*Berklee College of Music - Valencia Campus*

# The Lament (Culminating Experience)

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2019

# Abstract___

In the 2018-2019 school year at the Berklee College of Music Valencia class, I have been given the task to produce a project with the purpose of scoring to visual media. This includes composition, orchestration, music preparation, conducting, and mixing. The primary focus of this project is to go through all of the typical tasks of scoring for visual media and handling the preparation and execution for working with fifty-one piece orchestra at Air Studios in London. This paper represents all of the creative and technical decisions I have made in order to execute the entire process. Thus, representing my fulfillment of the curriculum in the Master's Program for Scoring to Film, TV, and Video Games.

# Acknowledgement___

Before we began discussing the specifics of this film scoring project I would like to express my gratitude for the people who have helped me get to this point. I feel very honored and privileged to have been able to attend this year's edition of SFTV as it has not only given me the opportunity to record with top level orchestras, I have been able to expose myself to people all around the world. I never thought I would be close friends with people either from Spain or many other countries in the world. It has given me new experiences and outlooks on life and I believe I am more knowledgeable about the world because of attending this program.

I would like to thank my professors for the high level of education and support that has been present throughout this year's program in SFTV. The information has been critical not only in filling in the requirements of this project, but also in how I will begin my career after graduation. I would also like to mention my family for the ongoing support throughout the whole process of this project and the most hectic moments of this last year. From the very moment I decided I wanted to go into music, they supported me immediately and I wouldn't be in this situation without them.

Lastly, I would love to give thanks to my girlfriend Corinna for the wonderful and thoughtful support she has given me throughout the whole process of this year. The relationship we have means so much to me and I have been able to grow and be very successful here due to your support. Thank you so much for always being there for me.

# Culminating Experience: The Lament

This past year, as a student, I have been able to explore new methods of composition, production, and other musical techniques which eventually aided my creation “The Lament”. In this paper, we are going to discuss the overview in how my piece was created. There are many specific moving parts, but throughout the thesis, I will explain part by part the making of.

Firstly, let’s begin to delve into what the London trip for SFTV meant for us as students musically, and individually. Throughout the year, we had various recording sessions either with Valencian musicians or remote control sessions with the Budapest Art Orchestra in Hungary. While the level of these professional musicians and the production were very high, we were spoken to over and over again about the importance and impressiveness with recording at Air Studios in London. We were told that the level of musicianship and production techniques is at the top of what you can expect in the recording studio. This was a very big chunk of information throughout the year as we prepared our CEs. For me personally, speaking of the London recording as being a “once in a lifetime experience”, has been a very stressful topic because it put a lot of pressure on me. From the very basis of the creation of my piece has been grounded by the ideas of culmination and “once in a lifetime experience."

Discussing the medium to which my piece was composed too will be a complicated topic. Throughout the couple months it took to complete the piece, I have changed mediums various times as I was insecure with my decision. At first, I was to begin scoring an original short film that I received from a young film director back home for me in the United States. But as I continued to spot and discuss the film with him, we both agreed that using an orchestra wouldn’t be the best idea for a film such as this. So I ended up scoring it on my own time. Moving on

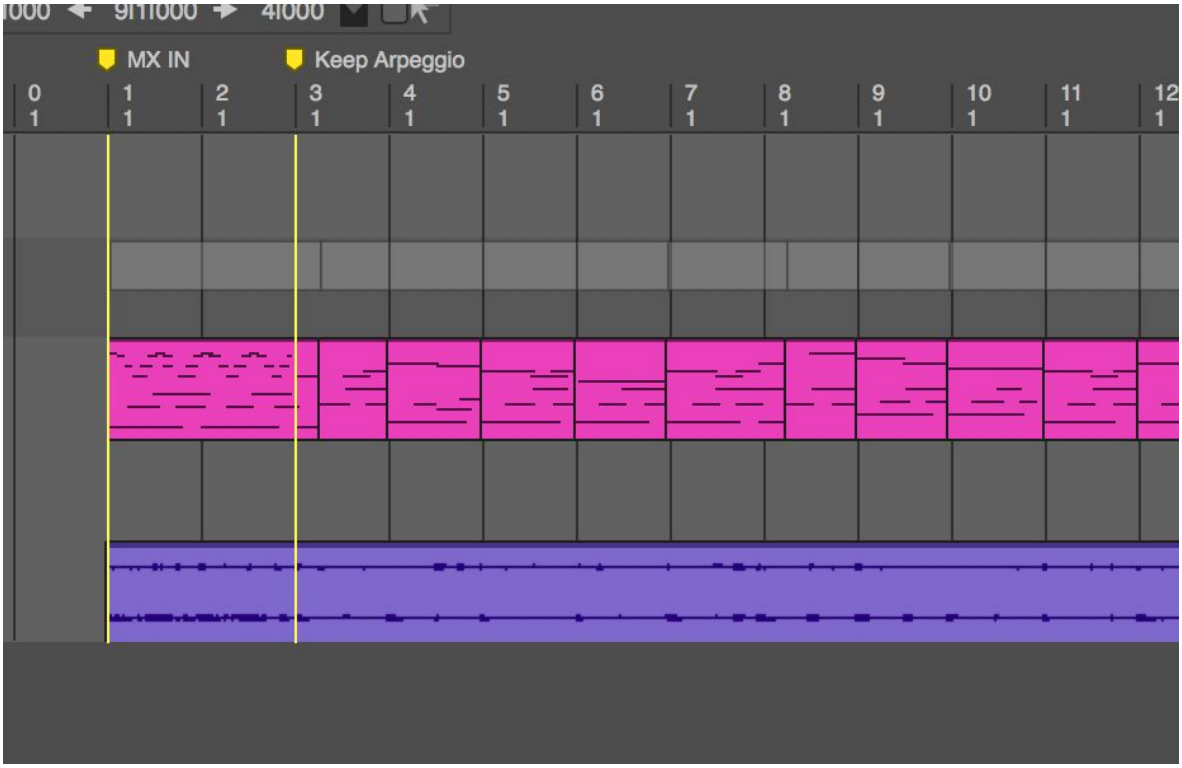
from that, I had an idea to write a cue based upon a royalty free script found online. However, it was very difficult for me to find one that I felt would not only work as a good cue, but as a good portfolio piece. This overall began to fuel my anxiety for the cumulative experience. With the increasing pressure to hand in material for the directed study meetings once per week, I had to force myself to work with material I was not happy with. I began to work on a fantasy-horror script, that vaguely reminded me of "Stranger Things", but after further thought, I dumped it as I couldn't find a way to work it well with the orchestra. Further frustrated, I went back to the idea of working with a film and I began to work with free narrative videos online. I eventually found a website that offered a short animation film that was offered directly to students studying film scoring. I began to spot the film and had resurged confidence with the whole project. The film had themes and ideas that really resonated within me and I felt like I could write a cue that would of worked really well for the picture. I created spotting notes and a piano sketch of the composition very quickly because of the resurged confidence. Soon later, I handed in the sketch and spotting notes to my directed study professor and began to discuss the legitimacy of the proposition. Unfortunately, with both of our agreements, we felt that this video also did not fit orchestral instrumentation at hand. The film I brought in would have better been scored with a piano basis and a few strings. No need to record an orchestra for it. Moving on from there, I once again looked for scripts that would work for the London piece. Even though I did eventually find one that works, I cannot lie and say I was in high morale. With all of this, it finally leads to my main point on this topic. The search to find a workable medium was exceedingly more difficult than I expected. There are a couple reasons for this. In the realm of creating an original cue for a young filmmaker's project, in my experience there seems to be less

and less for a need for a large cinematic orchestra. The types of films and projects being created is far more suited to working with small and more intimate ensembles, synths, and other styles/genres of music. While I truly love to work with these types of films as well, for the purposes of this project, it was difficult to find one that would work with this orchestra in London. Another reason for the difficulty was the idea of "finding a good medium for my composition". As this is truly a recording session for our portfolio and thesis projects for a lot of people (only few people used this for original scores), we needed to find a medium that also allowed us to showcase our music in the most effective way we can. After browsing many scripts and films, finding the right choice was critical.

I believe I led myself to find a decent choice for this recording session. I began to work with a script called "In the Hands of Time"[1]. I really wanted to work with a unique script that told a dramatic story. I would define this script as being Scifi-Romance. With a lot of themes that stick out in front of the story, it wasn't hard to come up with demos and concepts for the composition. There were a few methods I took to spot this scene. Firstly, I know that we are limited to a 3 minute composition time to our pieces. This isn't a problem, but it made me truly think about how I structured my music to the text. I began to come up with "timecodes" that would help sync the music and text together. These became my "spotting notes" on the script itself where I listed "what kind of music goes where". This in general was a smooth process and not only does it work with the character of the script, it also started to generate interesting ideas in how I could use the orchestra functionally. Moving to the spotting phase musically, I had to decide on what program I wanted to sync my music to the text. After all of the experience this

[1] Written by Cheickna Kebe https://www.simplyscripts.com/scripts/INTHEHANDSOFTIME.pdf

year during the SFTV program. I decided that Digital Performer is the most superior Digital Audio Workstation to sync timecode with music. This mainly has to do with how markers are laid out in the sequencer. The markers in DP are very "composer friendly" in how they function. Unlike other DAWs, the markers in DP signify a specific area or timecode in the sequencer, rather than an entire region.[2]




In this example, the markers are shown by the yellow vertical lines that indicate sync points with the music. At this point, I created a tempo map for how I would actually write the piece. While following the script, it led me to have a few various sections in the cue. Overall, the cue I designed has a couple collective themes. Melancholy but hopeful is one phrase to easily describe the beginning. It is a "flashback". While the audience understands what really is going on with

[2] Markers in other Composer DAWs such as Cubase or Logic are better suited for region markers, rather than timecode markers

Alice and Ben in the story, Alice starts explaining the flashback hopefully as she describes her life with her lover. The way I had to reflect that in my music is not with happiness or sadness. So finding the area between the two was a great challenge. For the rest of the cue it was easier because I set the tone from the beginning. There are instances of epic orchestral areas and instances of euphoric and ethereal solos.

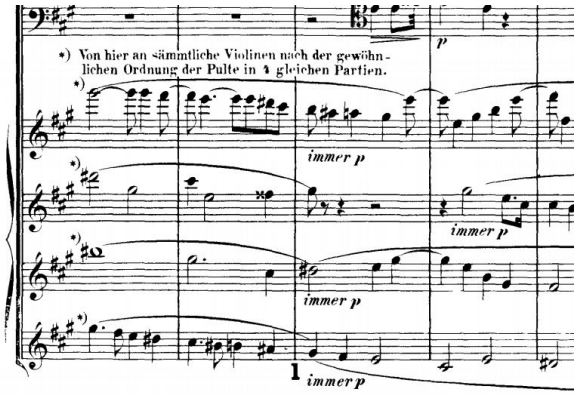
In the next part of the paper I will define the steps it took to produce the musical cue after the spotting stage. Now that the tempo map and markers are completed, I had another decision to make. As a production and composition DAW, DP was not my preferred software. I took the risky move to switch over and import the midi tempo map into Cubase. The reason why it was risky was because it was my first time producing an orchestral mockup on that specific DAW. While my usual software was Logic, there were many technological benefits in Cubase that suited my workflow. This mainly has to do with template creation and how virtual instruments interact with the DAW. On DP, all routing and connections have to be created and named manually. This gives you a lot of control over multitimbral instruments, but lacks time saving capabilities. On Logic, the way it connects with multitimbral instruments is less than preferred and should be avoided in many instances as the software is not well optimized for it. Cubase has been the most advanced because it held the capability of DP while having the simplicity of Logic. I was able to set up multitimbral instruments in Cubase's VRack that automatically created midi tracks for the amount I needed, with a few clicks create outputs that I needed for my instrument, automatically bus those outputs to AUX tracks, automatically bus the AUXs to audio tracks, with a few clicks offline bounce all the stems at once separated and organized. It was very easy to setup and it increased my workflow. I then created the piano sketch track to which

was loosely based upon ideas I had before in other sketches of the CE. This was not long to produce as I can come up with ideas quite quickly. Choosing the appropriate orchestral libraries and sounds was also not any difficulty. For this specific mockup, I decided to use mainly libraries from the Spitfire Audio library because they were recorded in the same hall as we recorded our CE in. Because of this, if I wanted to sweeten my final recording with my midi stems, they would blend very well due to being both from Air Studios. Those specific libraries were their Symphonic Strings, Symphonic Brass, Symphonic Winds, Orchestral Percussion, and Symphonic Harp. Other than that, I decided to add a choir to add to the tone of melancholy to the cue. This library I used is called Dominus by FluffyAudio and it is an absolute beautiful library that has patches soaked in reverb. Because of its specific dark style, it fit itself nicely within the other texture. Lastly, I used original bowed cymbal scrapes we recorded in the AKKS this year. This was part of creating our own sample libraries a few months back. Because of the cymbal, it adds more original flavor to the composition.

Actually creating the mockup and creating the living and breathing texture that exists in this piece was an enjoyable experience once I past the many stages I dealt with anxiety. As a mockup, the piece that acts as my CE now was the last of around 10 tries I had of designing a piece for the CE. Due to the negative repeating thoughts in my head I scrapped many versions of previous ideas. It even caused a delay in my workflow as because the “London experience” was so culminating, it created more pressure inside me to “create the best composition of my life”. Because I felt this pressure, I still to this day don’t believe I created the “best composition of my life”. But during my private sessions of Directed Study, I was given good advice in how to move forward and think of this session not of something so culminating but just as “another recording

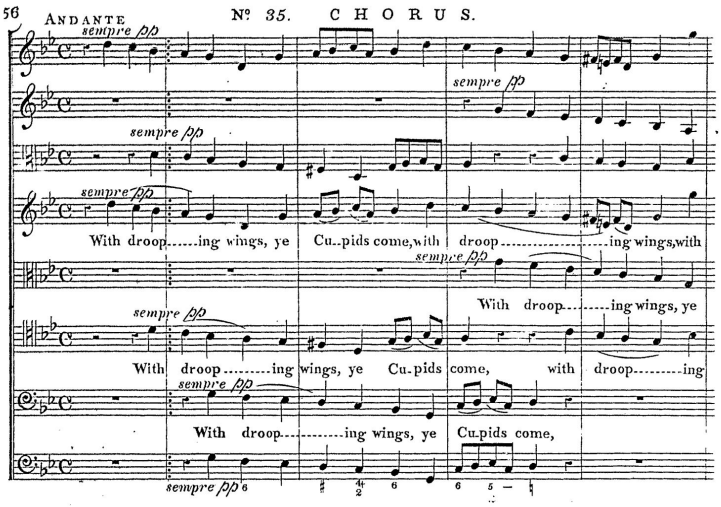
session". This didn't completely alleviate the pressure, but it did get me more in the productive zone to compose again. Going through this experience really defined my piece as a whole and the way I orchestrated it. I will explain later in this paper how this connected.

After conceiving ideas for the overall structure and timbre, I felt I was ready to title my cue for the standalone release. The title that was eventually chosen was "The Lament". Lament is usually defined as passionate expression of grief or sorrow according to the first link you will see in a google search. This however was not of the utmost importance to me. Thinking even further of the topic of Lament, I had to look back in the Classical music repertoire. After deliberating with my research, I was very moved by Laments such as Dido and Aeneas by Henry Purcell and harmony/texture in Wagner's Lohengrin and Tristan und Isolde. I

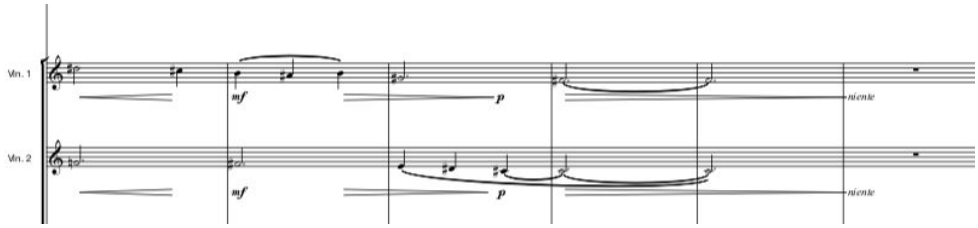



was very inspired by these pieces and characterized both of my slow sections within the piece around them. The figure I have above shows an example of inspiration of "falling" that eventually was simulated in my piece. Specifically, I was very interested in parallel and contrary motion Wagner uses during the Prelude of Lohengrin. While the harmony is always moving, the way it sonically works always seems simpler than as it's written. As a reference, Henry Purcell in Dido and Aeneas does something similar. While pertaining to more baroque style of

counterpoint, in the Chorus of "With Drooping Wings", Purcell achieves something of the opposite of Wagner in that while the writing and harmony is more simple, the counterpoint finds itself more sporadic sonically. [3] While there are specific topics within this piece that are really




interesting and wonderful to discuss, that is not the point of this paper. The choir in the production of this opera is very soothing and melancholic. Mainly because of this, I added the use of choir within my composition to add this flavor. I recommend when listening and analyzing my work to refer to the referenced scores as they create a lot of harmonic and sonic context for my orchestrational decisions. Here is an example of "falling down" and using parallel/contrary counterpoint in my score.




Overall, it did not take very much time to create a full mockup fleshed out with orchestral elements. Polishing the mockup and making it presentable to my peers and professors was the

[3] http://ks.imslp.net/files/imglnks/usimg/1/19/IMSLP275428-PMLP05472-Purcell_Dido_and_Aeneas.pdf

next stage. This mix, because of Cubase's simple template setup, was not very complex. The instrument families were already grouped and I was able to position them in the stereo image very well. Using Fabfilter Pro-R, I was able to position the instrument families under one cohesive sound. Using the mix knob on the reverb plugin as an insert, I can vary the distance between the initial sound, and reflection. The other "obvious" mixing decision I had to make was how to utilize the low end. Using a high pass filter, I was able to clean the low end very quickly. With a little bit of shaping EQ, glue compression, and limiting on the mixbus, the mix of the mockup was complete. The mockup was approved quickly as I had positive remarks from my peers and professors and I had to decide on the next best move.

At this point in the production process the date of the recording session has been moving closer and closer. The entire class body had to take a lot of care with time management and meeting deadlines. Knowing this, I had to move quickly and create my final score for the session. The best way, as from my previous experience in music preparation, is to export the midi session from the DAW, and import it in the notation software of choice. My notation software of choice of course is Sibelius. I have been a user of Sibelius for around 7 years and have used Finale as well. Overall, while I think the composer can create more creative looking scores in Finale, Sibelius is the most intuitive and has the quickest workflow. In this case, being quick is one of the most important attributes in this industry. With the overall score creation, what took the most amount of time was known as the midi cleanup phase. While using the "renotate performance" function in Sibelius, due to the size of the orchestra and complex textures, it took a considerable amount of time to make the appearance adequate. This command in Sibelius is extremely useful because it automatically aligns the sporadicness of midi to what

would be acceptable in a score. However, for this to work properly, care needs to be taken to when midi is exported. If midi is not exported to the grid of the composition, renotate performance would not work as viably. At this point, the score that is presented visually is ugly, sporadic, and not detailed. The clefs are incorrect, and many of the tracks don't even have proper instruments. This is of course okay for the situation because this Sibelius file acts as an organization file. After the notation is prepared, the notation will be copied and transferred to a film score template. This method is very beneficial to make the most use of everyone's time. Moving on, after the renotate performance, the process of transferring "mockup to orchestra" begins. Because of my ear training experience and knowledge of the orchestra, listening to my mockup and applying it to the capabilities of the orchestra was not difficult. Having good knowledge of how the instrument families work and how they work together provided a great basis in how to effectively recreate my mockup with a live orchestra. This all included in instrument timbre and color, dynamics, and expression. Going back to the themes and timbres I described before, I needed to find out how I could represent that in my orchestration. The biggest decision I made with this was changing bowing techniques with the strings. During my mockup review with my Directed Study, I was informed to change the beginning string section to all "sul tasto". Because of this specific technique, it created a cool and soothing texture that really worked well with my theme intent. Towards the end of the piece I did something very similar in the string section. But rather than making them fully only sul tasto, I decided to create more of a unique texture and mix half the string section playing sul tasto, and the other half playing con sord. This unique mix made a very interesting ethereal sound that made a wonderful pad. It worked effectively with the Oboe and Bassoon solo that was playing on top of it.

There were a few non spotting related aspects I wanted to add to this piece. As the composition moved along I wanted to add more personal touches that I knew would work really well with this orchestra. One of these aspects was to include a soaring trumpet solo. As a former orchestral trumpet player myself, I almost felt obliged to include a beautiful, lyrical passage for the performer to record. Having performance experience has been a huge advantage when thinking about how to utilize the orchestra and understanding what is and what isn't possible for players. So specifically with this recording, I used that to my advantage and while writing interesting parts for the musicians, I was able to make everything clear and idiomatic.

Finalizing the score for the session came after a few diligent hours of work. Once the different instrument lines were cleaned up and orchestrated, they were ready to be sent over to the score template specifically made for this session. Instrument by instrument was copied and pasted into the score template and is one of the cleanest and smoothest ways to clean up midi and produce a score. The rest of the work to the score evolved primarily as music preparation as it was time to make the score look clean, polished, and easy to read. Luckily on Sibelius this was really easy to do. Going into the layout tab, you can choose which systems and how many bars would be placed on a page at a time. This gives the preparator a lot of choice in how much horizontal space exists on the page. With my score, there weren't many hard decisions to make with measures per page.

Known by a lot of people to be one of the most tedious areas of preparation is preparing the performer's parts for the session. Luckily again, Sibelius can create all of the transposed parts with a few clicks of a button. Similar to above, to make the parts look clear, we need to adjust how many bars there are per system and how many systems per page. After doing this for

every part, it is important to perform a quality check for the parts that were just created and the score. Being the biggest and most important recording sessions of our lives, there was a lot of pressure to make sure all of our parts are clear with no mistakes. Mistakes including instrumentation problems, collisions, and cohesivity. With the score and parts being complete, it brought on the next phase of preparation for the session.

Creating the Protools session for the recording is one of the most important parts of the production and needs to be taken with a lot of care. The Protools session acts as the backbone of the composition with the click track being played according to its strict measurements. Because of this, the click track needs to be prepared carefully. At this moment of time, I even look back towards the first recording session we had at Berklee where I mishandled the click track in my Protools session. This wasted a lot of time during my session and didn't allow me to get the performance I desired. However, every session I've had at Berklee since then did not run into that problem. I would not have it ruined for the most important session of the year, so I worked hard to create a logical click progression and click playlists that would make sense for the Protools operator at Air Studios. Besides the click track, I made it of utmost importance to make sure the session was polished before submitting. This included adjusting the level of the click and making sure it's printed, turn off automation, and consolidating stems.

Whilst many of the aspects of the cue productions were complete, it leads us to the next phase. Once the previous files were uploaded for inspection it was time to prepare for the performance of the cue and leading the orchestra in the form of conducting. This next step for me was probably one of the most difficult as I could never truly define myself as a conductor. While I truly tried to practice for the session by myself, it did not prepare me for any of the

anxiety I felt towards the session's approach. By the time most of my conducting preparation took place was when we arrived in London. Many of us had a very good idea to practice conducting and performance in front of each other while playing the mockup for reference. By the time it was my turn to perform in front of my friends I had multiple instances of self doubt and grief where I was exclaim "my piece sucking" or "hating my piece". Taking none of it I received excellent instruction and confidence in how to prepare for the session correctly. My conducting in front of them was locked, insecure, and without emotion. Mainly, my problem was being too hard on myself and not enjoying conducting my music. I learned to loosen my wrists and decided to not follow the score for the conducting as I knew my music well. This not only allowed me to focus on the music more with my ears but also feel it. This translated extremely well into the actual session where confidence, calmness, and security was extremely important.

Then so suddenly Friday morning came upon everyone and day two of recording at Air Studios began. It is very well known already how impressive the facilities are at Air Studios. Making the comparison between Berklee's or Budapest's own facilities was not even close to fair because Air Studios was completely on another league. Intimidation was a huge factor for many of the students who were recording that day and I was also directly in that pool. By the time it was my turn to conduct and record my nerves have calmed down and the adrenaline of the situation began. Previous to stepping up to the podium, the day before I had more anxiety than I did then due to the anticipation. When the reality has finally initiated the most important thing was at hand and I had to go to performance mode. Because we all were watching and listening to previous recordings the sound was not a surprise at all the moment we took our first take. While the first take was nerve wracking I couldn't help but hear the sound of a phone going off

in the violin section.[4] Nevertheless, we pressed on and completed the piece. Every take since the first I let go of my anxiety and truly tried to enjoy the music I wrote and created for the first time on stage. With the music sitting unused on the music stand, I was able to concentrate on listening to the piece I crafted. The previous recordings during the Master's degree had me wanting to leave the podium the instant I stepped on. However, this recording I had no such feeling. Unfortunately, for the very first time I enjoyed conducting in a studio session, it had to end very quickly as each student only had 18 minutes to record. Due to the success of the session, I dropped all my burdens and felt at peace for once.

The next stages of the production of the piece takes us all the way back to Valencia were the post recording quality control takes place. In general, I am confident of my orchestral mixing abilities and wasn't intimidated about handling this session. We have been informed over and over again about the quality of the micing and how useful it is to use the decca tree and ambient mics for the session. I took that in mind and when I initially got the post recording session, I balanced the mics to my liking. Once that was taken cared of I initiated my usual protocols when confronting a mix. Of course being on Protools, I like to stay very organized. For sessions like these where dozens of tracks are used, it is important to route properly and color code. This is to make sure the signal flow is correct and not contaminated or interrupted. The simple philosophy of the routing is to make groups according to instrument families or tracks with sonic similarities. Then bus them to a mixbus that contains the information of the entire track. Because we plan on creating an online mix print, we will route the mixbus to an audio track that its purpose is to print the audio back into Protools. Making AUX tracks are easy and usually we

[4] I was told the engineer Jake Jackson covered up for the orchestra saying that the "ringing" noise was in fact part of my stems

would designate them by the type of mic or instrument. Taking many of the spot mics used per instrument and combining them into an aux track is really convenient for more powerful mixing and time saving. I then panned all of the tracks appropriately either to the orchestra position or for stereo image. Once this was done, I made my first pass through the tracks cutting unnecessary lowend that would clutter the final mix. This creates more clarity for the actual bass instruments and allows more control over the dynamic processing we will later use. It was now time to clean up frequencies that were reasonating, or causing issues in the overall mix. Using a clean EQ such as FabFilter Pro-Q is a very effective way to clean frequencies. It is very useful because it does not add any other unnecessary "color" or saturation to the sound that is undesired for an orchestral recording. I quickly noticed that there were problem frequencies such as 2khz, 1khz, 500hz and 300hz. The solution was simple as I made slight cuts to these frequencies of around 2-3 db throughout most of the tracks used. At this point, the moves I've made to the mixing stage has been noticeable as the sound opened up and allowed the natural tendencies of the instruments to shine more. In terms of compression and other dynamics processing there is only a limited amount of areas that I needed to focus on. In some areas of my piece I have rampant bartok pizzicatos that swarm the entire orchestra. In order to control the dynamics better, I placed a Waves Renaissance Compressor with very conservative settings to smooth out the transients. The pizzicatos are an effect, not needed to blow someone's face off. Other processing I needed to do included the percussion that needed to have the low end and transients controlled. This and adding saturation was important because I wanted and needed to have the percussion have a lot of presence. However, pushing them back in the orchestral setting using an

inserted reverb can lose the clarity of them. The processing I did before using reverb allows the percussion to still have the bite they did.

Speaking of reverb, it is another subject on its own. A very important note about this is that in order place our orchestral sections in the mix the most effectively we would use reverb as an insert. This can even fake orchestral depth if we were to work only with midi mockups. In most situations while using reverb, we would have the reverb inserted on an effects return channel separate from the rest of the mix. This is done for a few reasons. We want to limit the amount of usage of the computer's CPU has to deal with and only using one reverb that multiple tracks send to highly reduces the power needed. Second, it preserves the original tracks volume as it sends an additional portion of its volume to the reverb track, not just mixing its own volume directly. The reverb effect return track is immediately bussed to the mixbus where it is mixed to taste with the other group busses. Because the natural hall reverb of Air Studios sounds incredibly pleasant, I decided to only add a few db of reverb on average. However, I did not use a hall reverb, I used a plate reverb that created very nice shimmer for the orchestra.

The next stages of the mix really came down to a few last steps in order to shape the mix and provide cohesiveness to the track. I ended up using a few EQs on the mixbus. The first one scooping out some of the frequencies I mentioned before that were causing an issue. The next EQ had a simple role of providing more of a cinematic sound. This was done using the "smile" EQ curve. Simply by boosting the lows and highs and carving out some of the mids gives the track more of the characteristic of being cinematic. Next, I wanted to glue the mix together using mixbus compression. I ended up choosing the Slate Digital MU bus compressor as it is often used for cinematic score mixing. Lastly for the mix, I decided to give a sense of analog

feel by adding a tape machine to the mixbus. This plugin offers a nice smooth saturation that smooths the high end and creates more texture throughout the mix. Overall during the process I want to create to master files. One mix that would be acceptable to place in a post production mix, and another mix that would be acceptable to distribute on streaming platforms. The difference between these mixing and mastering techniques often have to do with the LUFS, of average loudness of a track. The movie music being at a much lower LUFS than the distributed one.

In conclusion, even though I did not score directly to the picture, but working with a quality script, I was able to simulate the process of scoring and producing a film cue. While I still have my natural doubts of my own music, the amount of growth I've seen in myself throughout the whole process has been immense. The positive aspects to the CE and overall experience working with a top level production team and orchestra really forces the student to take everything that was learned during the year and apply it cumulatively to the entire process. It was a test of time management, balance, self esteem, and dedication. From every step, to the planning, script/scene choice, spotting, composition and mockup, orchestration/score prep, recording, and mixing, everything that was learned throughout the year had to be applied to these very situations. Knowing for the future when similar opportunities present itself again, the other students and I will have more confidence and assurance in how to go through these activities in the most proper of ways.