

Berklee College of Music

Countdown:
The Creation of “Battle For The Atlas”

Submitted in Partial Fulfillment of the Degree of
Master of Music in Scoring for Film, Television, and Video Games

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Abstract

The purpose of this project is to offer a small inside look at my composition process when it comes to scoring a short film, as well as my experience with the final recording session at AIR Studios and my thoughts on the end results. This project has forced me to look inside myself in a way I am not normally used to doing, and has been highly beneficial in revealing things I never fully realized about myself. I hope you enjoy taking a look back with me at my musical process, and hopefully learning something new as I have!

Acknowledgments

I would like to thank the following people who have helped me come this far in many different ways, I certainly would not be where I am today without them. These people have all had an impact on my life and career, and I consider myself blessed and honored to know them. Frankly there are *far* too many for me to properly thank each one individually, but just know that if you're reading this and wondering "Huh, I wonder if that includes me too?", I assure you it does.

First I want to thank God, my Lord and Savior Jesus Christ for all he has done to help me get here and never leaving me through even my darkest times. I truly believe it to be a miracle to even have the opportunity to be in a program like this pursuing my dreams like I never thought I'd be able to. I truly mean it from the deepest places of my heart when I say; Thank you Lord, for all you have done!

I would like to take a moment to thank the teachers I've had, both past and present, whose instruction and mentorship I cherish deeply. I would like to thank some of my first music teachers: Doug Monroe, Carrie Clark, Chris Reason, Kristy Juliano, and Dr. Terri Yumae, who all saw something in me and encouraged me to continue pursuing music. I'm also very grateful to my undergraduate professors Richard Cionco, Leo Eylar, and Dr. Stephen Blumberg, who all patiently helped me enter into the world of music composition. I would also very much like to thank all of my teachers here in the SFTV program (Lucio Godoy, Sergio Jiménez Lacima, Pablo Schuller, Alfons Conde, Vanessa Garde, and Vicente Ortiz Gimeno), who have always been incredible teachers willing to answer any and every question I could think of, and even set aside time to help me further progress in my skills and understanding. Every single one of these individuals has my utmost respect and admiration, and I look forward to hopefully making them proud someday.

I'd also like to express my appreciation for my wonderful friends and family back home, as well as the new friends and colleagues I have made here at Berklee. The support and encouragement I have received from everyone has filled me with a gratefulness I can never fully express, and inspires me to continue growing, learning, and writing music. You all have really helped me realize the importance of people, of connection, and of sharing life together. I joyfully look forward to reuniting with many of you in the future, whether near or far.

I'd also like to say a special thank you to my older brother Andrew Findlaytor and his wife Karrie [Findlaytor], who have helped me so much in my most difficult moments. When I was in the middle of my most stressful times, they would come unexpectedly and take upon themselves some of the heaviest burdens I had, while reminding me to still try to have some fun every now and then. I hope to be able to help others someday like they have helped me, and hope they know that their kindness will never be forgotten.

Finally, I'd like to say thank you to my mom and dad, Lori and Alton Findlaytor, who have encouraged me to pursue my dreams since day one. Without them I'm honestly not sure I would have even applied to the program in the first place due to my insecurities. They have supported me in every way imaginable, from financially, to emotionally, and even spiritually. They have shown me nothing but love over these past years, and I can never truly thank them enough for their love and sacrifices, for raising me as they did, for... everything. Mom and Dad, thank you for believing in me before I even believed in myself.

I. Introduction

- TIME UNTIL CULMINATING EXPERIENCE RECORDING: *T-minus 273 days*.

We were informed during the first weeks of the Master's Degree program in Scoring for Film, Television, and Video Games at Berklee College of Music on how the program would unfold throughout the following year. There were mentions of various assignments, classes, projects, and opportunities, all leading to the final Culminating Experiences project; scoring a scene of our choice (with permission) using full orchestra, which will be recorded at AIR Studios in London, England (considered by many to be one of the top scoring studios in the world). The idea of recording a project like this was both thrilling and terrifying at the same time, considering at that point I had never even written for full orchestra before. The more I thought about the project, the more my head began to spin with a myriad of ideas, concerns, plans, and fears. I was unsure what to write for the longest time, and as the semesters began to pass my concerns grew greater and greater. Throughout the year, however, there remained one solid, unwavering focus point, a core idea that I had already realized as soon as I learned of the assignment: I knew I had to write one of my greatest pieces yet.

This may come across as something that should be obvious, but for me it was a crucial mindset that would influence every decision made surrounding the project, from video selection, spotting, orchestration, etc., to updating my Twitter and LinkedIn accounts in order to contact video makers and companies, as well as other decisions I never imagined I'd find myself making during the beginning of the program. This mindset of writing one of my greatest pieces yet was important to me because I needed to know if I actually *could write for film*, which is not the same as simply writing some music and putting it with picture. I needed to know if I was actually any good at this career path I had chosen, if I could actually

accomplish what I set out to do. This Culminating Experience project was how I was going to determine that.

II. Personal Background

- TIME UNTIL CULMINATING EXPERIENCE RECORDING: *T-minus 431 days*.

I remember well feeling very surprised while reading my acceptance letter from Berklee for the Film Scoring Master's program. It had been almost a year since completing my undergraduate degree in Theory and Composition from California State University-Sacramento with the goal of being a film or video game composer, yet I knew I was still ill-equipped for either one. I was becoming accustomed to receiving rejection letters from other schools, internships, and jobs I had applied for, so to be accepted to Berklee was quite unexpected. I remember my mindset being something along the lines of "This is it, this is my last shot at this whole film-composer thing," so I knew I had to give it my all, "*leave it all on the dance floor,*" as it were.

Musically my background was rooted in an unusual combination of love for classical music and video game soundtracks. Though I began learning music at age 9 playing trumpet, I didn't get really into music until my teenage years, when I would find piano versions of my favorite video game pieces and spend hours and hours learning and playing them, for example the "Overworld Theme"¹ from Super Mario Bros., "Electric de Chocobo"² from Final Fantasy VII, and "One Winged Angel"³ also from Final Fantasy VII. As I grew in my piano skills I was also introduced to more classical composers (or rather re-introduced, since I often listened to classical music growing up, but never played it), with the most impactful

¹ Kondo, Koji. "Overworld Theme," *Super Mario Bros.* Nintendo, 1985

² Uematsu, Nobuo. "Electric de Chocobo," *Final Fantasy VII*. Square Enix Co Ltd., 1997

³ "One Winged Angel," *Ibid*

on me being Debussy. “Claire de Lune⁴” was such an influential, piece on me serving as the gateway to more serious study of classical composers such as Debussy, Liszt, Beethoven, Rachmaninoff, Chopin, Stravinsky, Ravel, and many more. The combination of these two worlds, classical and video game music, brought to light within me the desire to compose. I can still feel the influences of both of these genres in my works to this day, being fundamental parts in my compositional style along other styles including rock and jazz.

III. Video Selection

- TIME UNTIL CULMINATING EXPERIENCE RECORDING: *T-minus 75 days*.

With the determination that I needed to write one of my greatest pieces so far for this CE Project, I knew I needed to have an equally great video to score. I needed a great video because it would essentially determine what kind of music I would write (while I was free to choose any video within a 3-minute max length, the music would still need to *fit* the video). This led to an interesting circle of searching for videos to fit the style of music I wanted to write, only to find one in a different style that I really liked, leading me to begin a new search in this new style only to find another video in a varying style, etc. Lucio Godoy -the program director and my directed studies instructor at the time- thankfully informed me about Vimeo, a website with an incredible number of great videos that was supremely helpful in my search for the right video (as I was having a great deal of trouble searching for videos that would work well for the assignment). He also helped me narrow down my decisions when I couldn't decide between the videos at the top of my list. I wanted to do something somewhat “epic” musically, or at least something “big” if at all possible, making full use of the incredible opportunity to write for a world-class orchestra. Some of my final video selections included:

⁴ Debussy, Claude. “Claire de Lune,” *Suite Bergamasque*. 1905

- “*Via*⁵” (<https://vimeo.com/bluezoo/via>), an animated short film by Izzy Burton about the journey of life, narrated by a poem which the film's events revolve around. A few examples include finding love, losing a pet, growing old, and more. I was drawn to this short film because of the artistry that went into it, as well as the beautiful combination of all the elements involved in its making. While “big, epic” music would not have fit in this film, I would have gladly written music to this film instead as I believe the results would have been truly beautiful, with a greater focus on melody and harmony than I would have had for other videos or short films. The primary reason I didn't end up choosing this film for my final project was simply because I was unable to get permission from the creator, having zero responses after multiple attempts to contact her.
- “*Halo 5: Guardians*⁶” Opening Cinematic (<https://youtu.be/44oJi5w2Wjc>). This cinematic was one I had rescored⁷ during a previous assignment in my Video Games Scoring class, with the results being one of my favorite pieces I had written in a long time. I liked the action-packed nature of the video and hoped to further improve my original composition for it, making full use of the full orchestra I was being given the opportunity to work with. However, after bringing the video with my piece to an advisor, he suggested I try to find a video with more emotional versatility (as opposed to solely all generic action the entire time), which I agreed would be a good idea for the project.

Eventually I settled on doing a rescore of a cinematic trailer for a game called “Atlas Reactor.” Though it's technically a trailer for the game, it plays out much more like an

⁵ Burton, Izzy. *Via*. Blue-Zoo, 2017. <https://vimeo.com/bluezoo/via>

⁶ 343 Industries. *Halo 5: Guardians*. Microsoft Studios, 2015. <https://youtu.be/44oJi5w2Wjc>

⁷ Rescore: to write new music to a previously existing work that already had an original score.

animated short film, complete with story, narrative arch, unique characters, and other things you would expect to find in a short film, which is part of what drew me to it. I also thought it interesting and beneficial that it could be appreciated and received by both game developers and film makers, since it technically belonged to both worlds. The story is fairly action-focused, beginning with our main character Lockwood (a mercenary for hire) trying to escape with a briefcase from two enemy mercenaries who are after the same briefcase. Throughout the first half of the trailer additional characters are introduced, establishing the two opposing sides of the conflict. After multiple rounds of banter and explosively energetic battles, the main character(s) emerge victorious in recovering the briefcase... to an extent. I knew the musical style I wanted to write in would work well for this short film, while also stretching me beyond my limits in scoring a film; something I knew I would need to do in order to write one of my greatest pieces yet.

IV. The Approach

- TIME UNTIL CULMINATING EXPERIENCE RECORDING: *T-minus 28 days*.

At this point I was still undecided as to which of the above-mentioned videos I would choose to work on, as I was still awaiting responses from some of the creators and companies about permission (although I was already leaning towards the Atlas Reactor trailer). I decided that it would be good to spot⁸ the video to see what would need to be done musically in order to fit the video. Spotting was one of the things I had essentially zero experience with before learning about it at Berklee, so I was excited to see how well I could do it. After watching multiple times with the sound off, my spotting notes were as follows:

⁸ Spotting: Watching the video in its entirety, taking notes of what should happen musically at each moment. Generally including written timecode, as well as briefly describing what is happening on screen. In normal circumstances, the viewing would take place with the director and/or the producer of the project, commenting on what they'd like to happen musically, the overall mood, etc., as well as talking with the composer to hear their thoughts/impressions. Spotting is usually one of the first things the composer is involved with on a film project.

Example 1. Spotting session notes for the "Atlas Reactor" Trailer.

Atlas Reactor Notes

- MX_IN: 0:01, swell to 0:03 (running close-up)
- (consider syncing explosion 0:06)
- Down for dialog 0:07
- (consider sync for realization 0:14)
- Sustained/suspended, slow-motion feel
- (consider sine bass downer 0:15ish, rising towards end. Resume music like before)
- (consider syncing gunshot 0:19, bullets only if it feels natural/not forced)
- consider syncing wall landing 0:24 (less intensity/motion)
- consider syncing scare 0:28 (again, shouldn't sound forced/out of place)
- Sync shadow of container 0:32 (music low followed by riser/swell)
- Sync landing with Hit! (percussion, orchestra, etc.)
- (consider moment of "cuteness" 0:37)
- Ominous at 0:41 (sync foot if you can)
- (consider syncing roar 0:45) (Brass)
- Sync pan to Zuki 0:48 ("backup has arrived")
- Dramatic cresc. at rocket launcher opening 0:57
- Sync cut 0:58, Suspension feeling with accented staccato syncopations
- (consider syncing pink circle 0:59)
- Sync rocket launch at 1:04 (rising flurry of runs (up, down a little, up further, etc.)
- Crescendo to synced stop at Explosion 1:08
- Music back in with helmet lift 1:13 (or earlier at cut after explosion (1:11))
-minimal motion, suspense, to somewhat ominous/dangerous feel
- (consider sync of shoulder brush 1:17)
- Sync foot 1:21, and all weapon draws + roar and cut to dog (maybe try to have more continuous music/rhythm than original, possibly slight accel?)
-Better to sync the cut, or the realization?
- Low, tense music during dialog 1:30 (little-to-no motion) (consider zoom to...)
- Sync face zoom ("that pooch is nuclear") (abrupt, dramatic, etc.)
- Build to roar 1:45 (maybe sfz/accented hit on far cut (1:40), leave sustaining note(s) after roar to connect to...)
- Battle really begins at head transformation 1:47 (so sync if you can) or 1:48? (jump on back)
- (consider syncing ground punch at 1:54) (again only if it doesn't feel forced/overdoing it)
- Probably sync slow-motion 2:02 & Punch 2:03
- Begin Climactic build-up 2:07 (tremos, long cresc, etc.)
- (consider syncing rocket jump 2:10 & hide 2:11) (Sfz, syncopated if need be)
- SYNC BARK 2:16 (Music stops) (stop before bark or FF hit with bark?)
- Music back in cut at 2:22 (sounds like mercenary music, "just another day's work," "victory...kind of", etc.)
- (consider syncing growl 2:25)
- (consider syncing briefcase notice 2:36)
- Outro grows 2:39 to F end

As you can see, there were quite a few notes I took, as I felt it would be fitting to include many sync-points⁹ in the video, treating it as I would an animation (which generally has quite a few syncs). I also wanted to push myself to do many syncs because throughout the year I often found myself struggling to hit them effectively/correctly. The times in these spotting notes were not official timecode, as I had not yet burned timecode into the video, so they

⁹ Sync-points: Synchronizations of an event happening on the screen to a musical event/response, with the former generally carrying greater importance and effecting the latter.

were based on minutes and seconds and were still effective for my purposes. The turquoise-highlighted notes indicated ideas I was uncertain about, and would ask my advisor about during directed studies (which were one-on-one meetings we would have with an assigned instructor for the semester, very similar to private lessons). The black highlight meant I had essentially no intention of executing this idea, but left it in the notes more as a reminder to myself that I had already had the idea but didn't like it, or at least thought it would be "too much." With the spotting completed, it was time to begin the difficult part: composing the music.

V. The Composition Process: Beginning

- TIME UNTIL CULMINATING EXPERIENCE RECORDING: *T-minus 15 days.*

The blank page. 88 keys before me. An endless sea of possibilities which would result in different musical outcomes. This is often the most paralyzing part of the entire composition process for me, and certainly one of the most difficult parts as well. This was only made worse by the fact I had put so much pressure on myself to write something better than I had ever written before. It may sound strange, but I am generally thankful for the framework of the picture and the limits and boundaries it imposes. When presented with too many options I find it very difficult to move forward, so having something I'm writing *for* helps give me internal direction, something that is absolutely needed when composing. Even with this direction from the picture (or whatever project I may be working on), beginning is rarely something I look forward to (though there are of course times in which this is not the case). I've tried many different methods of beginning a composition, from trying to formulate a strong idea in my head before writing/playing a single note, to improvising on piano, to going straight to notation. I find that what generally works best for me is improvisation, either on piano or using virtual instrument software to improvise on for

example a string section, an electric bass, or even virtual synths. For this project, I wanted to have music that sounded animated, with fast, driving motion that matched the action-packed nature of the video; yet I also wanted it to work well as a full, standalone piece. I decided to take the improvisation approach, focusing primarily on the rhythmic identity of the piece, experimenting with various keys and harmonic progressions, as well as a few melodic lines here and there. Eventually I found a rhythmic motif that I liked and felt worked well for the mood I was trying to achieve.

Main Rhythmic Motif:

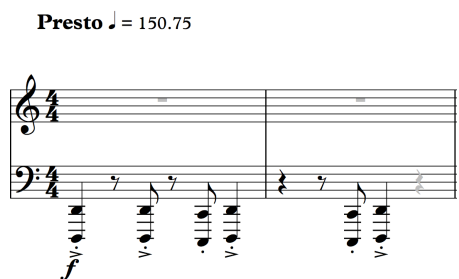


Figure 1. Main rhythmic motif for “Battle For The Atlas,” piano reduction. (m. 3-4)

I focused on the rhythm first because I felt that it would be the most important factor in the composition apart from the harmony and orchestration. There was a surprising amount of dialog in the video for an action-based short, so I knew I didn’t want to have too much melodic focus, leaving room instead for the dialog and some important sound effects. Other rhythmic elements that began to solidify throughout the process included a driving 16th-note pulse primarily written in the upper string parts, as well as accented rhythmic syncopations to match events happening throughout the video.

Figure 2. 16th-note motion in upper strings and accented syncopation, BFTA (m. 34-39)

The other key factor I knew would be critical in best supporting the video musically was the harmony. I needed the harmony to match what was going on throughout the video, serving as another force driving the momentum forward (or halting it when needed). This was achieved by using many non-resolving chord progressions, and especially by using unstable chords during the most intense/climactic moments. The key (really more the tonal center) I found fitting the mood I wanted was D Phrygian, though I freely moved in and out of it as I wanted. I've noticed that I tend to feel a difference from one key to the next, even when it's the same piece (for example, moving a piece from Db major to C major or D major would result in different feelings), so I spent quite a bit of time trying out different keys using the rhythmic motif to see which best fit the feel I wanted. A few of the more unstable harmonies I found myself repeating (with alterations) were Gsus4(add-b2), which was altered to G(add-b6, add-b2), as well as an overall augmented sound for continued tension throughout the fight(s), only fully releasing after the battle is finished.

Figure 3. Example of harmony during tension moments (piano reduction)

I also found myself making use of a fair amount of parallel motion harmonically, even sometimes using whole-tone scale-like movements. I believe this came subconsciously from my video game music influences, as well as Debussy (though not used to the same effect of course). Throughout this exploration of harmony (essentially continued improvising) I tried out multiple melodic figures and themes, though none of them seemed to fit quite right for me. In the end, only a few made it into the final piece, resulting in a work that may be difficult for the average listener to remember (since there's no clear, "singable" melody), but that fits the picture rather well in my opinion.

VI. The Composition Process: Mockup¹⁰

- TIME UNTIL CULMINATING EXPERIENCE RECORDING: *T-minus 13 days*.

I decided early on in the composition process that I would work/compose more so in my DAW (Digital Audio Workstation¹¹) rather than try to go straight to the notation software, as I tend to feel more freedom mentally in the DAW rather than being locked into bars and beats in notation software. I should mention that the DAW itself is not what gives me the sense of freedom, but rather the "virtual instruments¹²" I can use in the DAW, particularly the orchestral libraries I have (collections of orchestral virtual instruments). I like to think of this analogy: the DAW is the drawing canvas, the virtual instruments the various drawing supplies. A canvas by itself is not very useful without the tools to work on it; likewise, drawing supplies are most useful when you have something to work on, as well as something in mind that you want to create. I find it interesting that by many accounts it is

¹⁰ A Mockup is a realization of a piece using solely virtual/digital instruments, usually for demonstration purposes so the listener has an idea what the piece would sound like performed by live musicians.

¹¹ A Digital Audio Workstation is a digital system (usually software) used for recording, editing, and even producing audio (especially music).

¹² A Virtual Instrument is a software emulation of an existing acoustic or analog instrument, synthesizer, etc. They can also be non-emulations, instead manipulating various sound wave types in order to generate new, unnaturally occurring sounds.

“not good” to compose directly in the DAW, but rather one should compose outside it, either at the piano, with pencil and paper, or even in your head beforehand. I can understand the reasoning behind this, and honestly wish I was better about being able to compose this way (it’s something I feel self-conscious about sometimes), but I find that I tend to like what I write more when I begin in the DAW (or on piano) than trying to go with paper and pencil, all in my head, etc. For this project, I decided to stick with what I knew would work for me personally, and did most of my composing as well as orchestration in my DAW. I like the sound of using two or more orchestral sample libraries at once to create a fuller, thicker sound (a technique known as “layering libraries”), with the main libraries I currently use being Albion ONE by Spitfire Audio, and CineSymphony LITE by Cinesamples (as well as Stormdrum 2 by EastWest Sounds for percussion). Using these libraries, I can freely play and record every instrument or section in the orchestra to determine exactly how I’d like to orchestrate the piece, as well as improvise new parts that I had not previously written and are most idiomatic for the instrument (example, writing/playing in a flute run that I did not originally plan before).

VII. The Composition Process: Orchestration¹³

Throughout this project I really focused heavily on the way the piece was orchestrated, as well as how accurately it fit the scenes of the video. I really wanted to do a good job with the orchestration because prior to Berklee I had very little experience with orchestration, instead relying heavily on sample libraries. This brings me to one of the downsides of sample libraries, which is that it is very easy to write unrealistic or non-idiomatic parts for the instruments or sections of an orchestra. For example, with sample libraries I can layer multiple instances of string staccato notes to get a massive, powerful,

¹³ Orchestration is essentially deciding what notes each instrument in an orchestra will play.

cinematic sound. This massive sound comes from the fact that each *instance* can have around 50-60 musicians playing the notes (so long as they fall within an instruments range). Multiply that by the number of instances you have, and you can easily create sounds that would literally need hundreds of players in order to match the mass in a live recording scenario. That's why when these same notes are written for an average-size string section for a recording, it may not sound as powerful if you're not careful (because there's far less people actually playing the notes). I wanted my mockup to sound as close to how I imagined the actual recording would sound as possible, so I spent far more time focusing on each individual part of the orchestra, playing in each line carefully to get the realism I was looking for, as well as making sure that the orchestration was well written and creating the blends I wanted. This piece took me longer to write than any piece I have ever written of a similar duration, surprising me with how slow I was actually progressing with it. Though I grew more concerned as deadlines drew near, I knew I was going in the right direction compositionally as well as orchestrationally.

VIII. The Composition Process: Challenges

- TIME UNTIL CULMINATING EXPERIENCE RECORDING: *T-minus 8 days.*

By this time the piece was nearly finished, although I was struggling with the ending. I needed to write something that would fit the mood of the final scene, which takes place after the battle is finished. In the original score the mood and instrumentation shift drastically, from electronic with some orchestral elements to Latin jazz (including bongos, electric bass, and other standard instruments). I knew I didn't want that drastic of a change though, as I wanted the ending to still feel like it was part of the same piece (rather than two separate pieces played back-to-back). In order for this to work, I knew I needed to keep the same instrumentation and orchestration as the previous music, yet somehow capture the mood I

was looking for. The reason why this was a struggle was that I didn't want the ending to sound too "triumphant" or "heroic," as the main characters are mercenaries, solely battling for the sake of their paycheck. I felt that a strong horn line would not fit, as it would make the music too majestic, heroic, triumphant, etc. for the scene, nor could I do something overly "sweet" or "conclusive" with the strings and/or woodwinds. I needed a sense that this was not the end, that their lives and jobs would continue, while still sounding like a completed piece of music (and more importantly, a completed short). After multiple days of trying a myriad of ideas, I was nearly to the point of giving up and simply writing a mediocre ending until finally, with just two days left before all of my materials were due, I found the ending I was looking for. When I listened to the play back of the completed piece for the first time, I remember thinking to myself: "Wow. This is one of the best pieces I have ever written." The sense of relief was immense, far greater than I was expecting, although I knew my work was far from over.

IX. Preparing for London

- TIME UNTIL CULMINATING EXPERIENCE RECORDING: *T-minus 6 days*.

With the composition completed it was time to focus on the next major challenge: preparing the score¹⁴ and parts¹⁵. Thankfully at my previous school I had a good friend and mentor, as well as a brilliant composition instructor, who both thoroughly stressed the importance of having the score and parts as near-perfect as possible. Since these were both individuals I looked up to, I made it a point to take time and make sure my parts were pristine, or at least as close to it as I knew how. Because of this, I was much less worried about beginning the notated score than the composition process, though I did discover I

¹⁴ The Score is the written notation of all the instruments in the orchestra for the piece.

¹⁵ The Parts refers to each specific player's notated part to play in the orchestra.

didn't have nearly as much time as I originally planned to complete the score. I decided to use the music notation software Sibelius, primarily because it's what I've been using this past year at Berklee, and also because I knew I could make everything look good faster than I could in Finale (the other notation software I use). The most difficult part of writing out the notation for me was figuring out exactly what dynamics¹⁶, articulation¹⁷s, techniques¹⁸, etc. would best give me the result I was looking for from the live players. Dynamics, for example, are all relative; there is no fixed decibel level for a *mezzo-forte*¹⁹ marking (to my knowledge), so deciding between whether to mark something *forte*²⁰ or *fortissimo*²¹ took a fair amount of time (due to the number of instruments, since it's a full orchestra). Eventually, after a few nights of little-to-no sleep, I was able to finish the score and parts after double-checking them, triple-checking, and finally printing and taping every single part needed, as well as multiple scores (a process that took FAR longer than I initially expected, but was a good experience to have). Before printing the parts, I also had to prepare the Pro Tools session that would be sent to the engineers at AIR studios for the recording, something I thankfully learned how to do in this program and was fairly comfortable with by this point. The only thing left to take care of after all this was to pack my things for my flight to London the next day.

¹⁶ Dynamics are how loud or soft an instrument plays.

¹⁷ Articulations are directions on specific ways to play the written notes in order to achieve a desired sound or affect, for example very short, aggressive notes.

¹⁸ Techniques usually refers to more instrument-specific playing possibilities, for example a violin playing plucked notes versus bowed notes.

¹⁹ *Mezzo-forte* essentially means average volume, slightly on the louder side.

²⁰ *Forte* essentially means loud.

²¹ *Fortissimo* essentially means very loud

X. AIR Studios

- TIME UNTIL CULMINATING EXPERIENCE RECORDING: *T-minus 1 day.*

Being inside AIR studios was an incredible experience, let alone actually getting to *record my music* there. I remember having quite the epiphany when the first notes of the first piece began to fill the hall. All of the worry and stress over missing mistakes in the parts or session, to things going wrong during my recording the next day, not being able to conduct properly; all these went silent as my ears began to fill with incredible music, reminding me exactly why we go through all the trouble, all the headaches and sleepless nights, the classes, the programs, the years of education and instruction... It's for the music. I remembered in that moment the power of music, and why I fell in love with it in the first place; it makes me feel like nothing else can. In that moment, I was re-introduced to my love of music. It helps that the piece itself, by Benjamin Burrell, was brilliant, in addition to the unbelievably amazing players bringing it to life in the incredible space that is AIR studios. I spent the rest of the day at the studio thoroughly enjoying listening to my fellow classmates' compositions, as well as learning quite a lot by observing the interactions and feedback between the composer, the producers, the engineer, and the musicians. Upon the end of the first day of recording, I promptly headed to the apartment I was staying at to quadruple-check my parts and score, as well as practice conducting my piece; after all, tomorrow was the big day.

- TIME UNTIL CULMINATING EXPERIENCE RECORDING: *T-minus 2 hours.*

This was it. The Culminating Experience project. The recording session I'd been hearing about for nearly the past year was finally happening. By this point I knew it was too late to change anything, so all I could do was do my best and hope things went smoothly. I was nervous, but not as nervous as I was expecting to be. I knew I had an amazing team in the booth to help, with both Sergio Jiménez-Lacima and Vanessa Garde producing (both accomplished composers and teachers at Berklee), as well as Jake Jackson (an award-winning

associate producer and engineer), Lucio Godoy (award winning composer and program director at Berklee), and fellow classmates all there to help the session go as smoothly as possible. I was preparing to relax for a few hours, when Lucio unexpectedly approached me and asked if I'd be willing to switch my recording time into the set that was beginning shortly. Though initially surprised, I agreed to do it. I very much like the attitude of "be ready in season and out of season"²², so I was already mentally prepared to go at any moment just in case something like this was to happen. I quickly grabbed my scores and parts and distributed them among the players, engineers, and producers.

- TIME UNTIL CULMINATING EXPERIENCE RECORDING: *T-minus 2~~hours~~ 0:00*.

The session itself went extraordinarily well, far better than I had anticipated, or even hoped for. The musicians were able to play so incredibly well even on the first take it absolutely blew me away! The producers were quick to ask for clarification of certain spots as well as give feedback to the players directly, so I was able to fully maximize my allotted time of 18 minutes. The players were all very kind, easy to talk to, and responded well to feedback, resulting in each take being better than the last. It all felt like it happened so fast that it's hard to recall all of the details, but really one of the only issues I had and was unable to address in time was simply not writing a loud enough dynamic marking in a few places (like the beginning, for example), but that was easily taken care of later on in the mixing stage. After my session was finished I was able to relax a bit more and enjoy the rest of my classmates' pieces, as well as a Q&A session with some of the players and Jake Jackson. Recording at AIR was an incredible experience; one I definitely hope to have again in the future.

²² 2 Timothy 2:4, The Bible (New International Version)

XI. Post AIR: Mixing, SFX, Dialog, and Final Delivery

- TIME SINCE CULMINATING EXPERIENCE RECORDING: *T-plus 7 days.*

Mixing the recording was considerably easier than I was initially expecting, primarily due to Jake and the engineers at AIR doing such an incredible job with mic placement, balancing levels, and overall Pro Tools setup. Since the musicians were such good players, and the hall sounded so good, there really wasn't very much extra mixing needed in order to get a really good stereo mix, though I did layer my mockup underneath the recording to give it an even bigger sound. I brought my initial mix to Pablo Schuller (studio director and teacher at Berklee Valencia) who helped make some final adjustments to get a better mix which I was very pleased with. Now for most of my classmates, at this point all that was left was to sync the music to the video or complete a script (if that's what they chose); I, however, had chosen a cinematic that required me to create all the sound effects (abbreviated "SFX") for it, as well as record voice over for all of the characters. Even after the final mix of the music, my work was far from over.

Thankfully I had a few previous assignments that required SFX, so I had at least a little experience in creating and using them for a video. The process still took a MASSIVE amount of time and effort though, as I wanted it to sound as professional as the music I had spent the past weeks writing and recording. Through the process I discovered a new-found respect for sound designers, as the it is far more difficult than I believed it to be before experiencing the process for myself. I also was able to finally improve on some aspects of SFX that were a major struggle on previous projects (for example footsteps; I could never get them to sound quite right before), so I was really happy to be able to do better this time. I believe I spent over forty hours of work just on the SFX, not including dialog or the final dub. I feel it was absolutely worth it though, as they (the SFX) really bring each scene to life.

Dialog was another interesting challenge in that I had yet to actually do a project with character dialog before this point. The closest I came to this was a cinematic with narration over certain parts, but nothing that required me to sync voice actors to characters' lips. I was admittedly a little nervous, but the volunteers I had did a really good job with their voice-acting. This helped the syncing to picture go fairly smoothly and require significantly less time than inputting the SFX. Balancing volume levels between the different voices was a minor issue since the voice-actors stood at different distances from the microphone without me noticing (a lesson I have learned, and will pay attention to in the future), but that was one of the few things I really needed to adjust with the dialog.

The final dub was in a way the “moment of truth,” in that I would find out if all the separate areas I had created and recorded would be able to blend together into a video I would be proud of. Having all the elements mesh together was very exciting, and alleviated my concerns of missing some crucial factor or forgetting some important detail. Watching the finished product felt extraordinarily good, though I did continue to make minor “tweaks” and adjustments until I was pleased with how it had turned out. Honestly “pleased” is a rather mild way of putting it; I’m definitely proud of my work on this one, and I am really happy the results are as good as they are. While it’s true there’s always room for improvement, I do believe this turned out to be one of my best pieces ever, and easily one of my best assignments completed at Berklee.

XII. Final Reflections

- TIME SINCE CULMINATING EXPERIENCE RECORDING: *T-plus 23 days.*

Even now I am pleased with the end results, though looking back there are a few things I would have liked to have done differently. One thing that I think would have been very helpful in the composition process is to have completed the SFX and voice-over *before*

beginning the music so I would know exactly what to write the music around, and also because this is generally how projects go in the business, with at least a rough version of the SFX and dialog are already completed by the time the composer begins working on the project. I was indeed taught to approach the project this way (SFX and dialog first, then music), but because I was so focused on writing the music and the recording session that would follow, I simply decided to do the SFX and dialog after the music was already finished. Due to having the original cinematic as a reference I was still able to have a good idea where these elements would be in the frequency range, so there was not a strong negative impact on my music. Another thing I would have liked to have done is use more of the brass and upper woodwinds throughout the composition, particularly the trombones, clarinets, and flutes. These tend to be the instruments I am most uncomfortable writing for in an orchestral, action-style piece, so I think may have been “playing it safe” more than I needed to. I often struggle to find a balance between having instruments playing too much or too little, which varies from instrument to instrument, as well as style to style. I also think it would have been a good idea to experiment more with using electronic instruments in the final version of the music, as the setting of the cinematic is somewhat futuristic. Although I did try some experimentation (generally disliking the results), I believe I may have been able to find something subtle that would fit and add a nice touch. On the other hand, since I wanted this composition to work as a stand-alone piece as well as an effective score I remember being concerned that it may feel a little jarring to go from solely orchestral music to a section primarily focusing on electronic music, only to return to just orchestra again (even with subtle electronics). Looking back now I think it could have been done, but at the time I felt like the risks were not really worth the potential benefit.

One of the final things I would have definitely liked to have done differently is to “enjoy the moment” while I was recording at AIR studios. As mentioned previously, I

thoroughly enjoyed hearing my classmates' pieces; however, when it came to my turn I was fully focused on what needed to be done in each take (in "work mode," if you will), never taking even a moment to enjoy the music that I had spent weeks creating and preparing, which was being brought to life around me in that incredible place. I certainly don't regret focusing on the "work," but it would have been nice to allow myself to enjoy the experience in the moment more as well.

XIII. Conclusion

I am so grateful for being able to take part in an experience like the recording sessions at AIR Studios, as well as all the experiences I've had over this past year at Berklee. It has certainly been life-changing, taking such a massive step towards the career I have dreamed of since I was young. The number of things I learned here in the film scoring program are far beyond anything I expected, and even now I am still learning new things every day. I often wondered what would happen if I pushed myself beyond my limits in every musical aspect I could think of; this is essentially what occurred throughout the program, being most evident to me in the culminating experience project. While a part of me feels bittersweet that my time here in Valencia is coming to an end, I am also excited knowing that this is only the beginning of my musical career. I used to often wonder if I could actually do this, if I could actually be a composer for a living; I now know that I can.

- TIME UNTIL NEXT LIFE CHANGING EXPERIENCE: *T-minus...*

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