

Artistic Research Report

Submitted in partial fulfillment of the requirements for the degree of Master of Music 2023/4/22

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Title of the research: The new stage of bass trombone: study on the music of Daniel Schnyder

Artistic Research Question: How can I explore the extended techniques such as multiple tongues, different vibratos and glissandos with growling for bass trombone in Daniel Schnyder's composition *Subzero* and get a better understanding of his musical style?

Keywords: extended techniques in bass trombone, musical style of Daniel Schnyder,

Subzero concerto.

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1 Abstract

Many of the top musicians in the world have performed and recorded Daniel Schnyder's music, a Swiss-American composer and saxophonist. His compositions often combine elements of jazz, classical music, and world music. In this research, the focus is on his piece *Subzero*, which was composed for bass trombone and orchestra. The aim of this research is to gain a deeper understanding of Schnyder's musical approach, with a particular focus on the extended techniques used in the piece.

One of the key areas of investigation is the use of extended techniques such as multiple tongues, varied vibratos, and glissandos with growling. These techniques are not typically associated with the bass trombone, and their use in Subzero is part of what makes the piece so unique. Through a thorough analysis of these techniques and their use in composition, this research aims to shed new light on Schnyder's creative process.

Another important aspect of the research is an in-depth analysis of the musicality of each movement, with a particular focus on the second movement, Samai Thaquil. This movement is based on a rhythmic groove from Turkey that has been adapted by Arabs and is often used for belly dancing and celebration. The research explores the ways in which Schnyder incorporates this groove into the piece and the various possibilities it offers for exploring the timbre of the bass trombone with different mutes.

To achieve these aims, the research employs a range of methods, including the collection of literature and media, interviews with several experts, the study of recordings from different artists, various experiments, and structural analysis of the movements. By using these methods, the research aims to provide new insights into Schnyder's work and its impact on the bass trombone repertoire.

In conclusion, this research aims to contribute to the understanding of Daniel Schnyder's musical approach and the ways in which he incorporates extended techniques and world music influences into his compositions for the bass trombone. Through a range of methods and a detailed analysis of the composition, the research aims to provide new insights into Schnyder's creative process and shed new light on the possibilities for the bass trombone as a solo instrument in contemporary music.

2 Introduction

2.1 Motivation and goal

Bass trombone has many special techniques, such as double and triple tonguing, and also different kinds of mutes to provide more possibilities and give more flexibility to the timber. I want to learn and show the special characteristics of the bass trombone, and I want to be more versatile as a bass trombonist by playing solo compositions with many technique possibilities. Daniel Schnyder's compositions are being examined in this study in an effort to assist me in developing my solo performance skills. In Schneider's music, many diverse styles and civilizations are combined. His music has a number of characteristics that are uncommon in bass trombone music, including harmonic and blues elements, dynamic rhythms, and blends of American jazz, blues, African music, and Latin music. He gives the bass trombone a new sound. This new sound strengthens the bass trombone's reputation as a solo instrument. These unique elements are hardly found in the earlier bass trombone literature. Finding out more about Schnyder's Subzero concerto is fascinating to me.

By analyzing Daniel Schnyder's typical music on the bass trombone, which shows many technical skills and special music styles, I will get a better understanding of my instrument and performance at large. In addition, I will gain much insight into how to play his music in my graduate recital. His music allows me to be involved in the music of different cultures and, as a soloist, to be more versatile and open to the music of our day.

2.2 Contextualization

I found the literature on the *Subzero* concerto by Reinaldo Donoso Pizarro¹ (a former student at Codarts who did the Daniel Schnyder topic in his master's research). His research helps me to know a lot of information about his opinions and his network. It helps me analyze the *Subzero* concerto better. I also found the literature called A Performer's Guide to Daniel Schnyder's "subZERO-Concerto for Bass Trombone" by Mr. Matthew Bleys², which gave me a lot of information about how he analyzed the

¹ Reinaldo Donoso Pizarro, "SubZero on the SubTrombone," Literature, May 16, 2019.

² Matthew Bleys Hoormann, "A Performer's guide to Daniel Schnyder's 'subZERO-Concerto for Bass Trombone'," Literature (2007)

Subzero concerto. I also did find some literature, for example, The Techniques of Trombone Playing by Michael Svoboda³, that relates to the bass trombone special techniques that are related to the music that Schnyder composed, especially the double tongue skills. I also found the interview between the composer Daniel Schnyder and the bass trombone player who premiered the piece, David Taylor, interesting. It is valuable that I can understand the ideas of the piece better and what the composer was thinking about. There are also some educational videos of special techniques (multiple tongues, glissandos, and vibratos) that are related to the *Subzero* concerto, which I want to learn and analyze. For example, the youtube video from Christopher Bill called Trombone Lessons: Extended Techniques (How To Hit A High C.⁴

Based on my network with my main subject teacher at Codarts, Ben van Dijk, he gave me a lot of ideas of how to practice the required extended techniques in Schnyder's music to help me get more on the spot, ready for playing and analyzing the piece better. Also, the interview with Reinaldo Donoso Pizarro, who was a former student at Codarts and did the Daniel Schnyder topic in his master's research, gave me a lot of information about his opinion of Schnyder's music. I can learn a lot from how he practiced the extended special techniques, what music I should listen to, and also their ideas for learning the piece.

2.3 Research question

How can I explore extended techniques such as multiple tongues, different vibratos and glissandos with growling for bass trombone in Daniel Schnyder's composition *Subzero* and get a better understanding of his musical style?

2.4 Specific audiences and readers addressed

For musicians, musicologists, scholars, and everyone interested in extended techniques for the trombone, bass trombone, and music in general, and those who want a better understanding of current repertoire and the music by Daniel Schnyder, specifically the *Subzero* concerto.

³ Michael Svoboda, The Techniques of Trombone Playing = Die Spieltechnik Der Posaune. (Kassel: Bärenreiter, 2017).

⁴ "Trombone Lessons: Extended Techniques (How to Hit a High C)." YouTube, November 9, 2013. https://youtu.be/XfNNp0O8QRo

3 Research Process

3.1 First Research Cycle

3.1.1 Overview of first research cycle

In the first cycle, I mainly focus on special extended techniques such as multiple tongues, vibratos, and glissandos. I also do a music analysis of the first movement of the *Subzero* concerto. The reason why I want to start with these aspects is because Daniel Schnyder's music is very technical and his musical style is very diverse. As the reference recording I have chosen, I picked some typical fragments with the elements under study (extended techniques and some main features of his musical style) from his compositions. It is very valuable that I can make this research cycle focus mainly on technical aspects so as to make more improvements to my solo playing. I mainly focus on the first movement in my first cycle, and I will dive into more of the *Subzero* concerto and analyze the score in the second and third cycles.

3.1.2 Reference recording

https://drive.google.com/file/d/1nuakbnoRnGK7w4gWscPCgxbG4C4Avep5/view?usp=drivesdk

I recorded here the first 99 measures in the first movement of Subzero Concerto by Daniel Schnyder.

It was recorded on 9th February, 2022, at Hongyi's studio.

3.1.3 Feedback and reflection

Summarize the Feedback from Pawin Pungbua (American Trombone Workshop competition winner):

Character: Do more character changes between the movements, and also change the style of playing. Daniel Schnyder used so many styles of music elements in his music.

Articulation: Have more variety of the articulations, now everything is like from the book and follow the rules but in this piece, especially in his music, it has to include dirty articulation, something we don't do in the normal classical type of playing.

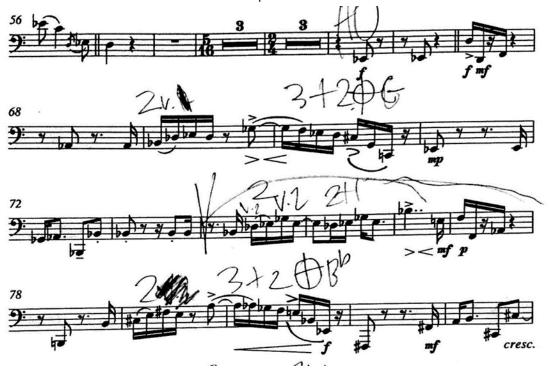
Dynamic: Do more contrast on the dynamic. Now you are almost playing all the same dynamics.

The feedback from **Reinaldo Donoso Pizarro** (Former student at Codarts who did the Daniel Schnyder topic in his master research):

Listening: Listen to more jazz trombone players, jazz vocal singers and try to get the concept of playing this type of music. Imitate how they use the accents and vibratos.

Tempo: For the first recording, your tempo can be more stable, sometimes the rhythm is a bit random.

Articulations: Do more accent on the note that requires the accent from bar 67:



This part of the rhythm feels more like the bass guitar slapping.

The feedback From **Ben van Dijk** (my main subject teacher at Codarts):

Sound: good.

Articulations: There are some parts that can be a bit more rough. It is almost too clean for me. Take a reference to David Taylor.

Pitch: good.

Self reflection:

I think what needs to be improved are the articulations and the musical idea of this first recording. The composer used a lot of blues and pentatonic scales in his music. I need to listen to more similar styles of music that are related to Schnyder's composition and do more character changes in the different moments. The first recording I chose presents special techniques such as multiple tongue skills, glissandos, and different types of vibrato. What I think I have to improve in the future is, firstly, the multiple tongue skill; right now I can still hear a stuck and tense sound between the running notes. It's not very smooth and fluent. The articulations are too 'clean' sometimes; they need to have more variety. Sometimes I can also hear that the glissandos I did were too wide and exaggerated the slide vibratos too much. It is not organic. I think to solve those problems, I can listen to more jazzy trombone players and imitate what they do. There are some parts that can be more jazzy or bluesy.

3.1.4 Data collection & data analysis

In the method of the data analysis, I analyze the literature and media, interviews, analysis from the recording and parametric experiments,

Literature and Media:

I found three sources which gave me the information. This first one is the youtube video by Christopher Bill. It helped me to dig into the special extended techniques on trombone⁵. In the recording, Christopher Bill shows many extended techniques on trombone and teaches me how to approach it.

The second literature is from Michael Svoboda⁶. It also talks about the techniques of trombone playing. Including the extended techniques. It is more detailed and clearer in explanation than the video.

The third reference is Daniel Schnyder 5 podcast episodes⁷. It is an interview of Daniel Schnyder and David Taylor (bass trombone player for Subzero). In this interview Schnyder talked about how he wants

⁵ "Trombone Lessons: Extended Techniques (How to Hit a High C)." YouTube, November 9, 2013. https://youtu.be/XfNNp0O8QRo.

⁶ Michael Svoboda, The Techniques of Trombone Playing = Die Spieltechnik Der Posaune. (Kassel: Bärenreiter, 2017).

⁷ "5 Of Daniel Schnyder Podcasts Interviews: Updated Daily." *OwlTail. Accessed April 15, 2022. https://www.owltail.com/people/LCnbt-daniel-schnyder/appearances.*

the player who plays his music, it is more important to play the right feeling of the piece and how to phrase the music, it is not about playing only following the score. This interview also helps me to understand better about his musical style.

Interviews:

With **Ben van Dijk** (my main subject teacher at Codarts):

He suggested that I build into my daily routines the required extended techniques in Schnyder's piece. Playing and exploring the required extended techniques on a daily basis will make my interpretation of the piece personal.

Playing-wise, he suggested I start learning the notes by studying everything in a very slow tempo. With pieces like this, it's a must to avoid learning the wrong notes and rhythms when I play too fast or too early.

For the steady rhythmical parts, I should make constant use of the metronome.

The piece really needs a steady, solid pulse to make it work, so working with the metronome will help build this steadiness.

I have to listen to or watch all the recordings of David Taylor for sure, but of course, players like Stefan Schultz, Brandt Attema, and James Markey Schnyder's music is a combination of many different styles. It's a hectic melting pot of all sorts of styles, and within his pieces, I have to switch in a split second between J. S. Bach and Thelonius Monk.

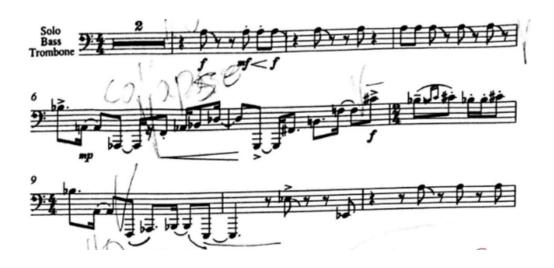
Balkan music, Klezmer (Jewish), jazz in all possible styles, and contemporary classical music are all in his compositions.

With **Ricardo Rocha** (a former student at Codarts who interviewed Daniel Schnyder and David Taylor):

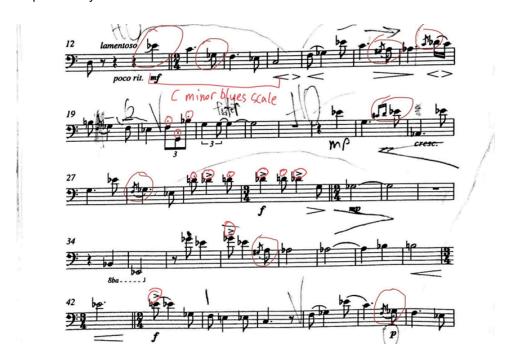
He said what Daniel Schnyder wants is that he hopes the performance of his piece will be different every time. In the interview, Schnyder mentioned that he wants people to be special, and he does not want people to play his music each time the same way. For example, with different and diverse articulations, do extreme dynamic and tempo changes, and you can even change a little bit of the notes if you feel there are some parts that you are not comfortable with. I can start this piece by listening. Listen to the orchestra's vision of this piece. David Taylor playing with the orchestra on YouTube is a good reference because Schnyder composed this piece for him. David Taylor is a person who is really thinking outside the box, and he made every note meaningful. His musicality and the way he played are very suited to what Schnyder wants.

With **Reinaldo Donoso Pizarro** (former student who did the Daniel Schnyder research):

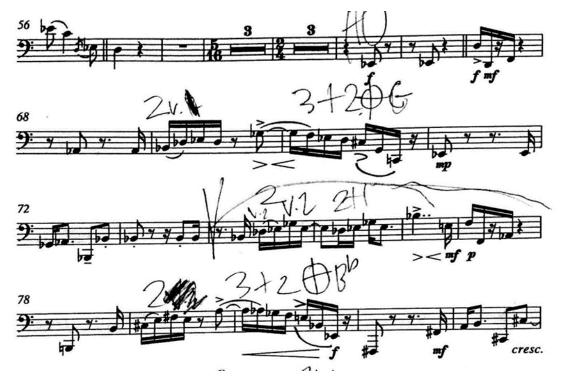
I have to really keep the tempo when you play the piece, especially in the first movement. It is very easy to play the notes randomly. Because this piece sounds so free. What you need to do in the first movement is connect all the fragments; there are so many different parts in the first movement. For example, from the beginning:



The tempo and rhythm are more consistent and direct. From bar 13:



the music is changing to the blues, it sounds more lazy. From bar 67:



You should feel the rhythm more like the bass guitar slapping.

Analysis from the recordings from different musicians:

I found three musicians playing this piece on YouTube, and they are David Taylor⁸, Stefan Schulz⁹, and Justin Clark¹⁰.

The first musician is David Taylor. His style of performance, which I think is most in line with the composer's thoughts, For example, with different and diverse articulations, do extreme dynamic and tempo changes. The composer also wrote this music for him. What he plays is very different from that of the other two musicians. For example, David Taylor exaggerated the dynamic marks between loud and soft and also his articulations. David Taylor is not playing every note with a nice articulation and warm sound; sometimes he plays the articulations very harshly and sharply. The length of the staccato notes is extremely short. He is very passionate and plays with a sense of freedom, completely out of the box. Although he modified some scores and made some wrong notes in many places, this is exactly what the

⁸ "David Taylor Plays the Daniel Schnyder Concerto, Movement 1." YouTube, October 3, 2008. https://youtu.be/gwH-oGyOKLA.

⁹ "Justin Clark Plays Daniel Schnyder's Subzero - YouTube." Accessed February 10, 2022. https://youtu.be/ui4zh-C1ZU8

¹⁰ Schulz, Stefan. "SubZERO, Bass Trombone Concerto":1.SubZERO," October 26, 2010. https://youtu.be/MyMb1vLPzGI

composer wants to express. The composer hopes that everyone can play their own music in different ways. But for me, sometimes I feel he is too aggressive in his articulations.

The second musician is Stefan Schulz, who is the bass trombonist in the Berlin Philharmonic Orchestra. In this video recording, I hear a very different version. Overall, the two of them sounded differently, and he sounded fuller and longer on each note.

The opening part of the first movement:



Stefan Schulz played faster than David Taylor. He changed the tone of the sound to a darker color when he played from bar 13:



His playing is following the score; I like his cadenza more than David Taylor's; it is more disciplined and not as free as David Taylor's. Overall, I feel like in his recording, he played with a nice and warm sound in the first movement. His rhythm and coordination with the piano are excellent.

The third musician I have listened to is Justin Clark. All his articulations are very different from the first two musicians. He kept a steady tempo. He did not play the articulations as nicely as Stefan Schulz or as harshly as David Taylor. I can hear his articulations more clearly. His performance of phrases is more coherent and continuous; I think he used a more continuous air stream when he changed the note. Justin Clark's timbre of sound is more open and direct compared to Stefan Schulz's playing. He changed his tempo from bar 238. It is much slower than Mr. Schulz and Mr. Taylor. For me, I think his playing in this video does not have so many dynamic changes; I can almost only hear him all the time loud, and he is rarely doing the soft playing. In my playing, I think I can make it more contrasty.

Parametric Experiment:

In the parametric experiment, I want to explore more combinations with different parameters, such as dynamics changes, several tongue syllables of the double tongue skill, and different air speeds while blowing the instrument, to have a clearer articulation and a more interesting interpretation.

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Schnyder used a lot of trombone Glissando techniques here which were inspired from the jazz blues scales (example 2). What I need to do is try out which one gives a more natural and relaxing jazz feeling of playing it. To have the jazz feeling I need to experiment, whether to play more or less glissando and accent more or less to the note. Try to find out how much air I should give.

1. With slower air speed and without tonguing the note when playing the glissando note that I circled. Recording:

https://drive.google.com/file/d/1TqtCXAt2cA3s-lo2hW_Or3wvikXTiLBM/view?usp=drivesdk

This method I feel is not very clear on the articulation but the sound of glissando is nice and relaxed.

2. With slower air speed and with tonguing the note when playing the Gliss note. Recording: https://drive.google.com/file/d/1uCGidg53Jf8DDdZgW1BLCHY6EvsobHMS/view?usp=drivesdk

This method I feel is clean on the articulation and I also feel the sound of glissando is nice and relaxed.

3. With faster air speed and without tonguing the note when playing the glissando note. Recording: https://drive.google.com/file/d/12FtLjpNIIFnW9NrpR3h10U4fBUVMTxft/view?usp=drivesdk

This method I feel is not clear on the articulation but the glissando sounds a little tense because the air speed is too fast for this.

4. With faster air speed and with tonguing the note when playing the glissando note. Recording: https://drive.google.com/file/d/1ig2flvx8Fd2-HnaqQKw0qpBkn5bAp5qf/view?usp=drivesdk

This method I feel is the sound is too harsh because the air stream is too fast but the articulation is very clear.

Example 2

This is the C minor blues scale¹¹ with Schnyder using it from bar 12-56.



¹¹ Piano-ology, "Scales: Minor Blues Theory & Ear Training," accessed April 15, 2023, https://piano-ology.com/scales-minor-blues-theory-ear-training/.



I used different ways to practice the double-tongue skill. For example, how much air should I use and how much strength should I use to articulate the notes? I experiment with faster and slower air streams and also change the syllables of the articulation (TaKa changes to DuGu) and compare which syllable gives a more rounded and jazzy sound to the notes that fit in Schnyder's music when I use double tongue.

- 1. With softer dynamic, slower air speed and 'Dugu' syllables of the articulations. Recording: https://drive.google.com/file/d/1EOWGJAHQ4rJjB6SrEuV7LqUBzdGFTJfN/view?usp=drivesdk In this method I feel the sound is a little unclear, because the air speed is slow. The "Dugu" syllables with the soft dynamic make the sound easier and less effort.
- 2. With softer dynamic, faster air speed and 'Taka' syllables of the articulations. https://drive.google.com/file/d/15TWZWrjG6VMPAZkDXt0lqtumqq1Htb2E/view?usp=drivesdk
 In this method I feel the "Taka" syllables with the faster air speed are easier to articulate the notes but I feel it is a little bit aggressive with the sound.
- 3. With softer dynamic, faster air speed and 'Dugu' syllables of the articulations. https://drive.google.com/file/d/19HamY5ZCFIfKvMWvHjBFWz0spmmL7gIY/view?usp=drivesdk
 In this method I feel "Dugu" syllables with the faster air speed in softer dynamics are easier to articulate the note and also the sound is very good, warm and effortless. I think I need to practice this method more often.
- 4. With louder dynamic, faster air speed and 'Taka' syllables of the articulations. https://drive.google.com/file/d/1o9Fv0EbsfY2eFl5uvPvIP6IVJ85UWMi7/view?usp=drivesdk
 In this method I feel It is too aggressive with the sound and also make the articulation very harsh.

5. With louder dynamic, faster air speed and 'Dugu' syllables of the articulations. https://drive.google.com/file/d/1YwZfAoNb2Pq3hqI4YsAjjc0rrq0hA2Te/view?usp=drivesdk
In this method I feel it is harder to make the note very clear in a louder dynamic. The sound is ok with the "Dugu" syllables.

Conclusion:

In the first parametric experiment, I preferred to use the combination of slower air speed and tonguing the note when playing the Gliss note.

In the second parametric experiment, I prefer to use the combination of softer dynamic, faster air speed, and DUGU syllables in the articulations.

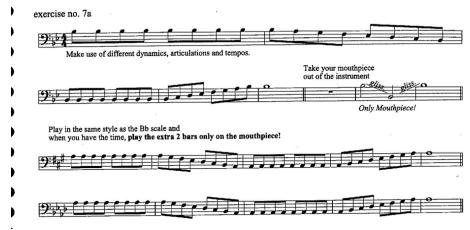
3.1.5 Interventions / practical application

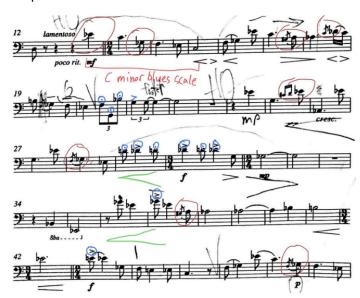
I did some changes of techniques and interpretations after my analysis and the exercises, which I explain and annotate below.



Here is the beginning of the piece. I want to have the sharp articulations as David Taylor's sharp articulations but I want to have a nicer sound. I decided to use the method of Ben van Dijk tonguing exercise in Ben's Basics¹². Here is the exercise ¹³to practice my articulations very precisely (example 2):

Example 2





¹² V. B. Dijk, Ben's Basics - *Method for Tenor Trombone with F attachment / Bass Trombone, 4th ed.* (Cherry Classics Music, 2022).

¹³ V. B. Dijk, Ben's Basics - *Method for Tenor Trombone with F attachment / Bass Trombone, 4th ed.* (Cherry Classics Music, 2022), page 25.

For this part of practicing, I need to have a very smooth slide. When I moved the slide, I relaxed the body to produce the tension from the shoulder to make the gliss sound smoothly. Imitate the singer to get organic vibratos and glissandos. Also, I have to do more accent and staccato, which I marked.

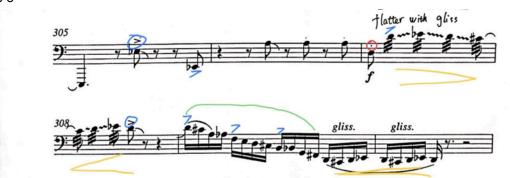
Based on my parametric experiment, I decided to use the method with a slower air speed and tonguing the note when playing the Gliss note.

Example 4



As Reinaldo Donoso Pizarro mentioned in the interview, I have to get the feeling of bass guitar slapping, so here I marked the score with some accents and the way of playing the double tongue technique. Based on my parametric experiment, I decided to use softer dynamics, faster air speed, and 'Dugu' syllables in the articulations.

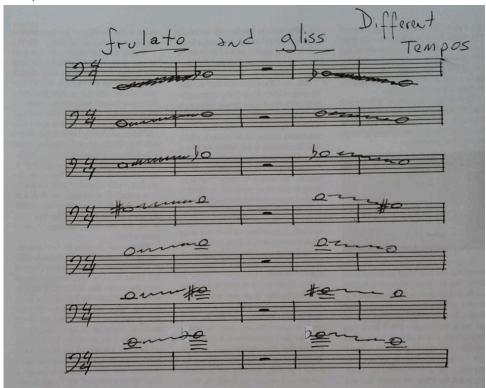
Example 5



Here, the extended techniques that Schnyder used are the combination of glissando and flatter tongue. I decided to use the exercise (example 6) that Reinaldo Donoso Pizarro created, which I found in his

research, to develop my glissando and flatter tongue. I marked the score with the accent, and I added some dynamics changes to help me play this phrase more fluently.

Example 6



Example 7



I decided to work on the consistency of playing the long low notes and also on some slurs that I added to make the sound more connected and smoother. I worked with exercises by my main subject teacher, Ben Van Dijk, in Ben's Basics. Here is the excise (example 8) that was blown:

exercise no.15b Play in a slow tempo.



3.1.6 Outcomes

https://drive.google.com/file/d/13zNInMfLJqZinleHoNpCAnpqP9KTt3d4

Recorded on 3th April, 2022, at Hongyi's studio.

3.1.7 Feedback, reflection and conclusion

Feedback from Reinaldo Donoso Pizarro:

Rhythm: Getting much better

Intonation: Better

Style: Can still do more accent on the note from bar 13 (the blues section), the glissandos are very good

Articulations: Can be clearer from bar 65 (the bass guitar slapping section)

¹⁴ V. B. Dijk, Ben's Basics - *Method for Tenor Trombone with F attachment / Bass Trombone*, *4th ed.* (Cherry Classics Music, 2022), page 61.

Feedback from Pawin Pungbua:

Rhythm: better and more steady than the previous recording.

Glissando: very good and natural.

Articulations: still can be clearer and more accurate, especially the fast passage from bar 65. Can do

more "dirty" articulations.

Dynamic: louder in the beginning of the piece.

My own reflection:

I think what still needs to be improved more is the musical idea of this piece. The composer used a lot of blues and pentatonic scales. Especially in the section that has a lot of glissando passages in blues style. For me, I think I can focus on those points and make improvements. What I think I have to also improve in the future is the multiple tongue skill. Right now, I can still hear there is a stuck and tense tone between the running notes. It's not very smooth and fluent. Sometimes I can also do the glissandos wider and exaggerate the slide vibratos more. It is not organic. I think to solve those problems, I can listen to more jazzy trombone players and imitate the way they play. For me, I found that approaching the variety of the articulations is difficult; sometimes I am 'afraid' to play the music and articulations more freely and exaggeratedly because of my classical music background. I was afraid it would disturb the music.

Conclusion:

For me, it is a great start to analyze this beautiful music from Daniel Schnyder in the first cycle.

After the first research circle, I think what improved the most was the idea of playing Schnyder's music. It is very hard to break out based on my classical music background. Because Schnyder wants people to be special and have everyone's own version, I can really exaggerate the dynamics and the way of articulating and feel free to do everything that makes sense in the music. Also, on the technical side, although I still need to work more on it, it is already getting much better.

3.2 Second Research Cycle

3.2.1 Overview of second research cycle

In my first research cycle, I worked on the first movement of the *Subzero* concerto. I wanted to do research on the second movement for the second cycle. The first thing I would love to do is find the information of the title of the second movement. It is called Samai Thaqil¹⁵. After checking online I found out that it is an Arabic word and it is also a Rhythm groove from Turkey adapted by Arabs. Also in the second movement, the composer gave us the freedom to try out the different mutes (buzzer mute, bucket mute, harmon mute) to play the music. For me it is also a chance to explore more possibilities of the timbre on the bass trombone with different mutes. This is one aspect that I did not work on so much in my previous music education and career.

3.2.2 Reference recording

For this cycle I decided to record the whole 2nd movement of the Subzero concerto by Daniel Schnyder. Recorded on 21/9/2022.

https://drive.google.com/file/d/1fgnyqQSm6s-vkPrKuuJpHaN8 RGlvsVk/view?usp=sharing

3.2.3 Feedback and reflection

Feedback from Ben van Dijk (main subject teacher at codarts):

Style: He missed a little bit of the music -style -outgoing exposure. Feel more free while playing. Dare to gliss more and use slide vibrato at movements.

¹⁵ "Samai Rhythm for Belly Dancers: Sharqi Dance," *SharqiDance Belly Dance Classes, accessed September 16, 2022, https://www.sharqidance.com/blog/samai. 25*

Intonation: overall was good only some little places are not very in tune.

Articulation with mute: good

Feedback from Reinaldo Donoso Pizarro (former student who did the Daniel Schnyder research):

Mute using: He suggested that I should try out more different kinds of bucket mute, because each one provides different timber of sound. There are more options for me to choose, for example the plastic mute, wooden mute also the softone mute and others.

Articulation: He feels that I play all the notes too similar which makes the music sounds too flat and also the audience feel less interested.

Rhythm: I need to check the rhythm, there are few spots that I played the rhythms wrong.

Feedback from Jan Donner (trombone player in Deutsch Oper Berlin):

Listening: He suggested to me that I could listen to more different versions of this movement to get the right idea of how to approach this style of music. For instance David Taylor is a very good choice.

Tempo: He feels in the beginning of this movement, the tempo was a little bit too slow. I can move the tempo slightly forward. There are a few places where I played some wrong rhymes after I took out the mute.

Articulation: Some places need to use a sharper tongue, right now he feels I used almost everywhere the lagarto tongue. It makes the music very boring.

Connection: The air stream should not be interrupted when playing the music and changing the note, should have longer phrases, right now every note is too separate.

Self reflection:

I think after researching the previous research cycle, my biggest problem is that my way of playing this music is a little too conventional, like how I play other classical music. I almost used only one articulation, and I played the music too flat in the reference recording. Like I said in the previous cycle, I need to get

more out of my classical music background. It is necessary to do something new in more 'dangerous' ways. For instance, some more extreme volume changes and different pronunciations of articulations may even affect the timbre of the sound. In classical music, I am more concerned about how to maintain a good timbre during dynamic and articulation changes, but in this music, sometimes the color is more important than the timbre. There are some parts that can be really rough to achieve the effect. I feel a little lost in the general direction of playing this movement; what I mostly do at the moment is just play the notes. I feel like the notes are a little too scattered at the beginning of the recording, and I feel like there needs to be more continuity. Including the direction of the musical phrase and some dynamic marks. I don't think it is very obvious. I should have different articulations according to different sections. Now I think some articulations are a little too soft. I could not hear the front of the notes very clearly. Also, there are some notes or fragments that are not particularly in tune. I think first of all, I need to have a general understanding of this second movement in terms of style.

Considering all the above, the focal points I would like to cover in this research cycle are:

- intonation.
- to have a clearer idea of the Samai Thagil.
- clearer articulation.
- do more changes on the dynamics.

3.2.4 Data collection & data analysis

As part of my data collection, I used literature and media research, interviews (including the great opportunity of interviewing Daniel Schnyder, composer of the piece), structural analysis of the movement, analysis of recordings and experiments of mute using.

Literature and Media research:

Before I dive into the second movement, it is very important to find the information about the Samai Thaqil ¹⁶. Samai Thaqil is an Arabic word and it is also a rhythm groove from Turkey adapted by Arabs. People

¹⁶ "Vecchio, F. (2021) Samai Thaqil drumset groove, Francis' Drumming Blog." *Accessed: November 8, 2022).* https://francisdrummingblog.com/2021/07/26/samai-thaqil-drumset-groove/

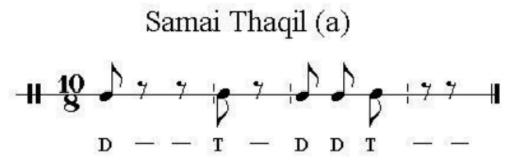
normally use it for belly dancing¹⁷. It is a rhythm that divides 10/8 to 3-2-2-3. This rhythm is very commonly used in middle eastern music for dances and ceremonies. I found out this rhythm is used from bar 40. Although the music is in 5/4 bar, the accompaniment part is dividing the beat to 10/8.

Example 1



I also found the YouTube video that teaches me how to dig into the Samai thaqil rhythm¹⁸, it presents how the most classic arabic rhythm Samai thaqil sounds like. Also it teaches me how to get into the right groove. It also helps me to understand the feeling of the rhythm of Samai Thaqil better. It is easier to feel the rhythm when I find the strong beat on 1, 4, 6 and 7.

Example 2



In this movement, Daniel Schnyder gave the freedom to use three different mutes of bass trombone¹⁹. Using mutes is a very great way to present and produce a different sound effect. In the second movement the composer wants us to decide which mute the performer should use.

¹⁷ "Samai Rhythm for Belly Dancers: Sharqidance," SharqiDance Belly Dance Classes, accessed September 16, 2022, https://www.sharqidance.com/blog/samai.

¹⁸ "Samai Thaqil Lesson on Darbuka, Doumbek for Beginners. Demonstrated by Reda Darwish," *YouTube, January 17, 2019, https://youtu.be/kNMTnR4Ed6U.*

¹⁹ "Trombone Mute Comparisons - Top 10 Mutes for Trombone Players at Dawkes Music," *YouTube, May 27, 2015, https://youtu.be/SBZkCg2ancA*.

I also found the literature called A Performer's guide to Daniel Schnyder's "subZERO-Concerto for Bass Trombone" by Mr. Matthew Bleys²⁰. A more technical and complete analysis of each of the three movements of this piece can be found in his work. Matthew Bleys digs into these movements very deeply, doing a very technical analysis of specific parts. In the literature of Mr. Bleys, he affirms the importance of rhythm in the second movement, that Arabic rhythms (Samai Thaqil) are included in music, and the importance of accents and articulations. Also he did an interview with Daniel Schnyder about the second half of the second movement, which shows that at measure 75, Schnyder wrote:" I superimposed *son* rhythms from Cuba so you can get a natural polyrhythmic structure...sounds very cool since both rhythms are very organic." Schnyder was building up the 10/4 (pairs of the 5/4 bars) meter and placed a 4/4 Cuban son rhythm on top of it. With this rhythm, the Cuban son rhythm is not very noticeable, but it is still present. We can see it in example 3.

Example 3



When the bar lines are moved to the 4/4 feeling of this part, the beats that are accented in the Cuban son rhythm is more prevalent as the rhythmic accent of the bass trombone part which falls on the strong beat of the 4/4 section. But when we see the original score which was written in 4/5 meter, the feeling of accents in cuban son rhythm are not as clear as in 4/4 meter.

²⁰ Matthew Bleys Hoormann, "A Performer's guide to Daniel Schnyder's 'subZERO-Concerto for Bass Trombone'," Literature (2007).

²¹ Matthew Bleys Hoormann, "A Performer's guide to Daniel Schnyder's 'subZERO-Concerto for Bass Trombone'," Literature (2007), page 35.

Interviews:

Interview with **Daniel Schnyder** (Composer of the *Subzero* Concerto):

I had an email interview with Daniel Schnyder, the composer of the Subzero concerto. I asked him about what the title of the second movement, 'Samai Thaqil, meant and how to play this type of music. He told me that rhythm is basically from Syria. It is an Arab Sufi meditation beat. It is a dum-tak rhythm, which means the dum is lower pitched and the tak is higher pitched on the drum. I need to listen to more music with the Samai Thaqil rhythm. It goes on 10/8. The very important thing is that I should have a slight accent on the 6th and 7th beats, but not a crazy accent. Later in the second movement, from bar 81 onward, the rhythm is superimposed by a Cuban son clave rhythm, creating an east-west polymeric structure (10/4 against 4/4). You can see it in example 4. Also, for the mutes choosing, it is my own choice to try out which one I like. Based on the score that was written, I can decide whether to use the normal bucket mute, the plastic one, or the softone mute.

Example 4



The rhythm here is 10/4 against 4/4.

Interview with **Jan Donner** (trombone player in Deutsch Oper Berlin)

First of all, he emphasized that I needed to make all the dynamic marks. In Daniel Schnyder's piece, the second movement is divided into several parts to maximize the dynamics of the different parts. He thinks that I need to use a traditional bucket mutes and that I need to explore more different kinds of mutes.

Another point is that, when I play the second movement, the movement itself is quite slow. If I play all the articulations in the same way, it is very easy for the audience to feel bored. I need to listen to more different versions to see how other musicians play this movement and explore options and ideas.

Structural Analysis of the second movement:

The goal of analyzing the structure of the second movement is to make my thinking clearer when I play this movement, whether it is the overall style of the "Samai Thaqil" or the interpretation of the small phrases. It also helps me to understand and interpret this work more deeply, sort of like having a map of the piece to guide my interpretation.

The second Movement "Samai Thaqil"

Through analyzing the score, I understood it divided the structure of the second movement into 7 parts.

A-B-C-B'-D-A'-D'

| 1-39 | 40-47 | 48-62 | 63-74 | 75-78 | 79-80 | 81-117 |
|------|-------|-------|-------|-------|-------|--------|
| А | В | С | В' | D | A' | D' |

A section is from bar 1-39

Example 5



This is the beginning of the second movement (Example 5). It starts with a soft dynamic and a long crescendo to bar 5, which is the melody line of the piano. It creates a very mysterious atmosphere for the listener. I feel measures 1–39 are more like an introduction going into a real piece with the theme "Samai Thaqil" in bar 40.

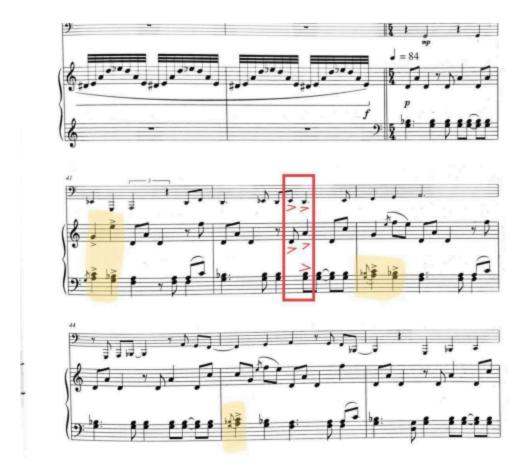
The composer also used a lot of accidentals to create a minor scale, and he also used some trills that sounded like Arabic. Below is example 6, and you can also find more places where the composer used these scales in the intro section.

Example 6



B section is from bar 40-47

In this section, you can see the score that the music turns into the theme "Samai Thaqil". In the interview that I did with Daniel Schnyder, he mentioned that we have to do a little bit of accent on the sixth and seventh beats. Also, he gave the extra accents (Example 7) to the piano to give this section a more articulated and rhythmic feeling, for which I highlighted some ornaments in yellow.



C section is from bar 48-62

The Samai Thaqil rhythm feeling is still there, and the piano part (Example 8) is still the same, but the bass trombone part has a more smooth feeling with a melodic line.



In bar 60, the composer used a descending minor scale (Example 9) with a strong dynamic to create an arabic $style^{22}$ atmosphere (Example 10).



²² "Guide to Arabic Music," Salamuzik (blog), accessed April 15, 2023, https://salamuzik.com/blogs/news/guide-to-arabic-music.

Example 10



B' section is from 63-74

Similar to section B. The bass trombone part goes back to a more rhythmic feeling again.

D is from bar 75-78

As I mentioned before in the interview with Daniel Schnyder, from bar 75-78, the rhythm is superimposed by a cuban son clave rhythm, it creates an East West polymeric structure (10/4 against 4/4). The composer was also using a Chinese pentatonic scale ²³ called G 徵 (Zi Scale).

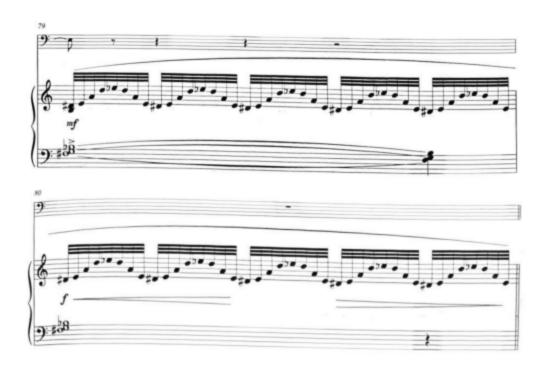
Example 11



A' is from bar 79-80

Similar to section A. The piano part has the same rhythm section as bar 38-39 (A).

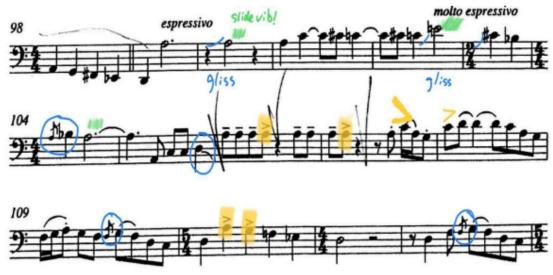
²³ "Primary Link Harmony," Iba Mitabiona (blog), February 2016, accessed April 15, 2023, http://ibamitabiona.blogspot.com/2016/02/primary-link-harmony.html.



D' section is from bar 81-117

For bars 81–117, I think this part is the most expressive part of this movement. The composer needs us to take out the bucket mutes. I think it is kind of like a climax, especially from bar 99 (Example 13) until the end, which really exaggerates the dynamics, accents, and articulations. Also, Daniel Schnyder was writing molto espressivo.





Analysis of the recordings from different musicians:

As I did in the first movement, I want to compare different versions of the second movement of the *Subzero* concerto. It really helps me to have the ideas and also approach my own way of performing the piece. The first recording I listened to is from David Taylor's version²⁴. Every time when I listen to his playing I can feel the difference between him and other trombone players. He is not a typical classical trombone player. His style of playing and his sound on trombone is close to jazz style. Because he has a lot of varieties with his articulations. Also when he changes the note in the phrases, his slide moving is very smooth. In the beginning of the second movement (Example 14). He starts with a strong f dynamic instead of mp dynamic, also he adds a glissando between the first two notes (D and E flat).

Example 14



From bar 40, David Taylor made some marks (Example 13) on the score as in Example 4. He added some staccatos, accents, and slurs to make the music more interesting and also easier to make the listener feel the groove of the Samai Thaqil rhythm. When he played from bar 81, the tempo was faster than other players, and he also played one octave lower. I can really feel the energy and the groove in the 1st, 6th, and 7th beats of the Samai Thaqil.

Example 15

²⁴ "David Taylor Plays the Daniel Schnyder Concerto, Movement 2," YouTube, October 2, 2008, https://youtu.be/9QleVRI0x-A.



The second recording I listened to was Stefan Schulz's version²⁵. His playing is quite different from David Taylor's version. The first thing I feel is that his tempo is not as fast as the written tempo on the score. He played much slower. For me I think it is not a bad idea to play it slower. It brings more laziness and a relaxing feeling in the music. The second thing is the color of his sound is darker than David Taylor. In my opinion, I think when we change the mutes it should have a different color and timber of the sound, right now I feel his playing is too similar to the mute changing.

The last musician I chose to listen to was Justin Clark' version²⁶. After listening to his playing, I feel he plays at a very high level. Every note is clear and clean. But for me it is a little bit boring. He played exactly on the score, without adding anything of the dynamics and different articulations. For me, I don't think it's a problem to play it according to the score, the composer really did not add too many dynamic marks, obviously he gave us more freedom to interpret this piece and hoped that we could have our own version, instead of just playing according to the score. But I still can learn the accuracy and cleaness of the playing.

Experiment:

Experiment of the different bucket mute choosing

https://drive.google.com/file/d/1J9PFdTuQnUTXo269o4-igK_RskgRUvJK/view?usp=drivesdk

²⁵ "Subzero, 'Bass Trombone Concerto': II. Sama'i Thaqil," *YouTube, May 14, 2017, https://youtu.be/hb_6FgT1DRo*²⁶ Justin Clark Plays Daniel Schnyder's Subzero - 2nd MVT. Sama'i Thaquil," *YouTube, November 24, 2014, https://youtu.be/MsfoSqZMWNw.*

Wooden bucket mute

With the Wooden bucket mute, I think the sound is a little bit dark but people can hear the center of the sound very clearly. Also the articulation is clean. This is perfectly suited for the beginning of the second movement to create a nice mysterious atmosphere.

https://drive.google.com/file/d/18m1jsS0BFBCjalGqtGe17GGQYwPxdAM5/view?usp=drivesdk Softone mute with half of coverage

I think in this softone mute with half of coverage, the sound is a little too bright for me, when I try to give more air, the sound quality is getting thinner. For me It is not a good choice.

https://drive.google.com/file/d/1n8ER_GXbtzEkfl1TKiSBQyGPrX5ig8Jm/view?usp=drivesdk Softone mute with full coverage

For the Softone mute with full coverage. The sound is much better than the one with half of the coverage. It is warmer and darker, but for me I think it lost the focus of the sound. It sounds a little bit vague and also hard to articulate the note. I do not like it so much.

https://drive.google.com/file/d/1wUzZZgSQEqAIJT8AO01hcPEXXLv0aLbf/view?usp=drivesdk Plastic bucket mute

I like the sound in this Plastic bucket mute, it is clear and precise. Also it is easy when I blow through the air of the instrument. It is only a pity that I don't think this mute is very suitable here. In my opinion I think it is about to create a mysterious atmosphere, which is why the composer let us use the bucket mute in the beginning of the second movement.

3.2.5 Interventions / practical application

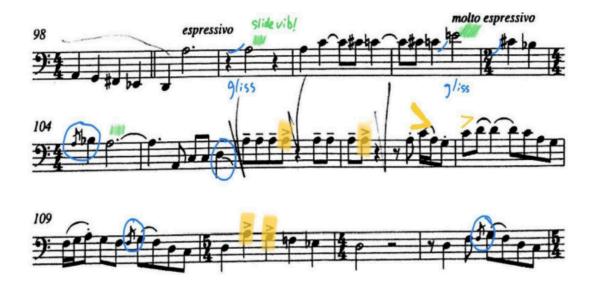
After researching the second movement, I decided to use a faster tempo in the whole second movement based on my feedback from Jan Donner; otherwise, it would sound very lazy and heavy. For the first reference recording, I felt that the tempo was a bit slow, and the experts who gave me the feedback could not feel the rhythm, groove, and vividness of Samai Thaqil. Especially when I understand the importance of the accent beats on the sixth and seventh beat, which I found out in the media research of the explanations of the Samai Thaqil rhythm and how to play the right style of it. After analyzing the second half of the second and according to the Cuban son rhythm, which I found out in the research by Mr. Matthew Bleys, from bar 75, and in order to have a better feeling of the Cuban son rhythm, I added some accents to help me have a better sense of the direction of the music phrase (Example 16).

Example 16



After I did the experiment in the data collection to try out different mutes, I think the wooden mute can be used in the second movement of the Subzero concerto. Because the sound is very warm and dark, people can still hear the focus of the sound. It can create a mysterious atmosphere. For me, although the softone mute can have more kinds of tones by adjusting the coverage area, for the sound and hearing, I feel the vibration is not so concentrated, which causes the sound to become a little fuzzy. Also, from my own perspective, it is hard to hear the articulations. The sound of this microphone in the low range is acceptable. Once it reaches the mid-high range, the sound is less clean and a little darker.

In the last part of the second movement, which is from bar 99 (Example 17), according to the structural analysis of the second movement in the data collection, it is the climax of the second movement. In bar 41, Schnyder writes espressivo from bar 99 and molto espressivo in bar 103. So it is the moment to exaggerate the dynamics and articulations, and I also decided to add glissando, slide vibrato, and accent marks in the score, which give more intensity to the music. As my main subject teacher, Ben van Dijk, said, "Dare to gliss more and use slide vibrato at movements."



3.2.6 Outcomes

https://drive.google.com/file/d/1NAMWNd_JBrK3vk-pfNenGthDBkXV3bqg/view?usp=sharing

Recorded on 9th November, 2022.

3.2.7 Feedback, reflection and conclusion

Feedback from **Ben van Dijk** (main subject teacher at codarts):

Connection: There are many moments where I can make the connections without the tongue, even when it creates glissandi. It will make it smoother and jazzier.

Vibrato: to start on the longer notes in general straight and shortly after start a slide vibrato moving the hand from a relaxed wrist.

Style: still short moments of more exaggeration in my playing would make that last step (from bar 99) really interesting.

Feedback from **Jan Donner** (trombone player in Deutsch Oper Berlin):

Tempo: better than the first recording, it is more forward and has more direction of the phrase.

Articulation: he thinks the articulation is way better than the old recording, much clearer, lighter but still with the bouncy feeling.

Connection: the notes are more connected. Think more about the music while playing.

Reflection:

I feel that in this recording, my articulation has improved significantly; it is not as flat as before, and it is less monotonous. Musically, I feel that there is more direction, and the playing of the notes is not as scattered as before but more continuous. By adding a series of accents, I could hear the feeling of Samai Thaqil better, and I had a lot of variation in volume. In the last part, I think I still need to have more slide vibratos on the long notes. I really like the sound of this wooden mute; it guarantees a warm sound and allows me to clearly hear the articulations and accents I made.

Conclusion:

Through this whole research cycle 2, I think my biggest improvement is that I now have a clear idea of how to express and play this piece. I do not think this movement itself is difficult to play (in terms of technical requirements). There is more attention I should pay to the music scene and style, which is why I focus on the analysis of music and structure in this research cycle and mention less about some technical difficulties. Interviews with composers and various kinds of information I collected by myself made me know more clearly about the importance of accents to Samai Thaqil and different ways of articulation to play this Middle Eastern style of music, as well as the use of mutes. They also let me try out and find different possibilities for sound. The different sound effects, whether they are made of plastic, wood, or fabric, are all new experiences that I had never researched before. I think I have learned and absorbed a lot through this research cycle.

3.3 Third Research Cycle

3.3.1 Overview of third research cycle

I have so far worked on the *Subzero* concerto's first and second movements. I now want to do further research on the third cycle, which is the third movement of the *Subzero* concerto. It is called "Zoom Out." This movement is quite challenging for me technically. It covers nearly all of the bass trombone's extended techniques, including glissando, pedal low notes, flatter tongue, double and triple tonguing, and others. Double tonguing makes up the majority of them. This extended technique has also appeared before in the first movement of the piece, but only in a few fragments. In this third movement, it is used almost all the time. This is a big challenge for the coordination of my slide, valve, tongue, and air stream. I will keep doing structural analysis of the third movement, as I did in the previous research cycles.

3.3.2 Reference recording

For this cycle I decided to record the whole 3rd movement of the *Subzero* concerto by Daniel Schnyder. Recorded on 20/1/2023.

https://drive.google.com/file/d/1ojZVwGmflP4UcoabDptEtwx3nMAgJEMC/view?usp=share_link

3.3.3 Feedback and reflection

Rhythm: very Sturdy

Intonation: in general very good, only few notes are not clear

Dynamic: more extreme dynamics.

Articulation: can be more roughly. Use more tongue, especially the low note. Sometimes I can't pronounce the articulation very clearly, and sometimes my hand has reached the slide position before my tongue has reached it, so it makes the sound very out of tune.

Tempo: could be faster.

Connection: sometimes I forget to use the air; I was focusing too much on the double tonguing. Keep the air going through the instrument to make it more smooth. I have to also use more lower belly support while playing those fast passages, to help the air follow and keep the body relaxed.

Listening: I should listen to the version that Brandt Attema played. He plays everything very cleanly and is also not aggressive with the sound.

Self reflection:

After listening to my own recording, I feel that the third movement is very different from the second movement; not only is the speed different, but also the style is different, so the timbre and articulations of the sound must be obviously different.

Also, I think Pawin Pungbua mentioned an important thing, which is the lower belly support; it is quite different from my normal playing. When I usually play the trombone, I often use the upper belly support. It makes the sound easily become forced and unrelaxed.

Considering all the above, the focal points I would like to cover in this research cycle are:

- intonation.
- better coordination of the slide, tongue and air stream
- clearer articulation, dare to use more tongue.
- do more dynamics.
- use more lower belly support

3.3.4 Data collection & data analysis

Literature and Media research:

It was a huge surprise to find Mr. Bleys' comprehensive research, "A Performer's Guide to Daniel Schnyder's subZERO-Concerto for Bass Trombone." I used a lot of references from his work in research cycle 2 as well. I can find a more in-depth and technical analysis of the third movement of the Subzero in his research. I also learned through his research how Broadway musical style²⁷ inspired Schnyder's third movement composition. According to Mr. Bley's research: "This movement is clearly very heavily inspired by the beginning overtures typical of Broadway musicals, Daniel Schnyder was most assuredly inspired by these elements when composing this work."28 Broadway musicals can be said to be the epitome of American cultural history. Its music is more inspired by jazz, swing, and pop music, which makes it more contemporary, and the songs become lively and easy to understand. Combined with drama and dance, musical stage plays have gradually developed into a very charming musical form. In the overture to "Merrily We Roll Along²⁹", I can hear a lot of rhythmic changes, and the music can switch very smoothly between fast-paced and slow-paced, so I can clearly feel a musical story. The exaggerated effect of the music in the Broadway style that gave me a feeling of uncertainty about what was going to happen next, and it was this uncertainty that added to the fun. In fact, in Subzero's third movement, it's not like an overture; it's more like a musical, because it contains a complete story development in itself, with the last few bars of the music going back to the theme.

Also, Mr. Bley mentioned the Bebop-styled³⁰ elements, which Schnyder used in this movement between bars 15–21 of the solo bass trombone line and the piano's eighth-note walking bass line. Bebop rhythms are generally known for creating an exciting sense of propulsion. And even more so with Charlie Parker's playing. One of the reasons why Charlie Parker's use of rhythmic phrases is notable is that he often uses syncopation, especially for phrases starting on the backbeat, as can be seen in Parker's version of "Billie's Bounce" in which every short sentence begins with a backbeat. At the same time, part of Bebop's melody is that more semitones are used. We can see in the score of Subzero (Example 1) that Schnyder used a lot of backbeat starting phrases and lots of chromatic tones.



²⁷ "What Are Broadway Musicals?," *Musical Expert, January 21, 2023, https://www.musicalexpert.org/what-are-broadway-musicals.htm.*

²⁸ Matthew Bleys Hoormann (2007) A Performer's guide to Daniel Schnyder's "subZERO-Concerto for Bass Trombone". *Literature*. *Page* 37

²⁹ Charlie Rosen. "The Overture from 'Merrily We Roll Along' - Charlie Rosen's Broadway Big Band," *September 11, 2015. https://www.youtube.com/watch?v=Mj7wAzUQpyU.*

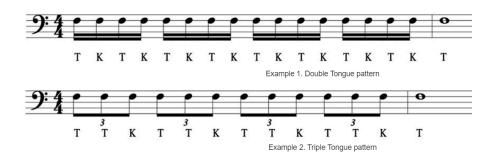
³⁰ The Editors of Encyclopaedia Britannica, "Bebop | Definition, Characteristics, Artists, & Facts," *Encyclopedia Britannica, July 20, 1998, https://www.britannica.com/art/bebop.*

^{31 &}quot;Billie's Bounce / Charlie Parker The Savoy Recordings," August 8, 2010. https://www.youtube.com/watch?v=S4mRaEzwTYo.

Through Reinaldo Donoso Pizarro' research report³². I found out that he did an interview with Maaike Wijntje, a MuziekTheater student at Codarts. They listened to the complete third movement of the composition. Ms. Maaike thinks the third movement is obviously connected to a Broadway style. Ms. Wijntje claims that the movement has a plot that has a climax. There is a distinct sense of a story in the music with an increasing direction and a descending force. Maaike Wijntje commented on the third movement and how it had a bombastic effect on the music with many things happening at once, giving the impression of not knowing what was going to happen next, which fit the ideals of a Broadway musical.

A David Mathie paper titled "Multiple Tonguing for Trombonists" was another resource I found online. The most difficult special technical challenge of this movement, in my opinion, is achieving particularly clear articulation at such a high speed. In his paper, he demonstrates certain methods for learning multiple tongue syllables as well as double and triple tongue skills (Example 1). To ensure that my K syllable is as powerful and reliable as my T syllable, I must start carefully. I acquired a weak K syllable in the past since I didn't actually practice it slowly, and I now want to use the research to fix that issue.

Example 1



Interviews:

Aihao Zhang (Jazz bass student at Codarts):

I did an interview with Aihao Zhang, about this third movement. He thinks in this movement, the composer used a lot of jazz blues elements, especially in bars 31–43. Schnyder used a B flat minor blues scale, and he was using some repetitions of the bass trombone part during these bars. Also from bar 61 onwards, the music turns into f minor blues. He suggested I use more attack on the note with super clear articulations, especially from bars 44 to 60. Here is the part that is really similar to the bass guitar. He also demonstrated this passage on his instrument. I can hear that the beginning of the notes he played were

³² Reinaldo Donoso Pizarro, Reinaldo. "SubZero on the SubTrombone." *Literature. May 16, 2019.*

very clear and light; each note ended with a small release. It should not sound like a sustained note, which would make it sound more alive and bouncy.

Daniel Schnyder (Composer of the Subzero concerto):

I had the immense pleasure and honor of conducting an email interview with Schnyder. He thinks the title "Zoom Out" means very fast speed. The final movement is quick and brief. He got a lot of influence from the Absolute Ensemble NYC at that time. This ensemble fused classical, funk, Middle Eastern, and Latin jazz styles; this was where Schnyder got his inspiration from. He also gives me some music references in which he composed a concerto for pipa and orchestra, played by a Chinese pipa player, Min Xiao-Fen³³. He was influenced by Latin jazz and incorporated many blues elements into his music. I can hear the beginning of the pipa concerto being very similar to the third movement of *Subzero*. I can really feel the lightness and the clarity of every note, which I can take into my performance as a reference for the articulations of this pipa concerto.

Marques Young (Former teacher, Jazz trombone player):

I had an online meeting on multiple tongue skills with my former teacher, Marques Young. He is a jazz trombone player. He suggested trying to put more direct and continuous air steam when I play double tonguing. I can use the double tongue as a 'Da Ga' or 'Du Gu' syllable to get a round, warm sound and soft attack at the beginning of every note. Relaxation is the key to creating warm, rounded wood. It is very easy to get my body tense when I change the slide at a high speed. He recommended that I use more of my wrist when moving the slide instead of the whole arm. Also, sometimes it is easy to destroy the cleanliness if my hand moves too fast and my tongue doesn't match. It will sound very messy.

Structural Analysis of the third movement:

In the research cycle 2 I did the structural analysis, I found out it was very helpful to me to understand and interpret Schnyder's music very deeply. So I will keep doing it in this cycle.

³³ XIAO-FEN MIN, "Min Xiao-Fen Performs Concerto for Pipa and Orchestra by Daniel Schnyder," *May 23, 2016, https://www.youtube.com/watch?v=4JJHz-GDsHc.*

The third Movement "Zoom Out"

Through analyzing the score, I understood Schnyder divided the structure of the third movement into 7 parts.

| Α | В | С | D | E | F | E' |
|------|-------|-------|-------|-------|--------|---------|
| 1-14 | 15-30 | 31-43 | 44-60 | 61-76 | 77-108 | 109-134 |

Section A is from bar 1-14

Beginning with cluster chords on the piano as as you can see on the example 2, the solo bass trombone joins in after two bars with a big volume and running sixteenth notes in unison with the left hand of the piano. It provides the impression of the opening of a Broadway musical feeling. The main theme uses a lot of chromatic scales.



Section **B** is from bar 15-30

This section is where Schnyder used the Bebop-style elements: the solo bass trombone line together with the piano's eighth-note walking bass line. In Example 3, you can see that the composer used the bass trombone's special extended techniques of flutter tonguing and glissando to add more color and variety to the sound.

Example 3



Section C is from bar 31-43

As I mentioned in my interview with Aihao Zhang, the composer used a lot of blues elements in this section. Schnyder wrote Lamentoso here, and he used a B flat minor blues scale; you can see in the beginning that he added both a flutter tongue and a glissando on the A flat. It immediately created the heaviness and crude sound of the atmosphere.



Section **D** is from bar 44-60

In this section, the bass trombone part has the same melody as the left hand of the piano part. The right hand of the piano part is a groove loop. It makes this moment have a more rhythmic feel.



Section E is from bar 61-76

From bar 61 onwards, the music turns to f minor blues, as I discussed with Aihao Zhang in the interview before. Schynder used the same note and rhythm in the downbeat of almost every bar excerpt, bar 64, and used a long glissando to build up and create the tension in bar 64.

Example 6



Section **F** is from bar 77-108

In Section F, the composer used the Latin rhythm groove (Example 7) in the bass line, as I found in Mr. Bleys' research. At the same time, the bass trombone part has a gorgeously beautiful phrase, which I can do with some extra slide vibratos and glissandos to enjoy the moment.



Section E' is from bar 109-134

The music goes back to F minor blues. In the last section, from page 129 to the end, The bass trombone has the same melody as the piano to create a strong ending and stops at the same time at the loud pedal F.

Analysis of the recordings from different musicians:

Brandt Attema

This time, I chose Brandt Attema's recording of the third movement. It is a very strong and high-quality performance. The idea behind Broadway is quite straightforward to hear and see, and the ensemble providing the support helps by enhancing the sound with additional colors and textures. Still, the end result is astounding. I was able to get a lot of information from Brandt's version, including the sound effects in the bebop section and how smoothly and clearly the fast-flowing notes were articulated. I can also hear how rich the sound that Brandt provides is in that last movement. When he plays some long notes, he does not sustain the note to its full length; he always makes a little release on it and adds some vibratos, which make the music sound more interesting. I've been inspired so much since I heard this recording a long time ago.

David Taylor

David Taylor's performances have always been an inspiration to me because of both his musicality and his excellent bass trombone technique. He plays every note in the third movement more clearly and shorter than Brandt did. Compared to Brandt's, it is a completely different version. His articulation provides the audience with a more direct sound. He has a very energetic sound, but sometimes for me, it is a bit harsh.

Csaba Wagner

I had a chance to watch his performance at the Lätzsch trombone festival some years ago; he played the first and third movements. I also found that recording online. What inspired me the most was his articulation and his sturdy rhythm. He used a very hard attack at the beginning of the note. Everything he played is perfect; there are no mistakes, but for me, it can have more of a freeness in the slow moments, such as using more slide vibrators and slower glissandos.

Experiment:

In the experiment, I want to have a clearer articulation, a more personal interpretation, and a more interesting performance by adding glissandos, vibrations, flatter tongues, and some other marks.

Bar 3-6

first: https://drive.google.com/file/d/1vaPvySpcR0Ti4WoXwhJeDOcNJ9Kz-Wr0/view?usp=sharing
Final: https://drive.google.com/file/d/1LLo8UrpzoUFv0bwLl9Wa-gQS1swMmWgm/view?usp=sharing

In the first version, I think the articulations are very vague and sound very legato.

In the final version, I put more accents on every note to make a clearer attack and used more of the belly support to keep the air flow, which sounds much cleaner.

Bar 10

first:https://drive.google.com/file/d/1USfhJ2NFwtglTUmG7BDvACPcFb755fy9/view?usp=share_link

Final:https://drive.google.com/file/d/1LCq0JJVcirz-EzrAa3wcEruClQTnG7Lt/view?usp=share_link

In the first version, I just follow the score, and I think the interpretation is too flat.

In the final version, I added a little glissando on the last G to make this passage more energetic.

Bar 20

first::https://drive.google.com/file/d/1PZ9_nvkqyWRkuOM1MS97GLsOyyD_g61P/view?usp=share_link Final: https://drive.google.com/file/d/13mo_uphAvASVx4YNIftyJjehB0bfarC-/view?usp=share_link

In the first version, I feel that the notes are separated without direction.

In the final version, I did a slight rubato between the C and E, with clearer articulations. It has more direction.

Bar 31-36

first: https://drive.google.com/file/d/1qaAHoWuxBnrZDUR1|KK6TSq3626Ae98n/view?usp=share_link Final: https://drive.google.com/file/d/1DqG-IL3kuxY88Mq03vjxRyHJqtvEAYTy/view?usp=share_link

In the first version, I feel some long notes are too tenuto and flat; the lower notes need more attack at the beginning of the note.

In the final version, I added some vibratos and did some release on the long notes, and I added more tongue attack on the lower note to have the clarity and also to keep the tension until the last B flat.

Bar 112-115

first: https://drive.google.com/file/d/1VBjFyDaj5oTjukEJ6FPMNImJpZ2Bg4Ss/view?usp=share_link
Final: https://drive.google.com/file/d/1mHDeSyH qz1ze1n6BOP3CjyNwWoK-756/view?usp=share_link

In the first version, I used the "taka" syllable, which made the sound less fluent. Also, it is hard to blow the airstream.

In the final version, I changed to the 'Dugu' syllable. It shows a warmer and more rounded sound, and it is also easier to keep blowing the airstream.

Bar 128 -130

first: https://drive.google.com/file/d/1GnfmQgwph2 H8porTnWAFxtvXazdufUl/view?usp=share link

Final: https://drive.google.com/file/d/1yoiPNAF0wc2jcAPYZROw003gnByVw-1c/view?usp=share_link

In the first version, I was using all the double tonguing on the sixteenth notes, but it sounded very messy and had less continuity.

In the final version, I tried out with some slurs on the sixteenth note to give it more clarity and a more fluent sound. (Example 8)



3.3.5 Interventions / practical application

I made some changes in techniques and interpretation after my analysis and the experiments, which I explain and annotate below.

On Example 8, I decided to start with a mezzo-forte subito piano, which gave me more space to grow the dynamic until the last G with a strong F. In order to get more energetic sound effects, I added a glissando on the last note. For the running sixteenth notes, I decided to use a triple tongue with the 'TU TU KU' syllable, which makes the sound lighter and faster; otherwise, my tongue will get very heavy. Because I have a very slow single tongue.



Also in Example 9, I added a glissando between the C and E. As in the experiment, I decided to use a slight rubato between the C and E, with clearer articulations. It has more direction going to the last B Flat.



On Example 10, as I did in the interview with Aihao Zhang, Schnyder used a B flat minor blues scale here. So I decided that I would add some slide vibratos and do some release on the long notes, which I learned from the recording by Brandt Attema. I would add more tongue-attack on the lower notes to have more clarity and also to keep the tension until the end of the phrase.

Example 10



On Example 11, I decided to use the "dugu" syllable on the first four notes, which makes the sound warmer and more rounded based on the interview with Marques Young. Also, I added some slur marks on the sixteenth note. With these slurs, I can just use the air flow to approach the sixteenth note without any tongues. It will sound so easy and fluent.



On Example 12, I wanted to have some sharp articulation like David Taylor did in his recording, so I added some accents with the yellow mark to have more clarity in Bar 128. From bar 129 to bar 130, I decided to build up the dynamic until the last F with the biggest glissando and loudest dynamic in this phrase. Also, I added some slur marks on the sixteenth note. Same as in Example 11, have a relaxed, easy, fluent sound and reduce body tension while doing the crescendo.

Example 12



3.3.6 Outcomes

https://drive.google.com/file/d/1hx 6K-bz2mlY83-r9PgaB7EybcUf1YJE/view?usp=share link

Pianist: Alla Libo

Recorded on 2023/3/23.

3.3.7 Feedback, reflection and conclusion

Tempo: very sturdy, can be faster.

Articulation: much better and clearer, sometime can be more connected with the faster 16th running

notes.

Connection: better than the first recording, but still needs more air when using the double tongue.

Reflection:

In the final recording, I can feel that my articulations were much clearer than in the first recording, especially in the fast passages with the double tongue skill. My pianist, Alla, is very experienced working with trombone players. She is a great pianist and has played the accompaniment part of this piece many times. We have the same melody a lot of times on the fast 16th-note passages, so she was often able to give me some advice on articulation so that I could use more tongue to make each note clearer, like in playing on the piano, full of bounce and lightness. Also, I think my articulations in the lower register were very bouncy; before, they were very flat and sounded very legato. The tempo could still be faster, which will help me have more direction in the phrases. Also, the faster tempo will let the articulation be lighter. I think the sound control overall was very warm and not aggressive; only on the last pedal, F, did I give a big accent and play with longer length to make the music more exciting.

Conclusion:

Through this whole research cycle, I think I improved the most in the use of articulations. This third movement is one of the most difficult compositions in the history of the bass trombone repertoire. It is very difficult to play all the notes and articulations clearly and make the music more interesting by adding my own interpretations (glissandos, vibratos, accents, and so on), especially at such a high speed. In my final recording, I already have a very stable tempo with the piano in general, although it could still be faster to add more interest and effect to the sound. It is always good to have different varieties of control.

4 Research findings and outcomes

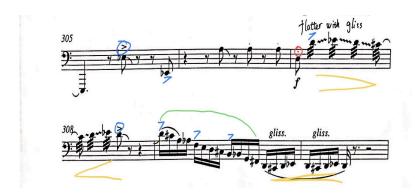
4.1 Documentation and explanation of the research outcomes

I chose some examples to document and explain the important moments of every recording in each cycle.

Cycle1:

https://drive.google.com/file/d/13zNInMfLJqZinleHoNpCAnpqP9KTt3d4

Example 1



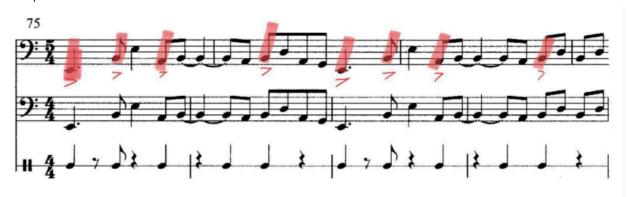
In the first cycle of research, the goal was to achieve sharp articulations like David Taylor's but with a nicer sound. To do this, the focus was on producing a smooth slide by relaxing the body and using tension from the shoulders. The singer was used as a model for organic vibratos and glissandos while also incorporating more accents and staccatos, as marked on the score. Reinaldo Donoso Pizarro emphasized getting the feeling of bass guitar slapping, so accents and the double tongue technique were used. Based on a parametric experiment, softer dynamics, faster air speed, and 'Dugu' syllables were chosen for the articulations. The most important details are the marks on the score; here I demonstrated one example above and the glissando exercise created by Reinaldo Donoso Pizarro (in the intervention of the first cycle), which were used to develop glissando and a flatter tongue and improve fluency in playing the music.

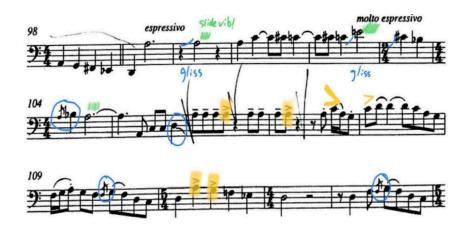
Cycle 2:

https://drive.google.com/file/d/1NAMWNd_JBrK3vk-pfNenGthDBkXV3bgg/view?usp=sharing

After researching the second cycle, I decided to increase the tempo of the second movement based on feedback from Jan Donner. Without a faster tempo, the music would sound lazy and heavy. In the first reference recording, the tempo felt slow, and the experts who gave feedback could not feel the rhythm, groove, and vividness of Samai Thaqil. Through media research and analyzing the second half of the second movement, I discovered the importance of accent beats on the sixth and seventh beats and added accents to better convey the direction of the music phrase, which is in Example 3. After experimenting with different mutes, I found that the wooden mute can create a warm and dark sound that adds a mysterious atmosphere to the music. Additionally, in the last part of the second movement, which is the climax, I demonstrate in Example 4. I added glissandos, slide vibrato, and accent marks to increase the intensity of the music, as suggested by my teacher Ben van Dijk. The softone mute had more tone options, but the sound was less concentrated and caused the articulations to be hard to hear. Furthermore, the microphone's sound was acceptable in the low range but became darker and less clean in the mid-high range.

Example 3





Cycle 3:

https://drive.google.com/file/d/1hx 6K-bz2mlY83-r9PgaB7EybcUf1YJE/view?usp=share link

During research cycle 3, I was surprised to come across Mr. Bleys' comprehensive research titled "A Performer's Guide to Daniel Schnyder's subZERO-Concerto for Bass Trombone," which was a valuable resource for their work. Mr. Bleys' research provided an in-depth and technical analysis of the third movement of the Subzero, which the author utilized. The research also emphasized how the third movement drew inspiration from the typical Broadway musical overtures. I mentioned that Broadway musicals are a crucial part of American cultural history and that jazz, swing, and pop music have influenced their music, making it lively and simple to understand.

In the third movement of Subzero, I observed a complete story development that was reminiscent of a musical. Mr. Bleys also highlighted the bebop-styled elements that Schnyder incorporated, particularly between bars 15–21 of the solo bass trombone line and the piano's eighth-note walking bass line. I learned from Reinaldo Donoso Pizarro's research report that Maaike Wijntje, a MuziekTheater student at Codarts, found the third movement to be connected to Broadway style with a plot that has a climax. Maaike commented on the bombastic effect of the music, with many things happening at once, which fit the ideals of a Broadway musical.

I also consulted David Mathie's paper titled "Multiple Tonguing for Trombonists," which demonstrated methods for learning multiple tongue syllables and double and triple tongue skills. I found the most challenging technical aspect of the third movement to be achieving clear articulation at high speed. To address this, I utilized the techniques outlined in the paper and made experiments to improve the clarity of the double-tongue syllable. In Example 5, I added accents with yellow marks to increase clarity in bar 128 and built up the dynamic from bars 129 to 130, leading to the loudest dynamic in the phrase. I also added some slur marks on the sixteenth note to have a relaxed, easy, and fluent sound while reducing body tension during the crescendo.



4.2 Self-assessment of the research outcomes and expert feedback

The most important details in the outcomes are the improvement of the musical ideas of the piece, the multiple tongue skills, the articulation, and the sound control. In the first cycle, the composer used a lot of blues and pentatonic scales, so I need to focus on those points and make improvements. In cycle 2, the player's articulation has significantly improved, and the playing of the notes is not as scattered as before. In cycle 3, the articulations were clearer and the tempo was faster, allowing for more directions in the phrases. The sound control overall was warm and not aggressive, and the player was able to give a big accent and play with longer length to make the music more exciting.

Reinaldo Donoso Pizarro and Pawin Pungbua both praised the rhythm, intonation, style, and glissandos in cycle 1. Pizarro said the rhythm was better and more steady than the previous recording, while Pawin said the glissando and articulations were better and more accurate. Dynamic was louder at the beginning of the piece.

In cycle 2, Ben van Dijk (the main subject teacher at Codarts) and Jan Donner (a trombone player in the Berlin Opera) both gave positive feedback on the performance. Van Dijk noted that the connection was smoother and jazzier and that the articulation was clearer and lighter. Donner noted that the notes were more connected and that the player should think more about the music while playing.

Feedback from Ben van Dijk and Pawin Pungbua in cycle 3 showed improvement in tempo, articulation, connection, and style.

4.3 Conclusion

The first movement of Daniel Schnyder's Subzero Concerto is a remarkable work that has been instrumental in my growth as a musician. The initial research that I conducted on the piece helped me to improve my understanding of Schnyder's music and develop new techniques for interpreting his compositions. One of the most valuable aspects of Schnyder's music is his encouragement of individuality and creativity, which has allowed me to explore new dynamics and approaches to playing his music. While there is still room for technical improvement, I have made significant progress thanks to the guidance and inspiration of this piece.

Throughout my research cycle 2, I have gained a deeper understanding of the broader music scene and style, particularly in relation to Samai Thaqil's piece. Through interviews with composers and research on Middle Eastern music, I have discovered the importance of accents, articulation techniques, and the use of mutes to achieve the desired sound. Moreover, I have gained knowledge on the various sound effects that can be created using materials such as plastic, wood, or fabric. These insights have allowed me to approach the piece with a greater level of nuance and artistry, resulting in a more polished performance.

My third research cycle, which focused on the third movement of Subzero, presented one of the most challenging compositions in the instrument's history. Achieving clarity and precision while adding my personal interpretation proved to be difficult, especially at the high speed required. Although the final recording showcases a stable tempo with the piano, I believe that greater speed would add interest and enhance the overall sound. Control, both in terms of variety and nuance, is critical in achieving a balanced and nuanced performance.

Through my three research cycles, I have achieved mastery of the Subzero Concerto. The process has provided me with invaluable insights into the art of music analysis and interpretation, which will undoubtedly serve me well in future pursuits. I have gained critical thinking skills and developed effective methods for approaching challenging compositions, and I have also discovered new ways to expand my range of interpretive possibilities through the development of specialized techniques and articulation methods. Ultimately, I have succeeded in creating a unique version of the concerto that embodies Schnyder's vision, and I have grown significantly as an artist by exercising independent judgment in the interpretive process.

In conclusion, the Subzero Concerto has been an incredible journey that has helped me to refine my craft and develop my skills as a musician. With each research cycle, I have grown in my understanding of Schnyder's music and discovered new ways to approach challenging compositions. I am grateful for the opportunity to work with such a remarkable piece, and I look forward to continuing my growth and development as an artist.

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6 Network

- 1. Pawin Pungbua, he used the *Subzero* concerto to win the 1st Prize in American Trombone Workshop.
- 2. Ben van Dijk, my main subject teacher at Codarts.
- 3. Brandt Attema, bass trombone professor in Hochschule für Musik Karlsruhe, has performed almost all the bass trombone pieces that Daniel Schnyder composed.
- 4. Ricardo Rocha, Former student at Codarts who interviewed Daniel Schnyder.
- 5. Reinaldo koko Donoso, Former student who did the Daniel Schnyder research.
- 6. Jan Donner, Deutsch Oper Berlin trombonist.
- 7. Daniel Schnyder, Composer of the Subzero concerto
- 8. Marques Young, Former teacher, Jazz trombone player
- 9. Aihao Zhang, Jazz bass student at Codarts

Appendices

Appendix 1: List of all AV media included in report

First Research cycle

https://drive.google.com/file/d/1nuakbnoRnGK7w4gWscPCgxbG4C4Avep5/view?usp=drivesdk First reference recording in cycle 1

Expriment in cycle 1

1. With slower air speed and without tonguing the note when playing the glissando note that I circled.

Recording: https://drive.google.com/file/d/1TqtCXAt2cA3s-lo2hW_Or3wvikXTiLBM/view?usp=drivesdk
This method I feel is not very clear on the articulation but the sound of glissando is nice and relaxed.

2. With slower air speed and with tonguing the note when playing the Gliss note. Recording: https://drive.google.com/file/d/1uCGidg53Jf8DDdZgW1BLCHY6EvsobHMS/view?usp=drivesd k

This method I feel is clean on the articulation and I also feel the sound of glissando is nice and relaxed.

- 3. With faster air speed and without tonguing the note when playing the glissando note. Recording: https://drive.google.com/file/d/12FtLjpNIIFnW9NrpR3h10U4fBUVMTxft/view?usp=drivesdk This method I feel is not clear on the articulation but the glissando sounds a little tense because the air speed is too fast for this.
- 4. With faster air speed and with tonguing the note when playing the glissando note. Recording: https://drive.google.com/file/d/1ig2flvx8Fd2-HnaqQKw0qpBkn5bAp5qf/view?usp=drivesdk This method I feel is the sound is too harsh because the air stream is too fast but the articulation is very clear.
- 1. With softer dynamic, slower air speed and 'Dugu' syllables of the articulations. Recording: https://drive.google.com/file/d/1EOWGJAHQ4rJjB6SrEuV7LqUBzdGFTJfN/view?usp=drivesdk In this method I feel the sound is a little unclear, because the air speed is slow. The "Dugu" syllables with the softr dynamic make the sound easier and less effort.
- 2. With softer dynamic, faster air speed and 'Taka' syllables of the articulations. https://drive.google.com/file/d/15TWZWrjG6VMPAZkDXt0lqtumqq1Htb2E/view?usp=drivesdk
 In this method I feel the "Taka" syllables with the faster air speed are easier to articulate the notes but I feel it is a little bit aggressive with the sound.
- 3. With softer dynamic, faster air speed and 'Dugu' syllables of the articulations. https://drive.google.com/file/d/19HamY5ZCFIfKvMWvHjBFWz0spmmL7gIY/view?usp=drivesdk
 In this method I feel "Dugu" syllables with the faster air speed in softer dynamics are easier to articulate the note and also the sound is very good, warm and effortless. I think I need to practice this method more often.
- 4. With louder dynamic, faster air speed and 'Taka' syllables of the articulations. https://drive.google.com/file/d/109Fv0EbsfY2eFl5uvPvIP6IVJ85UWMi7/view?usp=drivesdk
 In this method I feel It is too aggressive with the sound and also make the articulation very harsh.
- 5. With louder dynamic, faster air speed and 'Dugu' syllables of the articulations. https://drive.google.com/file/d/1YwZfAoNb2Pg3hgl4YsAjjc0rrg0hA2Te/view?usp=drivesdk

In this method I feel it is harder to make the note very clear in a louder dynamic. The sound is ok with the "Dugu" syllables.

https://drive.google.com/file/d/13zNInMfLJqZinleHoNpCAnpqP9KTt3d4 Outcome in cycle 1

Second Research cycle

https://drive.google.com/file/d/1fgnyqQSm6s-vkPrKuuJpHaN8_RGlvsVk/view?usp=sharing First reference recording in cycle 2

Experiment of the different bucket mute choosing

https://drive.google.com/file/d/1J9PFdTuQnUTXo269o4-iqK_RskgRUyJK/view?usp=drivesdk Wooden bucket mute

With the Wooden bucket mute, I think the sound is a little bit dark but people can hear the center of the sound very clearly. Also the articulation is clean. This is perfectly suited for the beginning of the second movement to create a nice mysterious atmosphere.

https://drive.google.com/file/d/18m1jsS0BFBCjalGqtGe17GGQYwPxdAM5/view?usp=drivesdk Softone mute with half of coverage

I think in this softone mute with half of coverage, the sound is a little too bright for me, when I try to give more air, the sound quality is getting thinner. For me It is not a good choice.

https://drive.google.com/file/d/1n8ER_GXbtzEkfl1TKiSBQyGPrX5ig8Jm/view?usp=drivesdk Softone mute with full coverage

For the Softone mute with full coverage. The sound is much better than the one with half of the coverage. It is warmer and darker, but for me I think it lost the focus of the sound. It sounds a little bit vague and also hard to articulate the note. I do not like it so much.

https://drive.google.com/file/d/1wUzZZgSQEqAIJT8AO01hcPEXXLv0aLbf/view?usp=drivesdk Plastic bucket mute

I like the sound in this Plastic bucket mute, it is clear and precise. Also it is easy when I blow through the air of the instrument. It is only a pity that I don't think this mute is very suitable here. In my opinion I think it is about to create a mysterious atmosphere, which is why the composer let us use the bucket mute in the beginning of the second movement.

https://drive.google.com/file/d/1NAMWNd_JBrK3vk-pfNenGthDBkXV3bqq/view?usp=sharing
Outcome

Third Research cycle

https://drive.google.com/file/d/1ojZVwGmflP4UcoabDptEtwx3nMAqJEMC/view?usp=share_link First reference recording in cycle 3

Experiment Bar 3-6

first: https://drive.google.com/file/d/1vaPvySpcR0Ti4WoXwhJeDOcNJ9Kz-Wr0/view?usp=sharing

Final: https://drive.google.com/file/d/1LLo8UrpzoUFv0bwLl9Wa-qQS1swMmWgm/view?usp=share link

In the first version, I think the articulations are very vague and sound very legato.

In the final version, I put more accents on every note to make a clearer attack and used more of the belly support to keep the air flow, which sounds much cleaner.

Bar 10

first: https://drive.google.com/file/d/1USfhJ2NFwtqlTUmG7BDyACPcFb755fy9/view?usp=share_link Final: https://drive.google.com/file/d/1LCq0JJVcirz-EzrAa3wcEruClQTnG7Lt/view?usp=share_link

In the first version, I just follow the score, and I think the interpretation is too flat.

In the final version, I added a little glissando on the last G to make this passage more energetic.

Bar 20

first::https://drive.google.com/file/d/1PZ9_nvkqyWRkuOM1MS97GLsOyyD_g61P/view?usp=share_link Final: https://drive.google.com/file/d/13mo_uphAvASVx4YNIftyJjehB0bfarC-/view?usp=share_link

In the first version, I feel that the notes are separated without direction.

In the final version, I did a slight rubato between the C and E, with clearer articulations. It has more direction.

Bar 31-36

first: https://drive.google.com/file/d/1qaAHoWuxBnrZDUR1IKK6TSq3626Ae98n/view?usp=share_link Final: https://drive.google.com/file/d/1DqG-lL3kuxY88Mg03vjxRyHJqtvEAYTy/view?usp=share_link

In the first version, I feel some long notes are too tenuto and flat; the lower notes need more attack at the beginning of the note.

In the final version, I added some vibratos and did some release on the long notes, and I added more tongue attack on the lower note to have the clarity and also to keep the tension until the last B flat.

Bar 112-115

first: https://drive.google.com/file/d/1VBjFyDaj5oTjukEJ6FPMNImJpZ2Bg4Ss/view?usp=share_link Final: https://drive.google.com/file/d/1mHDeSvH_gz1ze1n6BOP3CivNwWoK-756/view?usp=share_link

In the first version, I used the "taka" syllable, which made the sound less fluent. Also, it is hard to blow the airstream.

In the final version, I changed to the 'Dugu' syllable. It shows a warmer and more rounded sound, and it is also easier to keep blowing the airstream.Bar 128 -130

first: https://drive.google.com/file/d/1GnfmQgwph2_H8porTnWAFxtvXazdufUl/view?usp=share_link Final: https://drive.google.com/file/d/1yoiPNAF0wc2jcAPYZROw0O3gnByVw-1c/view?usp=share_link

In the first version, I was using all the double tonguing on the sixteenth notes, but it sounded very messy and had less continuity.

In the final version, I tried out with some slurs on the sixteenth note to give it more clarity and a more fluent sound. (Example 8)

https://drive.google.com/file/d/1hx_6K-bz2mlY83-r9PgaB7EybcUf1YJE/view?usp=share_link

Outcome

Appendix 2: Critical media review

1. https://youtu.be/gwH-oGyOKLA David Taylor plays the Subzero concerto.

For me, the reason why I choose this as a reference is because Daniel Schnyder wrote this composition for David Tylor. David Tylor has his own strong interpretation on this Subzero concerto. His playing jumps totally out of the box. I think it is valuable that I can learn so much from it. Although he does not play everything perfectly. I want to dive into not only technical skills of Subzero concerto but also analyze the music style and perform what the composer wants us to play.

2. https://youtu.be/338RamfWhHQ How to practice jazz double tongue and execute it.

https://youtu.be/XfNNp008QRo. Bill, Christopher. "Trombone Lessons: Extended Techniques (How to Hit a High C)." YouTube, November 9, 2013.

Multiple tongue skills are definitely very important skills as prerequisites of learning this music. It is not the same as normal classical multiple tongues. The composer used a lot of jazz elements such as blues music, Arabia jazz music, swing and so on. So if I want to match the right music style, I have to explore how to use jazzy multiple tongues in his piece. Fot me it is a big challenge. JJ.Johnson also used many special techniques such as slide vibratos, glissandos and multiple tongues that match this piece. It is good to listen to his music. These references can help me more on the technical side.

3. https://www.owltail.com/people/LCnbt-daniel-schnyder/appearances Daniel Schnyder 5 podcast episodes. It is an interview of Daniel Schnyder and David Taylor(bass trombone player for Subzero).

If I want to analyze his music style, I have to also know about him better. I need to know what he thinks about the right music phrasing, articulations and music style on Subzero. It is very lucky for me that I can find an interview recording on the website for both Daniel Schnyder and David Tylor. It really helps me to dig in more on his thoughts of playing his music correctly. I also choose some music recordings as references that I can feel and understand his music style. It is also important for me to learn.

Appendix 3: Full feedback on reference recordings

The first recording:

Interview with Pawin Pungbua:

I think you can have more characters change between the movements, and also change the style of playing. Daniel Schnyder used so many styles of music elements in his music, so you have to really switch the concept of playing.

I think you can have more variety of the articulations. Now you are more "educated" with articulations, everything is almost like from the book and flow the rules but in this piece, especially in his music, it has to include dirty articulation, something we don't do in the normal classical type of playing, you can watch and listen to the recording on YouTube that David Tylor does and compare the differences. He is a musician that has many non-standard ideas of his own approach to play this Schnyder music. You can take a look at it.

The feedback from **Reinaldo koko Donoso**(Former student at Codarts who did the Daniel Schnyder topic):

In the first movement, Schnyder used a lot of jazz elements, so I need to listen to more jazz trombone players, jazz vocal singers and try to get the concept of playing this type of music. Imitate how they use the accents and vibratos. For the first recording, he told me that my tempo can be more stable, sometimes the rhythm was a bit random. Do more accent on the note that requires the accent. From bar 67, I should feel more like the bass guitar, with the groove section.

The feedback From **Ben van Dijk**(my main subject teacher at Codarts):

Very well played with extreme control of sound, articulation, pitch and rhythm.

My only little criticism is that it's almost too clean. There are some parts that can be a bit more rough. Remember who is the person that Daniel Schnyder was written for. Take more references from David Tylor.

The second recording:

Feedback from **Reinaldo Donoso Pizarro**:

He thinks that my rhythm from the beginning in the new recording is getting much better, also the intonation. In the second part which is the blues section, he can feel I am now closer to the style but I can still do more accent on the note to follow the score. From bar 65, the rhythm is better, sometimes the articulations can be clearer as he said before, this part should sound like the bass guitar, but it is much better.

Feedback from Pawin Pungbua:

I also received some positive feedback from him. The rhythm is better. Great glissandos and feeling in the blues section. Also he said my articulations should have more diversities between the moment changing. He suggested that I open up the sound in the beginning. Play the groove section which is from bar 65 more accurately and do more dynamic change.

The second cycle:

First reference recording Feedback from myself

I think after researching the previous research circle, my biggest problem is that my way of playing this music is a little too conventional like I play the other classical music. I almost used only one articulation and I played the music too flat in the reference recording. Like I said in the previous circle, I need to get more out of the box of the classical music background. It is necessary to do something new in more 'dangerous' ways. For instance, like some more extreme volume changes and more different pronunciation of articulations, It may even affect the timbre of the sound. In classical music, I am more concerned about how to maintain a good timbre during dynamic and articulation changes, but in this music, sometimes the color is more important than the timbre. There are some parts that can be really rough to achieve the effect.

I feel a little lost in the general direction of playing this movement, what I mostly did at the moment is just play the notes. I feel like the notes are a little too scattered at the beginning of the recording and I feel like there needs to be more continuity. Including the direction of the musical phrase and some dynamic marks. I don't think it is very obvious. I should have different articulations according to different sections. Now I think some articulations are a little too soft. I could not hear the front of the notes very clearly. Also there are some notes/fragments that are not particularly in tune. I think first of all I need to have a general understanding of this second movement in terms of style.

Appendix 4: Transcription of interviews

Interview with Ben van Dijk

The first thing I think you have to find out is, what inspired Daniel Schnyder to introduce all these specific techniques in his compositions for bass trombone.

Is it simply because of his own saxophone playing experience, his composer skills or is he inspired by players he worked with?

It might be useful to collect all the information available on the internet about Schnyder. I'm sure you can find articles about it and perhaps even interviews with Schnyder that might provide interesting information to you.

The most ideal step to take is making contact with Schnyder himself and ask him some good questions about this topic.

In connection with this last step, asking some of the major Schnyder bass trombone interpreters what their experience is an interesting possibility.

As I told you I never dived deeply into the music of Schnyder as a soloist so I didn't experience planning a personal practice approach for this piece but working with several students on it, I have some ideas.

With today's availability of several amazing recordings of Sub Zero, I would start with listening to different recordings with the score to learn both the structure of the piece and the accompaniment.

I would divide the piece in easy- and more difficult sections so I know on which I have to give the most study time.

Playing wise I will start learning the notes by studying everything in a very slow tempo. With pieces like this it's a must to avoid learning wrong notes and rhythms when you play too fast too early.

For the steady rhythmical parts I would make use of the metronome constantly.

The piece really needs a steady solid pulse to make it work so working with the metronome will help building this steadiness.

I would build in, in your daily routines, the required techniques on a daily basis. I think Schnyder wants you to make all his indications of techniques very personal.

Playing and exploring this on a daily basis will make your interpretation of the piece personal.

For sure you have to listen/watch all the recordings of David Taylor for sure but of course players like Stefan Schultz, Brandt Attema and James Markey are players so you have to listen to.

You have to look into the interview Ricardo Rocha had with both Schnyder and David Taylor. This interview is filled with lots of interesting information about the style of Schnyder's compositions in general. Schnyder's music is a combination of many different styles. It's a hectic melting pot of all sorts of styles and within his pieces you might have to switch in a split second between J. S. Bach and Thelonius Monk. Balkan music, Klezmer (Jewish), Jazz in all possible styles and contemporary classical music are all in his compositions.

With Ricardo Rocha(former student at Codarts who interviewed Daniel Schnyder):

He did an interview with both Daniel Schnyder and David Taylor. He said what Daniel Schnyder wants is that he hopes the performance of his piece will be different every time. Schnyder wants people to be special and he does not want people to play his music each time the same thing. Maybe you can start this piece with listening, listen to the orchestra vision of this piece. David Taylor playing with the orchestra on YouTube is a good reference. Because Schnyder composed this piece for him. David Taylor is a person

that is really getting outside of the box and he made every note meaningful. His musicality and the way he played are very suited to what Schnyder wants.

With Reinaldo koko Donoso(former student who did the Daniel Schnyder research):

He suggested that I have to really keep the tempo when I play the piece, especially the first movement. It is very easy to play the note randomly. Because this piece sounds so free. What I need to do in the first movement is I have to connect all the fragments, there are so many different parts in the first movement. For example, from the beginning the tempo is more consistent and direct, from bar 13, the music is changing to the blues, it sounds more lazy. After bar 67, the feeling is changing again, to the more rhythmic feeling. It sounds like the bass guitar player plays the groove section. I need to really connect those fragments together.

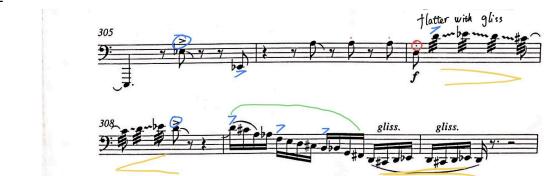
Appendix 5: Transcriptions, (annotated) scores, analyses

1

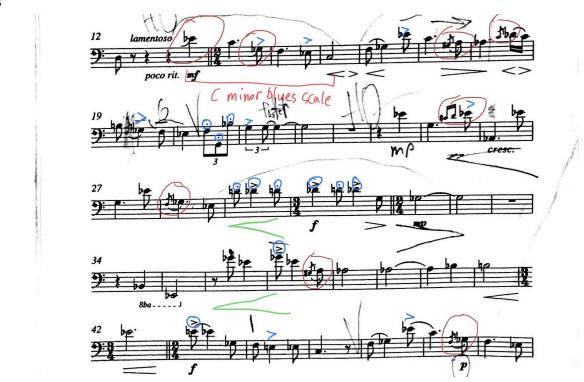


I marked the score with some accents and managed to articulate the double tongue technique as "Du Gu" syllable.

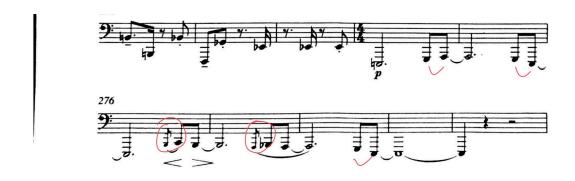
2



I added some accent on the note to help me play the note clearer. Also I added some dynamic marks to make me have more direction of music, make the music more interesting.



I add some accents to have more up beat feeling sounds more jazzy. Also I cycled all the decorated notes, which I played them as glissando.



I added some slurs to make the note changing easier and sounds more connected and smoother.



I added some staccato and also some accents on the notes. It helps me to have sharp articulations which David Taylor did. Also I made the slur mark to make the phrase more sustained.