Stanley Friedman’s Solus for trumpet unaccompanied

A study of learning and approaching the extended trumpet techniques in Stanley Friedman’s Solus.
Abstract

The purpose of the study was to figure out a good and an effective way to learn how to master extended trumpet techniques in order to be able to play the piece *Solus* (1975) by Stanley Friedman (b. 1951) for unaccompanied solo trumpet. To gain a deeper understanding of the composer’s intentions, the study also includes a music analysis of *Solus*. Various methodological approaches were used: sheet music and performance instructions, own practice, digital tools, recordings, literature and trumpet method books. The results of the study indicate that five different extended trumpet techniques were identified and analysed. They were slide glissandi, flutter tongue, pedal tones, singing and open trigger. For slide glissandi, it was important to separate the technique into smaller portions, to first practice without glissandi in order to embody the music and then practice glissandi separately. For flutter tongue, airflow and a relaxed tongue were essential. Pedal tones require time to master and using trumpet method books was a great way to improve the pedal register. For singing in the third movement of *Solus*, it was useful to practice singing and even screaming, both in private and in front of an audience. The open trigger technique was mastered by practicing with a drone, using digital tools, and to practice playing the open trigger notes with open fingerings. It was very rewarding to master the extended trumpet techniques in the piece *Solus* and it will be of great use for any performer.

Keywords: Trumpet, Extended Trumpet Techniques, Stanley Friedman, Solus
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1 Introduction

Learning a new piece for a trumpet player is often quite straightforward. To look at the sheet music and listen to a recording is always a good start. The next steps are usually to get the notes embodied in the fingers or the muscle memory and to hear all the pitches. However, approaching a piece like Solus by Stanley Friedman for the first time is not as simple. The reason is that the piece has a lot of what is called extended techniques, or non-standard notational styles. Flutter tongue, slide-glissandi, pedal tones and an open trigger are some examples of the extended techniques used in the piece.

As a trumpet player and student, I am not used to the extended techniques that the piece demands. However, the list of trumpet repertoire that contains these techniques is always getting bigger, and these techniques should in my opinion be in every trumpeter’s arsenal. Therefore, the aim of this study will be to examine the approach to learn how to play the piece in the best way possible.

1.1 Background

This background will include a short biography of Stanley Friedman, his piece Solus, and extended trumpet techniques.

1.1.1 Stanley Friedman

Stanley Friedman (b. 1951) is a musician, composer and conductor. He studied at the Eastman School of Music in New York where he got his DMA in composition. His teacher there was Sam Adler. Friedman is an established composer, whose music has been played all over the world, as well as being a successful trumpet player. He has played with orchestras like the Los Angeles Philharmonic, the Israel Philharmonic, the New Zealand Symphony and the Hong Kong Philharmonic. In 1989, his solo album The Lyric Trumpet won Classical Record of the year honours at the New Zealand Music Awards. Friedman is a popular performer and a guest teacher (Friedman, 2017).

Friedman’s music has been premiered by orchestras like the New Zealand Symphony Orchestra, l’Ensemble Intercontemporain, the Los Angeles Philharmonic Chamber Music Society, the Memphis Symphony, the Northwestern University Orchestra. (Ibid.)

Friedman is mostly known for his brass music, and the most famous piece he has written is probably his Solus for unaccompanied trumpet. Friedman wrote the piece for his own master’s recital, but the work has become a standard piece in the trumpet repertoire. His opera Hypaita which was premiered in New Zealand earned praise as orchestrally impressive and
lyrically quite rich, and Friedman was called a significant new opera composer (Friedman, 2017).

1.1.2 Solus

Solus was composed in the mid-seventies by Friedman when he was 24 years old. It is a contemporary classical piece, published on The Brass Press in 1975. It’s in four chapters, of which each is different with various characteristics and different styles and technical requirements.

On Friedman’s website, Solus for unaccompanied trumpet is being described as a world success and a required contemporary repertoire for major international solo trumpet competitions. (Friedman, 2017). Solus really was a great success, and in my opinion the piece is relevant for me personally as a trumpet student as it is often performed on trumpet competitions and is unquestionably a standard piece in the repertoire. As a trumpet player, I find Solus challenging because of all the extended techniques it requires.

1.1.3 Extended trumpet techniques

The trumpet was originally an instrument that could only play notes in the overtone scale. Playing on an instrument tuned in C, the trumpet player is then able to play the tones, C, C, G, C, E, G, Bb, C, D, E and so on. This of course affected how music was written for trumpet and is the reason for why trumpet parts for a great period were written with only a few notes, all on the same overtone scale. The trumpet was then used almost as a percussion instrument.

![Figure 1](image)

A lot of baroque music is very melodic, which can seem surprising seeing as the trumpets didn’t have any valves. Nature trumpets as they are called, are two times the length of the modern trumpet, making the overtone scale an octave lower on them than the modern trumpets. That is one of the reasons why it is possible to play melodic music on the nature trumpets. It however requests a great skill on the instrument. The Brandenburg concerto no. 2 is a good example for that. Then the instruments were used so high in the overtone scale that the trumpet players could play this melodic music. It was however not very easy and demanded a virtuoso player to be able to play the music that was written. Some of the music written in the baroque era is still perceived as some of the most difficult music that has been written for trumpet.
Keyed trumpets were something that people tried to add to the trumpet so that trumpet players could produce more tones and tones that were in better pitch. A product of these additions was the trumpet that Haydn and Hummel wrote their famous trumpet concerts for. Even though it was a step forwards, the instrument was not without its flaws. It sounded closer to what the natural trumpet sounds like than it does to the valve trumpet.

> Due to its physical characteristics (bore, bell, historical mouthpiece), the keyed trumpet is closer in tone to the natural trumpet than the valved trumpet. It was once said to have sounded like a "Demented Oboe... despite Haydn's efforts, the keyed trumpet had no real success- the explanation may be that the holes detracted from the brilliant tone of the instrument. “(Geiringer, 1982, p. 324-325)

It wasn’t until the early 19th century that the valves were invented for brass instruments, allowing the instruments to play chromatically. That opened a whole new world for composers and trumpet players. Since then, the trumpet technique has evolved immensely, and the repertoire with it, getting inspirations from jazz, computers and all the things that have happened for the last two hundred years. “Found with frequency in the solo literature written during the 1960s and 1970s and often considered stereotypical of that avant-garde period, these techniques are now a necessary part of the training of today’s trumpet students. “(Cherry, 2009).

Since extended techniques were used first, they have become a necessary part of training trumpet players. They have been a part of trumpet repertoire for many years now, but one can find it surprising how little focus is on extended trumpet techniques in music schools and academies. Friedman’s Solus is written in the year 1975. That makes it almost half a decade old. That means it is within the experimental period, and that is fairly clear when looking at the extended techniques he chooses, one of them being an open trigger that had never been used before. “Ulrich denoted three separate periods of compositional practice which demonstrate how the types and number of extended techniques being used progressed over time. He has labelled 1963-1969 as “the conservative period,” 1970-1977 “the experimental period,” and 1978-1988 “the radical period. (Cherry, 2009, p. 19).

1.2 Purpose

The purpose of this bachelor’s degree project is to figure out a good and an effective way to learn how to master extended trumpet techniques, in order to be able to play the piece Solus by Stanley Friedman for unaccompanied solo trumpet. To play the piece in the best possible way, it is also essential to understand the composer’s intentions in a more analytical way. Therefore, the purpose is also to perform a music analysis.

The following two research questions will be answered:
1. What is a good way to learn a piece like *Solus* with extended trumpet techniques?

2. If and how can the extended trumpet techniques improve a player’s general technique and be useful in other aspects of playing the instrument?

## 2 Method

In this chapter the method of the study will be presented. Relevant parts will be discussed, including the instrument I play, sheet music and performance instructions, my own practice, digital tools that I have used, recordings of other trumpet players interpretations of *Solus*, literature, and trumpet method books that I have read.

### 2.1 Instrument

The instrument I play is a Yamaha YTR-9335 CHS 05, which is the newest c-trumpet model of their Chicago trumpets. The piece *Solus* is written for a c-trumpet like a big part of modern music written for trumpets today. To play on a c-trumpet is essential for the open trigger technique in the fourth movement, but it is also important to play on a c-trumpet that has good enough intonation for the fourth movement so that it is not too far from the pitches that are written. I find the model I play on works well for the intonation of the false tones.

### 2.2 Sheet music and performance instructions

The sheet music I use is a ------- edition from the year ------- that I have loaned from my school library. It contains both the sheet music, but also performance instructions written by the composer himself.

### 2.3 Own practice

In my own practice, I have used several different methods to learn *Solus*, and a different method for each of the four movements in the piece. I started with listening to the piece and looking at the sheet music. After I had gained a feeling for the piece and a musical idea, I started to practice the piece, movement by movement. What I used most in my practice was sitting at the piano and playing the notes just to learn the pitches. I find it is essential for me when I play the trumpet to be able to sing my part to play in the best possible way. Especially in twelve-tone music. I practiced the slide glissandi in the piece separately from the music, to get the sound I wanted and to get used to the movement of the left hand, which is not used so often. Then I practiced the music without doing the slide glissandi to get a good flow in the music. When the music and glissandi felt comfortable, I put them together, first in a slow
tempo, and then faster. The theatrics of especially the third movement I practiced in front of first my teacher, and then in group lessons with my trumpet class. It was a good practice to get out of the comfort zone of my own playing into doing the things the third movement of Solus asks for, to scream and shout and play with molto portamento and molto vibrato.

2.4 Digital tools

My iPad has been my most important tool in my practice of the piece Solus, and most importantly I have used the apps TE tuner and the sheet music app forScore. The TE tuner app is a tuner, drone and a metronome and the application functions for all kinds of practice. I have used it to learn different rhythms in the piece but mostly to listen after pitches in the fourth movement. I have done that by setting a drone on in the application, I usually use the sound saw wave. The app forScore I have used for the sheet music, I scanned the music and opened in the app. The reason for that is that I find it easier to focus on a small part of the music while using the app than the paper version. It is also so easy to write in notes in different colours and highlight different parts of the piece in the application. The application also has an inbuilt metronome, so it is very easy and effective to use.

2.5 Recordings

As a reference, I have chosen to listen to the recording from the trumpet player Ole Edvard Antonsen (b. 1962) made in 1989. The recording is available on Spotify. Antonsen is a Norwegian trumpet player and is one of the leading trumpet soloists today. “Antonsen has played as a soloist on the major music scenes in more than 40 countries around the world like Carnegie Hall NY, Musikverein in Vienna, Suntory Hall Tokyo, Sydney Opera House, Barbican Hall London, Philharmonie and Konserthaus Berlin, in addition to big stadiums like Olympiahalle Munich, Seoul Olympic Stadium etc etc “(Antonsen, 2022).

I chose this recording specifically because it is so musical and Antonsen’s technique and sound is something that I admire and want to mimic. With that being said, I will myself play the piece slightly differently than Antonsen does, making it into my own personal version, and the third movement of Solus I want to do more of the instructions that Friedman wrote in, almost to the extent where it is too much.

2.6 Literature and trumpet method books

The literature that I used in my research was two dissertations and one trumpet method book. The dissertations were Extended Techniques in Trumpet Performance and Pedagogy (2009)
by Amy K. Cherry, from the University of Cincinnati, and Extended Techniques in Stanley Friedman’s Solus for Unaccompanied Trumpet (2008) by Scott Meredith from the University of North Texas.

Amy K. Cherry discusses many different extended techniques and organises the text into different chapters where for example different tonguing techniques have their own chapter. For every technique, Cherry first explains the technique, clarifies the notation, makes a list with repertoire that includes the technique, discusses challenges to the performer and then she discusses exercises and suggestions for studying the technique. Cherry’s dissertation was of great help to my when first approaching new techniques to get inspiration for exercises to use.

Scott Meredith’s dissertation was very informative for me that was approaching the piece for the first time, as it analyses the piece and is very detailed in describing the extended techniques and how they should be executed as well as discussing of what benefit they can be for the student in other aspects of playing.

The trumpet method book that I have used the most is James Stamp’s Warm-ups and Studies (1995). James Stamp (1904-1985) was a renowned trumpet teacher. He started his career as a trumpet player in the Mayo Clinic Band at Rochester in Minnesota, and then as a principal trumpet player in the Minneapolis Symphony orchestra. In 1944 Stamp moved to California, and after serving a heart attack in 1954, he started devoting more and more time teaching. “I believe James Stamp was one of the finest teachers in the world. His approach was so flexible that I have never seen him fail to improve a player, whether it be an established symphony musician, jazz or “lead” player or a twelve-year-old student.” (Thomas Stevens, 2022)

Stamp’s method book has helped many trumpet players with developing range and strength in their playing, and especially connect the different registers, meaning making the difference between the high and low register smaller. That is very beneficial for playing Friedman’s Solus, because the piece hops between registers quite a lot. Developing the pedal register was also a goal for the piece Solus and using Stamp’s method book has helped me with that greatly.
3 Results

In this chapter there will be a music analysis of each of the four movements of Stanley Friedman’s Solus. The form, tonality and character will be the main focus of this chapter. Then there will be a chapter about each of the extended techniques the piece demands, the possible problems and solutions, and advise which I want to give from learning the piece myself.

3.1 Music analysis

Musical analysis is an important way to better understand the music one is playing or studying. That is because the trumpet player in this case can better understand the thing the composer meant with the notes he wrote in the music, why the tonality is the way it is, why the rhythm is the way it is, and so on. It is then much easier to form a musical picture of the piece and gain confidence in one’s interpretation. That is why the piece Solus will now be analysed.

3.1.1 I. Introduction

This first movement is a twelve-tone composition from the beginning to the end. The form of the movement is ABA, where the first eleven bars are A, the next eighteen bars are B, and the last seventeen are A again. All together the first movement is forty-six bars.

Dedicated to Sidney Mean

SOLUS
for trumpet unaccompanied (1975 - ca 12')

I. Introduction

Stanley FRIEDMAN (* 1951)
The first twelve tone row in the movement is started in the first bar with the first four notes, A-Db-C-F. The phrase starts again, almost like the musician can only start in the second try, and then takes off and finishes the twelve-tone row with the next tones E-F#-G#-Eb-D-Bb-B.

The second tone row in measure 5-7 is a retrograded inversion of the first row, meaning that all intervals in the first row are the same, only that they are inverted and played backwards. The tones are then B-C-Ab-G-Eb-D-E-F#-F-Bb-A-C#.

Then the third tone row in measure 7-9 is an inversion of row nr. 2 transposed up a small third, which makes the tones Db-C-E-F-A-Bb-Ab-F#-G-D-Eb-B.

And lastly the fourth tone row in measure 9-11 is same as the second one only a half tone higher: the tones are then C-C#-A-G#-E-Eb-F-G-F#-Bb-D.

It is interesting to look at how Friedman writes the start of each twelve-tone row in the A part, because they all start with something extra in the beginning of each phrase, giving the performer almost a stutter-like beginnings to each of the rows. Just like the trumpet player tries the notes ones before they feel sure they can move on with the phrase. That feeling comes from the repetitive parts of the twelve-tone rows, trills and tremolos, and also the notes that are repeated with accent marks, sounding like the trumpet player plays them out of frustration. When the B part starts, it’s the same intervals as in the very beginning, only down a fifth. Friedman also writes down the dynamics to pianissimo like in the beginning, making it sound like the trumpet player tries to begin the piece for a second time, only to fall into the same traps as last time and giving in to their anger and frustration, playing a lot of tremolos, trills with crescendos and even now slide glissandos. In this part, the music feels more erratic and ends on higher tones than have been introduced in the piece at this point. When the A part starts again after that, it is again the same intervals as the very first phrase, but up a whole tone, the volume is forte, and the feeling is much more confident. The very last phrase is interestingly also the same twelve-tone row as the first one, but retrograded.

3.1.2 II. Furtively

Furtively is a good description for the second movement. It’s played with a harmon mute with the stem in for the whole movement, which is often called a wah wah mute, and a big part of the movement is supposed to be played in piano or pianissimo dynamics.

The movement is based on the twelve-tone system but doesn’t follow it as strictly as the first movement does. In fact, there are only four twelve tone rows in the movement and Friedman stays on some of them for a long time, both writing the same notes many times in a row and
coming back to them within the same tone row with the same figures as before. There are no bar meters (senza misura), and Friedman writes rubato. Therefore, the feeling of the pulse is at parts non-existent. My teacher described this movement as a typical good trumpet warm up, and it kind of sounds like it! It doesn’t go very high, it has pedal tones, and just simple and quiet attacks on the same notes.

This movement, like the first one, can be described as an ABA form. The A is almost the first seven lines, or the first whole page. Starting with a sextuplet and interesting rhythm, it displays the style that Friedman uses for the rest of the movement. B is then the next four lines until the pedal tones, and that has a much more intense character than the A part. It reminds you of a trumpet player that is getting irritated at himself or the instrument. Then there is an A part again, that is the remaining lines, beginning just like the first A form of the movement.

The most furtive thing in this movement apart from the quite dynamics and harmon mute, is the rhythmical pattern that is continuous during the whole movement. Changing between four sixteenth notes to sextuplet, and sometimes triples, is continued throughout the movement. It is also full of written accelerandos and ritardandos, meaning that the composer writes out in rhythmical patterns the accelerando or ritardando rather than writing the words.

3.1.3 III. Scherzando and Waltz

This movement is very different from the other first two movements. It is still an ABA form just like the first two, but the character is different, mainly the B part, or the Waltz part of the movement. The A part, the scherzando is also a twelve-tone system, and Friedman says this himself about the twelve-tone systems:

The pitch material in the entire third movement is derived from the 12-pitch row from the first movement. The row permeates the whole piece, in fact. That’s part of the underlying psychological/theatrical/symbolic structure of the composition. The row is fairly strictly employed in the first movement, treated more whimsically in the second, gradually broken
down in the third and reborn transfigured and fragmented in the fourth. Sometimes it’s a bit of a stretch to find the row. But it’s there. It’s not a “classical”, Schoenbergian treatment of the row. I repeat motives and small groups of notes to create “artificial gravity,” moments of temporary pseudo-tonality. In my compositions in general I often blur the so-called boundaries between tonality and atonality, as befits the intended emotional impact of the musical gesture. There are some “images” (for lack of a better term) that I only can express tonally, others I can only express atonally. Many of my works are based on pitch systems which offer both tonal and atonal possibilities. Solus was an early exploration of this concept. (Bellinger, 2002)

Friedman writes exaggerated and theatrical about the waltz part and asks for molto vibrato and very rubato style. He also writes molto portamento. These instructions really ask for the performer to play differently than they normally would, making this brief window into a more tonal world a special and even mocking part of the piece. It is also possible to interpret this part as the performers main piece of music, meaning that everything that has come before was some sort of warm up, thought or preparation, and the waltz part in this third movement is what the trumpet player was supposed to play for the audience. But this doesn’t go as planned, and the waltz leads us into a motive from the beginning if the third movement, that is played repeatedly, more and more franticly and finally asking the performer to scream multiple times, progressively louder, more frantic and more insane, as Friedman wrote in the music.
After this the A theme or scherzando starts again with an interruption of a fortissimo shake.

3.1.4 IV. Fanfare

This fourth and last movement of the piece is played with an opened second valve slide for the whole movement. The composer divides the movement into four parts, the beginning of the movement to A is the first part and is played solely on “false tones” that are produced with the open-tubing. This open valve slide plus the new tonality in which the movement begins gives a very different character than the other movements have. The name of the movement is *fanfare* and Friedman uses both fanfare rhythms and tonalities in the movement. The first line is a fanfare theme and has the tones F and Bb. The line after that has the notes F and C. These two first lines are therefore very unlike the other movements that have come before, because of the tonality and style.

The next three lines, line 3 to 5 expand the tonality with adding the note E, which gives the fanfare a modern colour as it is the tritone to Bb, which is the tonal centre of the movement.

![IV. FANFARE](image)

Figure 5

The remaining four lines until number A have similarities to the second movement with a written *accelerando* and *ritardando*, and here it is a written accelerando that finally leads us into part A where normal tones and fingerings are used for the first time in the movement. With a written *forte-fortissimo*, the first notes on a normal fingering should come as an almost shock because of the dynamic change. That is mainly because open valve slide makes the
instrument loose it’s power in dynamics so that is sounds muted and a lot quieter than the normal trumpet. So when the notes return to a normal way of playing they should produce a lot louder sound than the “false notes”. In A the first theme of the movement is played on normal fingerings but then quickly Friedman blends together normal tones with false tones, and the music gets more and more intense until it ends on a false tone that fades out. Part A has a lot of slide glissandos like the first movement of the piece. After that and a written four second rest, part B starts with the opening theme on false tones, only a fourth lower. Part C is the last part of the piece, and it starts on soft real tones for the first time of the movement, and it is a short melodic and almost twelve-tone phrase that has a similarity to the waltz in the third movement. After that there is a fanfarelike fifth in piano dynamic, and then as taken by surprise, a real Bb in fortissimo with a tremolo in a false fingering note is played with a slow glissando down to the pedal Bb on a false fingering, making it sound far away.

3.2 Extended Trumpet Techniques

3.2.1 Slide glissandi

Slide glissandi were the technique I personally had most problem with. Creating a trombone like affect, the slide glissandi are not so common for the trumpet player to use, and they make a new and interesting sound to the trumpet arsenal and catch the attention of the listener. To practise these slide glissandi, it is important to separate the technique into smaller portions. Practicing the left hand to move the slides at the right time and the right amount is something very beneficial that can be done without playing the benefit, and in doing so resting the lips. Then the player can practice the music without the glissandi and use regular fingerings instead to really be able to hear all the pitches that are supposed to be played. It is very easy to fall into the trap to lip bend to help with the glissandi, but that will take away the trombone like glissando the composer is after. The glissandi should instead be played with only the slides, and of course the dynamic markings that the composer has asked of.

Figure 6

I have found that to play the slide glissandi with the sound I want, I need to play in a way that is led by the airstream and not the tongue or lips or anything else. That encourages good airflow and has helped me to play in my centre, because if those things are not there, the sound that will be produced will not be the one that is sought after. The good airflow and the crescendo used in some of the slide glissandi in for example the first movement demand the player to use good support. So I found that in order to play the glissandi like I wanted them to sound I needed to have good airflow and support as well as to play in a centred way.
3.2.2 Flutter tongue

Flutter tongue is one of the most regular of extended techniques brass players see. It often depends on what language people speak how easy it is for them to produce the right effect. It’s commonly a problem for people that don’t roll their r’s to do this. If the right result can’t be produced, many people use a technique called growling, that sounds similar but is produced with the back part of the tongue instead of the front part in the flutter tongue.

![Figure 7](image)

As well as being a commonly used effect, flutter tongue is often used by many teachers in teaching. The reason is that to play with flutter tongue, the player needs a good airflow and a relaxed tongue. Practicing such way of playing enhances richer sound and a smoother way of playing. As a trumpet player, I can both use flutter tongue and growl, but my preferred style is flutter tongue, as it comes more naturally to me because of the language that I speak which is Icelandic.

I frequently use flutter tongue as a tool to encourage a good airflow in my practice and it has been very beneficial to my trumpet playing. In my experience, it does not matter if the front part or back part of the tongue used, both encourage a good airstream.

3.2.3 Pedal tones

Pedal tones are produced on the trumpet when playing any notes lower than the F# three lines under the usual treble clef. In more than one instance in the piece, Friedman writes notes that go way lower than that, as seen on the example below.

![Figure 8](image)

The pedal tones are not so hard to play if the performer has experience with playing pedal notes from trumpet method books like *Warm-Ups and Studies* by James Stamp, *Method for the Advanced Trumpet* by Pierre Thibaude, and more.

This is one of the extended techniques that is very beneficial in all areas of playing the trumpet and has helped many trumpet players develop their higher register and overall playing.
3.2.4 Singing

Singing, or screaming, as written in the 3rd movement, is probably the technique that I surprisingly found to be the most difficult. It was not because it is technically difficult, but because it required that I got out of my “comfort zone”. The only thing to be mindful of technically is to practice taking the mouthpiece from the lips and sing, and then quickly place it back without it disturbing the embouchure too much.

![Figure 9](image)

The singing our shouting written in the third movement are quite theatrical. Friedman writes a free line that shows the performer in what direction they should go, the music becoming more wild and louder, ending in triple *fortissimo* with the subtitle “progressively louder, more frantic, and more insane”. This place in the piece really calls for some sort of theatrics in my opinion, but every player should do as they think suits the music.

To be able to do this part of the music I have practiced in front of my trumpet class, and it has really helped me to feel less nervous to play in front of an audience. The first time I tried to do this in a trumpet lesson, I couldn’t really shout as I wanted to, but with practice I realised that I could in fact scream quite loudly and make a big effect in this particular part of the piece. Doing things such as shouting and singing in front of an audience has turned out to help me be less afraid of playing in for an audience.

3.2.5 Open trigger

The open trigger technique was used for the first time in Friedman’s *Solus*, and was discovered by him by accident. When asked about the open tube technique in the fourth movement, he recalled that he was cleaning his trumpet one day and forgot to replace the third valve slide before beginning to play. He discovered that he was able to produce a limited number of pitches and developed the idea into one of the most innovative techniques to be used in contemporary trumpet literature (Meredith, 2008)

Playing on an open trigger on the trumpet requires some practise, because the pitches produced when the open trigger is used are not the same as the trumpet player is used to, and it will most likely be very different between different trumpet players, depending on the mouthpiece, trumpet of choice and the embouchure.

Knowing how the open trigger works will help a lot. Using the third valve as a helping tool to lower the pitch is the best help the player can get when playing on the open trigger. That is
because pushing down the third valve will make the pipe that the air goes through on its way to the open trigger a little bit longer, and there for the pitch will be lower.

What has helped me personally to learn the fourth movement of Solus is to use a drone on my iPad while playing the movement, to make it easier for the ear to hear what adjustments need to be made. I used the app TE tuner, but anything producing a drone-like pitch can be used to the same result.

Other technique that has been very useful for me is to play the real notes first and sliding into the open trigger note and try to keep the pitch in the same place. Playing this as an exercise on long tones helps to get the pitch in the right place and to centre the tone on the open trigger. Not only will this technique help play on an open trigger, but this is required in the piece, as seen on the example below:

![Figure 10](image)

The trumpet player performing this should, as written, play the first sixteenth note, a fortissimo B-flat on finger 1, and then changing only the fingering to the open trigger on 2. The airflow and pitch should stay the same.

3.3 Summary

The first movement is a twelve-tone composition and an ABA form. The second movement gets its character from the harmon mute and quite dynamics, and the rhythmical patterns with the written rubatoes and accelerandos. The third movement, it is an ABA form where the first A form is a scherzando, then there comes B which is a waltz, that leads us into the scherzando theme again where the trumpet player loses its mind in the process. The fourth movement is the odd one out, both introducing new sounds and tonality, but also bringing in small proportions from the other movements.

3.3.1 Slide glissandi

The best way to learn the slide glissandi in Solus is do separate the technique into smaller portions, that is for example play without glissandi to get the music right, practice the glissandi separately, and then add those two things together. It is also important to practice the left hand separately, because the left hand might not be used to so many glissandi.
3.3.2 Flutter tongue
To get the hang of the flutter tongue it is essential to have a good airflow and a relaxed tongue.

3.3.3 Pedal tones
The pedal tones take time to master, but the best way is to play from books such as *Warm-Ups and Studies* by James Stamp, *Method for the Advanced Trumpet* by Pierre Thibaude. These kinds of trumpet method books will also improve the trumpet's overall playing.

3.3.4 Singing
The hardest thing about this is to go out of the comfort zone that. It can be helpful to use some kind of theatrics and to practise singing or screaming in simpler practice.

3.3.5 Open trigger
The open trigger challenges the ear the most because the instrument will produce slightly different pitches from what the trumpet player is used to. What helped me was to play with a drone (I used the *TE tuner* on my iPad) and to play the open trigger notes with normal fingerings to master the music.
4 Discussion

The purpose of the study was to figure out a good and an effective way to learn how to master extended trumpet techniques. It was accomplished by practicing, playing and analysing the piece *Solus* by Stanley Friedman for unaccompanied trumpet.

The results of the study will here be discussed in relation to the two research questions that were raised in the Introduction.

4.1 What is the best way to learn a piece like *Solus* with extended trumpet techniques?

Although there is no one right way or process of learning any piece, I have found the best way for me to learn the piece *Solus* by Stanley Friedman. I used several different methods to learn *Solus*. What I started with in all the movements was playing the music on a piano in order to learn and hear the pitches of the music. That is very important for me in twelve-tone music.

For the first movement of the piece, I practiced the slide glissandi separately from the music, to get the sound I wanted and to get used to the movement of the left hand. Then I practiced the music without doing the slide glissandi to get a good flow in the music. When the music and the slide glissandi felt comfortable, I put them together, first in a slow tempo, and then faster.

The second movement practiced used the same method as I used in the first movement for the slide glissandi, and for the pedal tones, I used the trumpet method book by Stamp.

The third movement was mainly difficult in terms of going outside of the comfort zone, so I practiced the shouting part of the movement first in front of my teacher, and then in group lessons with my trumpet class. It was essential for me to do this in front of people a few times, and it quickly became much easier and more fun to do.

The fourth movement I mostly learned by listening to it many times and playing the open trigger technique with a drone. I also found it to be very beneficial to play the “false tones“ with a normal fingering.

It was of great help to me to listen a lot to the piece, and I mostly used Ole Edvard Antonsen’s recording that I found on *Spotify*. I like that he plays so musically, so that is why I chose that recording rather than someone else’s. I however did not want to just play the same way as he did, both because I had other opinions on how some parts should be, but also because I think everyone that performs this piece should make it into their own version to get the most effective interpretation. That is most important in the third movement. The main difference in
my interpretation compared to Antonsen’s is that I exaggerate the waltz part of the third movement, almost to a level that seems ridiculous, and when it leads into the singing and screaming part I play it in a way that seems like I am screaming out of frustrations at myself for not being able to play the way I want, and I end that part on a loud scream, just like I lose control completely of my own emotions.

4.2 If and how can the extended trumpet techniques improve a player’s general technique and be useful in other aspects of playing the instrument?

Practicing the extended techniques of the piece *Solus* showed me that these techniques can be very beneficial for fundamental practice.

Two of the techniques I already used in my daily practice, these were pedal tones and flutter tongue. The benefits of pedal tones being range and strength, and the benefits of flutter tongue a good airflow. The other techniques such as slide glissandi, singing or shouting, and an open trigger also proved to be of benefit in overall trumpet playing. Slide glissandi can help a trumpet player to play more in the centre and help with playing with a good airflow and support. The shouting and singing technique forced me to go out of the comfort zone, but is not notably helpful for other aspects of trumpet playing. Lastly, the open trigger technique was fun to learn, but I don’t see how that technique would be of great benefit in general trumpet playing, only that it demands the trumpet player to have a strong pitch which is of course very important for playing the trumpet.

4.3 Method discussion

I think this Bachelor project study want well, because I gained a good understanding of the piece *Solus* as well as learning new techniques on my instrument and gaining an understanding of how those techniques can benefit me generally as a trumpet player. The goal of the study was to answer the research questions 1) what the best way is to learn a piece like *Solus* with extended trumpet techniques, and 2) if and how can the extended trumpet techniques improve a player’s general technique and be useful in other aspects of playing the instrument, and I think those were answered in a clear way. The research went as I had wished.
References

Partiture


Literature

Bellinger, Michael Craig. (2002) *A Model for Evaluation of Selected Compositions for Unaccompanied Solo Trumpet*. Louisiana State University and Agriculture and Mechanical College. [diss.].


Websites


Recording

[https://open.spotify.com/album/3QD9sDu7WUi1iFG7B4LtTB?si=oGs5jKvEQNul78XCHuFR7w](https://open.spotify.com/album/3QD9sDu7WUi1iFG7B4LtTB?si=oGs5jKvEQNul78XCHuFR7w)
Bibliography

Figure 1: The harmonic scale in the C Fundamental Scale

Figure 2: Excerpt from 1st movement of Solus

Figure 3: Excerpt from 2nd movement of Solus

Figure 4: Excerpt from 3rd movement of Solus

Figure 5: Excerpt from 4th movement of Solus

Figure 6: Excerpt from 1st movement of Solus

Figure 7: Excerpt from 1st movement of Solus

Figure 8: Excerpt from 2nd movement of Solus

Figure 9: Excerpt from 3rd movement of Solus

Figure 10: Excerpt from 4th movement of Solus