also actually embraced it in some pieces). I had various approaches for arranging the pieces and creating different polyphonic parts. Furthermore, I gained a lot of embodied knowledge for improvising in non-isochronous meters through various exercises.

The master's studies at KMH were my first encounter with the concept and principles of artistic research. Researching the field, documenting my insights and critically reflecting on my process became an important part of my work. It opened my eyes to a new way of approaching musical projects. It also speaks to me how the inevitable interwovenness between the artist and their art is embraced in artistic research. If we view art as a comment on situations, circumstances, issues, experiences - whether they are political, social, or personal - the objective becomes expression. Expression asks for resonance by an audience. And the resonance is usually

intensified when context is provided. Why was this done? By whom was it done? For whom was it done? Hence, it is important to relate art to the person who created it. And that is the beauty of being an artist: you are not a replaceable person providing a service, no one else can express yourself other than you. In his article “The Debate on Research in the Arts”, Henk Borgdorff states that “the answer to the question of art research methodology is briefly that the research design incorporates both experimentation and participation in practice and the interpretation of that practice” (Borgdorff, 2006: 13). I find it to be both challenging and rewarding to be the artist and researcher simultaneously. It can be exhausting to evaluate processes that oneself subjectively and emotionally has been involved in. But at the same time, it also feels empowering to be able to propel your own work by taking on another constructive perspective.

By documenting and reflecting upon my investigations, I hope that this thesis can serve as an inspiration or a gateway to certain topics for both musicians and non-musicians interested in the field. I see this project as a first excursion into the world of complex time signatures, a foundation for explorations and studies to come.

1. Non-Isochronous Meters in Jazz: A Brief Introduction

This work focuses on *non-isochronous meters*. Isochronous comes from Greek (iso = equal, chronos = time) and means divided into even durational units. The term non-isochronous meter then refers to a rhythmic cycle that is unevenly divided. Both isochronous and non-isochronous meters are subdivided into groups of 2 and/or 3. Isochronous meters consist exclusively *either* of groups of 2 or groups of 3, while non-isochronous meters are composed of *both* groups of 2 and 3. Rhythmic cycles based on prime numbers greater than 3 (such as 5, 7, 11, 13 ...) are by definition unevenly divided (since they cannot be a multiple of 2 or 3), which makes them the most obvious non-isochronous meters. But there are also other meters that can be divided both ways. For example, a rhythmic cycle of 9 could be divided into 3+3+3 (isochronous) or 2+2+3+2 (non-isochronous). Other terms for non-isochronous time signatures are *irregular meter* and *asymmetrical meter*, which can be used synonymously, and *complex meter*, which is rather vague and not accurately definable. Another very popular name for non-isochronous time signatures is *odd meter*, although it is not totally interchangeable: *Odd* includes all numbers that are not divisible by two, but, as illustrated by the example of 9 above, not all odd numbers are necessarily non-isochronous.

Non-isochronous meters have a long history in non-Western and folkloristic musical traditions, such as Indian konnakol (Young, 1998) or Southeast European folk music (Stoyanova, 2018). In Western classical music, early examples date back to the beginning of the 19th century, like Antonin Reicha's Fugue No. 20, Allegretto, Op. 36, written in 5/8 (first published in Reicha's *Douze fugues pour le piano* in 1800) or the larghetto from Chopin's Piano Sonata No. 1 in 5/4 (published in 1828).

In jazz history, early examples of non-isochronous meters can be found, too. In 1914, James Reese Europe and Ford T. Dabney co-wrote a piece in a 5/4 meter, called *Castles' Half and Half*, for the dance duo of Irene and Vermont Castle. The piece featured the *Half and Half* dance, "essentially a hesitation waltz danced in 5/4 time with three steps over five counts of music, moving on counts one, four, and five" (Sandke, 2012; quoted from Clendenen, 1914). Also, first waltzes made their way into the jazz repertoire during that time and continued to play an important role in jazz history. It was however not until the late 1950s when non-isochronous meters became a continuous part of the jazz practice (Saull: 2011). In 1956, Lennie Tristano

released “Turkish Mambo”, a polyrhythmic piece in 7/4. The widely received and highly acclaimed album *Time Out* by the Dave Brubeck Quartet, released in 1959, included Paul Desmond’s *Take Five* in 5/4 and Brubeck’s *Blue Rondo à la Turk* in 9/4. This release was a milestone and played an important part in popularizing irregular meters. Brubeck continued to showcase odd meter compositions in his subsequent albums. Other musicians started to explore irregular meters in the 1960s as well, arguably influenced by the popular reception of *Time Out*. In his dissertation *Non-Isochronous Meter*, Jordan P. Saull presents various examples of non-isochronous meter compositions from the 1960s in chapter 3.7 (Saull, 2011: 134f) and gives a more extensive list of non-isochronous meter compositions in jazz history from 1900 to 1969 in the appendix (Saull, 2011: 189ff).

Since then, countless jazz artists have written and recorded music in non-isochronous meters and it has become a common skill for jazz musicians to be able to play in basic irregular time signatures, like 5 or 7. A clear indication for an increased interest in the topic are the course offerings about irregular meters at music colleges and universities and publications of various non-scholarly educational literature, like *The Drummer’s Guide to Odd Time Signatures* by Rick Landwehr, *Odd Meter Bass: Complex Time Signatures Made Easy* by Timothy Emmons or *Odd Times: Workout in “Odd” Time Signatures* by Jamey Aebersold.

There are several ways to notate non-isochronous meter compositions regarding time signatures. Apart from the conventional method of writing the time signature in accordance with the rhythmic cycle, it is also possible to notate them as a *mixed* or *additive* meter. *Mixed meter* refers to a piece being notated with more than one time signature. Of course, there are mixed meter compositions that consist of many different, non-repetitive rhythmic cycles, but writing in mixed meter can also be helpful when dealing with larger meters, both regarding readability and indication of subdivisions. For example, 11/4 could be notated as one bar of 6/4 and one bar of 5/4. *Additive meters* are a solution in between: the bars have the length of the original rhythmic cycle, but the subdivision is indicated in the time signature (e.g., $\frac{6+5}{4}$). Pros and cons of these different possibilities (like visualization of a rhythmic cycle as one bar, readability of a bar length, clear indication of subdivision, etc.) need to be weighed and purpose and implications need to be considered when notating irregular meters, especially if the piece is to be played with or by other musicians. In certain situations, it might even be useful to produce more than one notation, to allow different perceptions and expressions to occur simultaneously. The main purpose would be to allow superimposition of different rhythmic

approaches. Nicholas L. Abbey coins the term *parallel meters*, defining it as “coexistence of two separate meter systems occupying the same total temporal space, with the same basic subdivision” (Abbey, 2011: 15). He also distinguishes between these parallel meters from cross-rhythms by only categorizing them “as parallel meter exploitations if they observably lock into the parallel meter frameworks established through composition” (Abbey 2011: 15).

Inspirations

I personally became actively involved with non-isochronous meter compositions soon after I started getting into jazz. I was truly intrigued by them, I practiced subdivisions and always tried to find new recordings of songs in irregular meters. Listed below are three examples of songs that really got me interested in the topic and made me want to dig deeper:

“Jelly’s Da Beener” by Robert Glasper

“Jelly’s Da Beener” is a song in 7/4 or 7/8. It starts with a distinctive bassline (see Figure 1) and when the melody starts, Glasper plays rhythmic chords in his left hand (see Figure 2).



Figure 1: "Jelly's Da Beener", Excerpt Bassline (Transcription)



Figure 2: "Jelly's Da Beener", Transcription Excerpt Melody With Left Hand Chords

When I first transcribed the song, I wrote it down in 7/4. When revisiting it later, I realized the bassline, melody and rhythmic chords all suggested a 7/8 time signature, since the melody and bassline could be evenly divided in the middle of the barline, making the long accentuated note

the first note of the new bar. In addition, the chords in the left hand indicate a 2+2+3 subdivision in 7/8. Figure 3 shows a possible notation of the musical material in 7/8:

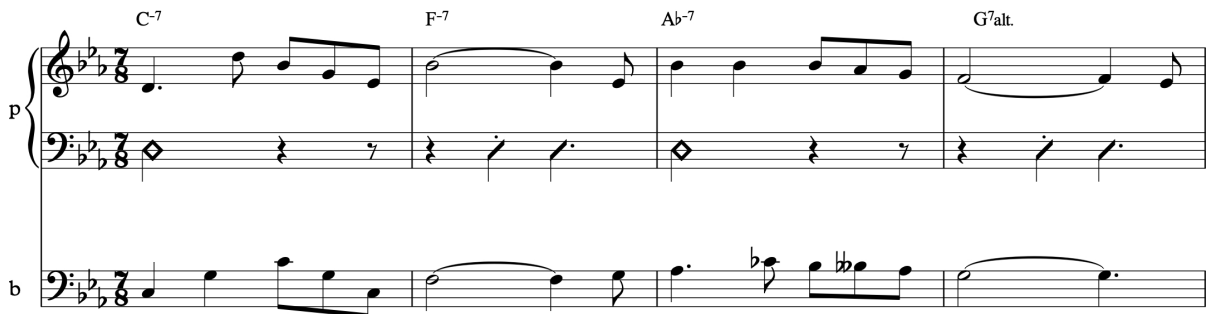


Figure 3: "Jelly's Da Beener", Transcription Excerpt, Notated in 7/8

The song caught my attention, because it is such a pianistic piece; it is a lot of fun to play it on the piano. What stuck with me most was the effect of a strong, characteristic bassline and how rhythmic chords can add to the dynamic of a piece. Also, it was the first time I became aware of different notation possibilities regarding metrical layers.

"Still Play" by Ben Wendel

"Still Play" is a composition in 5/8 or 5/4, written by Ben Wendel and originally released on a duo album with pianist Dan Tepfer, entitled *Small Constructions*. It features a seemingly endless melody in the first half of the theme (see Figure 4), which develops into accents highlighting the 5/8 subdivision in the second half (see Figure 5).



Figure 4: "Still Play", Melody (Transcription), Excerpt #1



Figure 5: "Still Play", Melody (Transcription), Excerpt #2

I found a video of Ben Wendel's Quartet playing the song live at the Blue Whale in Los Angeles and it was the first time I heard a beat being subdivided into quintuplets. The main difference in the recorded album version with Dan Tepfer, besides instrumentation, is the tempo. On the album version, the 3+2 subdivision of the 5/8 bar is clearly audible, while the tempo in the live video is so fast, that one bar basically sounds like one beat and the eighth notes sound like quintuplets. Another interesting detail of that video is how pianist Taylor Eigsti repeatedly switches between subdividing the bar into 3 or 5 during his solo. I remember that I was impressed by the feeling of effortlessness and joy that the musicians were radiating while playing this rather complex music. At some point, I wanted to learn the song, so I transcribed it. After figuring out most of it, there were still some details I was curious about, so I purchased the original sheet music on Ben Wendel's website. I was surprised to find out that he had notated the whole piece in 5/4 instead of 5/8. Once again, this time signature ambivalence made me wonder about the implications and impact of different metric layers.

“Spiral” by Brad Mehldau

“Spiral” is a song in 5/8. It features a continuous ostinato in the left hand (see Figure 6) that is maintained throughout the whole song. When hearing this song for the first time, I was really impressed with Brad Mehldau’s independence between the two hands, how he maintained the ostinato while soloing over it. This song also caught my attention because of the beautiful harmonies, it’s very intriguing, unusual form and the trio’s exceptionally well-attuned interplay.



Figure 6: "Spiral", Excerpt Transcription of Left-Hand Ostinato

Besides getting me interested in irregular meters, these three recordings also provided me with a few examples of how ostinatos and melodies can be incorporated in a non-isochronous meter in order to reinforce the meter’s idiosyncrasies. Furthermore, these compositions first raised my awareness of the intertwinement of eighth note-based and quarter note-based meters with the same number of beats, a topic I came across again when practicing and rehearsing for my master’s project (see chapter 2.2, chapter 3.3 and chapter 3.4).

2. Preparations

After determining non-isochronous meters as the focus of my master's studies at KMH, I started to explore the field. In this chapter, I present the groundwork that I did during my time at the Royal College of Music in anticipation of my master's project. I discuss how I approached the topic of non-isochronous meters through practicing both alone and with a band; I address creating an inventory of the field, present findings of transcribing pieces that served as inspiration for my compositions, discuss documentation methods and examine how my productivity was increased through coworking.

2.1. Explorative Practicing

As a first step into the field of non-isochronous meters, I started practicing improvising over pieces in non-isochronous meters with distinct basslines. I played the bassline in the left hand and practiced different exercises in the right hand in order to get a feeling for each meter.

I practiced different pieces in different meters, but I would like to exemplify my approach by a bassline in 5/4 that my friend and colleague Duy Luong composed for his piece "Long Journey":

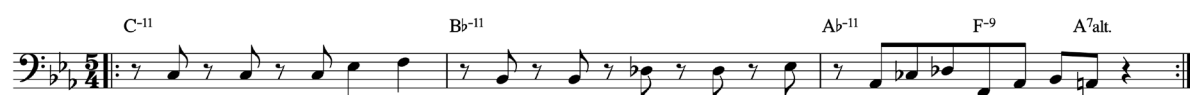


Figure 7: "Long Journey", Bassline

There are two characteristic features that make this bassline especially interesting: First, it is a three-bar bassline, which causes interesting patterns when experimenting with certain displaced rhythms. Second, the bassline never starts on the first beat of the bar, which requires the player to feel that first beat independently.

First, I played continuous lines of quarter notes and eighth notes with my right hand over the bassline in my left hand in order to sort the bassline into some kind of virtual grid. To monitor my time feel, I incorporated foot tapping on half notes, starting on the second beat of the first bar. Then, I tried to get a feel for every single beat of the bar. In order to achieve that, I played

the first eighth note of each bar for a couple of bars, then the second, then the third and so on. All possible placements of one eighth note in a 5/4 bar are shown below in Figure 8.











| Beat | 1 | 1+ | 2 | 2+ | 3 | 3+ | 4 | 4+ | 5 | 5+ |
|------|---|---|---|---|---|---|---|---|---|---|
| 1-1 |  | | | | | | | | | |
| 1-2 | |  | | | | | | | | |
| 1-3 | | |  | | | | | | | |
| 1-4 | | | |  | | | | | | |
| 1-5 | | | | |  | | | | | |
| 1-6 | | | | | |  | | | | |
| 1-7 | | | | | | |  | | | |
| 1-8 | | | | | | | |  | | |
| 1-9 | | | | | | | | |  | |
| 1-10 | | | | | | | | | |  |

Figure 8: Possible Placements of One Eighth Note in a 5/4 Bar

Once I had played through all the possibilities, I tried the same exercise with two eighth notes per bar.

























| Beat | 1 | 1+ | 2 | 2+ | 3 | 3+ | 4 | 4+ | 5 | 5+ |
|------|---|---|---|---|---|---|---|---|---|---|
| 2-1 |  |  | | | | | | | | |
| 2-2 |  | |  | | | | | | | |
| 2-3 |  | | |  | | | | | | |
| 2-4 |  | | | |  | | | | | |
| 2-5 |  | | | | |  | | | | |
| 2-6 |  | | | | | |  | | | |
| 2-7 |  | | | | | | |  | | |
| 2-8 |  | | | | | | | |  | |
| 2-9 |  | | | | | | | | |  |
| 2-10 | |  |  | | | | | | | |
| 2-11 | |  | |  | | | | | | |
| 2-12 | |  | | |  | | | | | |
| ... | | | | | | | | | | |

Figure 9: Possible Placements of Two Eighth Notes in a 5/4 Bar

Of course, this could be continued with more notes per bar and even different note values, resulting in countless possible combinations. I only worked through this systematically to a certain extent. My goal was not to go through every possible combination, but to repeat these exercises until I got some sense of embodied orientation in the bars.

After that, I took the bassline and played different repeated groups of eighth notes and a rest on top of it (e.g., three notes and a rest, four notes and a rest, etc.). I incorporated the rest at the end to demarcate the groups from each other. Of course, there are other possibilities of demarcating groups, for example melodic or articulate details, with which the exercises could be developed. Repeating these rhythms resulted in groups crossing barlines and the polyrhythmic tension only resolving after several bars. I started with groups of four: three notes and a rest (see Figure 10).

Groups of Four (Three Eighth Notes and a Rest)

The figure displays two systems of musical notation. The top system is labeled 'Groups of Four (Three Eighth Notes and a Rest)'. It features a piano part with a treble and bass staff, and a left foot part with a single staff. The piano part is in 5/4 time and consists of five measures, each with a specific chord: C-11, Bb-11, Ab-11, F-9, and A7alt. The left foot part shows a sequence of half notes with rests, corresponding to the piano part. The bottom system is a continuation of the piano part, also in 5/4 time, with the same five chords. The left foot part continues with the same sequence of half notes and rests.

Figure 10: “Long Journey”, Bassline With Displaced Groups of Four, Foot Tapping Half Notes

This way of practicing gave me three different rhythmic layers: First, the eighth note-based bassline in the left hand. Second, the half note rhythm in the left foot. And third, the right hand somewhere in the middle between those two layers. I also tried this exercise with the three other possible combinations of three notes and one rest (see Figure 11).



Figure 11: Variations of Displaced Groups of Four in a 5/4 Bar

Furthermore, I practiced groups of three (two notes and a rest), groups of five (four notes and a rest) and groups of seven (six notes and a rest).

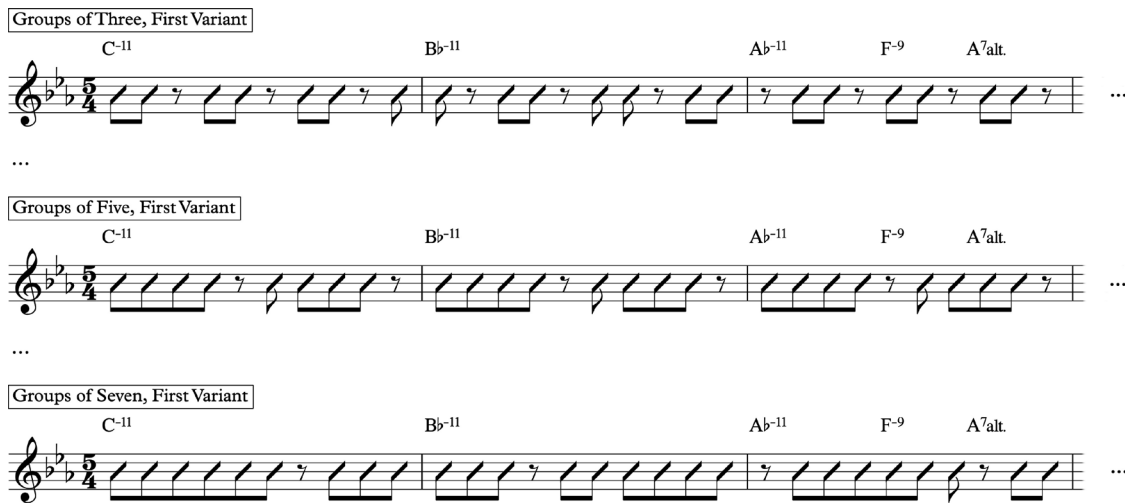


Figure 12: Examples of Displaced Groups of Three, Five and Seven in a 5/4 Bar

With certain groups, it became difficult for me to anticipate which notes in the right hand would come together with bassline notes in the left hand. This meant that I could not fall into a routine but rather needed to actively monitor the synchronicity of my hands.

Once I started to feel more comfortable with these groups, I added more melodic details to the rhythm. In order to implement these rhythms for the development of motifs, I added specific melodic details to the rhythm. I started by predetermining the direction of the melody. In the example of groups of four, there are three notes per motif, which means two possible places of deciding on a direction (either up or down). Figure 13 shows two examples of groups of four with a predetermined direction of melody.

Groups of Four, Up-Up (Example)

Groups of Four, Up-Down (Example)

Figure 13: Examples of Displaced Groups of Four With a Predetermined Direction of Melody

Then, I restricted the melody to certain intervals. Besides having to think about scales and chords in a different way, it was challenging to adapt to the chord changes within a rhythmically displaced motif. Figure 14 shows an example of motivic development with three notes, using diatonic intervals of a second and a fourth.

Groups of Four, Exact Diatonic Intervals (Example)

Figure 14: Example of Displaced Groups of Four With Defined Intervals (Second and a Fourth)

As a last exercise and more related to the technical side of playing piano, I tried to stick to the same fingering while playing different motifs:

Groups of Four, 1-3-2 Fingering (Example)

Figure 15: Example of Displaced Groups of Four With Predetermined Fingering

The figures in this chapter were only produced in retrospect for the purpose of visualizing my process. I did not write anything down while practicing and tried to keep it all in my head. This was not a dogmatic decision - writing down exercises for practicing can be a great tool, especially when it comes to more complex material. However, I felt the best way for me to internalize these rhythms would be to use acoustic references, like programmed basslines and rhythms to play along to.

During the explorative process I used different apps, which really helped me to practice in a more contextualized way: I used *Drumgenius* to practice along with different drum loops in irregular meters, but also got some inspiration from some of the drum loops for composing. I used various metronome apps, but specifically found one app called *Time Guru* to be a very effective tool for programming claves easily and quickly. Furthermore, I programmed a lot of play-alongs in *Logic Pro*. Hearing a bassline or a certain rhythm was very helpful and by programming it myself, I could customize everything to my needs.

To summarize, there are endless possibilities of a thorough and structured approach to getting a feel for a meter. I tried to guide my way through meters that were new to me with the help of these exercises until I got a feel for different periods in relation to the meter (such as the length of one bar, multiple bars, a part of the form, the whole form, etc.) and musical elements (the bassline, different rhythms, etc.) to an extent where I could improvise a bit more intuitively. As mentioned before, these exercises could have been developed further with different note values. I mainly worked with eighth notes because it was easier to relate those to eighth note-based subdivisions than uneven tuplets (e.g., eighth note triplets, quintuplets, septuplets) and more overseeable than bigger even groups of notes within a beat (e.g., sixteenth notes, thirty second notes, eighth note sextuplets). However, I also experimented with triplets and sixteenth notes briefly. Besides specific isochronous (evenly divided) note values, another rhythmic approach to explore these meters would have been other time feels, such as specific non-isochronous grooves, playing laid back, rubato, etc. My tendency towards an aesthetic of quantification and control of time surely stemmed from the influence of recordings that inspired me for this project (compare examples mentioned in chapter 1, chapter 3.1 and Appendix 3). On the other hand, it could be argued that I listened with a focus on quantized timing and probably disregarded other aspects of the music which are an essential part of why I like these recordings.

In retrospect, it would have been interesting to develop these exercises further: What other forms of grouping notes (like melodic, dynamic or articulation details) could I incorporate and how could I combine them? How could I develop the exercises with different note values and how would they put each other in perspective? How could I incorporate micro-timing aspects, such as rubato, prosody and other forms of non-quantized time feel? These could be topics for future explorations.

2.2. Working Ensemble

For my second semester, I assembled a working ensemble to transfer the exercises that I had been practicing on my own to a band context. The ensemble consisted of Anders Langørgen on double bass, Edvin Fridolfsson on drums and me on piano. The focus was to experiment with different rhythmic layers.

We played through some of the exercises I mentioned in chapter 2.1 together. We often took jazz standards as a vehicle for these exercises. First, all of us played the displaced eighth note or the displaced rhythms. Then, we took turns where one of us played the respective rhythm and the other two accompanied. After that, one of us improvised over the form and the other two played the displaced rhythms as kicks. We played the same kind of exercises with different note values, like half notes or dotted quarter notes. To play these while the other two are comping in a normal manner worked well pretty fast, but when it came to two people accompanying just with the note value and the third one having to solo over that superimposed rhythm, it was challenging. Figure 16 shows an example of an exercise with dotted quarter notes over the chord changes of *All The Things You Are* in 7/4. We simplified the changes in order to just have one chord per bar.

All The Things You Are

Rhythm Exercise: Dotted Quarter Notes Comping

The musical score is written for Piano (p), Bass (b), and Drums (dr) in 7/4 time. It consists of two systems of four measures each. The first system features chords F-7, Bb-7, Eb7, and AbΔ. The second system features chords DbΔ, G7alt., CΔ, a rest, and C-7. The Piano part is a continuous eighth-note pattern. The Bass and Drums parts play dotted quarter notes.

Figure 16: „All The Things You Are“ in 7/4, Improvisation Over Dotted Quarter Notes

A very important finding for me during these practice sessions was the impact of switching between different metrical layers. For example, when we played a piece in 5/4, either one or all of us occasionally switched to a double-time feel (5/8) or to a half-time feel (5/2). This, again, made me aware of the parallel existence and intertwinement of eighth note-based and quarter note-based meters with the same number of beats.

2.3. Contextualization: Creating an Inventory

Never having contextualized my work in such a structured and conscious manner before, I really enjoyed creating an inventory of the field which I consider my project to be in. I found a lot of interesting material addressing the topic of irregular meters, research papers, instructional literature, recordings and apps.¹ Researching the field and exposing myself to a lot of different

¹ A list of the sources that I did not directly refer to in the text but still served as inspiration to generate ideas for this project work can be found under *Appendix 3: Further sources of inspiration*.

material also gave me a sense of delimitation. It made me realize what I was truly interested in, what I wanted my music to sound like, how I wanted to write.

On the one hand, reading *research papers* not only provided me with a lot of new knowledge, but also made me think about sharing experiences in a text and how to make it as accessible as possible for readers interested in this topic. It should not go unmentioned, that most of the scholarly literature I found in this field is authored by white men. Factors might be that jazz still is a very much male-dominated field (Pellegrinelli: 2021) as well as the research field is a male- and non-BIPOC-dominated² field. But also, there is a good chance that I could have found authors with a more diverse background if I had invested more time and resources into researching the field.

Moreover, exploring different *apps* was a great advantage. Most of them were inspiration and a great support for different practice methods on topics like irregular meters and polyrhythms.

When I started listening and revisiting *recordings*, it made me realize a lot about the music I wanted to record, in many aspects: Which instrumentation I wanted to have, what guidelines and stylistic ideals I had in mind for composing and arranging, how I wanted the band sound to be like, etc. – so basically delimitations. There were moments when listening, where I thought “this is what I want for my music” and there were moments where I thought “I do not want my music to sound like this, because...”. Some recordings mesmerized me to an extent where I felt I wanted to gain insight into the musical details. I decided to do transcriptions.

2.4. Transcribing Arrangements

In anticipation of my own compositional process, I listened to a lot of pieces in non-isochronous meters. I often transcribed short excerpts or just listened carefully if something in the pieces had caught my interest. When it came to arranging, I occasionally felt the need to get a better overview of the material. As a result, I transcribed two exemplary pieces to examine aspects that I wanted to incorporate into the arrangements of my own compositions. In the following, I

² BIPOC stands for “Black, Indigenous, (and) People Of Color”

discuss my motivation for and insights from transcribing “Retold” by Nate Smith and “Future Reflection” by Gerald Clayton.³

“Retold” is a composition in 9/4. I was intrigued by the integration of a piano ostinato (see Figure 17) and how everything else evolves around it.

The song starts with the piano ostinato:



Figure 17: "Retold", Piano Ostinato

Nate Smith softly fades in the drums, mostly playing cymbals and a shaker. When the melody starts, he switches to a drumbeat (see Figure 18), reinforcing the piano ostinato and clearly subdividing the bar into 2+2+3+2 (indicated by the bass drum and snare pattern).

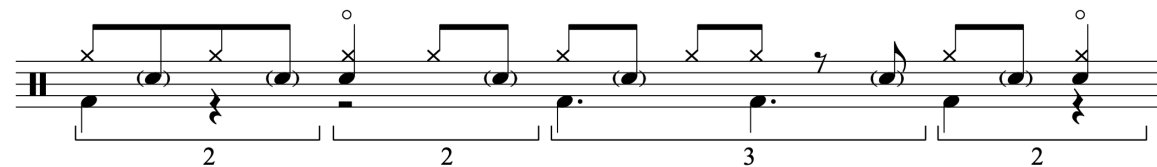


Figure 18: "Retold", Drumbeat

The melody, played by guitar and alto saxophone, mostly consists of long notes and the phrases float on top of the piano ostinato, contrasting its motion. The vocals have an accompanying role, switching between long overdubbed backing choirs and doubling the ostinato. The bass joins in the repetition of the theme, doubling the piano’s left hand bass pattern.

Furthermore, there are two passages in this song, where periods are being divided into equal units: First, in the interlude between the first theme and its repetition, the guitarist plays chords

³ The full score transcription excerpts can be found in Appendix 2.

in a dotted quarter note rhythm, dividing the bar into groups of 3 (see Figure 19). What basically happens here is the parallel occurrence of isochrony and non-isochrony.



Figure 19: "Retold", Interlude, Guitar and Piano Excerpt

Another example is in the drums in the repetition of the theme. Nate Smith adds half notes on an open-sounding cymbal to his drumbeat:

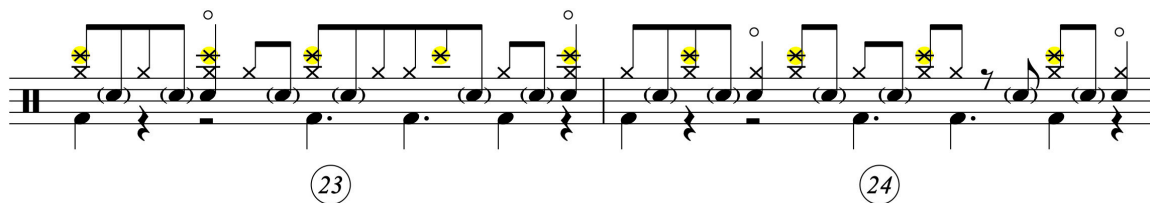


Figure 20: "Retold", Excerpt Drums, Bar 23+24

To summarize, the piano ostinato feels like the moving power in this piece, almost like an engine. Bass and drums support this steady motion while the melody instruments and backing vocals complement it with long spheric notes. Furthermore, superimposed isochronous subdivisions are implemented to put a different complexion on the ostinato.

Out of all the pieces that I consider an immediate inspiration for my project, *Future Reflection* by Gerald Clayton is the only (mostly) isochronous one. It caught my interest because all melodies and rhythms seem so fluid and unaffected by barlines, making it quite ambiguous meter-wise. Before transcribing and notating it, I actually did not realize that it was mainly written in 6/4. However, I decided to disregard that criterion when choosing an arrangement to transcribe, because it seemed like a great example for the topic of blurring barlines with phrases

and rhythms. I want to clarify that I do not have an official score of this piece and that all my following assumptions are purely based on my transcription, which is my personal interpretation of this recording, basically a statement about how I perceived this music.

The metric ambiguity of this piece has two reasons: First, there are a lot of phrases or kicks that appear around the first beat of the meter, giving the impression of a downbeat while actually being syncopated. Second, some motifs are being rhythmically displaced when repeated.

In most pieces, the first accented note of a piece indicates the first beat of the first bar. In *Future Reflection*, the very first rhythmic motif starts on the second eighth note of the bar (see Figure 21). This syncopated motif is being repeated a few times. Then, in bar 4, it unexpectedly starts on a downbeat.

The image shows a musical score excerpt for the piece "Future Reflection", specifically bars 1 through 4. The score is written for Piano, Bass, and Drums. The time signature is 6/8. The Piano part has a melodic line that starts on the second eighth note of the first bar. The Bass part has a rhythmic motif that starts on the second eighth note. The Drums part has a syncopated pattern. Circled numbers 1, 2, 3, and 4 are placed below the Drums staff to indicate specific rhythmic motifs.

Figure 21: "Future Reflection", Transcription Excerpt Bar 1-4

After the intro, there is a stop at the end of bar 16, before the first melodic line starts in bar 17 (see Figure 22). Both, the stop and the beginning of the melody could be on the first beat of the bar, but instead they are both syncopated, leaving the first beat empty. The melody develops a motif in a rhythmically complex way, with the final note, once again, being anticipated.

Figure 22 shows a transcription excerpt of "Future Reflection" from bar 16 to 20. The score is written for trumpet, alto saxophone, piano, bass, and drums. A double bar line is present before bar 16. The time signature changes from 7/4 to 6/4 between bars 16 and 17. A time stamp "0:33" is located above bar 18. The drums part includes a "snare on" instruction in bar 19. The bars are numbered 16, 17, 18, 19, and 20 at the bottom.

Figure 22: "Future Reflection", Transcription Excerpt, Bar 16 to 20

Another interesting effect happens in bar 50 to 53, when the alto saxophonist and trumpeter play a motif and repeat it echo-like:

Figure 23 shows a transcription excerpt of "Future Reflection" from bar 49 to 53, focusing on the Alto Sax and Trumpet parts. A time stamp "1:26" is located above bar 49. The score shows a repeating motif in bar 50, followed by its repetition in bars 51, 52, and 53. The bars are numbered 49, 50, 51, 52, and 53 at the bottom.

Figure 23: "Future Reflection", Transcription Excerpt Alto Sax and Trumpet, Bar 49 to 53

The motif in bar 50 is repeated after three eighth notes, the motif in bar 51 after two eighth notes and in bar 52 the same motif as in bar 50 is being repeated after three eighth notes again.

This variation in time between the initial motif and the first repetition creates a very interesting effect of change in tempo.

These are a few examples of placing strong, accented notes around the first beat of the bar and developing motifs by rhythmically displacing or altering them. This transcription made me realize how crucial syncopation, displacement and alteration of motifs are for creating barline-blurring passages.

2.5. Documentation

When I began my studies at KMH, I was searching for a good way to document my insights. I started by creating an audio logbook. Every time I developed new thoughts, had a new insight or gained a new perspective, I recorded a voice memo as if talking to my future self. The benefit of this method was that all thoughts and ideas were conserved unfiltered, which was especially important to me in the initial phase when there were still so many possible directions that my project could have been developed in. I wanted to let my mind wander more freely and simply chronicle my thoughts. It also helped me with staying in the creative process, since recording voice memos took significantly less time than writing ideas down. A few months later, I listened back to all the voice memos, revisited and assessed my thoughts and sorted them into the bigger picture. Some of the thoughts that seemed very important at the time, turned out to be negligible in retrospect, others remained as valid in hindsight as I assessed them at the time.

In a later stage of my work, when the project idea had become more concrete and included formulated objectives and strategies, my preferred documentation method became taking notes in written form. In this phase, I perceived my thoughts as clearer and more structured, which made it easier to write them down in a concise way. An advantage of this method was that it took way less postprocessing because my thoughts were already condensed.

I also recorded all practice sessions with the working ensemble (see chapter 2.2) and all rehearsals with the project band (see chapter 3.4). Besides not having to take notes during the process, it also helped me to revisit the exercises and songs played from an outside perspective.

2.6. Study Sessions

In the beginning of my second year at KMH, my fellow master student Mats Dimming proposed that we could create a coworking space. We just set two basic rules: To meet up twice a week for a couple of hours and to research or work on project-related topics. Whenever possible, we met in person, but sometimes we also conducted these meetings over video chat. Benefits of these *study sessions* were that the set dates led to a planned and continuous work on our projects. We held each other accountable and created a social environment to work in. Also, we discussed ideas or insights with each other, which often led to new ideas or new perspectives. It was very valuable to get feedback during different stages of a process, whether it was an initial thought, a first draft or the final result.

3. Master's Project

After getting to know the field of non-isochronous meters through explorative practicing, transcriptions and research, I started to develop my master's project. In this chapter, I explain my choice of instrumentation, elaborate on the compositional process, share insights from practicing and rehearsing the pieces and discuss the course of my exam concert.

3.1. Instrumentation and Musicians

Before starting my compositional process, I had to choose an instrumentation for my project band. I wanted the band to be big enough to have some choices and flexibility when arranging (e.g., write accompanying voices for the main melody, write independent polyphonic passages for multiple melody instruments, write backings, etc.), but I also wanted it to be small enough to be able to make every musician an integral part by showcasing both their instrument and their musical personality in my compositions. I listened back to albums that I considered inspiration for this project regarding the band sound: amongst others, Tigran Hamasyan's *Shadow Theater*, Gerald Clayton's *Future Reflection*, Eric Harland's *13th Floor* and Ben Wendel's *High Heart*. After contemplating different options for a while, I finally decided to write for a sextet, consisting of voice, alto saxophone, electric guitar, piano/Rhodes, bass and drums. The combination of vocals, alto saxophone and guitar seemed like a great choice, because each have their own very distinct sound, but they also blend well as a section. I wanted to employ the vocals in a more instrumental way (without lyrics), like it had been done on most of the recordings mentioned above. The guitar could take over the role of both a monophonic melody instrument and an accompanying harmony instrument, making it very versatile.

After having decided on the instrumentation, a musician for each instrument came to my mind very quickly. The only problem was that these musicians were scattered all over Europe, which of course would be a logistical problem. We would not be able to rehearse regularly and the whole organization would take a lot of planning. However, I was intrigued by the idea of bringing musicians from different scenes together. With this thought of transnational collaboration and exchange in mind, I asked Anna Serierse (vocals) and Teis Semey (guitar) from Amsterdam, Duy Luong (bass) and Karl-F. Degenhardt (drums) from Essen and Sebastian Jonsson (alto saxophone) from Stockholm. Luckily, they all agreed.

It was an intense process for me to conceptualize and write the pieces without a real feedback loop. I sent some ideas and asked for opinions or advice and I drew a lot of inspiration from envisioning this constellation of musicians playing the pieces, but of course sharing ideas cannot replace rehearsals. If I had to do this project again, I probably would cast the band with people I could rehearse more and regularly with. However, I do not regret making that choice, because it challenged me to use my imagination and see to what extent I could imagine a band sound or anticipate how the arrangement or structure would work out. It taught me a lot.

One month before my final exam, it became clear that traveling restrictions caused by the ongoing COVID-19 pandemic would make it very unlikely for the musicians from Amsterdam and Essen to be able to come to Stockholm and participate in this project. Therefore, I needed to replace four out of five musicians with locals from Stockholm. I was lucky to find very skilled musicians that were also familiar with the style of music: Sofia Lärkfors (vocals), Bjarni Ingólfsson (guitar), Johan Tengholm (double bass) and Edvin Fridolfsson (drums). I was impressed with how they learned this fairly complex music within a short time and how they approached it with a combination of composure and confidence.

3.2. Composing and Arranging

After deciding on the instrumentation and finding musicians, I started to compose and arrange. In the following, I disclose my approaches to writing the pieces, discuss obstacles I encountered and highlight a few characteristic features of each composition.⁴ I tried to cover different approaches and different meters: This collection includes two compositions in 5/8, two in 9/4, one piece in 11/4, one in 13/8, as well as a ballad in mixed meter. Recordings of these pieces as well as the supplementing audio excerpts referred to in this chapter are available in DiVA.

⁴ All full scores of these compositions can be found in Appendix 1.

Meandering

Meandering is composed in a 5/8 meter, although the meter switches to 5/4 in certain passages. My starting point with this song was the harmonic rhythm, the chords sounding every five subdivisions. I wanted it to sound calm despite being in a fast tempo. Most of the time, the chords change every two bars, which creates a pendulum-like back-and-forth effect. After I had established that, I wrote the saxophone melody, floating on top of the chords and emphasizing most first beats of the bars. To further reinforce the pendulum-like feel, I wrote a background part for the vocals with long ambient notes or phrases that last two bars. The guitar only has an ornamental role in this piece, commenting the melody in the A section and thereby creating an echo-like effect or comping with long chords or notes in the B section and during solos.

When writing this piece, I envisioned a meandering river, flowing fast but smooth. Besides this general smooth and fluent movement, there are also little details or passages where the gradient changes too much and vortexes and whitewater form.

I notated the main part of this song in 5/8, because it seemed to be the best possible way to visualize the feel I had in mind. In bar 21 to 25 (and parallel passages), I changed the meter to 5/4 in order to adjust the underlying rhythm. In accordance with the bassline, the basic rhythm changes from the first beat of each 5/8 bar to a 3+2 clave in the 5/4 meter (see Figure 24). Although it is just a subtle difference, it changes the feel from forward-pressing to heavy on the quarter notes.



Figure 24: 5/8 Transitioning to 5/4

I wanted the piece to end climactically, which is why I added the drum solo vamp in bar 141 to 154. It is a six bar loop that consists of three variations of a two-bar bassline (see Figure 25).



Figure 25: “Meandering”, Excerpt Bassline Drum Loop



Audio 1: "Meandering", Excerpt Drum Loop

This loop has a few features that I incorporated in order to prevent the solo passage from becoming too monotonous: First, every other bar is rhythmically different in each variation. Looking at the last two beats of every other bar (considering that this part has an underlying 3+2 subdivision), each of these rhythms gives a different feel. While the first one divides more into quarter notes, the second one starts with an anticipated note and the third one ends on an off-beat. Second, in every other bar the bassline does not start on the first beat of the bar, which makes the barlines less audible and gives more room for interpretation. Third, it is a six bar form, which makes it less obvious for the listener when the loop starts again.

Sorrows

Sorrows is based on a Rhodes ostinato in 11/8 (see Figure 26). I stumbled upon this ostinato when I was playing around on the piano with my right hand while scrolling through my phone with my left hand. I did not know what kind of rhythm or meter I was playing and I was afraid to forget it again, so I recorded myself and transcribed it afterwards.



Figure 26: “Sorrows”, Excerpt Rhodes Part (Bar 4 to 6)



Audio 2: "Sorrows", Excerpt Intro and Beginning of Theme

I continued by developing the motif into different harmonies with subtle changes. While composing, I had associations with the motivic development of J.S. Bach's Prelude No. 1 in C Major, where the main motif is also adapted to different harmonies with small tonal changes.

For the theme, I wanted a polyphonic three-part movement with long horizontal lines that float on top of the Rhodes motif. Creating this three-part movement involved a lot of trial and error. I placed notes somewhere, listened back to the MIDI sounds in Sibelius (notation software) and relocated them intuitively until I was satisfied with what I heard. It was a particularly delicate task, because changing one part also altered the impact of the other two parts. All three melodies contrast and contextualize each other and create a symbiosis, forming a perpetuum mobile-like motion:



Figure 27: "Sorrows", Excerpt Vocals, Alto Saxophone and Guitar, Bar 10 to 12

Recollection

Recollection is a ballad in mixed meter. It is the only composition in this collection of songs where I let the melody determine the meter. It was interesting to mix meters based on quarter notes with eighth note-based meters in a ballad tempo.



Figure 28: "Recollection", Theme



Audio 3: "Recollection", Theme

Each meter change is serving the melody: the second bar in 5/4 extends the rest after the first phrase, making it weightier. The following bar in 7/8 allows the melody to gain momentum during the last three eighth notes and in this context, the second half of bar 8 seems like a slowed-down version of the rhythm in bar 4. Each bar is designed to let the melody move and breathe naturally.

It is a common practice in jazz-related music to solo over the same form as of the main theme. When playing through the form with Sebastian Jonsson in one of our duo rehearsals, we realized that two spots did not feel ideal for improvising over it: I changed bar 7 to 4/4, because it made the whole passage calmer. Also, I decided to skip bar 11 (except for the very last time). It felt like keeping up the energy over those two bars of $G_b\Delta^{(\#5)}$ would have required a big effort and I did not want the soloists to lose momentum.

Perseverance

Perseverance is based on a six bar loop in 5/8. It mainly serves as a vehicle to express energy and forward motion and it is the only composition in this collection where the subdivision is emphasized. The melody mostly reinforces the 5/8 feel. Only in bar 18 to 21 (and the parallel passage in bar 31 to 33) there is a short period of asynchronicity:

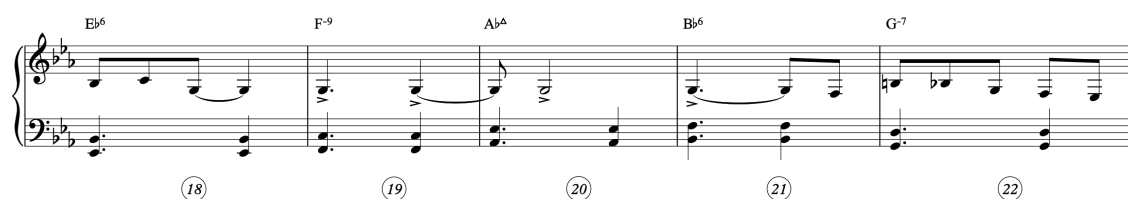


Figure 29: “Perseverance”, Excerpt Piano Part (Bar 19 to 21)



Audio 4: "Perseverance", Excerpt First Theme

In bar 18, the melody starts out with three dotted quarter notes and shifts to two half notes in bar 20 and 21. On the one hand, most notes are rhythmically in accordance with the underlying subdivision. However, there is a certain feel of superimposition created by equal note values. Additionally, the shift from dotted quarter notes to half notes creates a slowing-down effect. All these details are on a micro level and the whole passage just lasts three seconds, but it still takes the listener out of the 5/8 flow to a certain extent.

Change

Change is written in a 13/8 meter. I wanted the song to express the inner strife that comes with a big change in one’s life. I chose a tempo ($\text{♩} = 110$) that feels heavy and sluggish. The drumbeat reinforces this heavy feel. It basically is a slow eighth note drumbeat (but notated in halftime, meaning quarter notes), cut off after 13 beats. It almost sounds like a record that got stuck and plays over and over in a loop:



Figure 30: “Change”, Drumbeat



Audio 5: "Change", Drumbeat Intro

The main melody, played by vocals and piano in the first theme, floats on top, contrasting the exact metronomic playing of the drums. I incorporated a lot of different subdivisions, ranging from eighth notes over triplets and quadruplets to quintuplets in order to create a non-quantized feel that still could be played unisono by two instruments:



Figure 31: "Change", Excerpt Melody, Bar 29 to 34



Audio 6: "Change", Excerpt Theme

For the solos, I decided to change the meter to 7/4 + 6/4. I did not want us to be stuck in the 13/8 feel for the solos, since I was worried that the effect could wear off and it would start to feel repetitive.

New Horizon (Interlude)

New Horizon is based upon a harmonic chord progression with a mostly chromatically ascending bassline. I came up with this progression while playing along to a drum loop in 9. It

has a modal character, but the ascending bassline adds a harmonic movement to it. I intended this piece to convey the spirit of anticipating something unknown, yet to be explored, hence the title *New Horizon*. Because of its simplicity, the piece invites for experimentation. I suggested three different rhythmic parts: First, I wanted the piece to start rubato, then transition to the notated rhythm and then switching to dotted quarter notes (isochronous subdivision), which leads to a metric modulation to a 6/4, respectively a 18/8 feel. From there, it was open to go anywhere.



Figure 32: “New Horizon”, Different Rhythmic Parts

This composition was probably the simplest one in terms of predetermined material, but not the easiest one to rehearse with a band in a short time. Because it depends so much on interplay and establishing a mood together, in an ideal scenario the band would have a lot of time to rehearse it.

Tribe

Tribe is a piece in 9/4 based on a four-bar bassline (see Figure 33). I came up with that bassline while playing along to another drum loop in 9. I felt like the harmonical cycle of the bassline could be complemented with a simple melody. I called the song *Tribe*, because there is something tribal about how the groove and feel become stronger, the more musicians join in and interact. Because of its open form, the piece gives a lot of freedom but also responsibility to the musicians. This song felt the closest to being danceable.

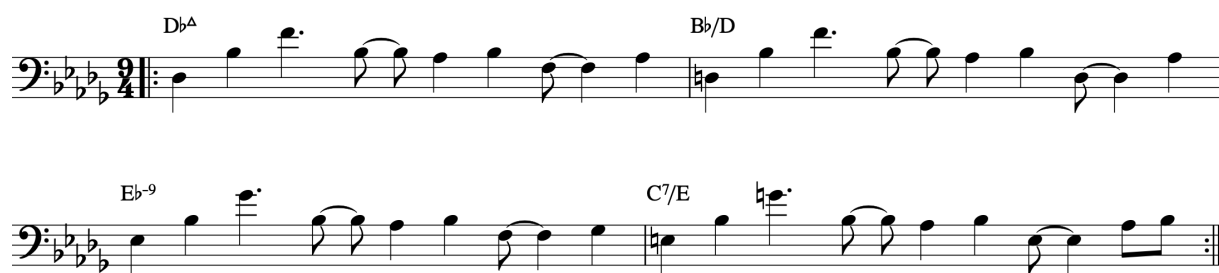


Figure 33: "Tribe", Bassline



Audio 7: "Tribe", Intro Bassline

3.3. Practicing Subdivisions

Before rehearsing my compositions with a band, I needed to make sure that I knew them well enough myself. First of all, I learned all pieces by heart. Once I had memorized the melodies, chord progressions, forms, etc., I focused on the improvised parts. Here, my main matter of concern was how to subdivide the bars. For most songs, I had indicated a subdivision on a quarter note basis, but I also prepared eighth note-based subdivisions and alternative quarter note-based subdivisions. I want to exemplify my process with *Sorrows*. This piece is written in 11/4. I indicated a subdivision of 2+2+2+3+2 in the sheet music, because this is how I heard the pattern when playing it on top of a quarter note pulse (see Figure 34).

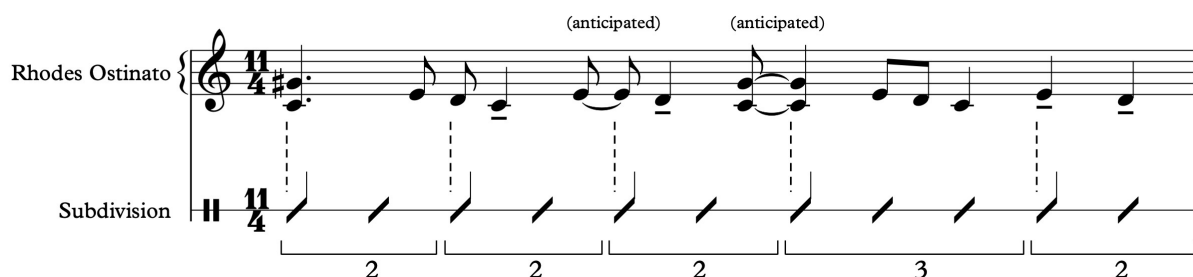


Figure 34: "Sorrows", Rhodes Ostinato With Quarter Note-Based Subdivision

Since the basic pattern itself consists of eleven eighth notes and then repeats after the first half of the bar, it would have been an obvious choice to repeat the subdivision as well. However, I wanted the eighth note-based subdivision to still have a strong relation to the quarter note-based feel. That is why I adapted a syncopated subdivision to the anticipated notes and otherwise featured the quarter note pulse in the form of groups of 2 (see Figure 35).

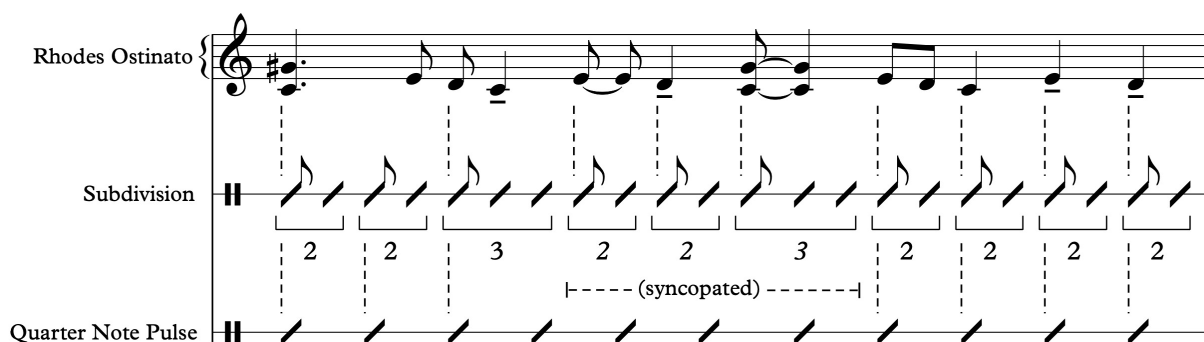


Figure 35: "Sorrows", Rhodes Ostinato With Eighth Note-Based Subdivision

I also came up with an alternative quarter note-based subdivision: 3+3+3+2. This would have drastically changed the prosody of the Rhodes ostinato in the main theme, which could add an interesting perspective, but in this case, I wanted the Rhodes ostinato to sound like mentioned above. However, for the solo form, it became an interesting variant regarding the perception of time: With the subdivision of 2+2+2+3+2, the prevailing unit is groups of 2 and the group of 3 is the outstanding, longer unit. With a subdivision of 3+3+3+2 on the contrary, the predominant unit is 3, so in general the same period is divided in longer units, making the general pulse seem slower.

When practicing these subdivisions, I usually played chords rhythmicized with note values that matched the length of each unit:

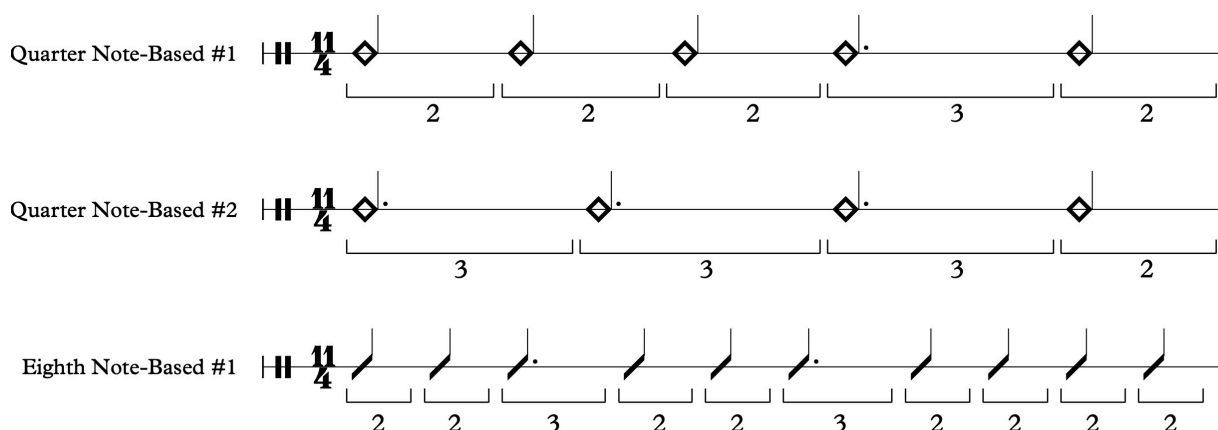


Figure 36: Accompanying Patterns Based on Different Subdivisions In 11/4

Sometimes, when the pattern was too detailed (mostly with eighth note-based subdivision), I subsumed certain units, often two groups of 2 in a group of 4:

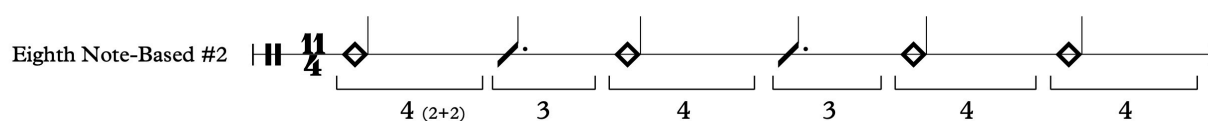


Figure 37: Accompanying Pattern Based on Eighth-Note Subdivision With Subsumed Units

To internalize these subdivisions, I both practiced just playing chords as if I was accompanying a soloist and playing these patterns in my left hand while soloing over it myself. I also applied some of the exercises described in chapter 2.1.

There are so many possibilities of subdividing a meter, but it is important to relate the subdivision to the musical material. Usually, there are obvious solutions that are more closely related to a musical element (like a melody, bassline or ostinato) and there are more vague or disconnected alternatives, which still might be of interest to create a strong contrast or an effect of two rhythms happening at the same time.

Although I practiced a lot of different subdivisions, I mostly ended up not applying them in a very distinctive way. My experience was that practicing these different subdivisions gave me embodied knowledge about the meter and made me more flexible with playing phrases and perceiving what my fellow musicians were playing.

I also practiced a few isochronous subdivisions over non-isochronous meters, mostly half notes over two bars or dotted quarter notes over the pieces written in 9. Figure 38 shows an example of half notes over the bassline of “Tribe”, dividing the period of two bars into even units:

The image displays a musical score for the piece "Tribe". It consists of two systems of music, each with a grand staff (treble and bass clefs). The key signature is B-flat major (two flats). The time signature is 9/4. The first system is labeled with chords D^bΔ and B^b/D. The second system is labeled with chords E^b-9 and C⁷/E. The bassline in the left hand features a complex, non-isochronous rhythm, while the right hand plays half notes, dividing the two-bar period into even units.

Figure 38: "Tribe", Half Notes Over Bassline

But these half notes could also be placed differently, starting on other beats of the bar:

Half Notes, Second Variant

Db^Δ Bb/D

Half Notes, Third Variant

Db^Δ Bb/D

Half Notes, Fourth Variant

Db^Δ Bb/D

Figure 39: "Tribe", Variants of Half Notes Over Bassline

I practiced dotted quarter notes in the same way:

Dotted Quarter Notes, First Variant

Db^Δ Bb/D

Dotted Quarter Notes, Second Variant

Db^Δ Bb/D

Dotted Quarter Notes, Third Variant

Db^Δ Bb/D

Figure 40: "Tribe", Dotted Quarter Notes Over Bassline

These isochronous subdivisions can be a powerful tool for creating a polyrhythmic feel or initiating a metric modulation.

3.4. Rehearsals

Five months before my final exam, I started to have duo rehearsals with Sebastian Jonsson (alto saxophone). These rehearsals were very helpful, because I was able to implement the generated feedback. Besides checking if Sebastian's saxophone parts were playable and sounded as intended, we mostly played through the songs and reassessed whether the forms would work. For some songs, we changed small details of the solo form (e.g. *Meandering* and *Recollection*, compare chapter 3.2).

With the premise of my band coming to Stockholm only a few days before the concert, I had to prepare the musical material as good as possible. I tried to notate everything very clearly, be exact with small details, like dynamics, slurs, accents, etc., but also thought a lot about the bigger picture, how to arrange different sections and how to distinguish the compositions from each other, so that it would become a diverse yet homogenous collection of songs. I prepared a folder for each instrument with taped sheet music and I created audio examples (mostly MIDI-based) and play-alongs for everyone to be able to learn the music as best as possible. It was a lot of work, but besides making it more convenient for the other musicians and thereby helping them to focus on the music, it also urged me to think about my compositions in a very thorough way. That is why I had a very clear picture when going into the full band rehearsals and not a lot of things were left to be clarified.

As mentioned in chapter 3.1, I had to replan the concert with local musicians from Stockholm a month before the concert. As soon as the lineup was complete, I met up with everyone, except for Sofia (vocals), beforehand to go through the parts to see if everything was playable and sounded as intended and to check if anything was unclear, hard to read, etc.

Then, we had two days of full band rehearsals. All in all, I was really satisfied with both the compositions and how the band turned the written notes into music. As soon as the arrangements seemed to be clear, we mostly worked on small details, like deciding who would play intros and solos, and practicing the solo forms. We also discussed subdivisions. There are

several examples of songs (e.g. *Change*, *Sorrows*, *Tribe*) where I had written a bassline, a drumbeat or a Rhodes ostinato based on eighth notes, but then decided that it might be easier and more liberating for the solos to switch to a quarter note feel. During the rehearsals, it turned out that the rhythmic feel that worked best was a hybrid between the two options. For example, during my solo on *Change*, Johan kept playing the original 13/8 division of 4+4+5. Edwin matched Johan's bass notes with his bass drum, while playing a quarter note-based pattern on hi-hat and snare. Figure 41 illustrates merging the bassline in 13/8 and the drumbeat in 7/4 + 6/4.

Figure 41 consists of three musical staves. The top staff is titled "Bass, Basic Rhythm in 13/8" and shows a bass line in 13/8 time, divided into three measures of 4, 4, and 5 eighth notes. The middle staff is titled "Drums, Basic Drumbeat in 7/4 + 6/4" and shows a drum pattern in 7/4 and 6/4 time, with a 7/4 measure followed by a 6/4 measure. The bottom staff is titled "Bass and Drums, Hybrid Between 13/8 and 7/4 + 6/4" and shows both parts together, with the bass line and drum pattern aligned to create a hybrid feel.

Figure 41: "Change", Drumbeat in 7/4 + 6/4 With Anticipated Bass

Sorrows turned out to be the most difficult piece to rehearse. The main reason for this certainly was the notation. During the rehearsals, I realized that a bar in 11/4 was quite difficult to read. I originally had decided against notation in mixed meter (6/4 + 5/4) because I imagined it to be confusing and I liked the idea of one bar representing one rhythmic cycle. My solution in the rehearsals was to tell my colleagues to keep the 6+5 subdivision in mind. Looking back, I would either use a dashed vertical line to visualize the subdivision or write the whole piece in mixed meter. Another reason for this piece being so difficult to rehearse was that all melodies engage with each other and the musicians oriented themselves by the other parts. As soon as one of them played a wrong rhythm, the whole melodic part collapsed like a house of cards. In the end, we managed to internalize the rhythms to an extent where everybody felt comfortable with the piece.

The night before my exam concert, we played a concert at Glenn Miller Café in Stockholm as a general rehearsal. It was good to test the whole program in a concert setting. I was happy to see that everything worked out. The material was prepared well enough for us to rehearse this rather complex program in just two full band rehearsals. I had practiced the pieces to an extent where I felt comfortable guiding a band through the compositions and I had picked the right musicians that approached this music with a serious, confident and composed attitude. We were ready to play the exam concert.

3.5. Exam Concert

My final exam took place in Lilla Salen, KMH on April 9, 2021. Because of restrictions related to the pandemic, no audience was allowed, but the concert was livestreamed. Since a live audience always gives back energy to the band, I had been a bit worried that playing in an empty room would make it hard for us to create a live concert atmosphere. To my relief, this was not the case. The whole concert felt very energetic to me and I got similar feedback from my fellow musicians and people watching.

I was very satisfied with the outcome of this concert, because, for me, it felt like a manifestation of accomplishing the challenges I had set for myself: I had composed and arranged an entire concert program consisting of non-isochronous meter compositions for a sextet formation. Most of these pieces featured non-isochronous meters without feeling too repetitive regarding the period of a rhythmic cycle, while this feeling was utilized and embraced in other pieces. Also, I had achieved a certain flexibility playing and improvising in these non-isochronous meters without having to consciously count the meter. Furthermore, I had found musicians that both fitted stylistically and were very skilled and I had prepared the musical material in a way that made us succeed in rehearsing this program with very limited time.

The only two pieces, where I felt like there was room for improvement, were *Sorrows* and *New Horizon*. Some of the rhythms in the melodic parts of *Sorrows* (i.e., vocals, alto saxophone and guitar) were not executed as written, certain notes were played slightly too early or too late. However, these unintentional alterations did not affect the intended dialogue between the three melodic parts in a fundamental way, so in my opinion the character and message of the piece remained the same. *New Horizon* on the other hand, did not have written material that was

difficult to play, but it depended on the musicians knowing each other and creating a mood together. It was the only piece, where I felt that the lack of rehearsal time affected the character of the piece in a major way. If we would have had more time to get attuned to each other in the context of this piece, we probably could have maintained the arc of suspense for a longer period and could have transitioned more smoothly between the different rhythmic parts.

4. Conclusions

My work in the last two years has expanded my skills and knowledge in the field of non-isochronous meters to a great extent.

First of all, I gained a lot of embodied knowledge within the field. I succeeded to reach a point where I started to sense the temporalities of these unfamiliar meters rather than consciously counting them. I accomplished this by various exercises mentioned in chapter 2.1 and 3.3. These exercises were my initial approach to non-isochronous meters and helped me tremendously to become more comfortable playing in those meters. However, there are certainly other ways of approaching non-isochronous meters through practice and my methods described in this thesis just cover a fraction of what is possible. I realized, the more meters I explored the easier it got to learn how to navigate in meters that were new to me. I could imagine a similar effect with different approaches to getting an embodied feel for non-isochronous meters; the more perspectives you gain, the easier it becomes. It would be interesting to explore other approaches in the future (like the possible exercise developments mentioned in chapter 2.1).

From a technical and instrumental side, I fundamentally improved my isochronous, quantized timing. I feel that I have more control now when playing lines based on eighth notes or eighth notes triplets.

When composing in non-isochronous meters, I tended to build a composition around a rhythmic element. It could be an ostinato, a bassline, rhythmic chords, etc., that had a very distinct connection to a non-isochronous meter. After I had established this element, I added melodies and developed harmonic progressions. This focus on rhythmic elements made me think a lot about interplay, how basslines would go together with drumbeats and chords and how the accompaniment would affect the melodic material. For some pieces, I started with a very distinctive ostinato or bassline with a quantized quality that emphasized the non-isochronous subdivisions and tried to contrast it with more freely floating melodies (e.g., *Sorrows* or *Change*). For other pieces, I simply reinforced the meter's idiosyncrasies in the melodic material (e.g., *Perseverance* or *Tribe*). My main strategy to not get *trapped* in a meter or stuck with a certain subdivision was to think in longer passages (create melodies across barlines, develop harmonic progressions, think about a whole section, etc.). This was also essential in

creating polyphonic lines in non-isochronous meter compositions: When writing polyphonic melodies, I did not start by thinking about the meter, but by envisioning a certain space that needed to be filled with different melodies commenting or complementing each other.

A possible direction for future practice could be to transfer this quality of thinking in longer passages to my improvisation. This also relates to my findings from transcribing *Future Reflection* (compare chapter 2.4) on how to blur barlines with phrases and rhythms. My practice strategy described in chapter 2.1 already involved the aspect of crossing barlines by repeating rhythmic groups and thus connecting bars (especially with larger groups), for example by creating a pickup to the next bar.

The only piece where the melody served as a starting point was *Recollection*, a mixed-meter composition. A possible reason why I did not come up with melodies as a starting point could be that it is hard to imagine a melody in an unfamiliar meter to begin with. I am very interested into a compositional approach of letting melodies define meters, although I would expect this to mostly result in mixed meter compositions. This, too, could be an interesting topic for future investigations.

Superimposed isochronous rhythms over non-isochronous meters were an interesting finding, that I mainly incorporated as a compositional tool (e.g., in the drum vamp in *Meandering* or as a metric modulation in *New Horizon*). Another very valuable insight of this work was the perception of different metrical layers: I became more aware of the intertwinement of eighth note-based meters and quarter-note based meters with the same number of beats.

I also learned a lot about preparing musical material without a band at hand. Before, I had always worked with bands for longer periods of time, which resulted in feedback that could be used to enhance compositions. I think this still is my preferred mode of working, but I learned a lot from the experience of having to prepare musical material for brief rehearsals taking place right before the concert. I am sure there will be situations in the future where this knowledge will be very helpful.

Researching artistically in a structured way has broadened my mind when it comes to working on specific topics and finding inspiration. One thing I will definitely take away from this is to contextualize my work even more.

As mentioned in the introduction, this work feels like a first excursion into the world of complex time signatures. Potential topics for future investigations could be a melodic approach to meters and other concepts to approach an embodied feel of non-isochronous meters. I am looking forward to continuing my investigations.

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Appendix 1: Compositions

Meandering

Full Score

Jan Alexander

even 8ths ♩ = 190

A On Cue

Intro

sample backing lines - may vary

mf

// comment melody

② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

v

as

g

p

b

dr

⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳

1. D^Δ#5 C^Δ#5 2. D^Δ#5

rimclick on every ♩

⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖

© 2020-2021

Meandering - Full Score

2

B

v $C^{\Delta\#5}$ $A_{-}(A)$ $G^{\Delta\#5}$ $A_{-}(A)$ $G^{\Delta\#5}$

as $C^{\Delta\#5}$ $A_{-}(A)$ $G^{\Delta\#5}$ $A_{-}(A)$ $G^{\Delta\#5}$

g $C^{\Delta\#5}$ $A_{-}(A)$ $G^{\Delta\#5}$ $A_{-}(A)$ $G^{\Delta\#5}$

p $C^{\Delta\#5}$ $A_{-}(A)$ $G^{\Delta\#5}$ $A_{-}(A)$ $G^{\Delta\#5}$

b $A_{-}(A)$ $G^{\Delta\#5}$ $A_{-}(A)$ $G^{\Delta\#5}$

dr $A_{-}(A)$ $G^{\Delta\#5}$ $A_{-}(A)$ $G^{\Delta\#5}$

(27) (28) (29) (30) (31) (32) (33) (34) (35) (36)

C

v $G-7$ $F^{\Delta\#5}$ $E\flat^{\Delta}$ $D\flat^{\Delta}$ $B^{\Delta\flat13}$ $E^{\Delta\#11}$

as $G-7$ $F^{\Delta\#5}$ $E\flat^{\Delta}$ $D\flat^{\Delta}$ $B^{\Delta\flat13}$ $E^{\Delta\#11}$

g $G-7$ $F^{\Delta\#5}$ $E\flat^{\Delta}$ $D\flat^{\Delta}$ $B^{\Delta\flat13}$ $E^{\Delta\#11}$

p $G-7$ $F^{\Delta\#5}$ $E\flat^{\Delta}$ $D\flat^{\Delta}$ $B^{\Delta\flat13}$ $E^{\Delta\#11}$

b $G-7$ $F^{\Delta\#5}$ $E\flat^{\Delta}$ $D\flat^{\Delta}$ $B^{\Delta\flat13}$ $E^{\Delta\#11}$

dr $G-7$ $F^{\Delta\#5}$ $E\flat^{\Delta}$ $D\flat^{\Delta}$ $B^{\Delta\flat13}$ $E^{\Delta\#11}$

(37) (38) (39) (40) (41) (42) (43) (44) (45) (46)

$E\flat^{\Delta\#11}$ $E^{\Delta\#11}$ $E\flat^{\Delta\#11}$ $A^{\Delta\#11}$ $E\flat^{\Delta\text{alt}/G}$

as $E\flat^{\Delta\#11}$ $E^{\Delta\#11}$ $E\flat^{\Delta\#11}$ $A^{\Delta\#11}$ $E\flat^{\Delta\text{alt}/G}$

g $E\flat^{\Delta\#11}$ $E^{\Delta\#11}$ $E\flat^{\Delta\#11}$ $A^{\Delta\#11}$ $E\flat^{\Delta\text{alt}/G}$

p $E\flat^{\Delta\#11}$ $E^{\Delta\#11}$ $E\flat^{\Delta\#11}$ $A^{\Delta\#11}$ $E\flat^{\Delta\text{alt}/G}$

b $E\flat^{\Delta\#11}$ $E^{\Delta\#11}$ $E\flat^{\Delta\#11}$ $A^{\Delta\#11}$ $E\flat^{\Delta\text{alt}/G}$

dr $E\flat^{\Delta\#11}$ $E^{\Delta\#11}$ $E\flat^{\Delta\#11}$ $A^{\Delta\#11}$ $E\flat^{\Delta\text{alt}/G}$

(47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57)

// comment melody

Meandering - Full Score

3

v $F\sharp-7$ $B^{13}\flat9$ $E\Delta\sharp5$ $D\Delta\sharp5$ $C\Delta\sharp5$ $D\Delta\sharp5$ $C\Delta\sharp5$
 as
 g
 p $F\sharp-7$ $B^{13}\flat9$ $E\Delta\sharp5$ $D\Delta\sharp5$ $C\Delta\sharp5$ $D\Delta\sharp5$ $C\Delta\sharp5$
 b $F\sharp-7$ $B^{13}\flat9$ $E\Delta\sharp5$
 dr

58 59 60 61 62 63 64 65

v **D** Solo Form $E\Delta\sharp11$ $E\flat\Delta\sharp11$ $E\Delta\sharp11$ $E\flat\Delta\sharp11$ $A\Delta\sharp11$
 as $E\Delta\sharp11$ $E\flat\Delta\sharp11$ $E\Delta\sharp11$ $E\flat\Delta\sharp11$ $A\Delta\sharp11$
 g $E\Delta\sharp11$ $E\flat\Delta\sharp11$ $E\Delta\sharp11$ $E\flat\Delta\sharp11$ $A\Delta\sharp11$
 p $E\Delta\sharp11$ $E\flat\Delta\sharp11$ $E\Delta\sharp11$ $E\flat\Delta\sharp11$ $A\Delta\sharp11$
 b $E\Delta\sharp11$ $E\flat\Delta\sharp11$ $E\Delta\sharp11$ $E\flat\Delta\sharp11$ $A\Delta\sharp11$
 dr

66 67 68 69 70 71 72 73 74 75 76

v $E\flat7\text{alt}/G$ $F\sharp-7$ $B^{13}\flat9$ $E\Delta\sharp5$ $D\Delta\sharp5$ $C\Delta\sharp5$ $D\Delta\sharp5$ $C\Delta\sharp5$
 as $E\flat7\text{alt}/G$ $F\sharp-7$ $B^{13}\flat9$ $E\Delta\sharp5$ $D\Delta\sharp5$ $C\Delta\sharp5$ $D\Delta\sharp5$ $C\Delta\sharp5$
 g $E\flat7\text{alt}/G$ $F\sharp-7$ $B^{13}\flat9$ $E\Delta\sharp5$ $D\Delta\sharp5$ $C\Delta\sharp5$ $D\Delta\sharp5$ $C\Delta\sharp5$
 p $E\flat7\text{alt}/G$ $F\sharp-7$ $B^{13}\flat9$ $E\Delta\sharp5$ $D\Delta\sharp5$ $C\Delta\sharp5$ $D\Delta\sharp5$ $C\Delta\sharp5$
 b $E\flat7\text{alt}/G$ $F\sharp-7$ $B^{13}\flat9$ $E\Delta\sharp5$ $D\Delta\sharp5$ $C\Delta\sharp5$ $D\Delta\sharp5$ $C\Delta\sharp5$
 dr

77 78 79 80 81 82 83 84 85 86

Meandering - Full Score

4

v

as

g

p

b

dr

87 88 89 90 91 92 93 94 95 96 97

A⁻(^Δ) G^Δ#5 A⁻(^Δ) G^Δ#5 G⁻⁷

v

as

g

p

b

dr

98 99 100 101 102 103 104 105 106 107

F^Δ#5 E^bΔ D^bΔ B^Δb13 (!) solo form one bar less than in the theme E^Δ#11 E^bΔ#11

v

as

g

p

b

dr

108 109 110 111 112 113 114 115 116 117 118

E^Δ#11 E^bΔ#11 A^Δ#11 E^b7alt/G F[#].7 B¹³b9 E^Δ#5

Meandering - Full Score

E

5

Score for measures 119-127, Section E. The score is for a 6-part ensemble: vocal (v), alto saxophone (as), guitar (g), piano (p), bass (b), and drums (dr). The key signature is one sharp (F#) and the time signature is 4/4. The piano part features a complex rhythmic pattern with many beamed sixteenth notes. The vocal and alto saxophone parts have melodic lines with some rests. The guitar part is mostly silent, with some notes in measures 125 and 126. The bass and drums parts provide a steady rhythmic foundation.

Measures 119-127. Chord changes: D Δ 5, C Δ 5, D Δ 5, C Δ 5, (rep. ad lib.) E Δ 11, E \flat 4 Δ 11. Dynamics: *mf*.

Score for measures 128-138. The score continues with the same 6-part ensemble. The piano part has a more active role with more notes. The vocal and alto saxophone parts have more melodic development. The guitar part has some notes in measures 137 and 138. The bass and drums parts continue the rhythmic pattern.

Measures 128-138. Chord changes: E Δ 11, E \flat 4 Δ 11, A Δ 11, E \flat 7alt/G, F#7, B7b9. Dynamics: *mf*.

Score for measures 139-144, Section F. The score is for a 6-part ensemble. The key signature changes to two sharps (F# and C#) and the time signature changes to 2/4. The piano part features a complex rhythmic pattern with many beamed sixteenth notes. The vocal and alto saxophone parts have melodic lines with some rests. The guitar part is mostly silent, with some notes in measures 141 and 142. The bass and drums parts provide a steady rhythmic foundation.

Section F: Drum Solo Vamp. Measures 139-144. Chord changes: E Δ 5, D Δ 5, C Δ 5, D Δ 5, C Δ 5. Dynamics: *mf*. Includes a "build up Solo" instruction.

Meandering - Full Score

6

On Cue

D Δ #5 C Δ #5 D Δ #5 C Δ #5 D Δ #5

v

as

g

p

b

dr

comp w/ sparse voicings and long notes

145 146 147 148 149

On Cue

1-x C Δ #5 last x C Δ #5

v

as

g

p

b

dr

150 151 152 153 154

Sorrrows

Jan Alexander

Solo Bass Intro



♩ = 200

Intro 2 - Cue: Bass starts playing in 11

v
 as
 g
 rh
 b
 dr

mp
 A-(A)
 mp
 A-(A)
 mp
 A-(A)
 mp
 (2+2+2+3+2)

② ③



A On Cue

v
 as
 g
 rh
 b
 dr

f
 mf
 mf
 mf
 mf
 mf

A-(A)
 F#A(♯11)
 A-(A)
 F#A(♯11)
 A-(A)
 F#A(♯11)

④ ⑤ ⑥

Sorrows - Full Score

The musical score for "The Sound of Silence" by Simon & Garfunkel is presented in a multi-staff format. The vocal parts (v, as, g) are written in treble clef, and the piano accompaniment (rh, b, dr) is written in bass clef. The score is divided into measures, with measure numbers 10, 11, and 12 indicated at the bottom. The key signature is E major (one sharp), and the time signature is 4/4. The piano part features a prominent bass line with a walking bass pattern, and the vocal parts feature a melodic line with a falsetto effect in the first measure of measure 10. The score includes various musical notations such as notes, rests, and dynamic markings.

Musical score for "The Sound of Silence" by Simon & Garfunkel. The score includes vocal parts (v, as, g) and instrumental parts (rh, b, dr). The key signature is D major (two sharps). The score is divided into measures 10 through 15. Chord symbols are provided above the vocal staves: D^bA9(♯11) and E^bA(♯5). The vocal parts feature complex harmonies and melodic lines, while the instrumental parts provide a rhythmic and harmonic foundation. The bass and drums parts are marked with diagonal lines, indicating a continuous rhythmic pattern.

Sorrows - Full Score

3

G♭A(♯5) G♭A(♯5)

v

as

g

rh

b

dr

16 17

E♭A(♯5) E♭A(♯5)

v

as

g

rh

b

dr

18 19

B♭(sus9) B♭(sus9)

v

as

g

rh

b

dr

20 21

mp *f* *mp* *f* *mp* *f* *mp* *f*

Sorrows - Full Score

4

$B\Delta 13(\sharp 11)$

v

as

g

rh

$B\Delta 13(\sharp 11)$

b

dr

$E\flat\Delta(\sharp 11)$

v

as

g

rh

$E\flat\Delta(\sharp 11)$

b

dr

(22) (23)

(24) (25)

B Solo Form

$A_{-}(\Delta)$

$F\Delta(\sharp 11)$

v

(first time only)

$A_{-}(\Delta)$

$F\Delta(\sharp 11)$

as

(first time only)

$A_{-}(\Delta)$

$F\Delta(\sharp 11)$

g

(first time only)

$A_{-}(\Delta)$

$F\Delta(\sharp 11)$

rh

$A_{-}(\Delta)$

$F\Delta(\sharp 11)$

b

dr

(26) (27) (28) (29)

Sorrows - Full Score

5

30 31 32 33



34 35 36 37



38 39 40 41

Sorrows - Full Score

6

B \flat (sus9) $\text{B}^{\Delta 13}(\sharp 11)$

v

as

g

rh

b

dr

(42) (43) (44)

after solos,
A to Coda

E \flat A \sharp ($\sharp 11$)

v

as

g

rh

b

dr

(45) (46) (47)

Φ

B $\Delta 13$ ($\sharp 11$) E \flat A \sharp ($\sharp 11$)

v

as

g

rh

B $\Delta 13$ ($\sharp 11$) E \flat A \sharp ($\sharp 11$)

b

dr

(48) (49) (50)

Sorrows - Full Score

7

Outro Loop

v $E\flat A(\sharp 11)$
 slowly disappear (fade out, leave notes out, etc.)

as
 slowly disappear, (fade out, leave notes out, etc.)

g
 slowly disappear (fade out, leave notes out, etc.)

rh
 slowly disappear (fade out, leave notes out, etc.)

b $E\flat A(\sharp 11)$
 slowly disappear (fade out, leave notes out, etc.)

dr
 break up the groove (different subdivisions) and slowly disappear (fade out, leave notes out, etc.)

(51) (52)

Full Score

Recollection

Ballad

Jan Alexander

A *rubato*

Piano *mp*

AbΔ Bb6 A-7 EbΔ 3 DbΔ (#11) E(sus4) 3

BbΔ E(sus4) 3 F-7 3 Bb7(b9) 3 EbΔ (#9) 3 GbΔ (#5) 3

B ♩ = 50

v *mp* *AbΔ Bb6 A-7 EbΔ 3 DbΔ (#11) E(sus4) 3*

as *mp* *AbΔ Bb6 A-7 EbΔ 3 DbΔ (#11) E(sus4) 3*

p *mp* *AbΔ Bb6 A-7 EbΔ 3 DbΔ (#11) E(sus4)*

b *mp* *AbΔ Bb6 A-7 EbΔ 3 DbΔ (#11) E(sus4)*

dr *mp* *AbΔ Bb6 A-7 EbΔ 3 DbΔ (#11) E(sus4)*

12 13 14 15 16

v *BbΔ E(sus4) 3 F-7 3 Bb7(b9) 3 EbΔ (#9) 3 GbΔ (#5) 3*

as *BbΔ E(sus4) 3 F-7 3 Bb7(b9) 3 EbΔ (#9) 3 GbΔ (#5) 3*

p *BbΔ E(sus4) 3 F-7 3 Bb7(b9) 3 EbΔ (#9) 3 GbΔ (#5) 3*

b *BbΔ E(sus4) 3 F-7 3 Bb7(b9) 3 EbΔ (#9) 3 GbΔ (#5) 3*

dr *BbΔ E(sus4) 3 F-7 3 Bb7(b9) 3 EbΔ (#9) 3 GbΔ (#5) 3*

17 18 19 20 21 22

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C Solo Form

AbΔ Bb6 A(sus4) EbΔ DbΔ(♯11) E(sus4) BbΔ

as

p

b

dr

(23) (24) (25) (26) (27) (28)

E(sus4) F-7 Bb7(b9) EbΔ(♯9) 1-x GbΔ(♯5) last time GbΔ(♯5) go back to C for more Solos

as

p

b

dr

(29) (30) (31) (32) (33) (34)

D

AbΔ Bb6 A-7 EbΔ DbΔ(♯11) E(sus4)

v

as

b

arco

mf

mp

(35) (36) (37) (38) (39)

BbΔ E(sus4) F-7 Bb7(b9) EbΔ(♯9) GbΔ(♯5)

v

as

b

(40) (41) (42) (43) (44) (45)

Perseverance

Jan Alexander

freely improvised Intro

Voice

Alto Sax

Guitar

Piano

Electric Bass

Drums

even 8s ♩ = 180

Cue for Intro 2

v

as

g

p

b

dr

② ③ ④ ⑤ ⑥ ⑦

Intro 2

v

as

g

p

b

dr

Ab^Δ Bb⁶ G⁻⁷ Ab^Δ Eb⁶ F⁻⁹

Ab^Δ Bb⁶ G⁻⁷ Ab^Δ Eb⁶ F⁻⁹

⑧ ⑨ ⑩ ⑪ ⑫ ⑬

Perseverance - Full Score

2

A

$A\flat^{\Delta}$ $B\flat^6$ G^{-7} $A\flat^{\Delta}$ $E\flat^6$ F^{-9}

v

as

g

p

b

dr

(14) (15) (16) (17) (18) (19)

$A\flat^{\Delta}$ $B\flat^6$ G^{-7} $A\flat^{\Delta}$ $E\flat^6$ F^{-9}

v

as

g

p

b

dr

(20) (21) (22) (23) (24) (25)

B

$A\flat^{\Delta}$ $B\flat^6$ G^{-7} $A\flat^{\Delta}$ $E\flat^6$ F^{-9} $A\flat^{\Delta}$ $B\flat^6$ G^{-7}

v

as

g

p

b

dr

(26) (27) (28) (29) (30) (31) (32) (33) (34)

1. 2.

Ab^Δ Eb⁶ F-9 Eb⁶ F-9

v

as

g

p

b

dr

drum fill

(35) (36) (37) (38) (39) (40) (41) (42) (43)



Solo Form

Ab^Δ Bb⁶ G-7 Ab^Δ Eb⁶ F-9

v

as

g

p

b

dr

(44) (45) (46) (47) (48) (49)

Change

♩ = 120 INTRO: Solo Piano Jan Alexander

Piano

G⁻⁷ C⁻⁷ D⁷ E^b^Δ C⁷(#11)/E B^b5⁶/F B^b5⁶/F E^b⁻¹³ F(sus4^{b9})

2 3 4 5 6 7 8 9

F⁷(b9) G^b^Δ E^b7(#11)/G D^b5⁶/A^b D^b5⁶/A^b F^Δ⁻¹³ A^b(sus4^{b9}) A^b7(b9) D^b-

10 11 12 13 14 15 16 17 18

v

as

g

rh

b

dr

f sample beat - may vary

19 20 21 22 23

A

D^b-⁷

v

as

g

rh

b

dr

distorted *f* sample bassline - may vary

24 25 26 27

2

dr

Change - Full Score

3

Score for measures 39-42, featuring vocal parts (v, as, g, rh, b) and drums (dr). The key signature is A major (A¹³). The guitar part (g) is marked with a slash (/) indicating a solo.

Measures 39-42 show the vocal melody and guitar accompaniment. The guitar part is marked with a slash (/) indicating a solo.

Score for measures 43-48, featuring vocal parts (v, as, g, rh, b) and drums (dr). The key signature is A major (A¹³). The guitar part (g) is marked with a slash (/) indicating a solo.

Measures 43-48 show the vocal melody and guitar accompaniment. The guitar part is marked with a slash (/) indicating a solo.

Score for measures 49-54, featuring vocal parts (v, as, g, rh, b) and drums (dr). The key signature is A major (A¹³). The guitar part (g) is marked with a slash (/) indicating a solo.

Measures 49-54 show the vocal melody and guitar accompaniment. The guitar part is marked with a slash (/) indicating a solo.

Score for measures 55-60, featuring vocal parts (v, as, g, rh, b) and drums (dr). The key signature is A major (A¹³). The guitar part (g) is marked with a slash (/) indicating a solo.

Measures 55-60 show the vocal melody and guitar accompaniment. The guitar part is marked with a slash (/) indicating a solo.

Change - Full Score

4 **C**

g G-7 C-7

rh G-7 C-7

b G-7 C-7

dr

61 62 63 64 65 66

g D7 Eb-7 C7(#11)/E

rh D7 Eb-7 C7(#11)/E

b D7 Eb-7 C7(#11)/E

dr

67 68 69 70 71 72

g Bb-9/F Bb-9/F Eb-13 F(sus4#9) F7(b9)

rh Bb-9/F Bb-9/F Eb-13 F(sus4#9) F7(b9)

b Bb-9/F Bb-9/F Eb-13 F(sus4#9) F7(b9)

dr

73 74 75 76 77 78

D Rhodes Solo

rh Bb-7 Eb-7

b Bb-7 Eb-7

dr

79 80 81 82 83 84

rh F7 Gb-7 Eb7(#11)/G

b F7 Gb-7 Eb7(#11)/G

dr

85 86 87 88 89 90

rh $G\sharp^6/D$ $D\flat-5\sharp/A\flat$ $F\sharp-13$ $G\sharp(sus4\flat9)$ $G\sharp7(\flat9)$

b $G\sharp^6/D$ $D\flat-5\sharp/A\flat$ $F\sharp-13$ $G\sharp(sus4\flat9)$ $G\sharp7(\flat9)$

dr

91 92 93 94 95 96

E

v $D\flat-7$

as

g

rh

b $D\flat-7$

dr

97 98 99

v $F\sharp-7$

as

g

rh

b $F\sharp-7$

dr

100 101 102

Change - Full Score

6

v

as

g

rh

b

dr

Ab⁷

A^Δ

103

104

105

106

G^b7^{#11}/B^b

E^Δ/B

E-^Δ/B

107

108

109

110

A-¹³

B^(sus4b9)

B^{7(b9)}

111

112

113

114

Change - Full Score

rit. 7

E-7 **rit.**

v

as

g

rh

E-7 **rit.**

b

dr

115 116 117 118 119

New Horizon (Interlude)

Jan Alexander

Full Score

Tribe

♩ = 170

Intro

Jan Alexander

Chords: $D\flat^{\Delta}$ $B\flat/D$

Voice:

Alto Sax:

Guitar:

Piano:

Double Bass:

Drums:

① ②

Chords: $E\flat-9$ C^7/E

v:

as:

g:

p:

b:

dr:

③ ④

Section: **A** On Cue

Chords: $D\flat^{\Delta}$ $B\flat/D$

v:

as:

g:

p:

b:

dr:

⑤ ⑥

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Tribe - Full Score

2

v $E\flat^9$ C^7/E
 as
 g
 p $E\flat^9$ C^7/E
 b
 dr

7 8



B

v $D\flat^A$ $B\flat/D$ $E\flat^9$ C^7/E
 as
 g
 p $D\flat^A$ $B\flat/D$ $E\flat^9$ C^7/E
 b
 dr

9 10 11 12



C

Solo Form (2+2+3+2)

v $D\flat^A$ $B\flat/D$ $E\flat^9$ C^7/E (rep. ad lib.)
 as
 g
 p $D\flat^A$ $B\flat/D$ $E\flat^9$ C^7/E
 b
 dr

13 14 15 16

Appendix 2: Transcriptions (Excerpts)

Full Score

Future Reflection Transcription Excerpt

Gerald Clayton

even 8ths ♩ = 200

0:14

snare off

1 2 3 4 5

6 7 8 9 10

11 12 13 14 15

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Measures 16-20 of the score. The vocal line (v) is silent. The alto saxophone (as) and trumpet (trpt) lines play a melodic phrase. The tenor saxophone (ts) and piano (p) lines play a rhythmic accompaniment. The bass (b) and drums (dr) lines play a bass line. The drum line includes a "snare on" instruction at measure 19.



Measures 21-26 of the score. The vocal line (v) is silent. The alto saxophone (as) and trumpet (trpt) lines play a melodic phrase. The tenor saxophone (ts) and piano (p) lines play a rhythmic accompaniment. The bass (b) and drums (dr) lines play a bass line.



Measures 27-32 of the score. The vocal line (v) is silent. The alto saxophone (as) and trumpet (trpt) lines play a melodic phrase. The tenor saxophone (ts) and piano (p) lines play a rhythmic accompaniment. The bass (b) and drums (dr) lines play a bass line.

0:58

3

v
 as
 trpt
 ts
 p
 b

33 34 35 36 37



v
 as
 trpt
 ts
 p
 b

38 39 40 41 42



1:15

v
 as
 trpt
 ts
 p
 b

43 44 45 46 47 48

Future Reflection - Transcription Excerpt (Full Score)

4

1:26

v
 as
 trpt
 ts
 p
 b

49 50 51 52

v
 as
 trpt
 ts
 p
 b

53 54 55

1:36 Piano Solo

p

56 57 58 59

Retold

Transcription Excerpt

Nate Smith

♩ = 160

Chord progression: D^Δ G⁷/D D^Δ G⁷/D

Voices: Voice, Alto Sax, Guitar, Piano overdub, Piano, Electric Bass, Shaker, Drums

Measure numbers: ② ③ ④

Chord progression: D^Δ G⁷/D D^Δ G⁷/D

Voices: v, as, g, p od, p, b, shk, dr

Measure numbers: ⑤ ⑥ ⑦ ⑧

Chord progression: D^Δ G⁷/D D^Δ G⁷/D

Voices: v, as, g, p, b, dr

Measure numbers: ⑨ ⑩ ⑪ ⑫

ad sim.

2

v D^{Δ} G^{Δ}/D D^{Δ} G^{Δ}/D
 as
 g
 p od
 p
 b
 dr

(13) (14) (15) (16)



v D^{Δ} G^{Δ}/D D^{Δ} G^{Δ}/D
 as
 g
 p od
 p
 b
 dr

(17) (18) (19) (20)



v D^{Δ} G^{Δ}/D D^{Δ} G^{Δ}/D
 as
 g
 p od
 p
 b
 shk
 dr

ad sim. (21) (22) (23) (24)

3

System 1: Measures 25-28. Chords: D^A, D^A.

System 2: Measures 29-32. Chords: D^A, D^A.

System 3: Measures 33-37. Chords: D^A, B⁻⁹, B^bA⁹, A(sus9), D^A, B⁻⁹, B^bA⁹, A(sus9), B^A, A^{b-9}.

System 4: Measures 38-41. Chords: G^A, C^b(sus9), B^A, A^{b-9}, G^A, /G^b, /G^b, Piano Solo.

Appendix 3: Further Sources of Inspiration

This is a collection of sources, that (despite not being referred to directly in my main text) have inspired me for this project work.

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