

Berklee College of Music

Cosmos Laundromat - First Cycle:

A Reflective Thesis

Submitted in Partial Fulfilment of the Degree of
Masters of Music in Scoring for Film, Television and Video Games

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Abstract

This culminating experience paper reflects the process of identifying a congruent thesis film, studying and analyzing the film, scoring the music, preparing the score along with all the parts for the orchestra to play, practicing conducting the score appropriately for a recording session, recording the composition at a professional studio in London, and mixing the recording which, as a result, fashions a broadcast ready cue.

The film that was chosen was “*Cosmos Laundromat: First Cycle*”. This animated film proved to be a challenging one that taught me many valuable lessons. As a result of my experience, I am able to fully compose and produce broadcast ready music for movies, television shows and video games.

Keywords: film scoring, composer, orchestra recording, session conducting, mixing, animation

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Furthermore, To my instructors at Berklee College of Music, You have all opened my mind, stretched both my technical skills as well as my imagination and deepened my understanding of scoring. It is because of you that I finally have a discernible grasp of what my career really is all about.

Thank you Lucio Godoy for accepting me into this great college. I had a wonderful time learning about a very different culture. You have had a lot of faith in me and I hope I have lived up to, or exceeded your expectations. I enjoyed all of our many conversations about our careers and life. I think it is important to say that after every conversation, I would feel reignited and my desire to grow would always be revived. I hope to have many more of these battery charging conversations with you.

I'd like to also show my appreciation to Alfons Conde. I have learned some important lessons from you which, really took my compositional skills to the next level. My music is certainly less predictable, and I have learned some unique techniques to keep the "*engine*" pumping and provide more "*motion*" to my scores.

To Vicente Ortiz Gimeno, thank you for showing me the importance of having a well produced mockup. You have shown me many ways to treat my sample libraries in order to create realism. Thanks to you, my mockups are sounding better than ever. You have also given me some insight and tips in using the software Sibelius. This was extremely helpful especially with the score preparation for the London recording at Air Studios.

Additionally, Pablo Schuller for your great tips that will certainly speed up my workflow in Mixing. You allowed me to hone my skills in mixing orchestral music and now I am able to get my mixes at a broadcast and T.V. ready level. Your lessons on melodyne and RX7 also

broadened my scope of audio. I am now more confident in my mixes as well as more confident in producing clean and respectable sounding cues.

Last, but certainly not least, Sergio Lacima for instilling in me that I am a composer *“FOR”* something. I truly understand that I am not just a composer of my own fruition, but I am now writing music for a film, or television show, or a video game. I have also learned many technical methods in producing music for various types of video games, and have enjoyed learning the new compositional techniques required for these games to operate with the music. Most importantly however, is the fact that you have taught me how to conduct an orchestra. This was something that I had absolutely no knowledge of. After taking your conducting class, I have been told after every single recording, that my conducting was excellent. I was even told by some of the members of the orchestra at Air Studios, that my conducting was unpar. This is very impactful to me since I started out at Berklee with the thought of asking a fellow classmate to conduct my piece. I am elated to realize my potential, not only as a composer, but as a composer with the ability to conduct his pieces.

Introduction: *How it came to be*

Ten years of age was the mark of my new beginning. This was the moment my initial interest in music became an obsession. This is how it came to be. I remember as if it were yesterday. My Father came home with a DVD that he was longing to watch. The 1997 film “Titanic”. It was a Friday night, all my homework was finished, and I was waiting with anticipation for my parents’ arrival from work to start watching the film. Finally, after much anticipation, I heard the car pulled into the garage. After they settled in and got the dinner ready, they started the movie. I was shaking from the excitement. While the movie was nearing its end, something amazing happened. For the first time in my life, I noticed the music. I have always heard and loved the music in movies, but I have never before truly noticed it. It was the diegetic music that grabbed my attention. The unbreakable ship was sinking slowly, and the string quartet in the movie was playing the song “*Nearer My God To Thee*”. It was a beautiful rendition that I have never forgotten. This was one of the most impactful moments in my life, as this was the moment film scoring was introduced in my thoughts. After hearing the string quartet play one of the most sorrowful and beautiful songs that I have ever heard, a very faint but illuminating idea was placed in my mind. I knew at that moment that I’d like to compose music for films. I rewatched that movie about 3 or 4 times the next day and finally got a chance to really hear and appreciate the composition of James Horner. This is how it came to be. One film, one experience and one moment changed my entire life.

The Project: *Summary*

The film chosen was a 3D-animated short about a suicidal sheep named Frank. This took place on a lonely and desolate island. In fact, there seemed to be no other animals living on this island except for the other sheep. Victor, the only human showed in the film, appeared behind Frank during Frank's second suicide attempt. As Frank was tired of his mundane life as a sheep, Victor offered Frank the ultimate gift. He placed a timer device around Frank's neck, which allowed Frank to live a variety lives as different life forms in many worlds. However, Frank could only maintain each life form for a short period of time. After a few minutes, Frank would be transported to a new life form in yet another world. This was understandably confusing to Frank, but, since the alternative would be him committing suicide, it seemed like a good deal since he had nothing to live for. As Frank awaits his new life, he notices the sky opening and a terrifying whirlwind of colorful smoke quickly spiraled down towards him. Frank's adrenaline kicked in and he ran in a panic. However, he could not out-run the smoke. He was pulled into the sky and was never seen again by his fellow heard of sheep.

I was only allowed to record 3 minutes of music. Since the animated short was 10 minutes and 2 seconds in length, I chose a part of the film that seemed most interesting and that would still have a reasonably easy-to-follow narrative. Upon the approval of my advisor, Lucio Godoy, I started the composition at 5 minutes and 40 seconds into the film, and ended when the screen went to black at 8 minutes and 40 seconds (exactly 3 minutes in total). After the allotted compositional time frame was confirmed, the composition process began.

Finding the Film

I have always had a great relationship with my instructors at my previous schools. I knew that I would always be able to compose for one of the student's thesis films at Full Sail University. However, I wanted to make this my *Plan B*. Wanting to score an original short film that was not affiliated with a particular school, I contacted some of the directors that I had worked with previously, along with a few whom I have never met before. I thought it would be a good networking opportunity even if it did not work in my favor. To my surprise, none of the directors I knew was working on anything at the moment. To add to the discouragement, none of the eight new directors I had reached out to replied to me. *Plan A* was a bust.

It was two weeks before the Easter holidays and I knew that I had to set a deadline for myself. I told myself that if I did not find a film by the holidays, I would choose a pre-existing short. This meant that I would need to have a *Plan C* in place. As a result of *Plan A* failing, I decided that *Plan B* and *C* should be done simultaneously. With that in mind, I emailed an instructor, William Benton (commonly known as Bill), from the film department at Full Sail University, while, at the same time, searched on vimeo and youtube for a suitable alternative. Bill told me that he found an interesting film that required an orchestral score. He connected the students with me and we instantly started working.

After our meeting, the students told me that I would have a picture locked edit by the end of the Easter holiday. After the holiday, I attempted to contact them. However, to my

dismay, no one even replied. One of my instructors, Alfons, prompted me to start working on another film as means of a back up. I have worked on many shorts, and have dealt with this exact situation many times before. I knew that although they meant well, and their intention might have been to send the picture locked edit to me by the end of the Easter holiday, things just happen. It was at that moment I was reminded that a film composer is not the priority of the film. I learnt yet another important lesson. I am a server who enhances a film. I heeded to Alfons wisdom and quickly turned to an alternative pre-existing film. I quickly found one that was reasonably interesting. But after watching it a few times, I became less interested in it. I wanted to score something a bit more dramatic that could stretch my harmony palate. Although I started to compose ideas for this short, I was still hunting for another.

A fellow student of mine, Oscar Lundberg was thinking about scoring an animated film. He thought that this particular film looked amazing, but it was not exactly the type of film he wanted to score. After we spoke about the film for a while, I asked him if he was certain that he didn't want to score it. Without hesitation, he quickly gave me the email of Ton Roosendaal, the chairman of Blender and the producer for the film. This animated short was called "*Cosmos Laundromat: First Cycle*". I contacted Ton, and he was pleased to allow me to use the film for my thesis project. He gave me the link to download the video and my "alternative" thesis project began. Another lesson was learnt that day, Always have a backup plan, and then a backup for that back up plan.

Spotting the Film

After figuring out the best starting and ending point for the music, I spent a few hours watching that segment of the film multiple times. I watched it with the original audio of the film until I knew the dialogue verbatim. After knowing the dialogue, I watched it without any sound. Watching the film with no audio gave me a new perspective on the required music. It was almost as if I was able to feel the emotional output of the characters more intensely. This was a useful strategy that allowed me to jot down the major moods and emotions that I saw in the scene. With those, I was able to get a clearer idea of the texture that I wanted to create.

Next, I watched the film with the intent of finding any effective hit points. After watching it again for a few times, a few important instances really stood out to me. I then made markers in my digital audio workstation (DAW), outlining all of the hit points and the moods that were associated with them. I used the comments section in my DAW to also write down some notes on what exactly happened in the film, as well as any musical ideas that came to mind from these instances. Below is a table that demonstrates the hit points, description of what happened in the scene, the mood that exude from the instance, and comments on how I approached the music.

Time	Description in Film	Mood	Comments
05:43	Cue Begins	Delicate	The music entrance was meant to give a sense of allurement to the scene. There is a hint of sadness in the music with the intent to portray the suicidal sheep's melancholy.
06:21	Sheep looks back on the rope that he tried to commit suicide with.	Reflective sadness	A combination of softly played high strings with wood winds which gave an atmospheric saddened mood.
06:34	Victor, the human, looks up to the sky	Suspense	When Victor looked up, the chordal tone changed. This shift marked the entrance of the dark and mysterious sky.
06:38	The first sight of the dark sky	Ominous	The camera suddenly cut directly to the dark sky. So the music therefore abruptly changed into its darker nature and texture. Suddenly, the entire mood changed as the subject quickly transferred from the emotional content of Frank, the sheep, to the mysteries of the sky.
06:53	The starting of the wrist watch	A sense of a mission, quickly switches back to the bitter sadness of Frank.	I was struggling with this section of the cue. Initially, I wanted some motion with the instruments as well as to start a percussive rhythm when Victor starts the timer on his watch. But then it seemed too abrupt and didn't fit well. I still wanted a slight mission feel or the sense that something started. As such, I came up with the best solution I could think of. After introducing the time factor of the watch and the timer around Frank's neck, I quickly reverted back to Frank's emotion.
07:06	Frank looks up at the sky	Worrying sense of Wonder	This small transition to the sky was more of an obscure way to make the music seem like its getting lighter in density as the camera pans upwards to the sky. I

			was trying to provide motion that was in parallel to the motion of the camera. And hence landed in a steady resolve to what the sky was; a strong force of artificial nature.
07:43	Frank runs away	Chase	By design, I tried to make this segment more of a medium intensity. It was meant to give some drive to Frank's running. This is the first introduction of an urgent tempo.
07:58	Victor embraces and calls for the whirlwind	Light	When I saw this shot, I thought it was a great way to evolve the cue into something more chaotic. It was a beautiful shot where Victor seemed to be inviting the chaotic whirlwind to take Frank away. This was the Final Calm before the storm, or in this case, before the whirlwind.
08:02	Frank is running as hard as he can	Urgency	The music started to get a bit more chaotic with a faster tempo and a stronger notion of elevation in the music. When Frank lifts up off the ground, I attempted to use the music to again follow the levitation. I did this by stopping the Bases and Brass section. This sudden emptiness was intended to give a texture that signifies anti-gravity.
08:14	Frank is caught up in the whirlwind	Chaotic and Epic	This final segment of the film was the most chaotic to me. The whirlwind was spinning fast at its maximum cycle while Frank was stuck in the spiral with no hope for escape.
08:39	Black out	END	The cue ended with a Black screen and I used the opportunity to end with a low impactful sub hit with only the Gran Cassa. This marked the Finale, the true end of Frank's life as a sheep.

Compositional Process

Over the years, I have tried many different ways and processes to compose the music for a film. I found that one of the most efficient ways for me was to start with a piano sketch of any ideas that I would get. However, the end result was often much different from the sketch. I have a tendency to deviate from certain obvious moods and chords when I find an opportunity to do so. Regardless of that fact, I still found it useful to at least gather the main content of my thoughts with the piano. From the piano sketch, I would then determine the necessary texture options and any other subtle changes that would make a difference in the orchestration.

For this film specifically, I started my piano sketch knowing only two predominant facts that the music must center. The first one was that the music needs to be very dark. Not only is the film filled with dark clouds and lightning, but the entire concept of the plot was of a dark tone. The second thing that must be captured by the music was the chaotic confusion. There was a significance between the simplicity and the ease of giving up on life, and the drastic change in the complexity of living multiple lives. I tried to portray the two extremes of death and life, simplicity and complexity, with the music. After the piano sketch was completed, I started allocating the notes to various instruments. Simultaneously, I amended the composition during the orchestration in order to allow a more homogenous and fluid playability amongst the orchestra players. During my studies at Berklee, I learnt that I should always keep the playability

of the players at the forefront of my thoughts as I compose with my DAW. I tried to do this with every single phrase that I thought of during this composition.

The composition was going great and very fast until day two. Although I had my piano sketch of the remaining film outlined, I was still battling with finishing the arrangement and orchestration. I soon realized that the frustration wasn't coming from the film itself, but rather from my inner unimpassioned feelings towards the film. I lacked inspiration, I lacked motivation, and worst of all, I lacked the desire I once had to compose for the film. I had no time to reinspire myself as the deadline was quickly approaching. It was at this moment I realized how overrated inspiration was. This led to one of my biggest lessons. Waiting for inspiration is one of the biggest time wasters when it comes to meeting deadlines. There are many ways to spark inspiration, but I now believe that an even more powerful skill, is to learn how to create meaningful and expedient content without being inspired. It's similar to the analogy of the thermometer and the thermostat. Someone who can only create content based on the external factors are like thermometers. The environment affects them and they can not act unless external factors deemed it viable. Whereas someone who acts despite having a lack of inspiration are similar to thermostats. Unlike the thermometer that can only let you know if the environment is hot or cold, the thermostat changes the environment based on what it deems viable. Therefore, someone who can push through their lack of inspiration and spark their own inspiration through sheer willpower, will be able to shape their own environment. I overcame my lack of inspiration by simply trying anything I could. Some of the things I tried sounded terrible, but I still pushed through until it gave life to something that made sense. After three days of focus and hard work, I finished my composition.

Preparing for London

Succeeding the completion of the composition, I went directly to Sibelius and notated all that I composed. After preparing the full score, I meticulously edited and cleaned the individual parts so that all the specific parts were easy to sight read. Printing the parts were very tedious, but it had to be done. I was very pleased with the way everything looked and decided it was time to start practicing my conducting.

After the notated score was completed, my thoughts switched solely to the recording in London. Practicing to conduct the orchestra was now my priority. This was my most fearful part of the entire process as I had no conducting experience prior to this master's degree program. I believe that it is precisely my lack of experience that pushed me to practice twice as hard as anyone else would. I practiced so much that I didn't even need my score anymore. This really boosted my confidence and made it much easier for me to pay close attention to the sound of the recording rather than having to only concentrate on my conducting.

The Recording

When I first saw Air Studios, I was taken aback by its structure. I have seen pictures of the recording booth and the live room where they record the players, but I have never seen the outside of the studio before. The church architecture was a pleasant surprise. It sprung up excitement and made me extremely eager to record. I assumed that the acoustics inside was magnificent, and much to my delight, it was.

When it was my turn to record, waves of nervous chills suddenly came over me. At first, I thought to myself that this was going to be horrible. Much to my amazement however, as the song began, the nervousness slowly went away. I began to get more and more comfortable with the players and felt more confidence after every take. Then I realized that I was conducting the entire piece without even realizing it. It was as if my hands have developed muscle memory for each bar. All my practice truly paid off, and as a result, I was able to focus more on the quality of sound coming from the orchestra. This is something that I was and still am very proud of. After eighteen minutes of recording, my time was up. I got everything I needed and I was reassured that my music was a pleasure to play by a resounding applause from the orchestra. Reflecting on that day, I can see that I was fully prepared for the session.

Mixing The Cue

I received the Pro Tools session of the cue a few days after the recording. I was so excited that I started the mixing process right away. After listening to the session a few times, I began to edit certain parts that I believed had a better take. Once my comp was finished, I consolidated, did a save as, and started the actual mix. I spent the next 6 hours trying to get a clean and dynamic mix.

The process of the mix went as followed. First, I organized the session and created all the necessary auxiliary tracks. After all the appropriate routing was done, I Muted all the room and ambient mics and then proceeded in getting a good balance with the spot mics. I then panned the room and ambient microphones hard left and right according to their naming convention, and then listened to them to get the placement perspective in order to pan the spot mics. After panning the spot mics, I balanced the room and ambient mics with the spots and then began to clean the mix through use of equalization. After I filtered and cut the necessary frequencies, I then added compression to anything that needed it. After compressing, I added another equalizer to the mixing chain and mixed to taste. Here is where I boosted any frequencies I thought needed to be boosted. In some cases, I added a saturator before this equalizer in order to add harmonics and excite specific frequencies, and then I would use the equalizer after, to further enhance the frequencies if needs be. Finally, I added time based processing such as reverbs and delays to the

stem auxiliaries. I utilized the sends as this saves quite a bit of processing power to the computer. I also used various tools on the stereo mix bus (where all the stems and auxes are routed to) that helped to further clean, enhance and glue the mix.

I was overall pleased with the end result, especially after comparing my mix to different film scores. After limiting the cue, I got my mix to sound as loud as most other broadcasted scores of similar genres. I focussed on getting my Loudness Units Full Scale similar to various modern scores (ie. 2017-2019). This process really allowed my cue to sound more up to industry standard.

Conclusion

My growth throughout the year have been quite obvious to me. I have a stronger understanding of who I am, what I am capable of and I now realize the importance of preparation. My father would always say to me, “proper preparation prevents poor performance”. This alliteration has taken on new meaning, as I now have experienced the true power of being overly prepared. I have proved to myself time and time again, that I can achieve my goals and I will continue to strive towards excellence.

Those 18 short minutes on that podium have been enlightening. I feel empowered knowing what I have done. I have gained invaluable experience and have networked pricelessly. I am eager to start my new journey with all the knowledge I have gained from my masters degree. In going forward, I will utilize this knowledge and experiences to continue to compound my growth. Everyone that I will work with in the future will know that I am a graduate of the master's degree program in Scoring for Film, Television and Video games, from the esteemed Berklee College of Music, Valencia, simply because I will exude my excellence in every chance I get.

I will continue to learn and hopefully, I will find a way to give back as much as I have received during my educational chapter at Berklee College of Music.