

Université de Montréal

**The composer-performer:
the influence of performing and improvising on the process of composing**

by

**Le compositeur-interprète :
l'influence de l'interprétation et de l'improvisation sur le procédé de la composition**

par

Pascal Bard

Faculté de musique

Dissertation submitted to the Faculté des études supérieures et postdoctorales
in order to obtain a Master's degree in Composition and Sound Creation

Avril 2022

© Pascal Bard, 2022

Université de Montréal

Faculté des études supérieures et post-doctorales

Dissertation titled

The composer-performer:
the influence of performing and improvising on the process of composing

Presented by

Le compositeur-interprète :
l'influence de l'interprétation et de l'improvisation sur le procédé de la composition

Présenté par

Pascal Bard

To be evaluated by a jury composed of the following members:

Ana Sokolovic, directeur de recherche

Ana Dall'Ara-Majek, présidente du jury

Pierre Michaud, membre du jury

Résumé

Ce mémoire présentera formellement trois pièces représentatives de mon parcours au programme de maîtrise en composition et création sonore. Le thème de la présentation de ces pièces est *Le compositeur-interprète : l'influence de l'interprétation et de l'improvisation sur le procédé de la composition*. Les pièces seront présentées dans une forme d'analyse formelle avec explications d'influences retrouvées en dehors de la musique classique. Les pièces ne seront pas présentées dans leurs ordres chronologiques de composition mais dans un ordre qui démontre une évolution vers un style de composition que j'espère personnel et original.

Mots-clés

Composition, interprétation, improvisation, musique du monde, jazz, rock

Abstract

This dissertation will formally present three pieces that best represent my time in the Masters in Instrumental Composition program. The theme presented by the use of these pieces is *The composer-performer: the influence of performing and improvising on the process of composing*. The pieces will be formally analyzed and contain explanations of the non-classical influences shown in them. They will not be presented in a way that shows their chronological order of composition but in a manner I hope shows the evolution of a personal and original style of composition.

Keywords

Composition, performance, improvisation, world music, jazz, rock

Table of Contents

Résumé	i
Abstract	ii
Table of Contents	iii
List of Figures	iv
Acknowledgements	vi
Introduction	1
1. The evolution of a creative process	2
2. Studienstück	16
2.1 Thematic Material.....	17
2.2 Formal Structure and Harmonic Analysis.....	20
2.3 Rhythmic Considerations.....	23
3. Undergrowth	26
3.1 Text as Structure.....	27
4. Sight of a Vicious Circle	35
4.1 Word painting as structure.....	37
4.2 Implied Harmony.....	45
Conclusion	55
Bibliography	59

LIST OF FIGURES

Figure 1: Basic chord-scale example.....	17
Figure 2: Advanced chord-scale example.....	18
Figure 3: First theme (in C) of Studienstück.....	19
Figure 4 : Scale of the first theme.....	19
Figure 5: Second theme (in C).....	19
Figure 6: Scale of the second theme.....	19
Figure 7: Last two measures of the piano ostinato of Daydreaming.....	20
Figure 8: General structure and harmonic zones of Studienstück.....	21
Figure 9: Sectional analysis of Studienstück.....	22
Figure 10: mm. 70-76. Scale used: Bb-7: Bb, B, Db, Eb, E, F, Gb, Ab, A.....	23
Figure 11: mm. 56-59, oboe and trumpet rhythmic figure.....	24
Figure 12: mm. 76-83, cello, bass and timpani rhythmic pattern.....	24
Figure 13: Text for Undergrowth.....	28
Figure 14: Coded translation of Undergrowth poem.....	29
Figure 15: mm. 161-168, «Concrete trees fill my view».....	30
Figure 16: mm. 170-178, «Nuru neon flashes through my soul».....	30
Figure 17: mm. 1- 11, part of «Through the dense undergrowth I walked».....	31
Figure 18: mm. 14-20, part of «a glorious wind sounds across the trees» with a repeated «Through the dense [...]» above it.....	31

Figure 19: mm. 38-42, example of alternating timbres for short and long marks	32
Figure 20: Structural analysis of Undergrowth	33
Figure 21: Text of Sight of a Vicious Circle	37
Figure 22: mm. 10-13 of the first movement	38
Figure 23: mm. 20-23 of the first movement	39
Figure 24: mm. 1-4 of the second movement	39
Figure 25: mm. 5-8 of the second movement	40
Figure 26: mm. 10-13 of the second movement	40
Figure 27: mm. 17-19 of the second movement	41
Figure 28: ending of the second movement	42
Figure 29: mm. 1-6 of the third movement	43
Figure 30: mm. 19-23 of the third movement	44
Figure 31: ending of the third movement	44
Figure 32: Row used for Sight of a Vicious Circle	47
Figure 33: Chords used for Sight of a Vicious Circle by movement	47
Figure 34: Harmonic analysis of Sight of a Vicious Circle	48
Figure 35: mm. 1-5 of 3rd movement, harmonic zone of Ebmaj7	50
Figure 36: mm. 6-8 of 3rd movement, harmonic zone of Fmaj7	51
Figure 37: mm. 9-13 of 3rd movement, harmonic zone of Emin7	52
Figure 38: mm. 14-23 of 3rd movement, harmonic zone of D7	53
Figure 39: mm. 24-30 of 3rd movement, harmonic zone of Bbmin7	54

Acknowledgements

Special thanks to Ana Sokolovic for her patience with me throughout these three years and for accepting me as one of her students.

Special thanks to all my musical colleagues and friends I have had during my career. I have learned something from every one of you.

Lastly, special thanks to my family. Their patience and support throughout the years have been noteworthy.

Introduction

The evolution of a creative process is something that is unique to every artist. This is because individual experience influences the path towards the completion of every project. Though some experiences may be similar among artists, the slight variations in one's path are often enough to bring a fresh perspective to the creation and completion of a new piece of Art. These experiences can be linked to our exposure to other works and performances in our chosen fields but also to life events and our emotional reactions to these circumstances.

The goal of this dissertation is to analyze my own growth in the field of composition that is based on Western European traditions. Throughout the following text, I will demonstrate how this growth is directly linked to my experiences and evolution as a performer and improviser, as well as to my reactions to various events and experiences that lay outside the bounds of my chosen Art. Through the analysis of a few selected works, I hope it will become clear that life itself is intrinsically linked to art and that this link is unavoidable. The text will also elaborate on the thought process behind my compositional approach and philosophies, and what specifically has been an influence on them.

1. The evolution of a creative process

In a correspondence email with French composer François Rossé, he explained to me that while composing and improvising are not the same, they both come from the same deep psychological area. Both come from a voluntary act of channelling our consciousness into the art of sounds, and while improvisation is impulse based, the quick and organic decision-making process can be easily translated to the act of writing through training. It is with this way of thinking that I have built my current composition process.

In any genre of music, the process of improvisation can be seen as exposing one's very subconscious and current state of being directly to an audience. Though genre will often dictate the musical language used in an improvisation, the choices made on the spot are governed by our mental and emotional states. Stereotypically, an «angered» state could lead to one playing more forcefully, sometimes louder to the point of sound distortion. A «saddened» state could lead to a mellower musical expression. A «bored» state could lead to more risk-taking in regard to specific sounds and/or notes used to make things sound more exciting. These are simple generalizations, but their point is to express how the complexities of human emotions and the state of one's mental being can come forth in an improvisation.

By contrast, some may argue for the possibility of the removal of Self in Art for objectivity in performance¹ but this I would argue is paradoxical in nature. This is because of how choices are made. It is, in essence, the culmination of past events, thoughts and emotions (our own or of others) to the present situation that guides choice. This means that the very act of trying to remove one's Self is a choice, as the reasoning behind the decision comes from somewhere influenced by past events. This makes the idea itself a paradox. In other words, this can be seen as a manifestation of the «Butterfly Effect», an underlying principle of chaos theory, during the creative process². Another point that could be made (though a purely hypothetical one) that if a Self-less expression in Art could be achieved, it could possibly lead to redundancy due to lack of originality. Originality in this sense being the differences, subtle or otherwise, at every iteration of the expression caused by the varied state of mind and beings at a given moment of time. This would mean the expression would most likely end up as an endless repetition of the same «pure» expression. This would most likely lead to the boredom of an audience and the performer(s).

In a more non-philosophical context, past experiences of playing in a specific genre or style can act as a guiding light in an improvisation or musical situation, even acting as a crutch in certain situations. That being said, gaining this experience and the knowledge of a musical language can

¹ Tracy McMullen, «Subject, Object, Improv: John Cage, Pauline Oliveros, and Eastern (Western) Philosophy in Music», *Critical Studies in Improvisation / Études critiques en improvisation*, Vol 6, No 2 (2010)

² Nancy C. Andreasen, «A journey into chaos: creativity and the unconscious», *Mens sana monographs vol. 9,1* (2011): 42-53. doi:10.4103/0973-1229.77424. (accessed March 2, 2022)
Krystyna Laycraft, «Chaos, Complexity, and Creativity», *Proceedings of Bridges 2009: Mathematics, Music, Art, Architecture, Culture* (2009) p. 355-362.

be difficult due to various obstacles caused by socio-political and cultural issues (though this is often quite warranted in the case of oppressed cultures i.e.: native American³), which can be a deterrent in learning and/or performing a specific musical language. In situations where the cultural music in question can be easily accessed through recordings and the gradual expansion of theoretical baseline (as with the case of jazz for example), one can come ready to a musical session (i.e., jam session), and if one can deliver a satisfactory performance, that said person could be accepted into the musical culture, regardless of one's gender, colour, creed, etc.⁴

As to why someone would choose to explore the music of different genres (especially of the more popular leanings) and cultures, I tend to believe this is simply for the need of musical vocabulary expansion. This need comes from the desire to avoid the constant repetition of one's musical expression and the never-ending search for originality amongst artists. I would also like to take into account that certain genres seem to express certain emotions better. An example of this that comes to mind would be the expression of anger through the music of metal and punk, with their rhythms, distorted sounds, and often frantic pace. Though specific emotional responses to

³ Andrea Boyea, «Native American Music and Curriculum: Controversies and Cultural Issues», *Philosophy of Music Education Review* 7, no. 2 (1999) p. 105–17. <http://www.jstor.org/stable/40327141>. (accessed March 2, 2022)

⁴ Gary Giddins and Scott DeVeaux, *Jazz*. (New York: W.W. Norton & Company. Inc. 2009). 44-45. Viswanathan Thanjavur, «Improvisation in South Indian Music», *The World of Music* 20, no. 2 (1978): 140–41. <http://www.jstor.org/stable/43563651>. (accessed March 2, 2022)

sounds will vary greatly depending on the culture and life experience of a listener⁵, opening one's emotion-to-music palette can only be useful for a musician.

A case could be made for learning different creative processes and mindsets that come these different genres and cultures. For example, in jazz, an improvisation is often based around a repeating chord progression, with a particular focus on the chord tones of said progression. This is in contrast with classical Indian traditions, where improvisation is often based on melodies and phrases that can be ornamented in an appropriate manner. These ornamentations are often limited to specific sections of a piece.⁶ That is not to say that Jazz doesn't use a melodic vocabulary in improvisation, quite the contrary, but this is often structured around a specific chord progression.

Often compared to learning a verbal language⁷, the abstractness of musical improvisation could be better compared to learning and becoming proficient at a sport, whether it be a physically demanding one such as basketball, or a mentally demanding one such as chess. In both, combining a «research» aspect (analyzing the strengths and weaknesses of an opposing team or player, an understanding of a given play area and its situational context, etc.) with a reflex-like

⁵ Donald A. Hodges and Robin W. Wilkins, «How and Why Does Music Move Us? Answers from Psychology and Neuroscience», *Music Educators Journal* 101, no. 4 (2015): 41–47. <http://www.jstor.org/stable/24755599>. (accessed March 2, 2022)

⁶ Thanjavur Viswanathan, « Improvisation in South Indian Music, » *The World of Music* 20, no. 2 (1978) p. 140–41. <http://www.jstor.org/stable/43563651>. (accessed March 2, 2022)

⁷ Bill Dobbins, « Improvisation: An Essential Element of Musical Proficiency, » *Music Educators Journal* 66, no. 5 (1980) p. 36.f

ability that is built upon a foundation of work (learning moves through repetition, analysis of weaknesses, etc.) done before a match will often lead to success. The research aspect of improvisation being the context in which an improvisation will happen and the reflex aspect being the things one would work on in a practice room (scales, arpeggios, licks, extended techniques, etc.).

Though one may argue that there is no competition in musical improvisation as there is in sports, which is true in the traditional sense, we cannot ignore the fact that there is a competition of sorts with an audience for their full attention. An audience wanting to reach for their phones and talk to each other out of sheer boredom is a challenge for any performer. And there is also the issue of ego between improvisers, causing another «competition» in the sense that there might be conflict concerning where an improvisation is heading in its musical direction: the musical language being used, dynamics, ending an improvisation, etc.

In continuing with the sports analogy, this last point brings up the use of teamwork. In a group improvisation, the satisfactory progress and conclusion of the musical event most often rely on the cooperation between performers. Though a contrast of personalities and experiences can lead to interesting musical results in a given situation, it is usually when performers have a certain amount of experience playing together that a better, cohesive result is produced. This rapport between musicians guides the musical reactions of each of them in the context in which they are

participating.⁸ This is true for group improvisation and groups of written or «pre-determined» music. The term pre-determined is used here as, in the example of «popular» genres of music: music that is not necessarily physically written in the theoretical sense or played with sheet music but is fully realized or conceptualized before a performance, usually via rehearsals.

I tend to categorize improvisatory reactions into two categories: complementary and contrasting. Complementary reactions are when an improviser produces a specific sound object, and another improviser creates a very similar sound object to the best of their ability. Another example of what I would consider a complementary reaction is the use of « word painting » when text is used in an improvisation. The musical invocation of text will always be valuable in the composer/improviser's toolbox. Contrasting reactions are the opposite, where an improviser will produce an often vastly different sound object to one already being produced. This can be as simple as dynamic contrasts, the contrast in the length of a sound, etc., or as complex as combining these various contrasting elements. These two categories exist at the opposite ends of a reactionary spectrum but delineating the categories like this is helpful pedagogically and useful for the starting points of improvisations.

⁸ Augusto Monk. «Symbolic Interactionism in Music Education: Eight Strategies for Collaborative Improvisation». *Music Educators Journal* 99, no. 3 (2013) p. 76–81. <http://www.jstor.org/stable/23364265>. (accessed March 2, 2022)

The term «improviser» comes with a need for differentiation from the term «performer». A performer is simply a musician who plays music, pre-determined and improvised, in front of an audience. Not all performers are improvisers, but all improvisers playing in front of an audience are performers. For the non-improvising performers, I believe the best word to use is «interpreter». That being said, there is a factor of improvisation in interpretation. This is because an interpretation will be subject to the interpreter's state of being and mind.

A simple example is a tired performer stumbling through a technical passage, making the music come out completely different from intended due to lack of focus. Another example could be that of a heart-broken performer interpreting accents and dynamics a bit more liberally than they are accustomed to. As unconscious as these examples may seem, they are still, at the very least, subconscious «choices» made in the moment that are influenced by experiences that came before.

In the example of a classical music performance, where the most detailed explanations by a composer can be seen in a score, parts and performance notes, the exact interpretation of a composer's intention will always fall short due to the limitation of language and communication in expressing the subjective thoughts and ideas of said composer⁹. Ways to try and fix this «problem» can be attempted through careful analysis, gaining knowledge of the performance

⁹ Michel Tye, «Qualia». *The Stanford Encyclopedia of Philosophy*, (Fall 2021 Edition), Edward N. Zalta (ed.).

tradition regarding the piece via past performers (i.e., teaching, method books), communication with the composer (if possible), and research on the composer's life to understand the state of being and mind at the time of composition. But all this research and communication combines with the interpreter's psyche in the moment of performance to make a choice. The very same choice that is, in its most primeval form, the same as one that is made in an improvisation. It should also be noted that what we choose to study and learn as an interpreter is governed by the biases caused by the chain of previous choices and experiences.

This factor of determinism becomes quite complicated with group performances, especially of popular music, where the pre-determined aspects of a performance are often flexible. What is meant by this is that choices are made by separate individuals acting as part of a group, with these individuals making choices with the best interest of the performance at heart, but balancing these choices with their own need to express themselves. The result of this are performances, where the sum of all their parts is very similar between performances, but analysis would show a multitude of variations. This can be with small things with parts being played slightly differently (things being accented differently, a change of equipment and gear to emphasize different sounds, more ornamentation to avoid boredom, etc.) or bigger things like entirely improvised sections being utterly different between performances.

In music that embraces improvisation more fully, like in the jazz genre, pre-determined factors guide an audience and the performers, giving a sense of form and structure. In more combo-

orientated jazz, this structure is often Head (where a pre-composed melody and chord changes are presented; these are often from various pop songs from different eras) – Solos (traditionally where performers take turns improvising on the given melodies and chords) – Head (a final repetition of the Head, sometimes with an added ending section (end tag) for greater emphasis)¹⁰. This structure is occasionally experimented upon and expanded. An excellent example of this is John Coltrane's 1961 recording of *My Favorite Things* off the album of the same name. A section of the pre-composed melody is used mid-solos as a signal to transition from E minor to E major.¹¹ This technique is similar to certain middle eastern music traditions, particularly Iranian Erudite Musique, where transitions in an improvisation are often melodically or rhythmically predetermined.¹² An expanded version of this idea is also seen with the group Kneebody. In a clinic, the group explained that a predetermined vocabulary of licks (short melodic statements) is called upon during improvisations to change a particular element of the music like the dynamics, key, tempo, soloist, or even to compose/improvise new sections spontaneously.¹³

This last point is similar to the conducting techniques found in conducted group improvisation. Though these vary from group to group, the ideas stay the same: a repertoire of hand symbols taught by a conductor to a group of improvisers for the conductor to shape the improvised music.

¹⁰ «Musical Elements: VI Form», *Grade 8 Lesson Plan*, Jazz in America, Herbie Hancock Institute of Jazz. (2000-2022) [https://www.jazzinamerica.org/lessonplan/8/2/203#:~:text=during%20each%20chorus%3A-a,melody%20is%20called%20the%20head.&text=Then%2C%20on%20each%20subsequent%20chorus,soloist%20wants%20\(within%20reason!\)](https://www.jazzinamerica.org/lessonplan/8/2/203#:~:text=during%20each%20chorus%3A-a,melody%20is%20called%20the%20head.&text=Then%2C%20on%20each%20subsequent%20chorus,soloist%20wants%20(within%20reason!)). (accessed March 2, 2022)

¹¹ John Coltrane Quartet, «My Favorite Things», *My Favorite Things*, Atlantic Records (March 1961)

¹² Dariush Zarbafian, *La musique savante iranienne, contribution à l'analyse des systems modaux et de la métrique*, Université de Toulouse (2008) p. 75-101.

¹³ *Kneebody – Band Clinic and Interview*, Drum Channel (January 8, 2019). <https://www.youtube.com/watch?v=lpn8e7ZFKM4> (accessed March 2, 2022)

Sometimes, visual cues of some type (cards, shapes, written words, etc.) are used instead by a conductor or performer in non-conducted performances with the same idea in mind. This element of predeterminism in improvisation shows that, in reality, there is a vast spectrum that lies between fully improvised music and fully predetermined music. This brings up the question of where a composer's job begins and ends.

I have been told at various points that composition is, in essence, slowed down improvisation. This I agree with, but up to a certain extent, as the factors of predeterminations in both acts vary. For improvisation, the choices we make in practicing before an improvisation will determine greatly what will come out. These choices will be affected by our state of mind and built-up biases regarding the practiced material itself, and then all that will be filtered again by our psyche at the moment of improv. For composition, the most direct association to practicing would be the research and work we put in before sitting down to compose, to which the reactions are again affected by our state of mind and biases and then that information is filtered by how we feel when sitting down. The main difference is that the «moment» of composition is usually extended over days, months, and even years.

This last point causes an issue that is not well documented, if at all. The problem is that with this extension of the moment of composition, various states of mind come into play and affect the specific sections of the work one is sitting down and working on. These various states can be pretty contrasting, leading to creative decisions that emotionally conflict with previous ones. In

the most extreme cases, this can lead to music that is disjunct emotionally in between sections, creating cognitive dissonance for a listener. Though this can be intentional, I believe that this is not the case more often than not. I've noticed this in some of my work, especially with the pieces I've composed before my compositional studies at l'Université de Montreal. Pieces like my *Concertino for Clarinet and Chamber Ensemble* (2016) and *Regurgitate, Rinse, Repeat* (2017) were composed over a few months. I believe this was a determinate factor in my feeling this issue with them. Granted, these pieces, along with a few others, were composed when my grasp of compositional technique was limited, but my criticism still holds.

During my master's, I chose to approach the resolution of this issue via different methods. One solution was to embrace short-form pieces, like miniatures, and collect them to make a longer piece, like my *Miniatures for Bass Clarinet* (2020) and *Punchlines for Alto Saxophone and Vibraphone* (2020). The short forms allowed for a faster writing process, creating a more consistent emotional journey within individual pieces. The research aspect for both these pieces was as demanding as any long-form piece, if not longer. This was mainly due to the necessity of contrasts between the individual short pieces in a collection to avoid redundancy. This was combined with a need for a sense of unity between the pieces to validate the creation of the collection itself.

For longer-form pieces, careful considerations were often put into the research for these to avoid a long writing process. These considerations were often regarding structure, harmonic structure

and thematic material. These needed to be thoroughly thought out before a single note was written to let a quasi-improvisational instinct come into play with these elaborated upon elements. This is seen the most in *Studienstück* (2020), where the form, harmonic structure and themes were all fully determined. Still, all dynamics, orchestration, scales, and breaking down of the themes were treated with an improvisational impulse. The initial writing of the complete draft of this piece took around a week, which I believe helped keep a solid emotional trend throughout the work. Long-form pieces that were less predetermined regarding musical material, like *A Recollection of Joyless Understandings* (2020), were heavily scrutinized in terms of structure. Still, the lack of predetermined material notably slowed down the overall writing process of a complete draft to about a month, creating what I find are notable emotional breaks in the music.

Another element that I found helped create a consistent emotional current in a piece, no matter the length, is the use of text in some form or another. Writing around text has been an excellent method of bridging sections, creating a more consistent whole. Though I have used numerous authors in my pieces, I have begun to move towards writing my own texts to have more control over the emotional and artistic content of a piece. At this last point, I know that I may not be a great author, but I have been writing prose and poetry since my teenage years, though in very intense, sporadic periods. Using my own texts for some of my compositions has been an excellent way to become more methodical in my writing approach, allowing me to slowly develop a writing style and write more regularly. *Undergrowth* (2019) is the first piece that used my own

text, and though I have issues with the work itself, it got the ball rolling regarding writing, and it is important in my portfolio for this reason.

The last noteworthy element in my composition process has been editing. The act of editing is particular as it is exclusive to composition. With improvisation, one has to live their «mistakes» and learn from them and not make them once the particular improvisational situation comes again. The act itself has developed a complex relationship with my composition process, which has become something akin to improvisation with a pen and paper. The necessity of editing for clarity for performers is obvious (adding dynamics, slurs, etc.). Still, editing imposes a new mind frame onto a composed draft, often clouding the initial intent. This issue has led me numerous times to the re-composition of an entire piece instead of going through a mass edit, which I have felt would muddle the emotional narrative of a piece. The first movement of *Deux mouvements pour octuors de saxophones* (2020) was such a situation where I re-composed it five times.

One of the goals in pursuing a master's at l'Université de Montreal was to learn how to harness the wealth of experience I have as a performer and improviser of multiple genres and channel it into the contemporary classical idiom. This I have done in the hope of finding an original approach to composition and, as mentioned above, reconciling the differences between improvising and composition. In the following pages, I have chosen three pieces that best reflect the evolution of my composition process during my time at the university. The analyses will look at the harmonic,

melodic, rhythmic, textual, structural, and timbral approaches I used during their composition and the specific influences that govern them.

2. Studienstück

Instrumentation:

I-II Flutes, I-II Oboes, I-II Clarinets in Bb (II-Bass clarinet), Bassoon, I-II Horns in F,
I-II Trumpets in Bb, Trombone, Timpani, Strings

Duration:

5 min 30 seconds

The bulk of the composition process for my orchestral piece, *Studienstück*, took place in August 2020, with the first draft taking a week to compose. I was one of the composers chosen for the annual composition competition of the Université de Montréal, and with this came the opportunity to write a short piece for the Orchestre de l'Université de Montréal (OUM). The title, which translates from German as «study piece, » comes from the context in which I wrote it.

For the composition, I had two «restrictions» imposed. This was mainly due to the requirements caused by the coronavirus. The first restriction was to limit the use of extended playing techniques. The orchestra primarily consisted of students coming out of CEGEP, many of whom had minimal experience with contemporary music. This, combined with the constraints imposed on private instrumental lessons, questions the possibility of accurate performance of contemporary playing techniques. The second restriction was to limit the size of the orchestra used due to the limited amount of space in the hall.

With this in mind, I chose to approach the work practically. The required size of the orchestra made me think of the classical-era orchestra and the use of sonata form, a form I had never experimented with before. This thought process also required me to make a certain amount of concretization of some concepts that I had been experimenting with, specifically, my pitch-based and rhythmic concepts. Let us first look at the thematic material I composed for the piece, as it questions what I chose in terms of pitch and rhythm.

2.1 Thematic material

My approach to the pitch material used in the themes and for the piece's entirety is based on the Chord-Scale Theory. This concept is initially used to teach improvisation in many notable jazz programs worldwide. It consists of associating specific scales, modes, or scale types, to specific chords (figure 1).

Figure 1 illustrates the Chord-Scale Theory concept. It shows three measures of music on a treble clef staff. Above the first measure is a box labeled "D-7". Above the second measure is a box labeled "G7". Above the third measure is a box labeled "Cmaj7". Below the first measure is the text "ii7: D Dorian Scale". Below the second measure is the text "V7: G Mixolydian". Below the third measure is the text "I7: C Major".

Figure 1: Basic chord-scale example

My predilection for this theoretical approach lies in its versatility. One can apply any scale to a chord as long as the said scale respects the chord tones, with flexibility regarding the root and

fifth of a chord (figure 2). This versatility is also why I have brought the concept to various performance contexts and multiple genres.

ii7: D Pelog Pentatonic V7: G 6th Messiaen Mode I7: C Major

Figure 2: Advanced chord-scale example

My experimentation with the ideas behind the theory has led me towards multiple ways of finding and even creating scales. This, in turn, led to the devising of multiple scale systems and methods to organize said systems, usually by means of associating a level of dissonance to a particular scale and ordering them by the said level of dissonance. In the past, I have used a seven-tone, an eight-tone, a nine-tone and quarter-tone scale system and applied these in pieces with the concepts of the Chord-Scale Theory in mind. For *Studienstück*, I used the nine-tone scale system. Choosing this approach allowed me to use the reflexes I had built up with Jazz improvisation to guide my ears in the selection of notes used over chords, allowing me to stay close to the idea of essentially improvising with a pen and paper (or computer).

As seen in figure 3, I combined three triads that do not repeat any chord tones to form a nine-note scale. The triads of C major, B diminished, and F# minor combine to create the scale shown in figure 4, with its possible scale function. I then used the scale to make the first theme.

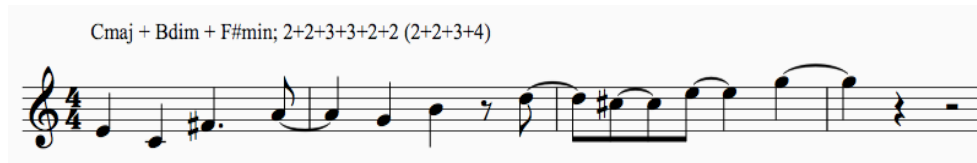


Figure 3: First theme (in C)

Cmaj + Bdim + F#min = C, C#, D, E, F, F#, G, A, B (Maj7)

Figure 4: Scale of the first theme

Another important aspect of the themes is rhythm. My experience with world music, especially with Turkish folk music, has led to my experimentation with additive rhythms. As seen in figure 3, the first theme uses the palindromic, additive rhythm of 2+2+3+3+2+2 (used with eighth notes), with a half-repetition for reasons of musicality. The rhythms used in the themes are also the basis for most of the rhythms used in the accompaniments and background figures throughout the piece.

As seen in Figures 5 and 6, the second theme uses a different scale and rhythm as its basis. Combining the triads of C minor, E major, F# major forms the scale seen in figure 6, with its possible scale functions. The rhythm used is the common 3+3+2 (with a small tag added for musicality) used in many folk dances, most notably in Argentinian tango, a dance I have some experience with as a player and a one-time amateur dancer.

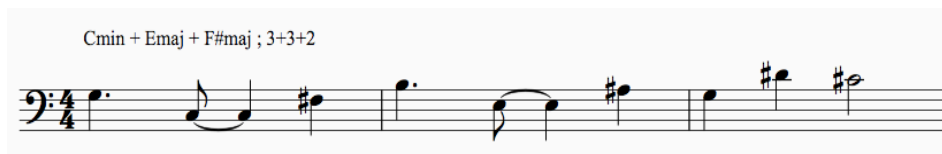


Figure 5: Second theme (in C)

Cmin + Emaj + F#maj = C, C#, Eb, E, F#, G, G#, A#, B (Maj7, Dom7, Min7, Half-dim7)

Figure 6: Scale of the second theme

2.2 Formal structure and harmonic analysis

As mentioned above, the piece uses the sonata form as its formal basis. I used the form in its most standard format, Introduction, Exposition, Development, Recapitulation and Coda, with no repetitions. Harmonically, my choices reflect my experiences of the past few years playing in rock and jazz contexts. The prevalent harmonic language found in the music of Radiohead, a highly influential band whose influence on popular music spans more than two decades, found its way into my choice of chords. In practical terms, this means chords do not always function as they do in Common Practice.

An example of this can be seen in figure 9 (below), where an F#min7 chord transitions by moving down a semi-tone to an F7 chord in the transition after the 2nd theme in the Exposition. Both chords share a third and a seventh, making the change between them smooth. This harmonic device is common in quite a few songs by Radiohead, ex: *Daydreaming* (figure 8), as well as in jazz, and is often used to help modulate to distant keys.

The image shows a musical score for the piano ostinato of the song 'Daydreaming'. It consists of two systems of music, each with a treble and bass clef staff. The first system starts at measure 3 and features a Bm7/A chord in the bass clef and a Bbmaj7 chord in the treble clef. The second system starts at measure 4 and features an Fmaj7 chord in the bass clef. The treble clef staff contains a melodic line with eighth and sixteenth notes, while the bass clef staff contains a steady eighth-note accompaniment. The key signature is three sharps (F#, C#, G#).

Figure 7: Last two measures of the piano ostinato of *Daydreaming* (\cong 2 minutes 28 seconds)

Though adherence to the traditional form was followed, some leeway was given to the harmony used in the sections. Examples of which are using a minor V chord instead of a major chord in the exposition of the 2nd theme and a move to an Ebmin7 instead of staying in Emaj7 (the key of the piece) in the recapitulation of the 2nd theme (figure 8). The overall sections are divided in a way demonstrated in figure 9.

<p><u>Introduction</u></p> <p>Emaj7: E, F, F#, G#, A, A#, B, C#, D#</p> <p><u>Exposition</u></p> <p><u>1st theme</u></p> <p>Ema7: E, F, F#, G#, A, A#, B, C#, D#</p> <p><u>1st Transition</u></p> <p>C#min7: C#, D, D#, F, F#, G, G#, B#, B</p> <p>F#7: F#, G, A, A#, B, C, C#, E, F</p> <p><u>2nd theme</u></p> <p>B-7: B, C, D, D#, F, F#, G, A, A#</p> <p><u>2nd Transition</u></p> <p><u>F#-7</u>: F#, G#, A, A#, B, C, C#, E, F</p> <p><u>F7</u>: F, G, G#, A, A#, B, C, D#, E</p> <p>Bb7: Bb, B, C#, D, Eb, E, F, Ab, A</p>	<p><u>Recapitulation</u></p> <p><u>1st theme</u></p> <p>Emaj7: E, F, F#, G#, A, A#, B, C#, D#</p> <p><u>1st Transition</u></p> <p>C#-7: C#, D, E, F, G, G#, A, B, C</p> <p>F-(maj7): F, E, Ab, Bb, B, C, Db, Eb, E</p> <p>Bb7: Bb, B, C#, D, Eb, E, F, Ab, A</p> <p><u>2nd theme</u></p> <p>Eb-7: Eb, E, Gb, G, A, Bb, B, Db, D</p> <p><u>2nd Transition</u></p> <p>Bb-7: Bb, B, Rb, Eb, E, F, Gb, Ab, A</p> <p><u>Coda</u></p> <p>Amaj7: A, A#, C, C#, D#, E, F, G, G#</p> <p>B7: B, C, C#, D#, E, F, F#, G#, A</p> <p>Emaj7 (last chord)</p>
---	--

Figure 8: General structure and harmonic zones of *Studienstück*

Introduction	mm. 1 to 12
Exposition	mm. 13 to 64
1st Theme (Expo.)	mm. 13 to 20
1st Transition (Expo.)	mm. 21 to 43
2nd Theme (Expo.)	mm. 44 to 50
2nd Transition (Expo.)	mm. 51 to 64
Development	mm. 65 to 107
Recapitulation	mm. 108 to 134
1st Theme (Recap.)	mm. 108 to 112
1st Transition (Recap.)	mm. 113 to 126
2nd Theme (Recap.)	mm. 127 to 131
2nd Transition (Recap.)	mm. 132 to 132
Coda	mm. 135 to end

Figure 9: Sectional analysis of *Studienstück*

Though there is a notable potential for using a high level of chromaticism with this nine-tone scale system, I chose to follow more diatonic tonal colours and save the dissonant aspects of the scales for transitional moments. This was done, in part, to help with the learning of the piece by the young orchestra members, as I felt a more diatonic work would be more straightforward for them to learn. An example of a transitional moment can be seen in figure 10, the transition in the middle of the development section (mm. 70-76), in which the woodwinds play the entirety

of the associated scale with an added tenth note as an emotional build-up to the next faster-paced section.

The image shows a musical score for measures 70-76. The score is arranged in a system with seven staves: Fl. I, Fl. II, Ob. I, Ob. II, Cl. I, B. Cl., and Bsn. The key signature is B-flat major (Bb-7). The score features a scale with an added tenth note. Blue arrows point to specific notes in the woodwind parts, and a 'rit.' marking is present above the Fl. I staff.

Figure 10: mm. 70-76. Scale used: Bb-7: Bb, B, Db, Eb, E, F, Gb, Ab, A (Added C Highlighted)

2.3 Rhythmic considerations

Though I limited the level of rhythmic complexity for this particular piece, I still made rhythm an integral part of it. Both themes have very identifiable rhythmic patterns that were carried over to the accompaniments and background figures. This was done to ensure a sense of connection between all the elements of the work. This can be seen in figure 11, where an oboe and trumpet use the rhythm of the first theme as a static response to a melodic fragment played by the first

violins and first flute. This also demonstrates a fondness I have for the call and response musical pattern, which I will elaborate upon in chapter 4.

The image shows a musical score for measures 56-59. The instruments listed are Fl. I, Ob. I, Ob. II, Cl. I, B. Cl., Bsn., and Tpt. I. The Fl. I part has a melodic line starting at measure 56. The Ob. I part has a rhythmic figure starting at measure 58. The Ob. II part has a rhythmic figure starting at measure 56. The Cl. I part has a rhythmic figure starting at measure 58. The B. Cl. part has a rhythmic figure starting at measure 56. The Bsn. part has a rhythmic figure starting at measure 56. The Tpt. I part has a rhythmic figure starting at measure 56. Dynamics include *mf* and *mp*.

Figure 11: mm. 56-59, oboe and trumpet rhythmic figure

The rhythms were also used in a slightly altered way. This was done to help maintain a level of interest. An example of this can be seen in figure 12, where the cello, basses and timpani use an extended first theme rhythm in a cyclical pattern, changing the 2+2+3+3+2+2 pattern to a 2+2+3+(2+3)+2+2+3+(3+3) pattern.

The image shows a musical score for measures 76-83. The instruments listed are Timp., Vln. I, Vln. II, Vla., Vc., and Cb. The Timp. part has a rhythmic figure starting at measure 76. The Vln. I part has a rhythmic figure starting at measure 76. The Vln. II part has a rhythmic figure starting at measure 76. The Vla. part has a rhythmic figure starting at measure 76. The Vc. part has a rhythmic figure starting at measure 76. The Cb. part has a rhythmic figure starting at measure 76. Dynamics include *ff* and *mf*. A tempo marking of $\text{♩} = 134-140$ is present.

Figure 12: mm. 76-83, cello, bass and timpani rhythmic pattern

The completion of this piece marked an interesting turning point as, while I saw a significant amount of potential with this scalar approach, I also saw where its limits lay. I knew that going forward, I needed to find a different approach that allowed for greater freedom and would also help me retain a sense of control over a piece. One where I could approach a work methodically, almost rigidly, while still being incredibly flexible. Since the completion of this piece, amongst others, the scalar method has only been used to get ideas for particular soundscapes but has not been used so strictly as in this piece.

Of note is also the rigidity in which I chose to use the thematic material. Almost all of the musical elements of the piece come from the themes in some shape or form. This comes from the decision to be influenced by the classical era and deciding to stay within that mindset. And though I still let a quasi-improvisational instinct guide things like the scales used, it was still something far removed from my background as an improviser. I have since decided to allow a more “reflex” based approach to guide my compositions, creating less predetermined elements before sitting down and composing. But this decision itself often leads to more time spent on the writing process, which is itself an issue, as stated above. A careful balance of the two will be necessary in the future.

3. Undergrowth

Instrumentation

Rock-style drum kit (bass drum, double-kick pedal, floor tom, high pitched tom, low pitched tom, snare drum, hi-hat, crash cymbal, ride cymbal, china cymbal)

Duration

7 minutes 30 seconds

Undergrowth (2019) was written as part of my residency with l'Ensemble de Percussion de l'Université de Montréal. For this project, I was tasked with composing a piece for solo percussion. The theme of a membranophone-focused concert was brewing, and avoidance of using pitched percussion was suggested. The idea of writing for an unpitched, multi-percussion set-up was appealing but caused initial frustration in finding the right combination of instruments. I eventually settled on writing for a drum kit, as it is one of the oldest multi-percussion set-ups and came into prominence with the early jazz eras and gained popularity with the rise of rock music. This choice also reflects the type of music I was performing at the time of composition, rock and funk music. Throughout the composition process, I also let my tastes for metal music influence the types of sounds I chose. I was notably influenced by the drummers

Mario Duplantier of Gojira and Matt Garstka of Animals as Leaders. Their approaches and overall aesthetics to the drums have left a strong impression on me.

3.1 Text as structure

The lack of pitched material brought up the question of how to structure the piece, as the use of rhythmic figures as thematic material was not appealing to me at the time of composition. The thought of using Morse code came up as I listened to the song *Art of Dying* by Gojira. The intro to the song features a complex rhythmic pattern played on the rim of a snare drum. This Morse code-like pattern inspired me to focus on that idea. This decision to use the latter brought up the question of what sort of text would be translated to code.

For this, I chose to use a poem as the whole piece, as I felt this would help solve the issue of structure as I could write in a through-composed form. I searched for a poem with specific characteristics, particularly a dynamic build-up in intensity and a clear structure. This only led to frustration, as I could not find anything to my liking, which led to my decision to write my own poem. The result, seen in figure 13, shows the influence of the band Gojira, known for their politically and environmentally charged lyrics. Another essential feature is the gradual deterioration of the naïve tone found at the beginning of the text towards a more cynical one. I

wanted to emphasize this musically, achieving this through my choice of instruments in each section and how I interpreted the Morse code translation of the text.

Through the dense undergrowth I walked
A glorious wind sounds across the trees
The cool air sticks to my lungs, refreshing my body and mind
I feel peace.

The pecking of a woodpecker drags me out of my daydreams.
I chuckle as a curious hare stares at me
I pace quietly as to not scare an eating doe.
I am in awe.

A dirt road appears under my feet.
Empty beer bottles lay in a ditch.
Signs of bored men looking to run from monotony.
I am disappointed.

Paved road sounds with every step
Signs of the apathy of man abound.
The stink of modernity binds to my lungs, corrupting my body and mind.
I am disgusted.

Concrete trees fill my view
Nuru neon flashes through my soul
An honest beggar asks me for booze money.
I am tired.

Figure 13: Text for Undergrowth

My choices for the translated text (figure 14) were fairly straightforward: eighth notes for long marks and sixteenth notes for short marks, with alterations to the rhythms in certain sections to keep up the level of interest for an audience. Rests between letters and words were treated more flexibly, as with them lay the piece’s musicality. Of note, to heighten the gradual intensity of the text, I chose to remove the rests between words slowly.

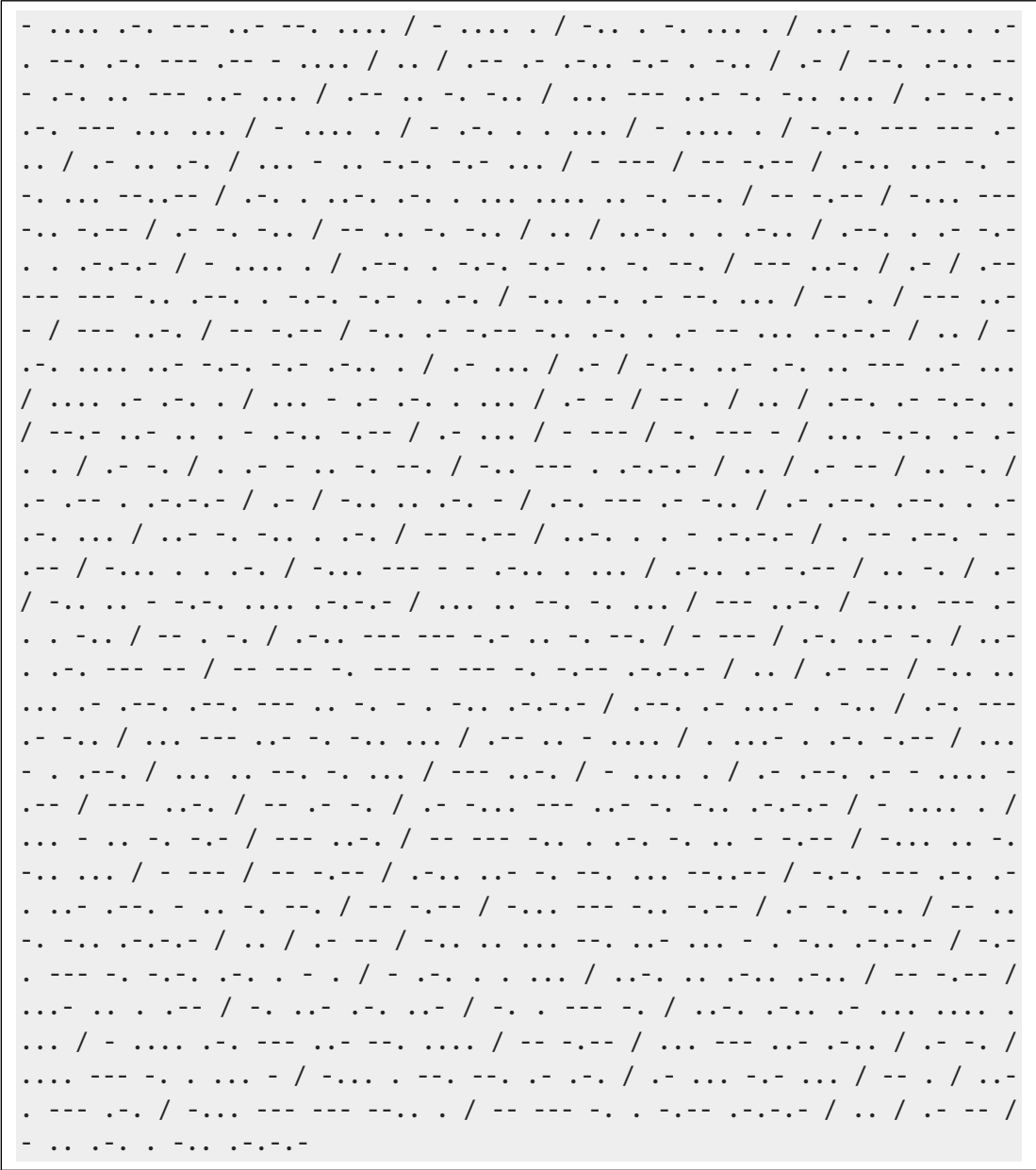


Figure 14: Coded translation of Undergrowth poem

To avoid a certain monotony that could arise from a long and pitch-less percussion piece, I interpreted some of the lines as a whole instead of word for word or letter for letter. I did this by using word painting, focusing on specific letters and building up a section. An example of this can be seen in figure 15, in which the line «Concrete trees fill my view» is shortened to the first few letters of «trees». The result is heard as masses of sound, which symbolize the word «Concrete». To this mass was added an echo-like figure on the closed hi-hat to symbolize a wind in the trees.

Figure 15: mm. 161-168, «Concrete trees fill my view»

Structurally, I strictly followed the stanzas but decided to use the fourth line of each as a repeated figure throughout the «recitation» of each stanza. This helped to create a layering of rhythms, complexifying the overall texture of a given section. It also allowed for creativity in terms of contrapuntal techniques such as augmentation, diminution and retrograde, as shown in figure

16.

Figure 16: mm. 170-178, «Nuru neon flashes through my soul»

In this particular section, where the line «Nuru neon flashes through my soul» is played on the snare drum, the fourth line of the stanza, «I am tired», is recited in augmentation on the crash cymbal and retrograded with inverted length values (short becomes long, and vice-versa) in the double kick drum. Another example can be seen in figures 17 and 18, where the first whole line is repeated overtop the second in a canon-like idea.

Stoic, in awe ♩=108

Drum Set

5

9

Figure 17: mm. 1- 11, part of «Through the dense undergrowth I walked»

Figure 18: mm. 14-20, part of «a glorious wind sounds across the trees» with a repeated «Through the dense [...]» above it.

I avoided using complex polymetric and polyrhythmic techniques to accommodate the time available for the performer of the piece, Robin Jaget, to learn it. Of note is the use of different timbres to help denote the differences between long and short marks in certain passages (figure 19).

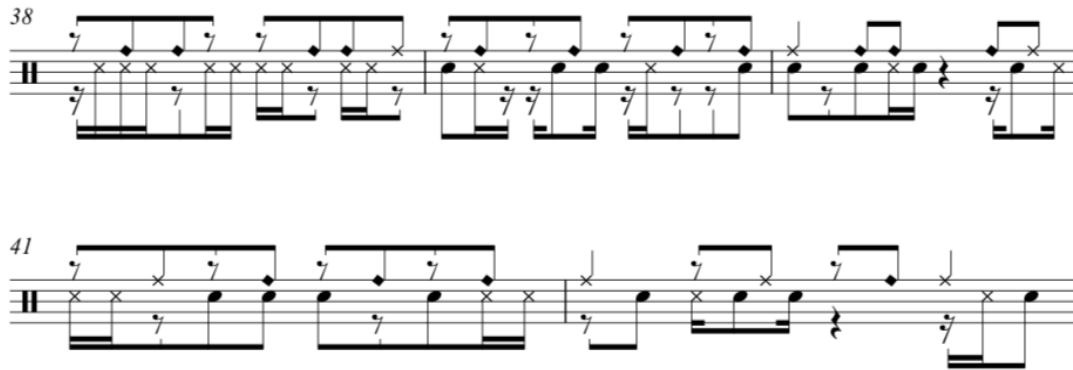


Figure 19: mm. 38-42, example of alternating timbres for short and long marks

Though a through-composed piece in principle, the clear structure of the poem does give it a sense of overall formal cohesion. If one takes the text as a point of structural division, one can impose a proper structural analysis over the piece, as figure 20 shows. It is important to mention that some sections become entangled as the lines are played in rapid succession. The first and second lines of the second stanza and the entirety of the fourth stanza make a clear division between the lines moot.

1st Stanza	mm. 1-45	- 3rd line	mm. 106-126
- 1st line	mm. 1-13	4th Stanza	mm. 127-160
- 2nd line	mm. 14-25	5th Stanza	mm. 161-202
- 3rd line	mm. 26-45	- 1st line	mm. 161-169
2nd Stanza	mm. 46-87	- 2nd line	mm. 170-178
- 1st and 2nd lines	mm. 46-73	- 3rd line	mm. 179-188
- 3rd line	mm. 74-87	- 4th line (coda)	mm. 189-202
3rd Stanza	mm. 88-126		
- 1st line	mm. 88-96		
- 2nd line	mm. 97-105		

Figure 20: Structural analysis of Undergrowth

This piece marks the first time I used my own text in one of my pieces. As stated above, poetry and prose are things that I have been doing for several years, albeit in sporadic waves of devotion to the craft. Though I still plan on using texts from other authors from time to time, the control and freedom that comes from being one's own writer is noteworthy. An issue I can foresee in writing the text for my pieces is the balancing of the frame of mind of the writer and the frame of mind of the composer.

This piece is also the first time I let the influence of rock and metal, genres that I have been performing in since my teenage years, be in the forefront to this extent. Hints of it have appeared before, most notably in *Regurgitate, Rinse, Repeat*, but allowing the total influence of a single musical language to govern the composition process is something I wouldn't want to let myself do again. I have found since the composition of this piece that I needed to truly embrace the multiple, not just one, facets of my performance background to come up with something much more original.

And similar to *Studienstück*, the rigidity that came from using Morse code to this extent as the primary compositional device caused certain musical issues. The retention of musical elements is not possible, leaving dynamics and orchestration as the only guides left to help an audience along during a performance. Learning from this mistake, I have since considered the various elements often needed in a composition for an audience to have a clearer understanding of a piece at the moment of performance. My attempt at starting to fix this last point can be seen in *Sight of a Vicious Circle* (2021).

4. Sight of a Vicious Circle

Instrumentation

Soprano and string quartet (Violin I, Violin II, Viola, Cello)

Duration

6 minutes

Composed during January 2021, *Sight of a Vicious Circle* can be viewed as a summation of my time in the master's program at the Université of Montreal. It was written in a way that reflects all my previous experimentation with pitches, timbre and text, such as in my *String Quartet* (2019) and *Monologues* (2020). Structure and form were not ignored but were not a strong focus of the work as musically, the piece is based on the techniques of word-painting and call and response. The use of these two composition techniques reflects my experiences with contemporary improvisation, which is very reactionary by nature and often uses these techniques as a starting point for an improvisation. Though literal interpretation (ex: the word «rain» is interpreted musically as rain or water-like effects) in improvisation can be seen as a crutch, it is a valuable tool to build rapport between improvisers. It can be used as a building block for more extended and powerful improvisation.

Again, I chose to write the text for the piece as I had enjoyed working on the text of *Undergrowth* and had established a process for writing text during the composition of the work. The very dark tone of the poems reflects the atmosphere of the second Covid lockdown, where the homeless population of Montreal was put in a desperate situation due to the imposed curfew and the takedown of the large tent village in Hochelaga-Maisonneuve neighbourhood, where I was part of a benefit concert few months prior. Though the poems do not reference this event directly, the general homelessness situation in metropolitan areas influenced my choice of words. This was something I had never truly experienced before moving to Montreal.

I came to my decision of using a string quartet and soprano quite naturally. Before this, I had often used miniatures for string quartets as a means to experiment with different ideas and concepts. Struggling to find inspiration for a new harmonic approach, the idea of focusing on voice and text began to materialize. This choice of instruments is, of course, inspired by the third and fourth movement of Schoenberg's second string quartet, in which a soprano joins the string quartet with texts by the German symbolist poet Stefan George.

4.1 Word painting as structure

The text, seen in figure 21, has very clear, powerful, dark imagery and invites the use of word painting, but its free-flowing nature defies a proper structure. As a result, I chose to use the word-painting itself as a type of formal structure. This, in turn, invited the use of call and response to make the piece progress forward, helping guide the eventual audience during a performance. The use of word-painting also influenced the use of timbral-based extended techniques for the voice and the strings. Figures 22 and 23 show examples of word-painting in the first movement.

1.
Bewildered, madly fumbling,
following little known routines,
hindered by draconian means.
Left quietly mumbling, stumbling,
whispering incoherently,
all with a laughable facade,
that will always look odd.
Crawling through an inhospitable old sod,
feeling extra small, ready to bawl,
maybe even yell at unseen gods!

2.
Labored memory marked by repulsive regret
Recall, recoil, reset.
Layered identity behind hallowed silhouette
Sinking, silence, sighing.
Tailored insanity through compulsive delirium
Decry, defy, Delphi.

3.
Empty eyed crowd flowing,
Merging like river water
But avoid crude oil stirring
Refusing strayed brother, sister
Moaning, lurking, burning.
Looking at ground,
Cloud, embittered

Figure 21: Text of Sight of a Vicious Circle

In figure 22, the word «quietly» invites the voice to whisper the text and forces a total silence from the strings to avoid overpowering the voice. When a string instrument does appear, it is to complement the use of the word «mumbling». It accomplishes this with a distorted harmonic trill (mm. 11) that is played as quietly as possible. The word «stumbling» uses an exaggerated stumbling rhythm that is then complemented by ricocheted bow strokes (mm. 12-13) in the strings, which symbolize the idea of dropping items when one is stumbling.

The musical score for mm. 10-13 of the first movement consists of five staves. The top staff is for the vocal soloist (S. Solo), starting at measure 10 with a *pp* dynamic. The lyrics are: "Left qui-et-ly mum-b(a) ling, stum-b(a) ling, whis-pe-ring". The vocal line features a trill on the word "mumbling" and a distorted harmonic trill on "stumbling". The string accompaniment (Vln., Vln., Vla., Vc.) begins in measure 11 with a *pp* dynamic and a *poco s.p.* marking. The strings play a distorted harmonic trill in measure 11, followed by ricocheted bow strokes in measures 12 and 13, with a *mp* dynamic. The score includes various musical notations such as trills, slurs, and dynamic markings.

Figure 22: mm. 10-13 of the first movement

In figure 23, vocal fry can be seen as an interpretation of the word «crawling», which also uses a downward portamento as emphasis. The lower strings reply with upward portamenti, symbolizing a certain uplifting quality with the word «through». The second movement features the most explicit examples of word painting, seen in figures 25 through 29.

Approx. pitches

S. Solo
vocal fry
mf
craw-ling through an in-hos-pi-ta-ble

Vln.
Vln.
Vla.
mf
Vc.
mf

Figure 23: mm. 20-23 of the first movement

The beginning of the second movement (figure 24) reflects the word «labour» and uses a heavily accented Gmaj7b5 with an added #13th chord that is dispersed throughout the strings. This culminates in a powerful and distorted G7#5b9 chord that brings in the arrival of the voice.

Soprano
♩=74
La-bored me-mo-ry

Violin
♩=74
f

Violin
f

Viola
f

Violoncello
f

Figure 24: mm. 1-4 of the second movement

Figure 25 shows an interpretation of the word «repulsive», in which the violins enter in syncopation that comes to a stop with the arrival of the viola. Like the beginning of the

movement, the word «layered» invites layered, syncopated entrances in the strings (figure 26), highlighting an Emaj7 with an added #11 and natural 13.

Figure 25 shows a musical score for measures 5-8. The vocal line (S. Solo) begins at measure 5 with the lyrics "marked by re-pul-sive re-gret". The instrumental parts include two Violins (Vln.), Viola (Vla.), and Violoncello (Vc.). The strings play a syncopated, layered accompaniment.

Figure 25: mm. 5-8 of the second movement

Figure 26 shows a musical score for measures 10-13. The vocal line (S. Solo) begins at measure 10 with the lyrics "Lay-ered i-den-ti-ty". The instrumental parts include two Violins (Vln.), Viola (Vla.), and Violoncello (Vc.). The strings play a syncopated, layered accompaniment, highlighting an Emaj7 with an added #11 and natural 13.

Figure 26: mm. 10-13 of the second movement

Figure 27 shows a descending portamento in the cello part that interweaves with a descending vocal line, starting with the word «sinking». This descent ends with a playful interpretation of «sighing»: the voice avoids saying the word but simply does the act.

The image shows a musical score for mm. 17-19 of the second movement. It consists of two systems of staves. The first system shows a vocal line (S. Solo) with the lyrics 'sink-ing' and 'sil-' and a cello part (Vc.) with a descending portamento line. The second system shows the vocal line continuing with '- ence_ sink - ing' and 'sigh', and the string parts (Vln., Vla., Vc.) with sustained notes. The cello part continues with a descending portamento line.

Figure 27: mm. 17-19 of the second movement

The last example from the second movement, seen in figure 28, shows a pretty stereotypical interpretation of the word «delirium», where the chaos implied by the word is notated graphically in the string parts, with portamenti lines drawn with register in mind instead of specific pitches. Distortion is added to this by the strings playing on their bridges and with *molto tremolo*. The voice is left decrying the last few words of the text amidst the chaos caused by the strings.



Figure 28: ending of the second movement

The third movement is the only movement that lets an interpretation of two words govern its near entirety, resulting in less call and response than the other movements. Those two words are «water» and «oil». I chose to follow a somewhat typical musical interpretation of these, where «water» is a flowing repeated figure that alternates in speed and where «oil» is a distorted sound that interjects while the flowing figure is being played (figure 29). I chose to give these interpretations specific instruments, with the lighter sounding violins playing the flowing figure and the heavier, more resonant cello interjecting as oil. The viola acts as the go-between, helping bring intensity to the parts by alternating roles. This texture lasts from the beginning to m. 17. The voice in this section functions in a more traditional manner. Singing in a classical fashion, it does not have as much vocal alteration as the previous two movements.

III.

The image shows a musical score for the third movement, measures 1-6. The score is written for Soprano, Violin I, Violin II, Viola, and Violoncello. The tempo is marked as $\text{♩} = 54$. A red box labeled "Water figure" highlights measures 1-3. A second red box labeled "Oil figure" highlights measures 4-6. The Soprano part has lyrics: "Emp-ty eyed crowd flow-ing". Dynamics include *ppp*, *poco s.p.*, *mp*, and *mf*. Performance instructions include "to trem." and "ord.".

Figure 29: mm. 1-6 of the third movement

Measure 19 of the movement (figure 30) continues the theme of letting an interpretation of a word influence the aesthetic of a section. The word «moaning» brings about open chords in the upper strings, played over pedal tones in the cello, as though letting out extended groans with each interjection. The voice returns to the use of extended techniques to help distinguish the two sections. The movement ends with one final chord that embodies the word «embittered»: a Bb diminished chord with an added major 7th, emphasizing a lack of resolution (figure 31).

4

** Approx. pitches**

vocal fry
mf

whispered
mp

19 ♩=48

S. Solo

moan-ing lurk-ing burn-ing,

Vln.

mp

Vln.

mp

Vla.

mp

Vc.

mf

Figure 30: mm. 19-23 of the third movement

24

mf

vocal fry

whispered
mp

S. Solo

look-ing at— ground, cloud, em-bit-tered

Vln.

mp

p

Vln.

mp

p

Vla.

mp

p

Vc.

mf

Figure 31: ending of the third movement

The use of word painting as the basis for the structure of a piece has, admittedly, some problems. There is a chance a certain repetitiveness could be felt, and a lack of proper development can lead to some other issues. The short duration of the work and its movements does alleviate some of those issues though. The reactionary nature of the technique should be considered as a tool in the search for material at the beginning of the composition process if nothing else.

4.2 Implied harmony

One of my goals with this piece was to move away from using specific scales as the basis of a work. Having used different types of scalar systems since 2015, I began to hear a uniformity in sound with some of my past pieces. I realized then that I had a predilection for particular scale sounds. Though still valuable tools, I knew I needed a different approach than what my scalar systems had to offer.

In parallel with my composing with the scalar approach, I often ventured towards an approach that was similar, in terms of sound, to early atonal music found at the beginning of the twentieth century. This was achieved by following my intuition and letting my inner ear guide what I wrote. This approach has always appealed to me as it was akin to a slowed-down contemporary improvisation. That being said, I always found it a slow and painstaking process and felt more

comfortable with something based on some type of harmony. The use of harmony also acts as an additional auditive guide for an audience and helps keep a solid emotional current going.

The idea of using this freer type of composition, but grounding it in harmony, slowly began taking shape in my mind. An improvisational philosophy found in jazz is that a note being played is not right or wrong, but it is the note that comes after it that makes it so.¹⁴ In practical terms, any use of dissonance is acceptable during a specific harmonic framework, but it must resolve to a new one once it changes. Then, once resolved, the free use of dissonance is acceptable again. This means that the pitches chosen must reflect the new framework (i.e., the evident use of chord tones) until the change in harmony is audible. Then, the pitches chosen can be selected in a freer manner. This helps in giving the music a sense of inner movement, as there can be some form of harmonic rhythm in incredibly dense and chromatic textures. The process of coming up with chords, or harmonic zones, for the piece was fairly straightforward. I had experimented with the idea of harmonizing twelve-tone rows to find unique chord progressions for a few years, most notably in my chamber opera *Épars Satellite*. This allowed me to avoid using chord progressions typically found in Common Practice, jazz, and pop. I must mention, though, that the idea itself comes from the jazz pianist Bill Evans and his song *Twelve-Tone Tune (T.T.T.)*. For this piece, I came up with a tone row and, since I knew it was not going to be a long work, did not proceed in finding its full matrix, choosing instead only to use the single row (figure 32).

¹⁴ Herbie Hancock, MasterClass. 2017. <https://www.masterclass.com/classes/herbie-hancock-teaches-jazz> (accessed March 2, 2022)

D, C#, E, F, C, B, Ab, Eb, A, G, F#, Bb

Figure 32: Row used for Sight of a Vicious Circle

With the row selected, the process of finding chords was reasonably straightforward. By using the note of the row as either the root, third, fifth or seventh of a chord, I was able to come up with a subjectively appealing progression of twelve chords that avoided my habitual chord progressions. The progression's uniqueness also helps give the overall piece a unique character (figure 33).

1st movement	2nd movement	3rd movement
D=Dmin7	F=Gmin7	Eb=Ebmaj7
C#=F#min7	C=Amin7	A=Fmaj7
E=C7	B=Emaj7	G=Emin7
	Ab=Fmin7	F#=D7
		Bb=Bbmin7

Figure 33: Chords for the used for Sight of a Vicious Circle by movement

The selected chords are used in the piece in what can be described as harmonic «zones». What is meant is that the chords are not used in quick succession, as is generally associated with the idea of a chord progression. Instead, they are used as static harmonic frameworks, allowing for the exploration of harmonic and melodic colours specific to one zone until the change to the next harmonic zone happens. This idea was also integral to the scalar approach of my past

compositions, allowing the application of concepts found in modal counterpoint and putting those ideas in a contemporary context. Though, as mentioned above, the work follows a free-flowing structure implied through word-painting, we can still analyze its harmonic structure and content quite easily. In Figure 34, we can see how these harmonic zones are divided up within the piece. It is essential to mention that transitions between harmonic zones are not as clear-cut as the analysis would have it seem. Zones can intermix within a measure. In such cases, I chose to analyze by looking at which zone was more dominant within a measure and marking the dominant one.

<u>1st movement</u>		<u>3rd movement</u>	
Dmin7	mm. 1-9	Ebmaj7	mm. 1-5
F#min7	mm. 10-17	Fmaj7	mm. 6-8
C7	mm. 18-30	Emin7	mm. 9-13
<u>2nd movement</u>		D7	mm. 14-23
Gmin7	mm. 1-7	Bbmin7	mm. 24-30
Amin7	mm. 8-14		
Emaj7	mm. 15-19		
Fmin7	mm. 20-25		

Figure 34: Harmonic analysis of Sight of a Vicious Circle

Of the three movements, the third best reflects the idea of free dissonance within a specific harmonic framework. This is because the music within is more interconnected than the other movements as it uses the technique of call and response less frequently. This allows the harmonic zones to flow better into one another, helping one feel the changes in zones easier. Figures 36 to 40 show a detailed harmonic analysis of the entire movement.

One thing of note is that the same tendency or reflex for certain scalar sounds, even when I am not focusing on using that approach, still seems to be present. With the scalar approach, it became a habit to use scales that notably had the b9th and the #11th. The tendency of using these tones in particular, even without basing myself in a scalar system, is still frequent. A deeper analysis of why that is will be required as breaking this habit might be necessary for the future.

Figure 35 shows the first harmonic zone of the third movement. Emphasis on the root, fifth and seventh of the chord can be heard. The natural ninth is very present and can be seen as harmonic preparation for the following harmonic zone of Fmaj7 as it is the root of that zone. The free use of the b9th and b13th can also be heard.

Zone: Ebmaj7

III.

♩=54

Soprano

R + 9th

Violin I

poco s.p.
ppp

Violin II

poco s.p.
ppp

R + maj7th

Maj7th

Viola

pp

mp

pp

Violoncello

R

b9th

to trem. -----

5th

3rd

9th

R

S. Solo

Emp-ty eyed crowd flow-ing

Vln. I

Vln. II

ord.

pp

mp

poco s.p.

Vla.

mf

b13th

9th

ppp

5

5

to ord. -----

Vc.

mf

5th

mp

pp

mf

Figure 35: mm. 1-5 of 3rd movement, harmonic zone of Ebmaj7

Figure 36 shows the harmonic zone of Fmaj7. This zone is the shortest of the entire movement. Its use of the #11 can lead to confusion as it is also the fifth of the next zone. But, as we can see in figure 37, that zone starts with a major seventh resolving to the root, marking its clear arrival.

The image displays a musical score for the harmonic zone of Fmaj7, spanning measures 6-8 of the 3rd movement. The score is divided into four systems, each with a specific label in a red box:

- System 1:** Labeled "Zone: Fmaj7". It shows a single staff with a melodic line.
- System 2:** Labeled "R + maj7th". It shows a staff with a melodic line and dynamic markings *pp* and *mf*.
- System 3:** Labeled "b13th". It shows a staff with a melodic line and dynamic markings *pp*, *mf*, and *mp*. It includes the instruction "ord." and "poco s.p."
- System 4:** Labeled "R". It shows a staff with a melodic line and dynamic markings *pp* and *mf*.

On the right side, a larger score shows the orchestration for measures 7-8:

- S. Solo:** Melodic line with lyrics "merg - ing like riv - er wat - er". Labels include "3rd", "13th", "R", and "Maj7th".
- Vln. (Violins):** Two staves. The first staff has a melodic line with dynamic markings *pp*, *mf*, and *ppp*. The second staff has a melodic line with dynamic markings *pp*, *mf*, and *ppp*. Labels include "#11th".
- Vla. (Viola):** A staff with a melodic line and dynamic markings *pp*, *mf*, and *ppp*. Labels include "#11th".
- Vc. (Violoncello):** A staff with a melodic line and dynamic markings *pp* and *mf*. Labels include "13th" and "#11th".

Figure 36: mm. 6-8 of 3rd movement, harmonic zone of Fmaj7

Figure 37 shows the Emin7 zone of the third movement. The colours used in this section can be seen as coming from a mixture of the Phrygian and Dorian modes, with hints of the diminished and harmonic minor scales. That being said, the outlined zone of Emin7 is still clearly stated.

Zone: Emin7

5th

3rd b7th b9th

but a - void crude o - il stir - ring -

R + b9th b9t 13th 5th R Maj7th

Maj7t R

to or R + maj7th poco s.p.

b9th 5th + b9th #11th + b9th

3rd + b9th R Maj3rd+11th

pp f mf mp

13

S. Solo #11th Maj7th

Vln. Vln. Vla. Vc.

b9th

5th

3rd + b7th 5th + b9th 5th + R Maj7th

Figure 37: mm. 9-13 of 3rd movement, harmonic zone of Emin7

The D7 zone (figure 38) is the most chromatically dense of the third movement. It nears the density that can be had with cluster chords, especially at the climax of the movement (mm.16-17). Even though parts of these sections defy chordal functionality, the beginning of the zone clearly outlines the chord in an extended elaboration.

The figure shows a musical score for measures 14-23 of the 3rd movement, focusing on the harmonic zone of D7. The score is annotated with various intervals and chord extensions in red boxes:

- Zone: D7** (top left)
- 3rd**, **#9th**, **5th**, **#11th** (top right)
- R** (bottom left)
- re-fus-ing**, **strayed**, **bro-ther**, **sis-** (vocal line)
- ter** (vocal line)
- 3rd + 11th**, **R + b9th**, **3rd + 11th**, **5th** (left side annotations)
- accel.**, **f**, **mf** (performance markings)
- #9th + R**, **11th**, **3rd + 5th**, **#11th + 3rd**, **maj7th + 11th**, **R + #11th**, **b9th + 5th**, **b9th + 5th**, **b9th + 7th**, **R + maj7th** (right side annotations)
- **Approx. pitches**** (middle)
- 5th**, **#11th**, **5th**, **#9th** (S. Solo annotations)
- whispered mp** (S. Solo marking)
- moan-ing**, **burn-ing** (S. Solo lyrics)
- 7th**, **b13th**, **9th**, **#9th** (Vln., Vla., Vc. annotations)
- R**, **mf** (Vc. annotations)

Figure 38: mm. 14-23 of 3rd movement, harmonic zone of D7

The last harmonic zone of the movement (Figure 39) is Bbmin7. Its drone-like but unstable character emphasizes the lack of resolution stated by the text.

Zone: Bbmin7

S. Solo: *mf* look - ing ground, cloud, em - bit - tered *mp* (vocal fry, whispered)

Vln. *mp* *p*

Harmonic labels: b9th, Maj7th, R, 3rd, 5th, #11th

Figure 39: mm. 24-30 of 3rd movement, harmonic zone of Bbmin7

The completion of this work started me down a new path that needs refining but has what I find to be great potential. It seems to be a more refined version of the quasi-improvisational approach that I have been searching for but has enough predetermined elements to help reduce struggle during the composition process. The next challenge will be to try and compose longer form music that doesn't use text. And though word-painting, as it was used here, is limited in scope, it is, along with my scalar approaches, timbral exploration, expressionist tendencies, part of my ever-growing compositional toolbox.

Conclusion

The purpose of this paper was to see if there was a way to combine the psychological and philosophical aspects of composing, performance and improvising in order to find a path to a unique creative voice. Though there are similarities, each one of these has its own unique challenges that make it impossible to combine them perfectly, but we can still use the base impulses of each as a frame of reference. This meant analyzing how the decision process works for each of these and what influences effects these decisions. Of the three, composition is the most complicated in this regard.

The main problem I have faced in reconciling the different frames of mind that come into play when composing is that it's a losing battle. The multiple hats that one has to wear to compose a piece each have their own needs and personalities, and this, of course, depends on whatever day one of those hats gets put on. The best recourse that I have found so far is simply to do everything in the shortest time possible, but this can get ridiculous quickly.

Jack Kerouac is a writer I admire but his method for typing up a book in a short time was a nice large cocktail of Benzedrine, coffee and cigarettes, which isn't the healthiest. But there is something important about this man's method that needs to be brought forth. This is the time he put in preparation before sitting down to type. Years were spent writing in journals about the

many adventures and misadventures he experienced, outlining everything into something that would shape up as a book. He sometimes tried to write initial drafts before settling on the writing method he would become famous for: scrolls made from taped-together sheets of tracing paper to avoid breaks in thought from switching the paper in a typewriter, which is combined with a refusal of using paragraph and chapter breaks.¹⁵ Though this helps create a sense of spontaneity in the final work, the editing that comes afterward does reduce that sense.¹⁶

I can see similarities between Kerouac's method with my current composition process. The years I've spent honing my performance abilities could be akin to his travelling years. The journal writing, outlining, and initial drafts could be the research and planning I put into each composition before I sit down to compose. As for the scroll, computers do remove that need. The only differences would be in the editing (the need hasn't been as drastic as Kerouac's) and the additional step of writing my own texts (when needed), and the eventual music.

This overall preparation method has been the closest to keeping the spontaneous, quasi-improvisational feeling that I want in my pieces. It's not perfect, as it's still the aforementioned losing battle that never ends, but it gets pieces written and completed, which is the end goal.

¹⁵ Shea, Andrea. «Jack Kerouac's Famous Scroll, «On the Road» again». *All Things Considered*. NPR. <https://www.npr.org/templates/story/story.php?storyId=14112461> (July 5th, 2007)

Suiter, John. *Poets on the Peaks Gary Snyder, Philip Whalen, and Jack Kerouac in the North Cascades*. Counterpoint. (2020). p. 189

¹⁶ Shea, 2007.

One of my goals in pursuing a master's degree was to learn to channel my experiences and all the musical languages I've learned as a performer and improviser into a personal composition language. Learning to do this is key to finding the path to artistic originality. In this goal, I think I am close to achieving something satisfactory. The next few years will focus on refining the ideas I have experimented with over the last three years and exploring new possible ideas.

Soon, I would like to also experiment with the concept of comprovisation. I have participated in works of this type before and feel an affinity with them. This, in turn, will require experimenting with graphic and open scores, which I have experience with as a performer and composer, although not at a significant level. The challenge for this will be balancing the elements of predeterminism and trying to find a way to consider the state of mind at both the moment of composition and improvisation.

Other future experiments lie with electro-acoustic and more timbral-based music. These types of music are always a challenge for me to compose, and combining harmonic-based concepts like the ones I have been using has the potential to be something interesting in my eyes. Working in these music worlds will also bring into question another level of collective mind frames as it involves programmers, sound technicians, and whole plethora of other people in the composition and performance worlds.

Further ideas revolve around performing, where the possibility of forming an ensemble, or at the very least, a collective of sorts, where ideas can be exchanged and be experimented with, is becoming more concrete. In the past, with my group Ensemble Atlantica, I felt I could safely experiment with and get immediate, honest feedback. This, I believe, is an invaluable learning experience that I would like to obtain again. This will also allow me to focus on understanding the role of group mindsets in the composition and improvisation contexts.

I also plan on bringing my new grasp of composition to popular genres. This is something I have been doing indirectly as part of various music groups, albeit not as a principal songwriter. The process of coming up with my own parts has become more and more influenced by what I've learned over the past few years. The next step would be to see the possibilities for me are acting as a principal songwriter in my own groups and seeing what could be possible regarding bridging the worlds of contemporary classical and Pop.

Bibliography

Andreasen, Nancy C. «A journey into chaos: creativity and the unconscious», *Mens sana monographs vol. 9,1* (2011). doi:10.4103/0973-1229.77424

Boyea, Andrea, «Native American Music and Curriculum: Controversies and Cultural Issues», *Philosophy of Music Education Review* 7, no. 2 (1999)<http://www.jstor.org/stable/40327141>. (accessed March 2, 2022)

Dobbins, Bill. «Improvisation: An Essential Element of Musical Proficiency», *Music Educators Journal* 66, no. 5 (1980).

John Coltrane Quartet, «My Favorite Things», *My Favorite Things*, Atlantic Records (March 1961).

Giddins, Gary and Scott DeVeaux, *Jazz*, New York: W.W. Norton & Company. Inc. (2009).

Hancock, Herbie. MasterClass, 2017.

<https://www.masterclass.com/classes/herbie-hancock-teaches-jazz> (accessed March 2, 2022)

Hodges, Donald A. and Robin W. Wilkins, «How and Why Does Music Move Us? Answers from Psychology and Neuroscience», *Music Educators Journal* 101, no. 4 (2015). <http://www.jstor.org/stable/24755599>.

Laycraft, Krystyna. «Chaos, Complexity, and Creativity», *Proceedings of Bridges 2009: Mathematics, Music, Art, Architecture, Culture* (2009).

McMullen, Tracy. «Subject, Object, Improv: John Cage, Pauline Oliveros, and Eastern (Western) Philosophy in Music», *Critical Studies in Improvisation / Études critiques en improvisation, Vol 6, No 2* (2010).

Monk, Augusto. «Symbolic Interactionism in Music Education: Eight Strategies for Collaborative Improvisation». *Music Educators Journal* 99, no. 3 (2013). <http://www.jstor.org/stable/23364265>. (accessed March 2, 2022)

Shea, Andrea. «Jack Kerouac's Famous Scroll, «On the Road» again». *All Things Considered*. NPR. <https://www.npr.org/templates/story/story.php?storyId=14112461> (July 5th, 2007). (accessed March 2, 2022)

Suiter, John. *Poets on the Peaks Gary Snyder, Philip Whalen, and Jack Kerouac in the North Cascades*, Counterpoint (2020).

Tye, Michel. «Qualia», *The Stanford Encyclopedia of Philosophy*, (Fall 2021 Edition), Edward N. Zalta (ed.).

Viswanathan, Thanjavur. «Improvisation in South Indian Music», *The World of Music* 20, no. 2 (1978). <http://www.jstor.org/stable/43563651>. (accessed March 2, 2022)

Zarbfian, Dariush. *La musique savante iranienne, contribution à l'analyse des systems modaux et de la métrique*, Université de Toulouse (2008).

«Musical Elements: VI Form», *Grade 8 Lesson Plan*, Jazz in America, Herbie Hancock Institute of Jazz. (2000-2022)

[https://www.jazzinamerica.org/lessonplan/8/2/203#:~:text=during%20each%20chorus%3A-a.,melody%20is%20called%20the%20head.&text=Then%2C%20on%20each%20subsequent%20chorus,soloist%20wants%20\(within%20reason!\)](https://www.jazzinamerica.org/lessonplan/8/2/203#:~:text=during%20each%20chorus%3A-a.,melody%20is%20called%20the%20head.&text=Then%2C%20on%20each%20subsequent%20chorus,soloist%20wants%20(within%20reason!)). (accessed March 2, 2022)

Kneebody – Band Clinic and Interview, Drum Channel (January 8, 2019).

<https://www.youtube.com/watch?v=lpn8e7ZFKM4> (accessed March 2, 2022)