This Is Not The End

A thesis submitted by

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Abstract

This Is Not The End is the partial score for the original video game of the same name. The game is currently being developed by students from Northeastern University's Game Design program, with whom I collaborated over the course of the full academic year. In the words of creator Marri Kang, "*This Is Not The End* is a JRPG centered on the millennial experience with depression. The game is based on persnal experiences, outlining the process of accepting mental illness and, more importantly, learning how to heal from it." This thesis is a collection of five musical themes, each written for a specific event or setting within the game. Instrumentation for the live performance included wind controller, two synthesizers, violin, cello, and drum set. In addition, footage from the game was projected onto a screen in the background.

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Introduction and First Steps

The decision to compose a video game score for my thesis came quite easily. Ever since I was a child, video games have played a significant role in my life. The joy and excitement they brought me in my youth has stayed with me for years, resulting in feelings of sweet nostalgia. Even as an adult, my enthusiasm has not waned. I find myself deeply rooted in the gaming sphere, in tune with the latest releases and goings-on, and just as hungry for the next big thing as I was twenty years ago. As a musician, it occurred to me several years ago that I needed to combine two of my greatest passions and pursue a career as a video game composer. Throughout my life, video game music has permeated my consciousness, connecting me on a deep emotional level to the many games I've played. As a composer, I strive to carry on this tradition; to give future generations such a connection and hope that one day, they too will look back with warm nostalgia. Thus, when it came time to choose my thesis, I knew I had the perfect opportunity to begin setting this dream in motion.

My first step in the process was to actually find a game to score. This began in the summer of 2018. One of my goals with this project was to collaborate with university students, as opposed to professional developers. There were multiple reasons for this decision. First, given that I have little previous experience with but great desire to pursue video game composition, I knew that it would be very difficult to find even a single opportunity to work with professional developers. Secondly, even if I were to find a willing team of professionals, the odds would be slim that the thesis timeline would align with their development timeline. Third, seeing as how the thesis exists in the realm of academia, I thought it would be most fitting if I collaborated with others working in that realm. I believed that it would be beneficial to work with students who are just starting out, given that I'm at the same stage.

With this mindset, I began seeking out university students to collaborate with. My goal was to find students who were developing an original video game over the course of the entire school year. I started by researching Boston-area schools with strong game design programs. I also looked into schools with strong computer science departments, like MIT, to see if they had any year long game development courses. Next, I reached out to the heads of these programs and departments, with the hopes of finding an opportunity. Some schools, I did not hear back from. Others did not have the necessary requirements. Eventually, I heard back from the head of the game design program at Northeastern University, one of the best programs in the state. I was informed that undergraduate seniors in the program complete a year long capstone project, which entails the development of an original video game. I also learned that the program regularly collaborates with outside composers to write the scores for these games. Upon hearing this news, I knew that I had found the opportunity I needed.

Not long afterwards, the head of the game design program introduced me to Kellian Adams, the primary capstone instructor, and with that, the process was underway. After a brief exchange, Kellian introduced me to Northeastern student, Isaac Schutz, who was the "resident game composer." In September 2018, I met with Isaac and he informed me of the operations regarding the capstone project. I learned that the project begins with students splitting into groups of five or six - a mixture of developers, writers, and artists. I then learned of the next major step - the process of deciding on a game. This is when Isaac presented to me a list of games that I could work on. Scanning through the list, I noticed a game entitled, *This Is Not The End*, a personal project about overcoming depression. Immediately, I connected with the idea and knew that musically, it would be an excellent match. Upon making this decision, Isaac introduced me to Marri Kang, an artist and the creator of the game.

A week later, I met with Marri and learned more about *This Is Not The End*. Marri informed me that the game was based on personal experiences, and that its goal was to help others who may be struggling with depression. Stylistically, the game was to be an RPG, or Role-Playing Game. In a typical RPG, the player assumes the role of the protagonist and gains experience throughout the game, normally by means of battling enemies. This experience manifests itself as a growth in power and the acquisition of new items and abilities. The game would also be top-down, meaning that the player would have an angled, birds-eye-view of the gameplay. Graphics-wise, the game would employ a pixelated, 8-bit style, characteristic of video games from the late 1980s. After a thorough explanation of the game, I asked Marri about the various settings and plot events that required music. As this was still very early in the process, Marri knew of only a couple themes that would be needed: the "Title Theme" and the "Overworld Theme." Although this list was minimal, it was enough to get me started.

Composition Process and Formation of Themes

In October 2018, I began composing. At this point in the school year, the Northeastern students had just begun the development process, meaning that there was no game footage for me to compose to. While I didn't exactly *need* to start composing right away, I knew it would be unwise to wait, given that there was a significant amount of music to write. This idea of "writing blind" presented a real challenge since my past experiences with video game composition all involved the use of footage. This time, however, my only visual aid was the artwork that Marri had created before the development process even began (*This Is Not The End* was a passion project for Marri that she had conceptualized months earlier). This and a description were the only tools at my disposal. Therefore, my compositional process instead focused on attempting to capture the correct vibe. This meant staring at the artwork and trying to imagine what a specific setting in the game would sound like. I needed to hear in my head the music that would capture the mood Marri had envisioned. I'm unsure as to the likeliness of such a situation arising in the professional world, but I still feel that composing this way was a valuable exercise. Knowing what style of music connects to a specific mood or setting strikes me as an essential skill for any composer writing for the screen, and I feel that this experience was a catalyst for further exploration of such unique knowledge.

As I continued composing throughout the fall, I learned even more about the game's plot. *This Is Not The End* follows the story of a young, cycloptic creature as she ventures out into the real world and comes face to face with her underlying mental illness. The story opens with her, alone in her bedroom, contemplating her life. Upon leaving her house, the protagonist has the opportunity to wander around her hometown, where she can visit businesses and interact with locals. But as soon as she decides to leave, she encounters her primary enemy: depression,

personified by a shadowy, disembodied figure. After this encounter, the protagonist embarks on a journey into the unknown, throughout which the feeling of depression is constantly looming. Thankfully, the protagonist meets a number of other creatures on her quest, whom she befriends and learns valuable lessons from. Along the way, she also encounters monsters, with whom she does battle. These are not ordinary monsters, but figures symbolic of the various mental blocks that the protagonist must confront. While depression is the overarching enemy, these monsters represent contributing factors like low self-esteem and anxiety. When battling monsters, the protagonist receives the help of the friends she's accumulated along the way, each friend having a skill set that overcomes a specific situation.

Based on the above information, I decided that the thesis would consist of five discrete musical themes. These themes were to cover the gameplay and major plot points that Marri had described. In order, they are: the "Title Theme," the "Home Theme," the "Depression Theme," the "Overworld Theme," and the "Battle Theme." Based on my understanding of the game's style, I made a number of artistic decisions from the get-go. I determined that my five themes would loop, meaning that the compositions needed to end in such a way that would allow them to smoothly transition back to their starting points. Perhaps, in the future, the game will call for dynamic music, but at this point, static, looping themes felt more appropriate. I also decided that my compositions would all have a length of around 2'30". There were a number of reasons for this decision. First of all, I wanted the themes to be long enough for the development of multiple ideas. I wanted them to possess substantial arcs or climaxes, and I wanted the returns to their beginnings to feel earned and satisfying. Conversely, I wanted the themes to be short enough so that the player would be able to hear the entireties before moving on to the next area or event. However, I still wanted them to be long enough so that the player wouldn't become tired of them

if they decided to spend more time in one area. With these parameters set, it was time to make some serious headway.

The Five Themes

The first theme that I composed for *This Is Not The End* was the "Title Theme." This is the primary theme of the game and the music that plays over the title screen - the first thing the player sees when starting the game. Some of my influences for this theme were the soundtracks to *The Legend of Zelda: Ocarina of Time* (Koji Kondo, 1998) and *Celeste* (Lena Raine, 2018). I composed a draft of this piece in November 2018, but didn't officially finish it until March 2019. For this theme, I wanted to capture a mood of unease and anxiety, punctuated with quick, fleeting glimpses of hope. I felt such a mood was the essence of the game's story. To achieve this feeling, I alternated between dissonant and consonant harmony throughout the entire piece - a constant shifting of emotions. After opening with a thin texture of synth strings, the music progresses slowly by gradually introducing new instruments into the texture, the majority of which are playing ostinati (mm. 5-12). The piece slowly builds to a prolonged climax at measure 13, at which point all six instruments are playing at once; some an octave higher and some with extended melodic lines. At measure 25, the anxiety finally eases up, and the music thins out, leading back to the opening texture. The duration of this piece is approximately 1'45," which was shorter than I had intended. However, this length felt acceptable, given that a player does not typically spend much time on the title screen.

The second theme that I composed was the "Overworld Theme." This is the music that plays when the protagonist leaves home after her initial encounter with depression. My primary influence for this theme was the soundtrack to *The Legend of Zelda: Twilight Princess* (Toru Minegishi, 2006). Like the "Title Theme," I composed a draft of this theme in November 2018, but didn't officially finish it until March 2019. While many improvements and orchestration changes were made in the spring, the overall form and harmonic structure remained relatively

intact. This piece is written in AB form. The A section was intended to capture the feelings of hopelessness and "being lost"; feelings associated with depression. To capture this mood, I employed a droning, slowly undulating texture with occasional fragments of melodic material (mm. 94-107). Harmonically, the majority of this section alternates between two contextually "melancholic" chords: Fmaj7b5 and Fmaj7. It then undergoes subtle evolution before reaching a minor climax at measure 109, characterized by a shared melodic line between the violin, wind controller, and synthesizer. The A section ends with a thinning out of the texture and a brief harmonic transition into the B section.

The B section is characterized by a long harmonic progression, spelled out by the constantly arpeggiating synthesizer line (mm. 116-139, 152-167). It is meant to symbolize the journey the protagonist now faces; a journey into the unknown with unexpected, sometimes jarring changes along the way. Only once is the synthesizer interrupted - by the strings and second synthesizer from mm. 140-151. Although this section puts a hold on the preceding rhythmic activity, the overarching harmonic progression does not repeat. Instead, it builds to a dissonant, panic-stricken climax at measure 158, enhanced by the anxious melodies of the strings and wind controller, before thinning out and falling back into wistful, consonant territory at measure 164. After a held synthesizer chord and brief violin line at measure 168, the piece gently transitions back to the A section. The duration of this theme is approximately three minutes, which felt appropriate, given that the player is likely to spend more time in this area of the game.

The third theme that I composed was the "Home Theme." This is the music that plays while the protagonist is in both her bedroom and her hometown. Some of my influences for this theme were the soundtracks to the *Pokémon Series* (multiple composers, 1995-present), and *Earthbound* (Hirokazu Tanaka, 1994). For the "Home Theme," I wanted to craft a mood of deep

nostalgia. Given that the protagonist begins in a somewhat disheartened state, I imagined music that was sweet and wistful, but with an air of looming sadness. To achieve this, I decided to focus on developing strong melodic material. Since this music was to represent the feeling of being home, I wanted it to be consistent and memorable in a comforting way. I did so by utilizing variations of melodic and rhythmic material throughout the majority of the piece. I felt that repetition, like home, has a very comforting quality to it. The second section of the piece (mm. 35-49) captures this technique most of all. Repetitions and consistencies include the arpeggiation of the synth line, the rate of harmonic change, and the rhythm of the melodic lines. The only difference in melodic material during the repetition is due to the harmony dropping down a whole step (Ab/Gm to Gb/Fm). The lines still remain relative to their supporting harmonies.

The feeling of nostalgia is driven home even more by the synthesizer's music box sound, a sound which evokes thoughts of childhood. As the theme unfolds at measure 51, new instruments are gradually introduced, thickening the texture and increasing the level of activity. This change in texture and dynamics accompanies the change in setting from bedroom to town, as the character leaves home to wander around and interact with locals. The form of this theme is essentially AA'B, with the repetition of A being an orchestrated version of the synth-based original. At the end of A', an emotional climax is reached when nearly all the instruments have joined in (measure 67). The brief B section begins suddenly at measure 74 with the wind controller and synthesizer playing a soft, subdued four-bar idea, before opening up quickly to a repetition of that same idea in the form of a second highly-rhythmic climax (measure 78). The theme ends with a distantly-related coda at measure 82, which tones down and thins out the

music, before returning to the opening section. The duration of the piece is approximately 2'30", which is exactly what I had planned.

The fourth theme that I composed was the "Battle Theme." This is the music that plays while the protagonist is engaging with enemy monsters. Some of my influences for this theme were the soundtracks to *Chrono Trigger* (Yasunori Mitsuda, 1995), the *Pokémon Series* (multiple composers, 1995-present), and *Celeste* (Lena Raine, 2018). As I mentioned earlier, an essential part of RPG's is the battle component, which entails transitioning to a separate screen so that turn-based combat can commence. The basic form of this theme is ABC. For the A section, I sought to capture the intensity of doing battle by employing a driving sixteenth note rhythm played by the synthesizer and drums (entering at measure 209). However, I was informed by Marri that this particular battle music was not meant to be tense and dissonant, as much video game battle music is. Instead, it needed to be determined and optimistic, representative of the feelings required to overcome the mental blocks standing in the protagonist's way. Therefore, over the driving sixteenth notes, I added a “triumphant melody” - first played by the wind controller at measure 197, then by the strings at measure 211. I wanted a memorable theme that would lock the player into the action and motivate them to succeed in battle. The B section (mm. 224-247) is primarily an evolution of the material developed throughout the A section. Although the harmonic language is different, the melodic material bears many similarities, and the rhythmic propulsion is still very much intact.

With the C section (beginning at measure 248), I decided to change up the feel by locking the drums and synthesizer into a groove with a sort of half-time feel. The intention was to slow down the intensity of the piece before ramping things up again. As the second half progresses, instruments are added gradually, either doubling each other or adding new melodic lines (mm.

256-279). The tension and determination build over a rising half-step harmonic progression in the strings and synthesizers (mm. 268-275), followed by a series of chords which excitedly leads back to the original harmony (mm. 280-288). The theme ends with a climax at measure 292 in which all instruments are supporting the primary groove and a shared melodic line. This musical unity is symbolic of the multiple friendships needed for the protagonist to overcome defeat. The duration of this piece is approximately 2'30," which again, is exactly what I had planned.

The fifth and final theme that I composed was the "Depression Theme." This is the theme that plays during the protagonist's initial encounter with depression, which is personified by a shadowy, disembodied figure. My primary influence for this theme was the soundtrack to *Earthbound* (Hirokazu Tanaka, 1994), specifically the "Giygas Theme." Unlike the "Battle Theme," this music was not to sound determined and triumphant. This theme was to represent fear and anxiety; to represent the feeling of coming face-to-face with depression for the very first time. Capturing the sound of depression presented itself as an interesting challenge. To create the ominous mood of this encounter, I decided to compose a piece of purely electronic music; music that is not intended to be performed live. In regard to technology, I used software like Logic and iZotope to craft the appropriate sounds. I utilized a number of patches within the Logic library and manipulated them by adjusting parameters like equalization and the amplitude envelope. I used automation for volume and panning to create a more dynamic experience that took advantage of the full sound space.

I structured the theme like a flattened pyramid, with a long ramp-up and a prolonged plateau (essentially ABA). The "whooshing" sounds and ghostly ambience of the opening section were meant to capture the eerie, foreboding nature of depression; an entity that you may not be able to "see," but is always lurking behind you. The theme builds gradually with brief

harmonic punctuations before arriving at the plateau. The plateau is representative of coming "face-to-face" with depression; the moment that everything changes. To capture this rush of terror, I introduced a sudden, jarring harmonic progression, played by a synthetic organ. The short progression transitions gradually from extreme dissonance to “melancholic” consonance, representing a range of feelings that depression can cause, like fear and deep sadness. Over this progression, I added the heavily-obscured sounds of myself repeating the lines, "Why is this happening to me?" and "I'm not supposed to feel this way," which I had recorded with my H4n recording device. To obscure my voice, I used iZotope to cut out all high and mid frequencies, resulting in a muffled, ghostly moan. The words are essentially inaudible, designed to capture the feeling of "drowning," a feeling characteristic of depression. After repeating the organ progression three times, the theme transitions back to the eerie ambience that opens it. Once again, the duration of the piece is approximately 2'30."

Composing for the Performance

It wasn't until halfway through my writing process that I decided on the final instrumentation for the thesis performance. For the majority of the time, I was focused primarily on how the music would sound in the game. This was, after all, the purpose of the project. However, I soon realized that it was time to start composing and orchestrating with the performance in mind. Up to this point, the themes that I had composed utilized a variety of different instrumentations - all synth-based. Some themes used only four instruments; others used up to seven. I eventually settled on an ensemble size of six instruments, which included two synthesizers, a wind controller, violin, cello, and drum set. I knew that this would be large enough to cover all of the material I had written, without creating superfluous parts for players who would rarely participate. I chose this ensemble for multiple reasons. First of all, it was an ensemble that I was already familiar with, as I had been composing another piece for the exact same instrumentation since the beginning of 2018. Secondly, I felt that the inclusion of both acoustic and electronic instruments would create an interesting contrast and would be representative of the many timbral qualities video game music can take. At the same time, I was confident that the timbres would blend well and create a unique, cohesive sound, especially given the synthesizers' broad list of patches to choose from. I also felt that the inclusion of a drum set would add much-needed energy and momentum to the music. Percussion, and primarily drum grooves are an essential part of any video game soundtrack.

With this ensemble in mind, I began re-orchestrating. Depending on the theme, this involved either condensing the music or expanding it. Condensing the music typically proved easier, as it became primarily a decision of which instrument would play which melody or harmony, while always being sure to "spread the wealth." Expanding the music was sometimes

challenging, as I would need to make more involved decisions like splitting up parts, doubling, or adding new melodic material, while still ensuring that all instruments were contributing equally. Throughout this process, it was important to keep in mind that I was composing for live players. When composing for the computer, the options are essentially limitless. However, especially with acoustic instruments like the violin and cello, there are limitations, and not everything that I had written with the computer was playable.

When transitioning to the live version of the soundtrack, I also made a number of changes that were just for the performance. I believed these changes would improve the live experience, despite being wrong for the in-game experience. For one, I added a pizzicato section for the violin and cello during the A section of the "Home Theme" (mm. 35-42). I felt that these sounds would add a nice buoyancy to the music as well as bringing a welcome contrast to the colder-sounding synthesizer. For the game version however, I decided to omit this, feeling that the sound didn't quite fit the context. Another performance-only feature was the intense climax of the "Overworld Theme" (mm. 152-163). In the live version, I decided that all six instruments should join together to achieve maximum emotional impact. But for the game version, I felt that this would be too much, given that the theme is being looped, and that such a strong climax would overwhelm, if not distract, the player after multiple listens. Finally, I decided to change the ending to the "Battle Theme." Since this was the final movement of the performance, I felt it was appropriate to go out with a "bang." This manifested itself as the entire ensemble ending on a loud, exclamatory G major chord (measure 297). In the game, however, such an ending would be completely misguided, since the theme does not end, but repeats indefinitely.

Utilization of Music Technology

Over the course of the academic year, I worked with a number of different music software, such as Reason, Logic, Pro Tools, and iZotope. Not only did I become more proficient with the inner workings of these programs, but I also gained a deeper understanding of how sounds, in general, operate (waveforms, envelopes, etc.) and how to properly manipulate them to my liking. Learning how to synthesize and manipulate sounds from scratch has greatly reduced my reliance on pre-programmed sounds, like those found in the Logic library, and that will be a very important tool going forward, given my interest in electronic music.

Regarding the use of technology for this composition, I had a very specific process. I would always begin by composing at a keyboard, whether it be piano or MIDI keyboard. While doing so, I would be sure to display the game's artwork in front of me and keep in mind the intended vibe of the theme. My next few steps involved switching back and forth between two software - Logic and Sibelius. I decided to use Logic, because it's a powerful, intuitive digital audio workstation with a substantial library of sounds to choose from. By experimenting with these sounds, I was able to gain a better idea of what the music would actually sound like in the game. From this point on, regardless of whether or not the music was composed in Logic, I would begin notating in Sibelius. For the live version of my soundtrack, the process would end here, resulting in a fully notated score and parts for all of the performers.

The game version, however, was significantly more involved. After assembling a full theme in Sibelius, dynamics and all, I would export the individual parts as MIDI files, then upload them back into Logic, where I would be able to choose from a larger and more appropriate library of sounds. My reason for composing this way concerns the idea of "perfection." With my in-game compositions, I sought a perfectly quantized piece of music with

rhythmic accuracy and easy control over parameters like volume and note velocity. Essentially, I felt that this particular style of game required complete precision, and I didn't feel I was capable of entering my entire composition into Logic in such a manner. Had the game been a visually stunning, 3D cinematic epic, deserving of a fluid, symphonic score, my process may have been very different. However, this was not the case. Stylistically, *This Is Not The End* is reminiscent of the 8-bit games of the late 1980s. Thus, a purely synth-based soundtrack seemed far more appropriate.

Collaboration

One of the most important aspects of this experience was having the opportunity to collaborate with developers; to work side by side throughout the entire process. Using the video game communication app, Discord, I made sure to stay up-to-date with the Northeastern developers every step of the way, consistently updating them as to my progress. Whenever I had questions or needed clarification on something, I made sure to reach out immediately. And whenever I had completed a draft of a theme, I would share it with them and ask for feedback. One major concern of mine before the process even began was how the developers would react to my music. How would it feel if they didn't think my music was a good fit? What would happen if they asked me to change or completely scrap a draft that I had spent weeks working on? Thankfully, these are issues that I never encountered. Much to my surprise, Marri and the other developers consistently celebrated my music, assuring me that it was a great fit and that it perfectly captured the vibe they were going for. The only time I was asked to make changes simply involved omitting the first two bars of the "Battle Theme." Receiving good news like this was always a relief, though I am aware that with professional game development, a smooth experience like this is very unlikely. In some ways, I wish that I had experienced disapproval of my music. One of my intentions with this thesis was to take part in an authentic game development process, and the struggle of having to rework my music or start from scratch would have been a valuable learning experience - an experience that I'm sure to encounter going forward.

Another form of collaboration that took place involved the rehearsal process. Rehearsing for the performance was a wonderful and extremely valuable learning experience, and having the opportunity to work and share my music with performers of such a high caliber was truly

humbling. This was the most time I had spent working with an ensemble for a performance of mine, and I feel like the experience really sharpened my collaborative skills. It also gave me more confidence as a composer; more confidence to open up about my music and lead a rehearsal; more confidence to open myself up to criticism and make artistic compromises. It was also incredibly valuable working so closely with a conductor. Like with the performers, this was the most time I had spent with a conductor (in this case, Bo Konigsmark), and I believe that the experience really enhanced my sense of collaboration. I felt like we were a team, working together to breathe as much life into my music as possible. Receiving feedback from Bo was especially valuable since he had spent so much time combing through my score, trying to understand the personality and intention of the music. Witnessing such a process made me more aware of how my music is perceived by others prior to actually hearing it. It was especially helpful observing the way he conducted specific sections and time signatures; deciding, perhaps, to conduct in one instead of four. I believe this knowledge will lead me to write music that is more intuitive upon first glance, and that lends itself better to conducting.

Development Issues

Despite the majority of the development process running smoothly, I eventually encountered a snafu not long before the thesis performance. Much to my chagrin, I discovered that the developers and I had branched off onto different work timelines. Based on my communication with the team throughout the year, I made the foolish assumption that we were at the same point in the process. This would imply that the five themes I had written were already programmed into their corresponding settings and events within the game: the title screen, the protagonist's bedroom and hometown, the depression encounter, exploring the open world, and battling enemies. Speaking with Marri in the late fall, she confirmed that these were the five themes to focus on and that the final presentation for her team was on April 11, just eight days after my performance. This led me to believe that the demo version of the game would be essentially finished by April 3.

However, this was not the case. As it turned out, the developers had only programmed content that covered two out of my five themes, meaning that I was much further along than they were. This meant that I didn't have game footage to present for the majority of my performance, a harsh blow to my original plan. While it was definitely better to be ahead of schedule, this dire situation still shined a light on a lack of communication that I hadn't even considered. Despite communicating quite often about my music, I realized after the fact that the developers and I rarely spoke about where *they* were in the process. They were receiving my music, but I wasn't receiving their updates. I also realized that I should have requested their latest builds of the game more often. This would have given me the opportunity to actually play the game and learn how far along they were. It wasn't until the last month or so that I began asking for builds. Why I made this mistake, I do not know.

Unfortunate as it was that the performance slideshow did not contain much game footage, I came to the conclusion that there was really nothing I could have done about it. Even if I had been communicating with the developers about their progress, it wouldn't have changed the final result. For this thesis, I needed to include multiple themes. I required at least 10 minutes of music, if not 15. If I had been on the same timeline as the developers, I would have had only two themes to present, which, time-wise, was equal to less than half my desired length. In addition, I could not have intervened and attempted to controlled the pace of the development process; this was not my place. I was the composer. I was an equal partner, not the team leader by any means. It would have been inappropriate for me to force the developers to work faster, and doing so would only have fostered a strained relationship. One of my intentions with this project was to take part in an authentic game development process and taking on such an authoritative role as the composer would not have been authentic or welcome. Besides, these were undergraduate students I was working with, not professional developers. For some of them, this may have been the first game they had ever worked on. Thus, in hindsight, I could not have expected them to adhere to a tight schedule when so many problems were likely to arise.

Without much game footage to present, my task of assembling a slideshow for the performance became significantly more difficult. By this point, I had footage for just the title screen and the protagonist's bedroom and front lawn. I decided very quickly that I was not going to scrap the entire slideshow, as this was an important component of the thesis since the very beginning. I was also not going to use it for just a portion of the performance, as doing so would have created an uneven presentation. As I considered my options, I recalled that Marri had already produced a decent amount of artwork for the game, some of which I already possessed. Thus, I decided that the three remaining themes would be accompanied by stills from the game.

While this was less than ideal, I felt like I could integrate them in such a way that they would help tell a story and contribute to a cohesive presentation. I ended up including single or (in the case of the "Battle Theme") multiple stills for the remaining themes that I felt really captured their moods without drawing too much attention to the fact that most of the game footage was missing. Thankfully, this idea worked, and the final product was a success.

Adapting a New Style

A major struggle and concern of mine which became apparent during my compositional process was the idea of compromising my voice and skill level to satisfy the new medium I was working in. Given that, up to this point, the majority of my work consisted of stand-alone compositions, I was worried that my style would not translate well to the visual realm, a realm with many restrictions and expectations. In this medium, I no longer had the freedom to compose whatever I wanted. There were now tough limits in place. I needed to compose music that was a certain length, that captured the appropriate mood, that supported the gameplay, that didn't distract the listener too much, and that, most importantly, was still interesting and enjoyable to listen to. With these daunting parameters in mind, the concern that troubled me the most was the thought of losing my voice or distilling my music to the point where it wasn't interesting anymore. I felt like the freedom that I experienced with concert music was partially responsible for the "success" of my compositions. Despite these concerns, I knew that my primary objective was to compose music that effectively supported the gameplay and captured the mood of whatever setting or event was present on screen. Judging by the developers' feedback, this objective appeared to have been met with every theme. However, I still worried that my music for this game, and perhaps even my future video game music, would be less interesting and "complex" than my past concert music.

Thankfully, due to positive feedback from collaborators, peers, and faculty, as well as personal reflection on my own part, I arrived at the conclusion that although my compositional style will undergo changes as I transition to this new medium, my voice will remain intact - or at least a positively-distilled version of it. I have accepted that, in a way, I'm starting over from scratch. No longer will I have the relative freedom I experienced as a composer of concert music.

I will now need to compose within a specific set of parameters; a different style of composing that I will eventually become accustomed to. To continue writing "interesting" music, I may need to rely on other techniques; ones that may have taken a back seat in the past. Such techniques might include clever orchestration, development of motifs, modal interplay, polyrhythms, and effective use of technology - all characteristics of great video game music. There is a lot of experimentation to be done, and I'm hopeful that I will be able to successfully adapt my style so I can begin growing in a different direction.

Concluding Remarks

Composing the score for *This Is Not The End* has been a rewarding and fruitful experience. I am so thankful that I have had the opportunity to work on a game with such a deep and meaningful story; one that I, and many others, can connect to on a personal level. Having this connection allowed me to imbue my own emotions and experiences into the music, and made it possible for me to write a score that properly captured the game's overall mood and aesthetic. While *This Is Not The End* is an excellent match for my compositional style, I believe that, going forward, it will be highly beneficial for me to work on games that don't, necessarily, seem like a good match. Doing so will allow me to expand my range as a composer, thereby opening myself up to more professional opportunities.

Over the course of the year, I have furthered my skills as both a composer and collaborator and grown closer to achieving my ultimate goal. Taking part in an authentic game development process has been beyond valuable, and I'm very thankful for Northeastern University and the student developers for giving me the opportunity to do so. Going forward, I hope to apply all the knowledge and skills I've acquired from this experience and continue down this new path I've forged. I hope to continue adapting my compositional style to fit this new medium, and to utilize all the music technology with which I've become proficient.

I'm optimistic that my work on *This Is Not The End* will lead to future collaborations with professional game developers, giving me the opportunity to apply everything I've learned and truly flourish. This is not the end.

Alexander Hite

This Is Not The End

(2019)

for
Wind Controller
2 Synthesizers
Violin
Cello
Drum Set

Synth Patches

1. Title Theme

Wind Controller: Smooth, space-like

Synth I: Soft Sawtooth

Synth II: Synth Strings (long release)

2. Home Theme

Wind Controller: 70s Analog

Synth I: Electric Piano (full-bodied, resonant)

Synth II: Electric Piano (bright, sharp)

4. Overworld Theme

Wind Controller: Smooth, space-like

Synth I: Electric Piano (full-bodied, resonant)

Synth II: Synth Strings (long release)

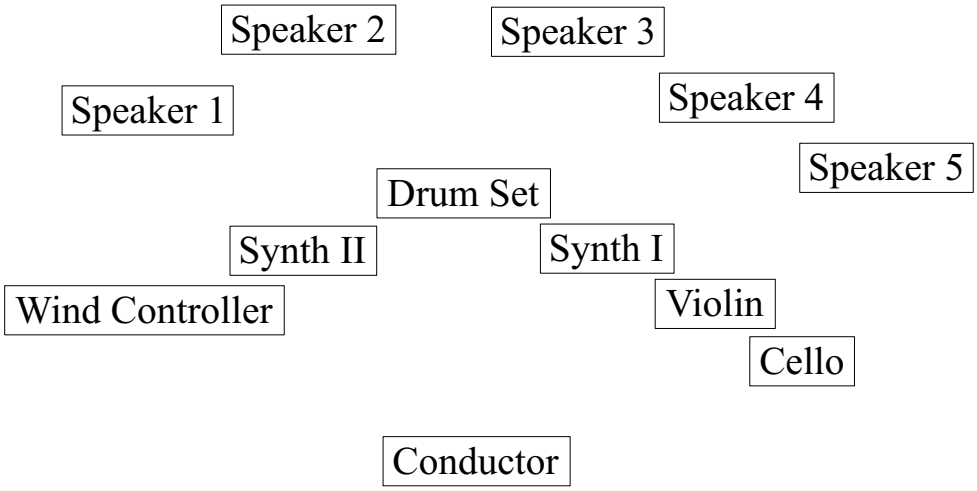
5. Battle Theme

Wind Controller: Smooth, fluid

Synth I: Electric Piano (full-bodied, resonant)

Synth II: FM Piano

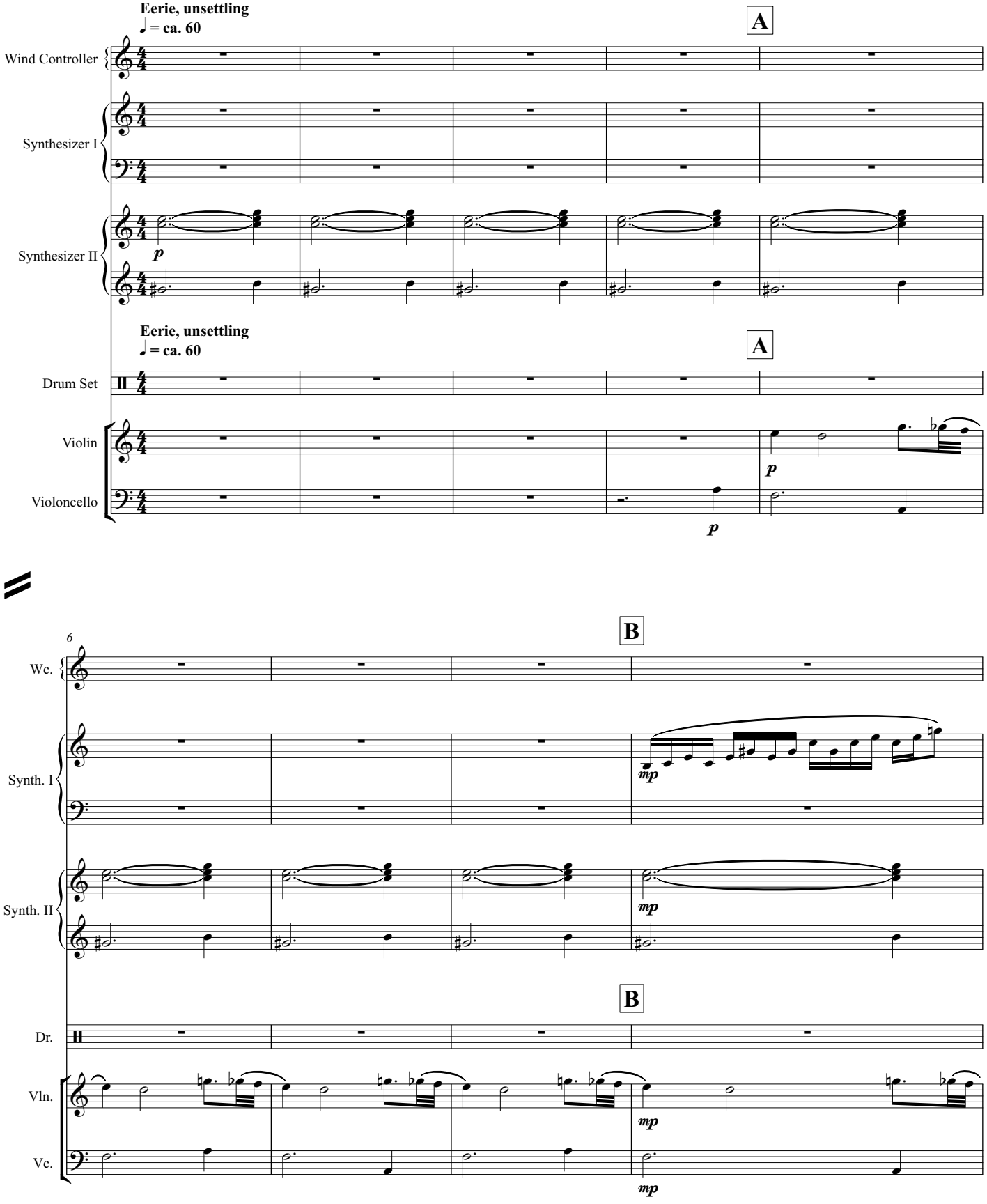
Performance Layout

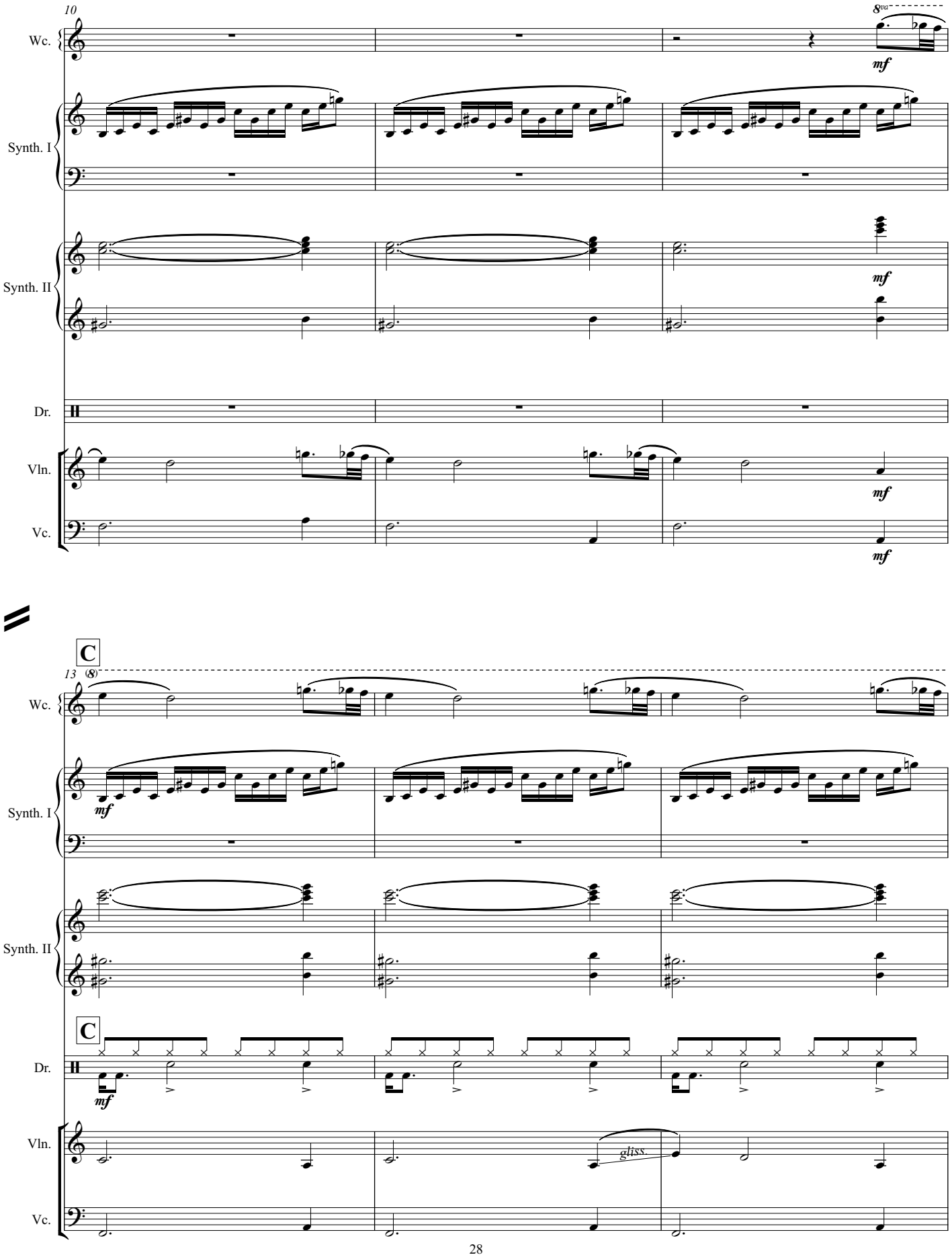


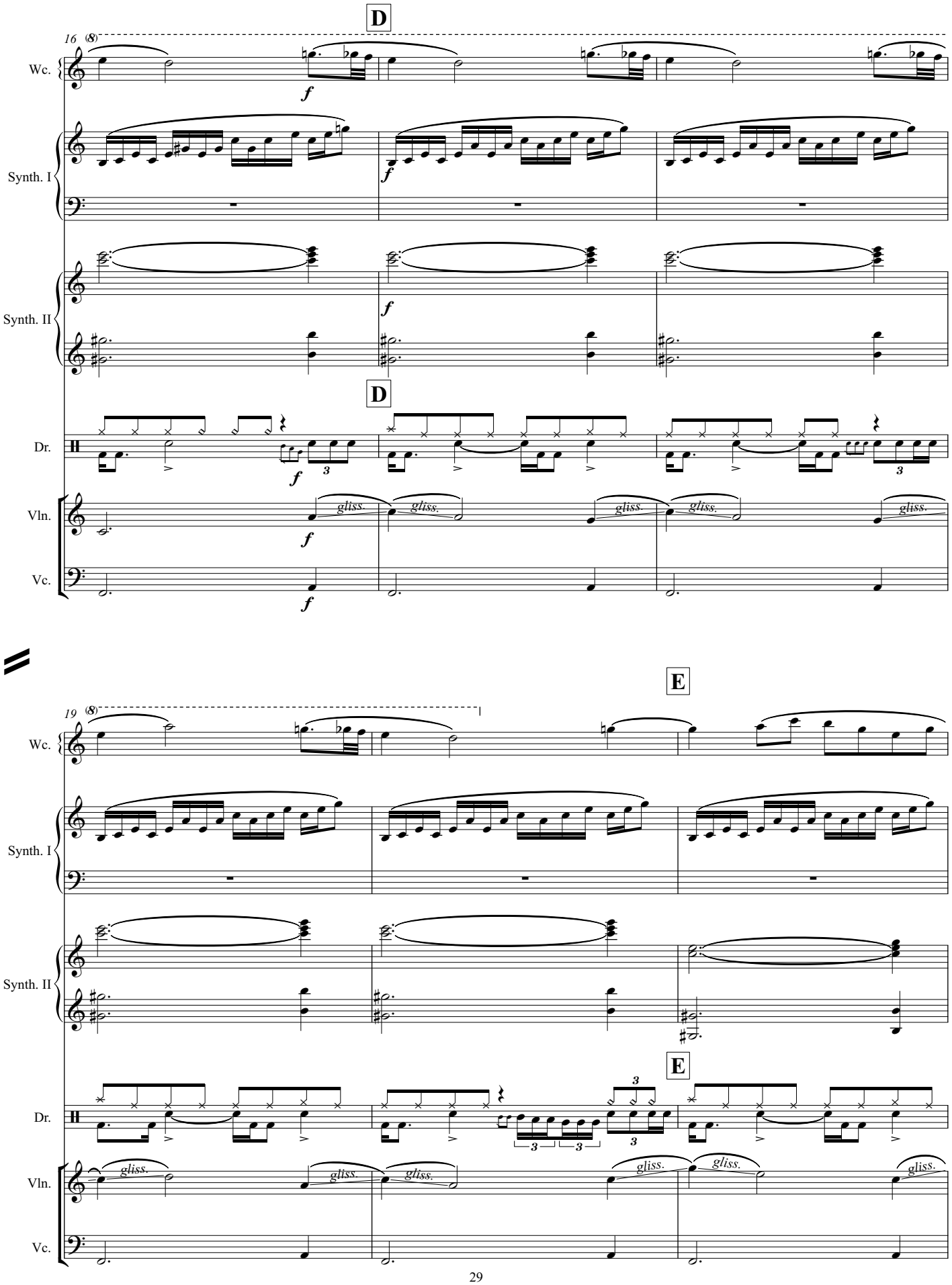
This Is Not The End

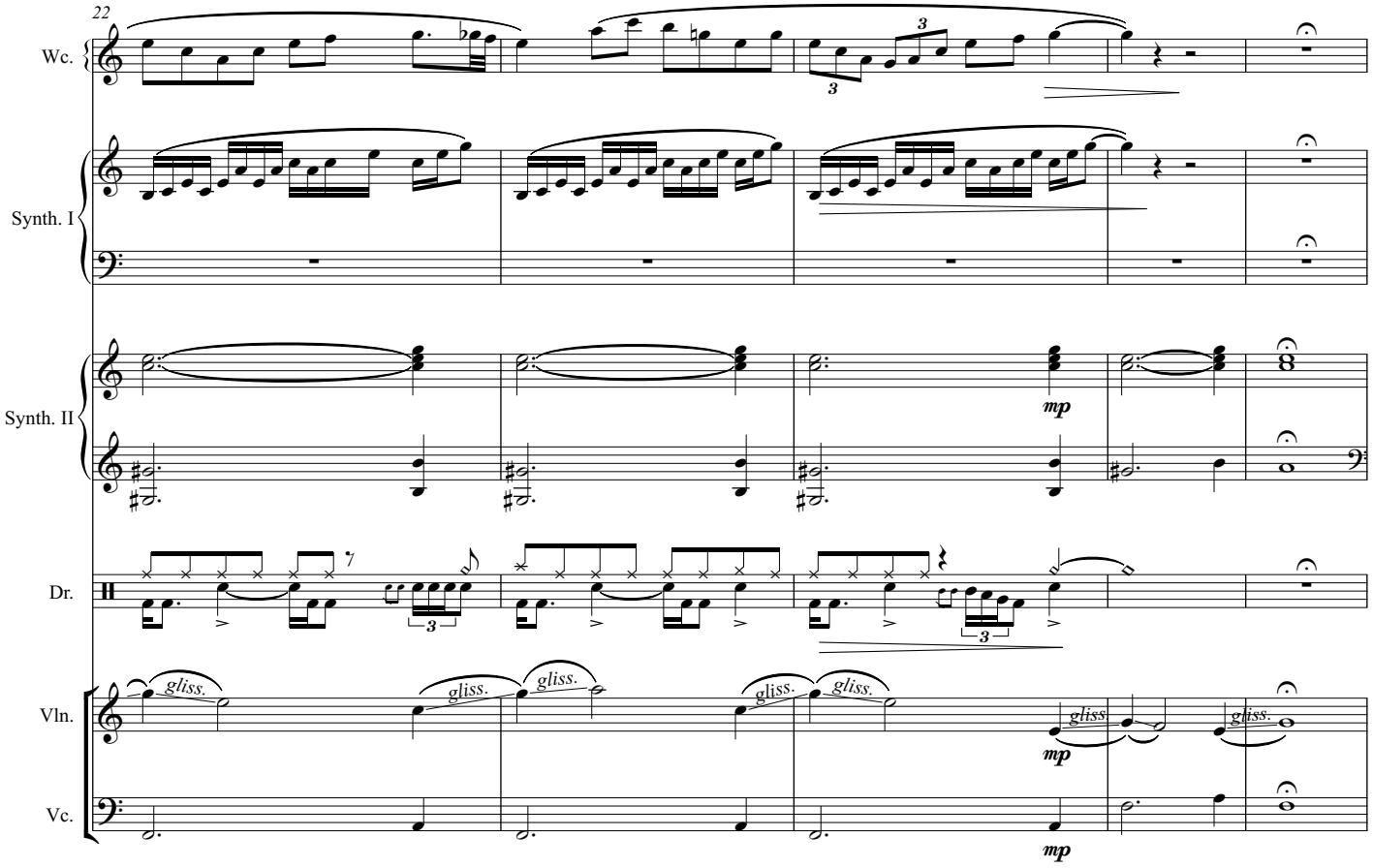
1. Title Theme

Alexander Hite



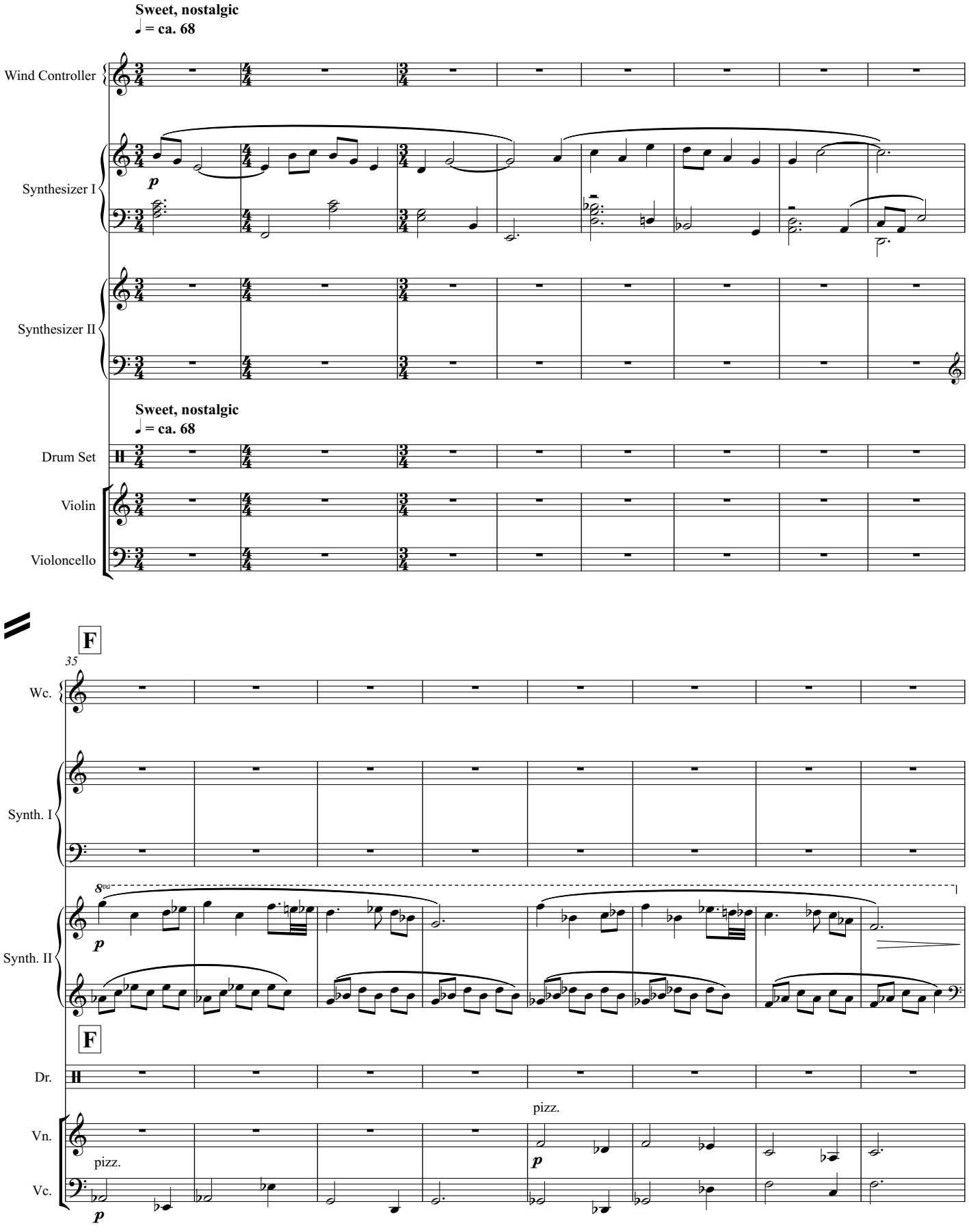

10
8va
mf
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.
C
13
(8)
gliss.

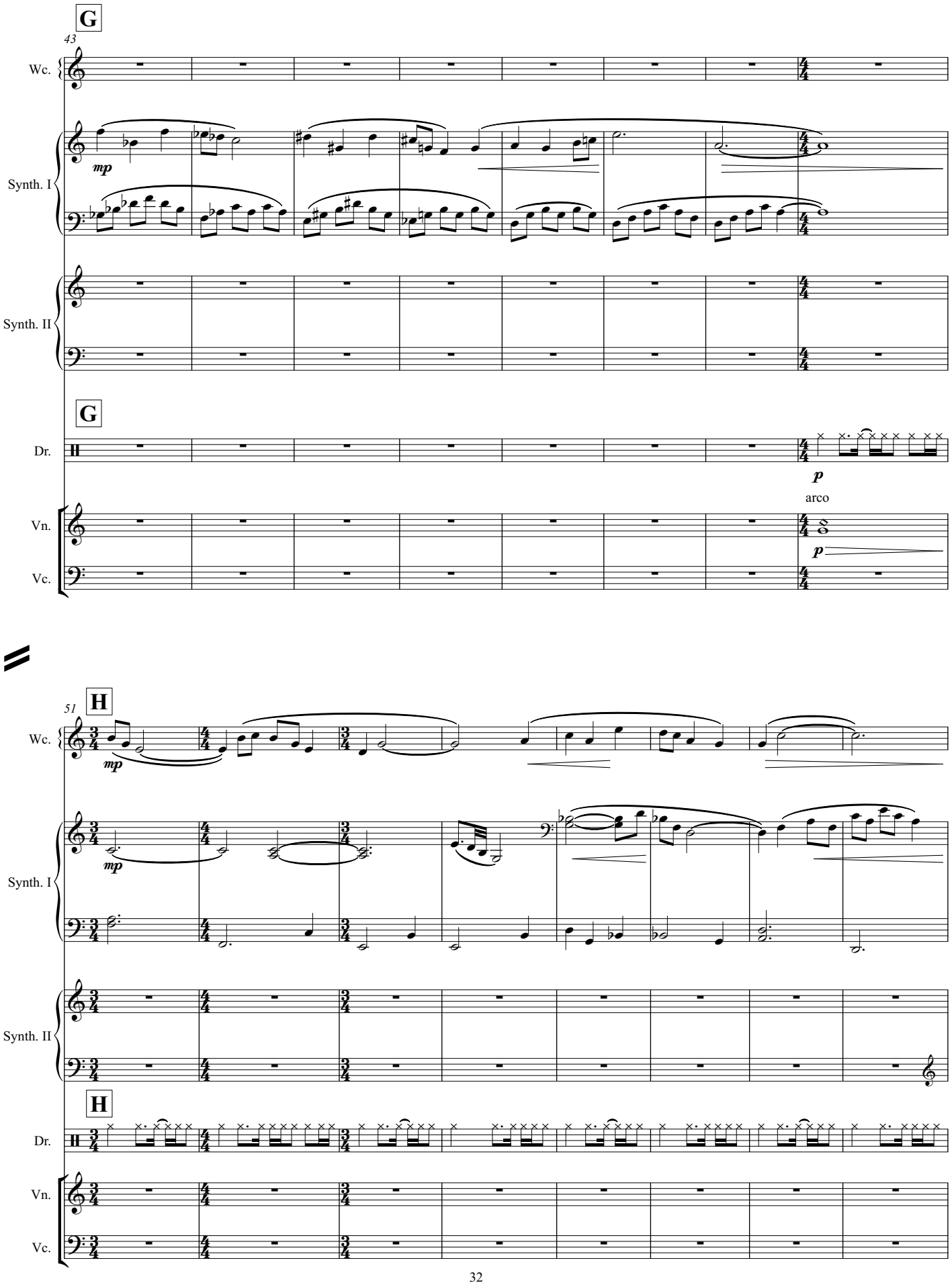

D
16
(8)
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.
gliss.
E
19

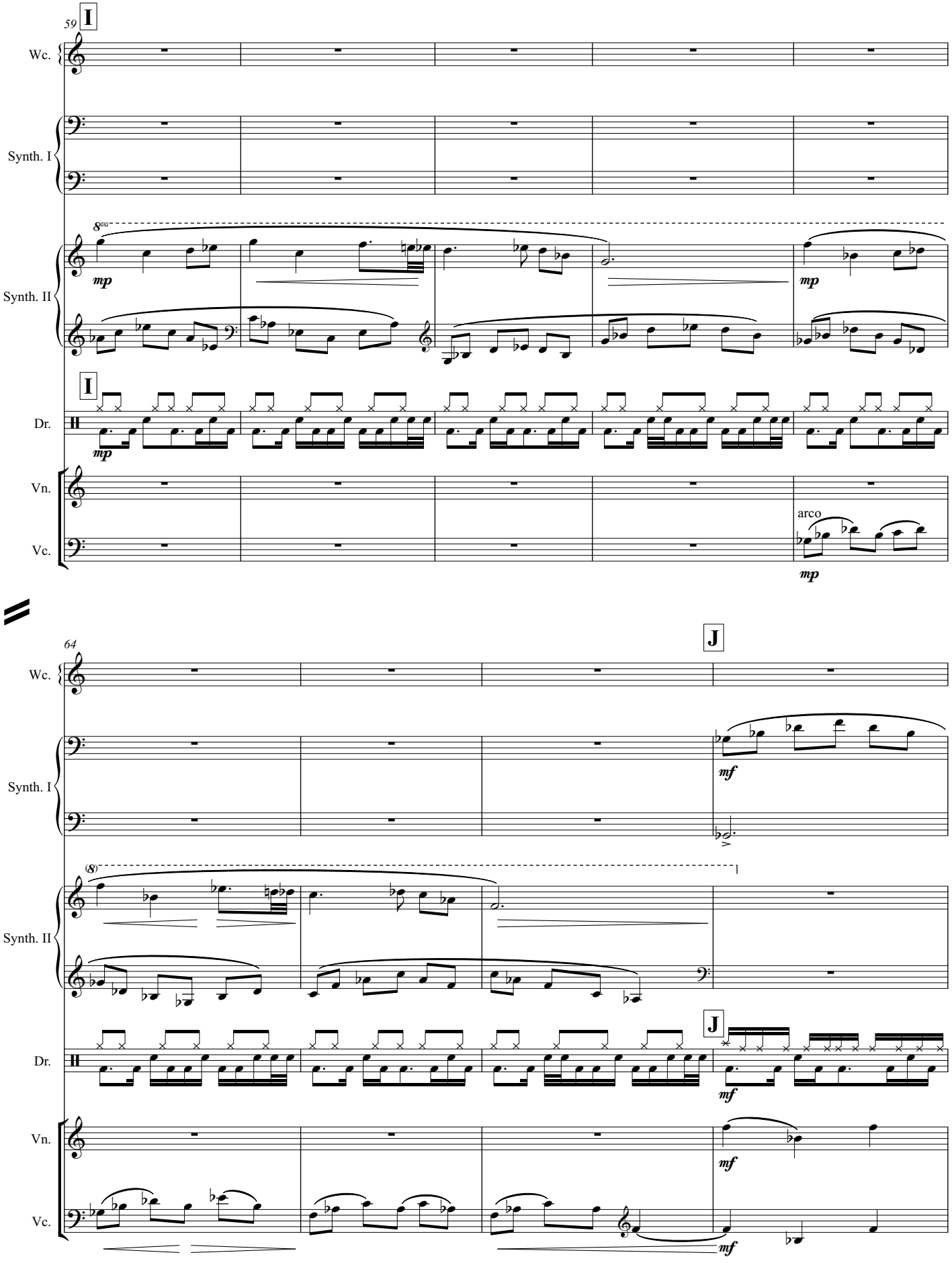

22
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.
gliss.
mp

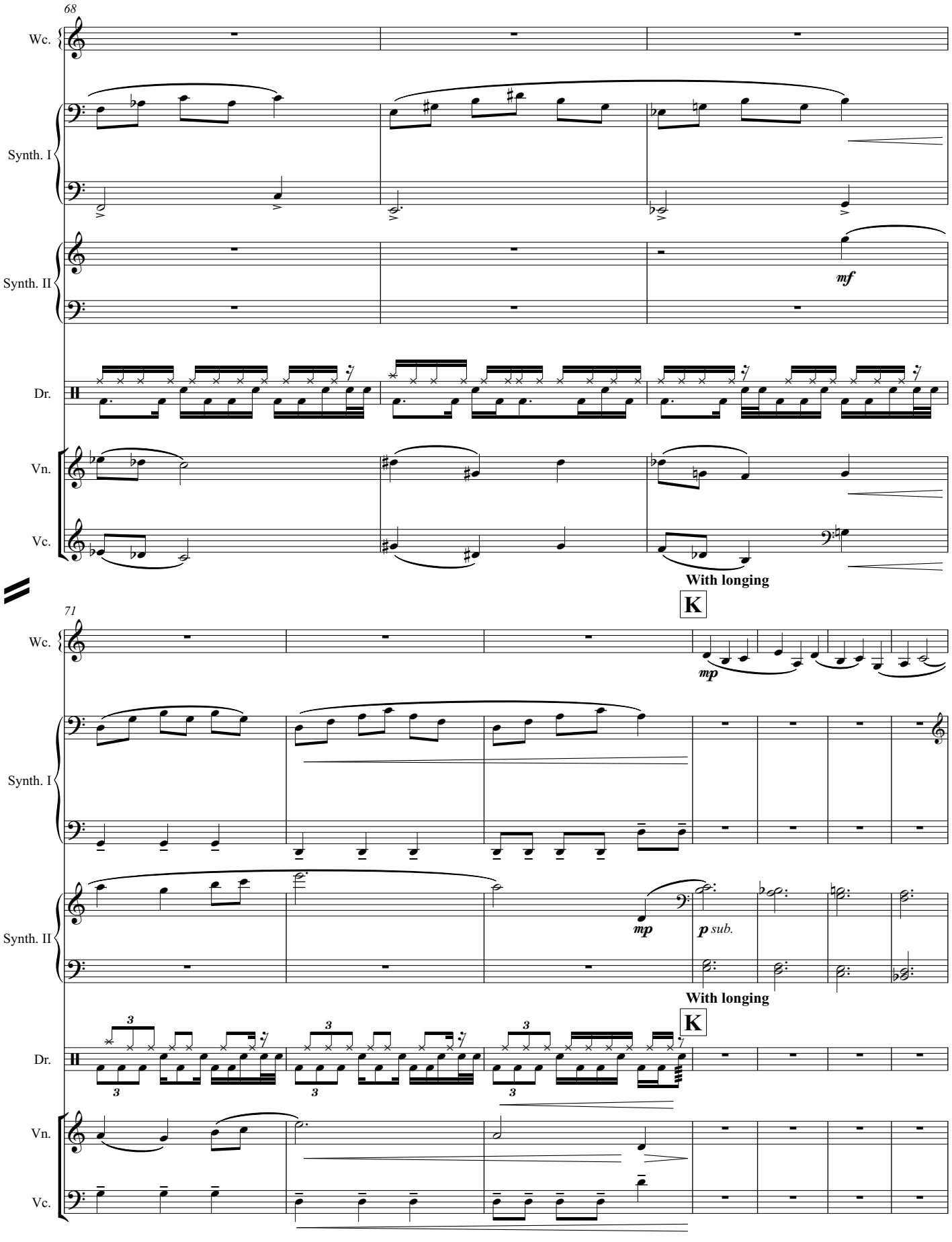
This Is Not The End

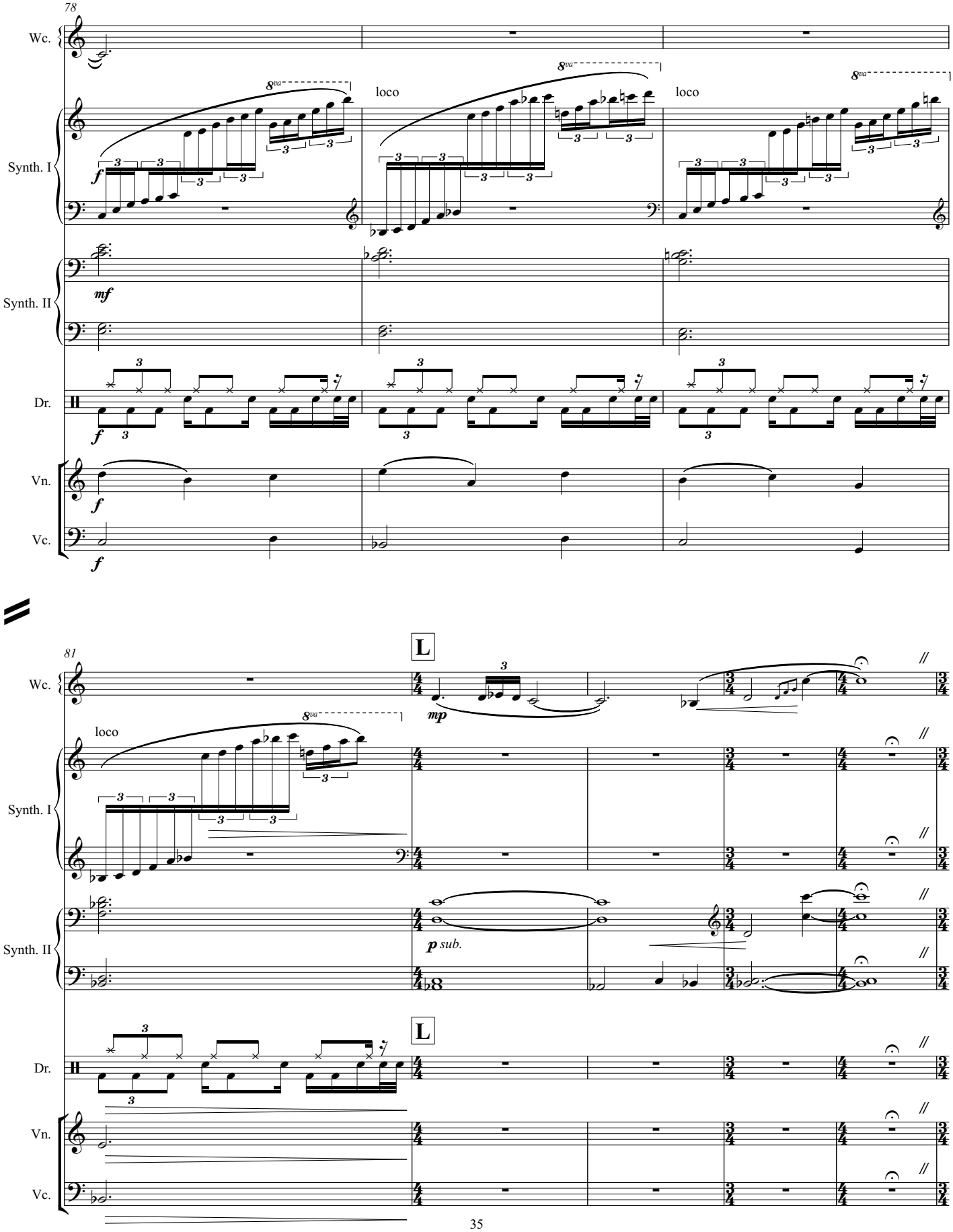
2. Home Theme

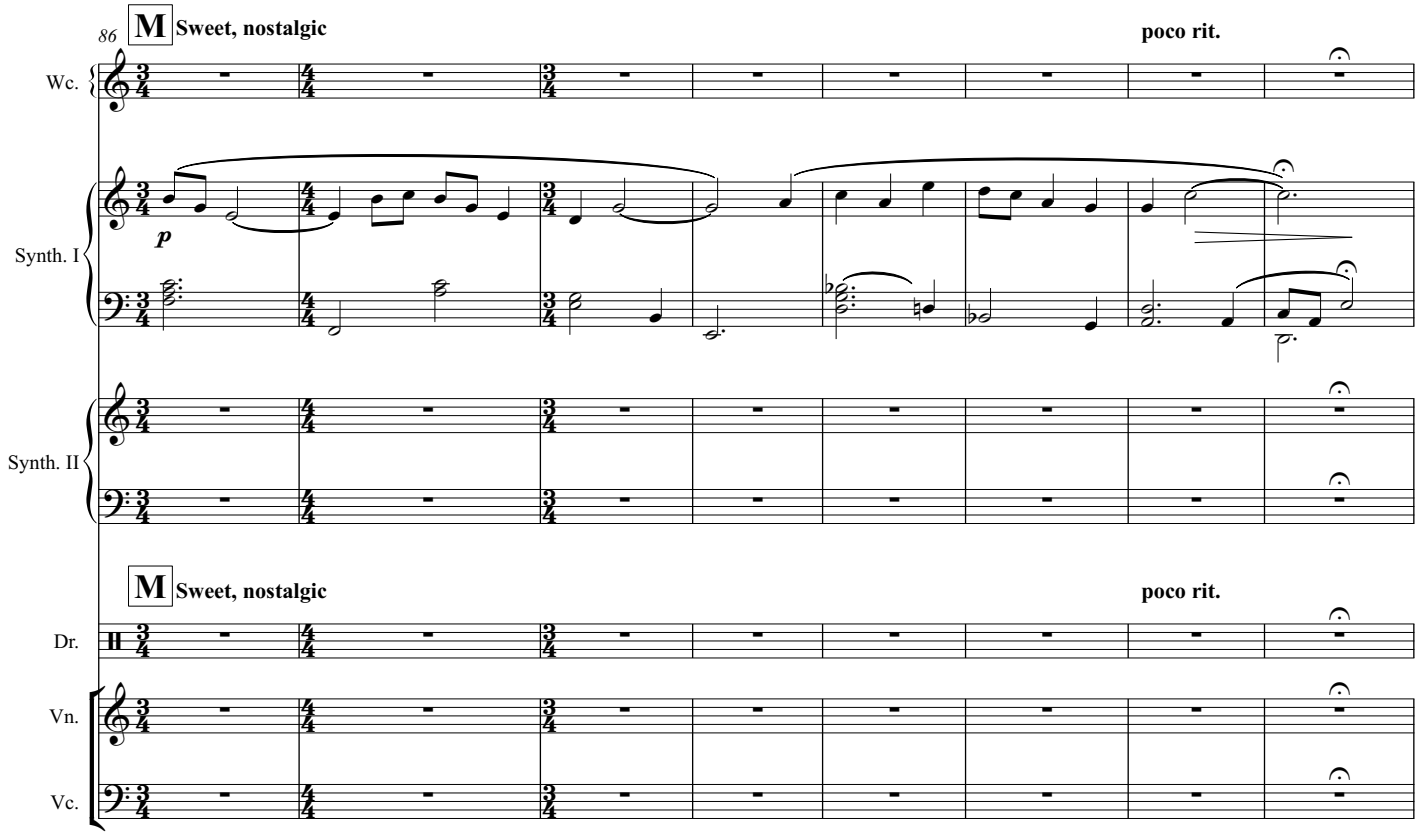



G
43
Wc.
mp
Synth. I
Synth. II
G
Dr.
p
arco
Vn.
p
Vc.
H
51
Wc.
mp
Synth. I
mp
Synth. II
H
Dr.
Vn.
Vc.


59
I
Wc.
Synth. I
8va
Synth. II
mp
I
Dr.
mp
Vn.
Vc.
arco
mp
64
J
Wc.
Synth. I
mf
(8)
Synth. II
J
Dr.
mf
Vn.
mf
Vc.
mf


68
Wc.
Synth. I
Synth. II
mf
Dr.
Vn.
Vc.
With longing
K
71
Wc.
mp
Synth. I
Synth. II
mp
p sub.
With longing
K
Dr.
Vn.
Vc.


78
Wc.
Synth. I
Synth. II
Dr.
Vn.
Vc.
8va
loco
f
mf
81
L
mp
p sub.


86
M
Sweet, nostalgic
poco rit.
Wc.
Synth. I
p
Synth. II
M
Sweet, nostalgic
poco rit.
Dr.
Vn.
Vc.

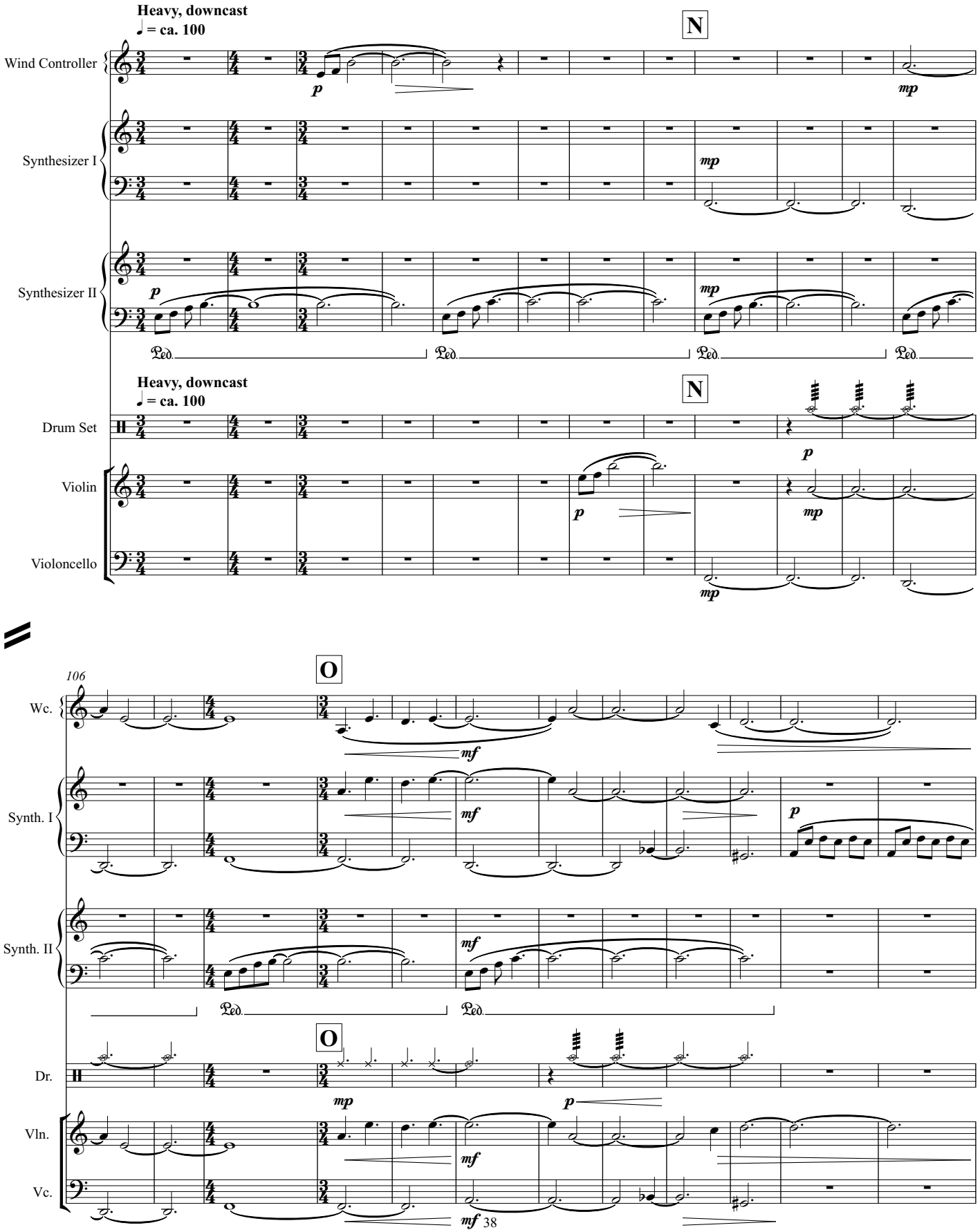
This Is Not The End

3. Depression Theme

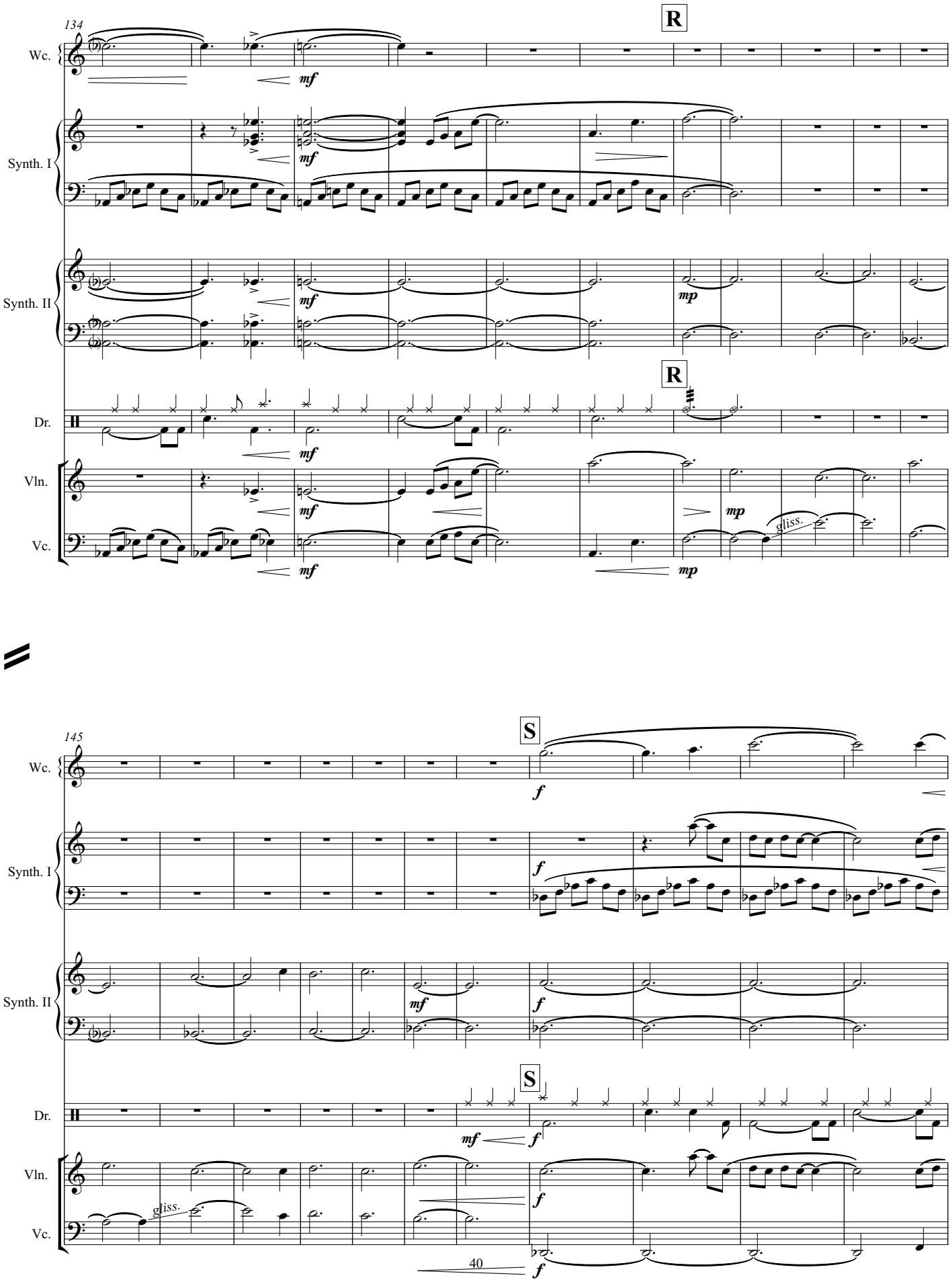
Movement 3 is a 2'30" recorded composition that is to be played through the house speakers

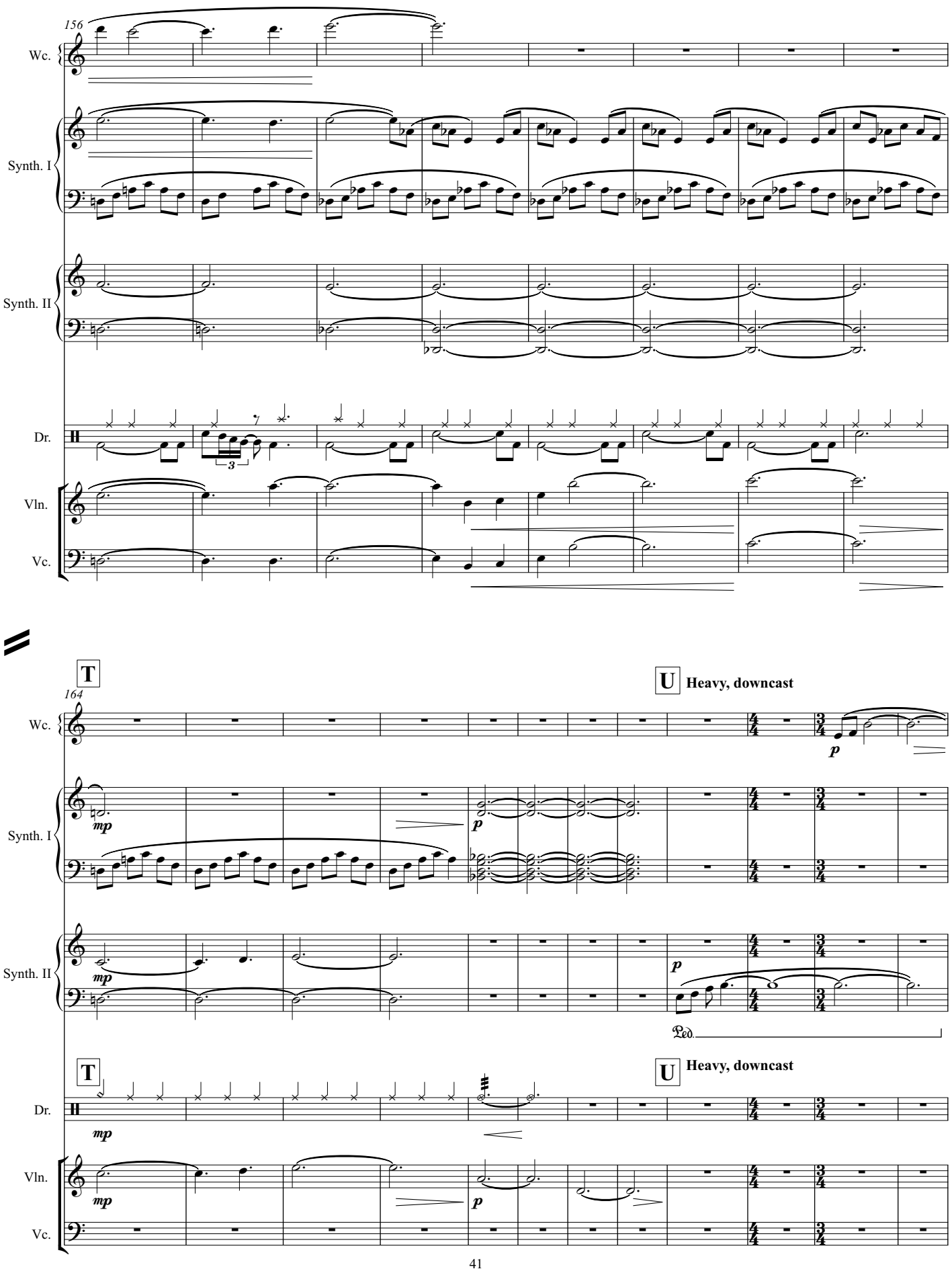
This Is Not The End

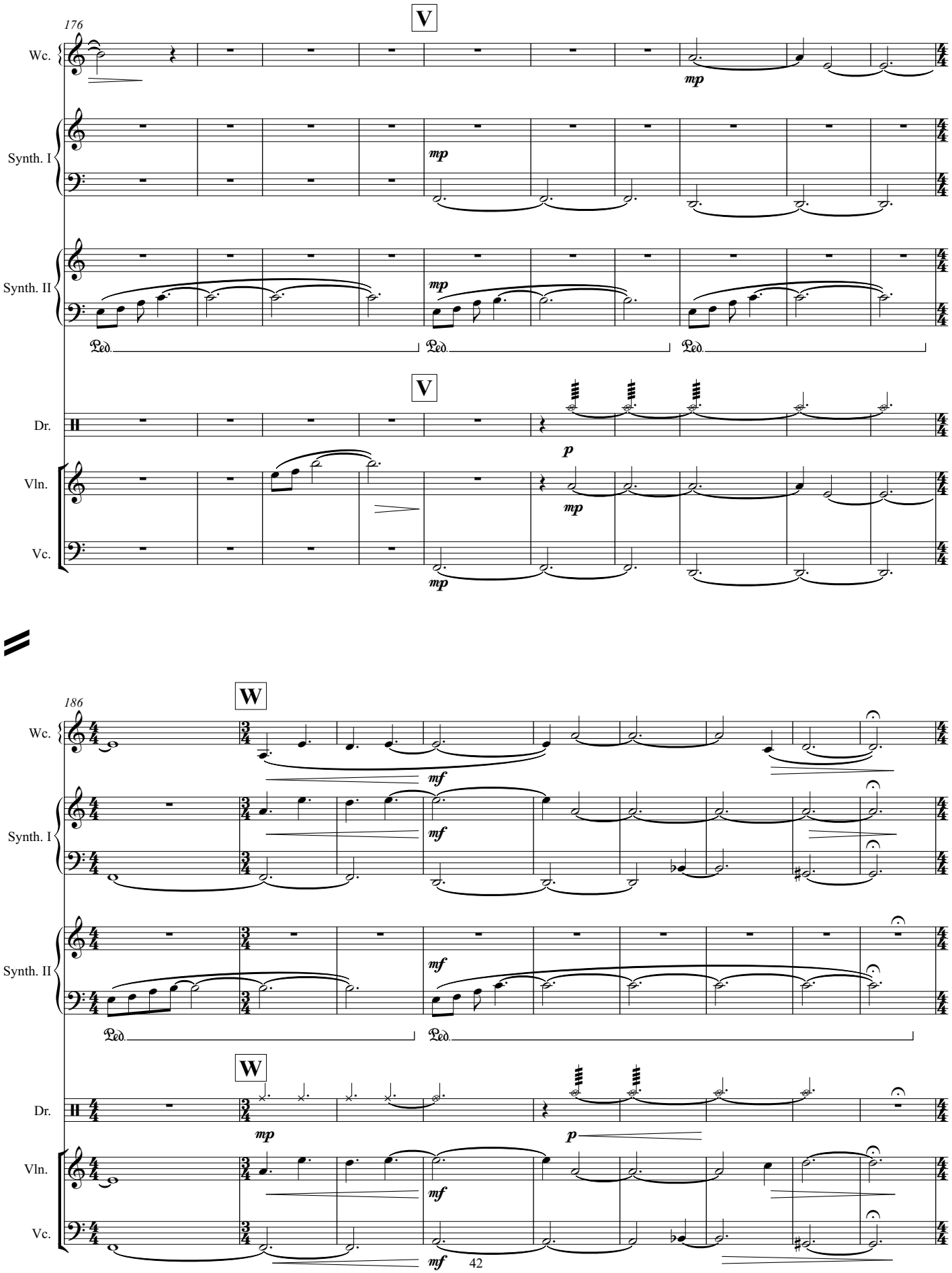
4. Overworld Theme




118
P
Melancholy, searching
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.
mp
126
Q

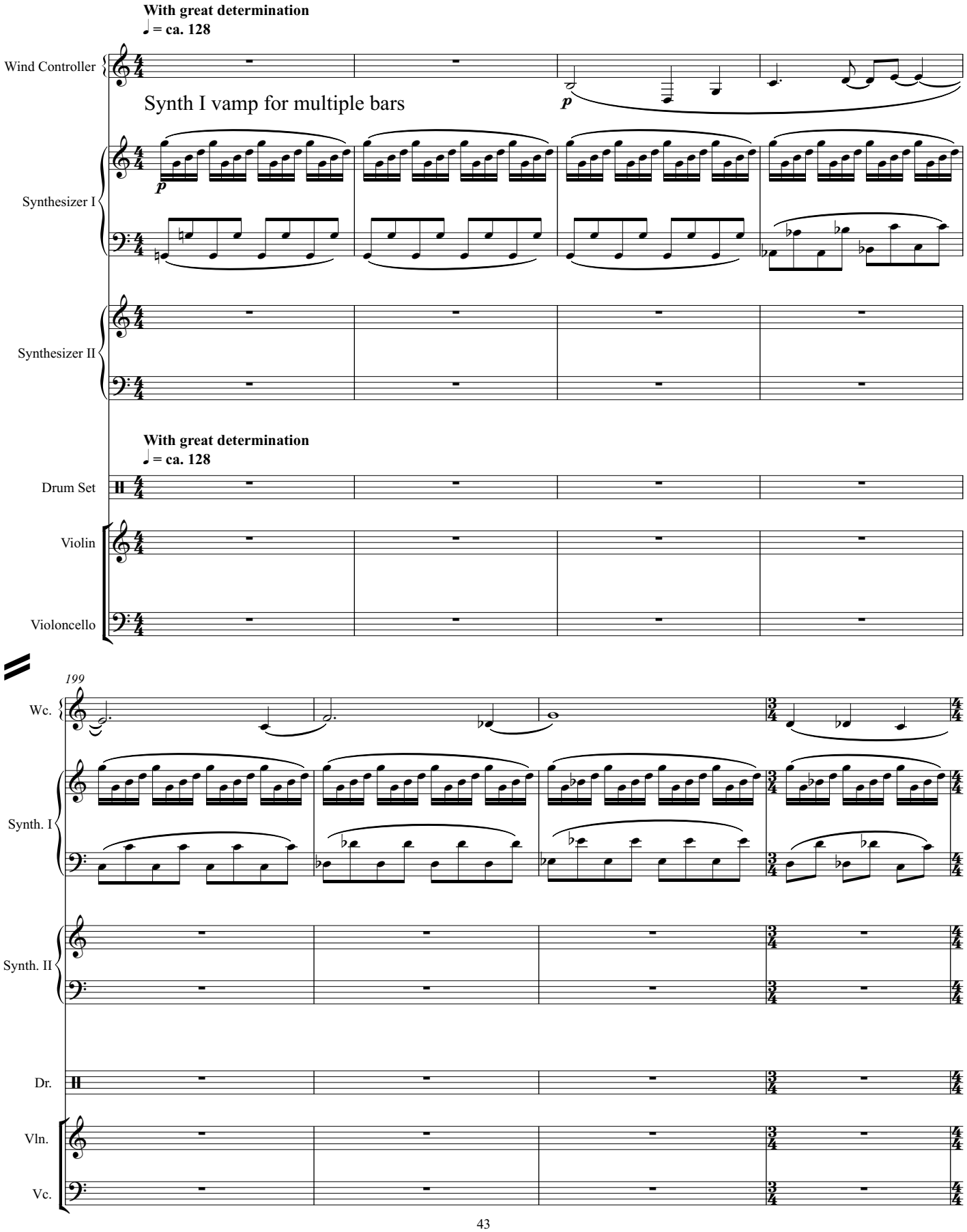

134
R
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.
mf
mp
gliss.
145
S
f
40

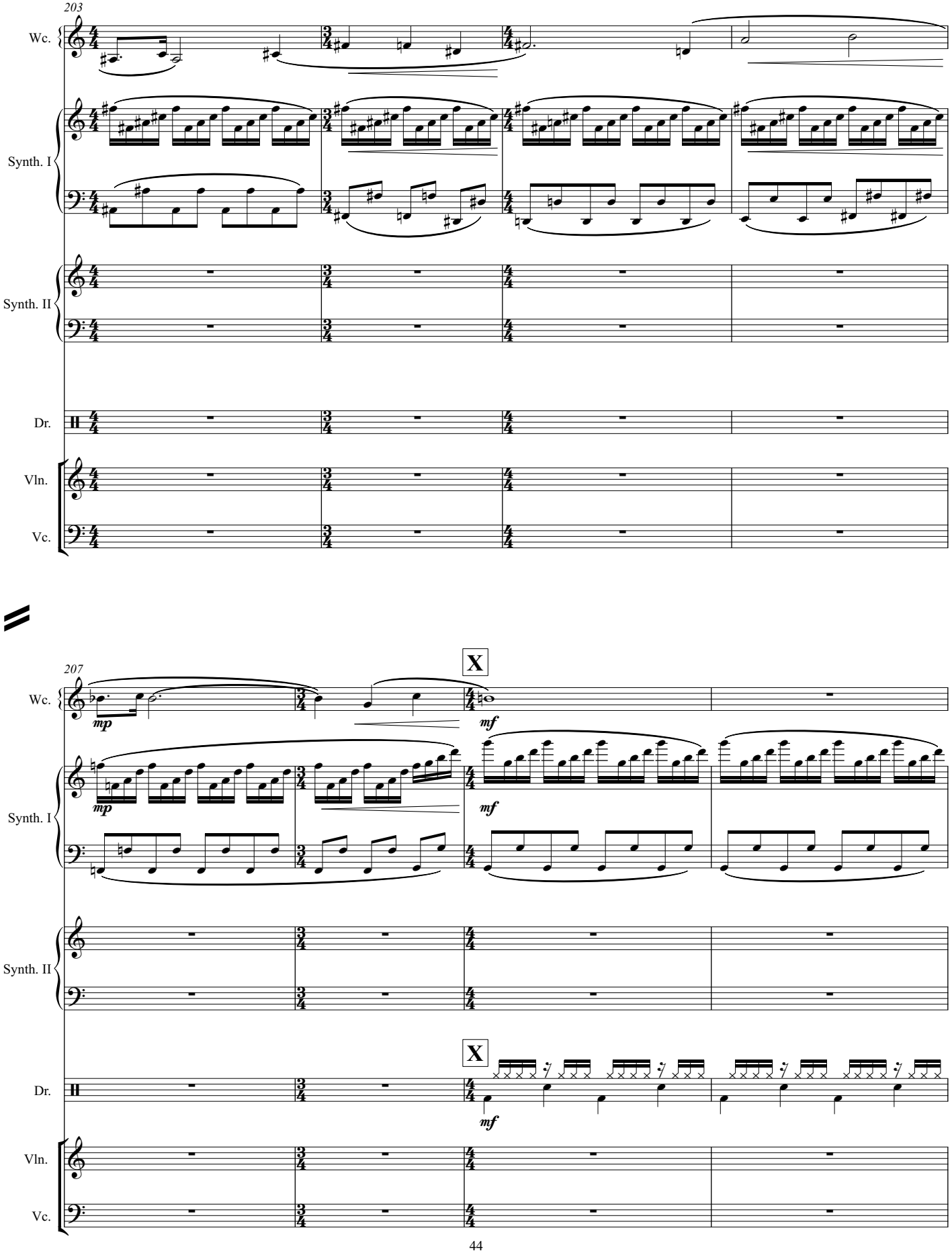

156
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.
T
U
Heavy, downcast
164
mp
p
Ped.

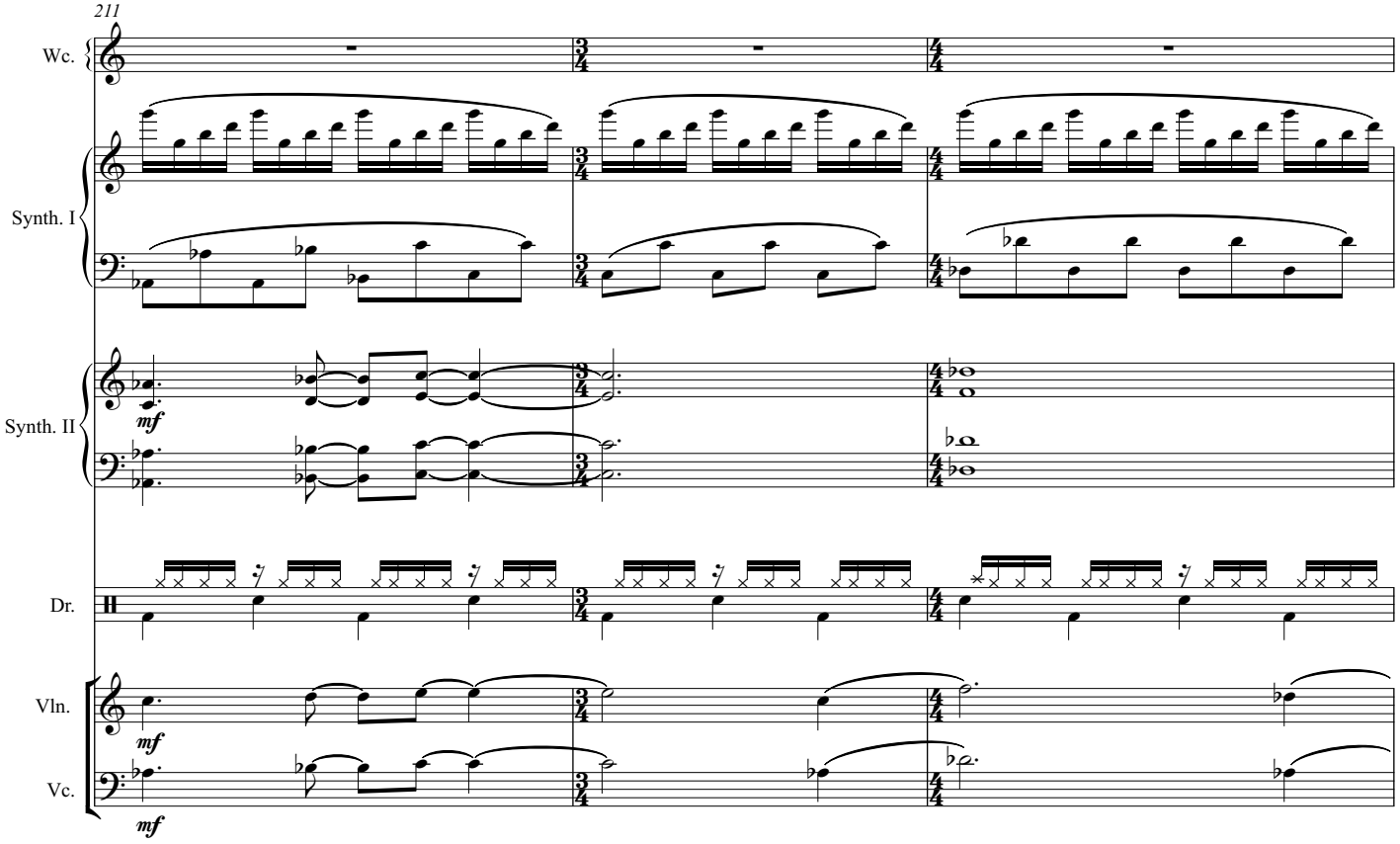

176
V
Wc.
mp
Synth. I
mp
Synth. II
mp
Ped.
Ped.
Ped.
V
Dr.
p
Vln.
mp
Vc.
mp
186
W
Wc.
mf
Synth. I
mf
Synth. II
mf
Ped.
Ped.
W
Dr.
mp
p
Vln.
mf
Vc.
mf

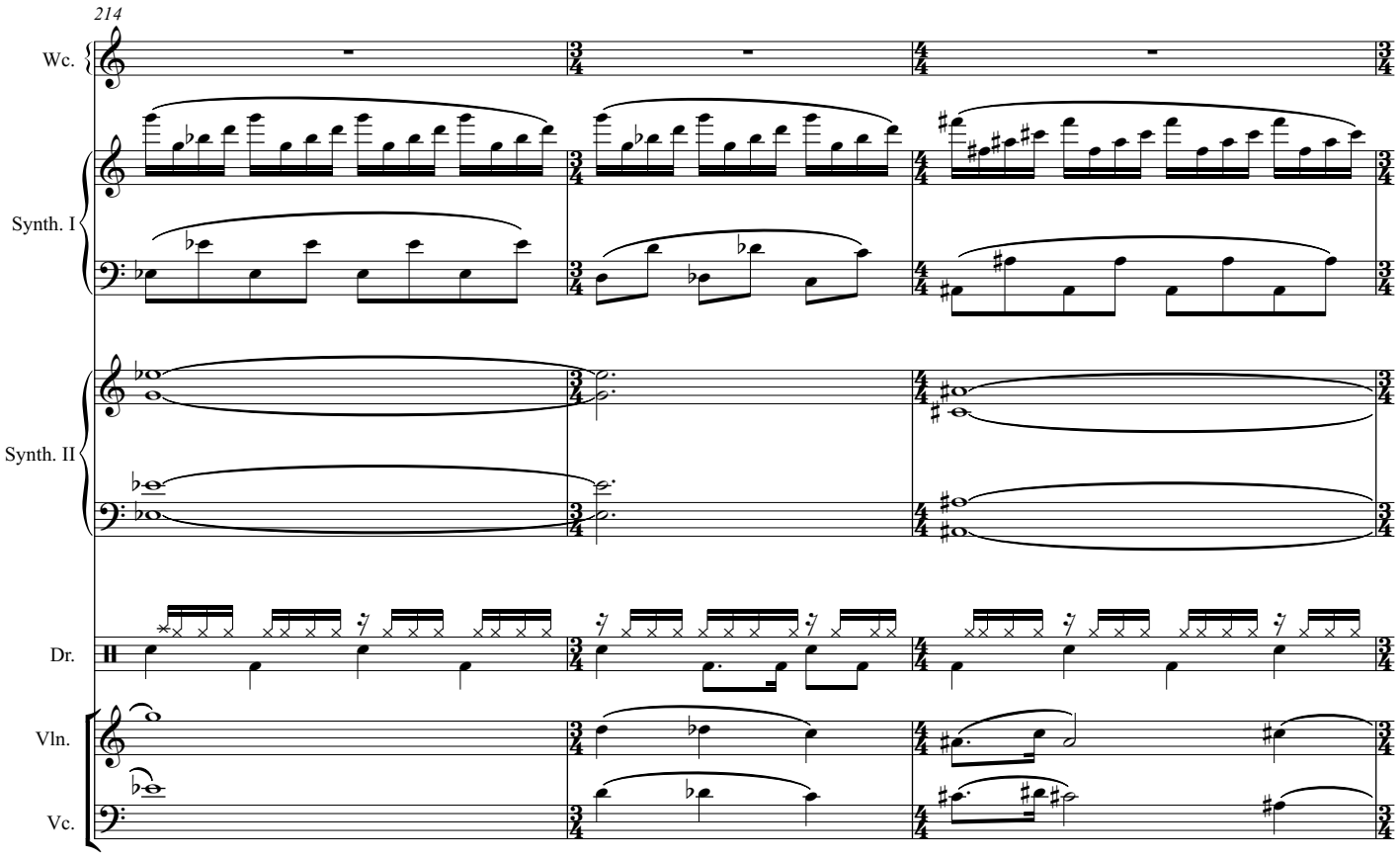
This Is Not The End

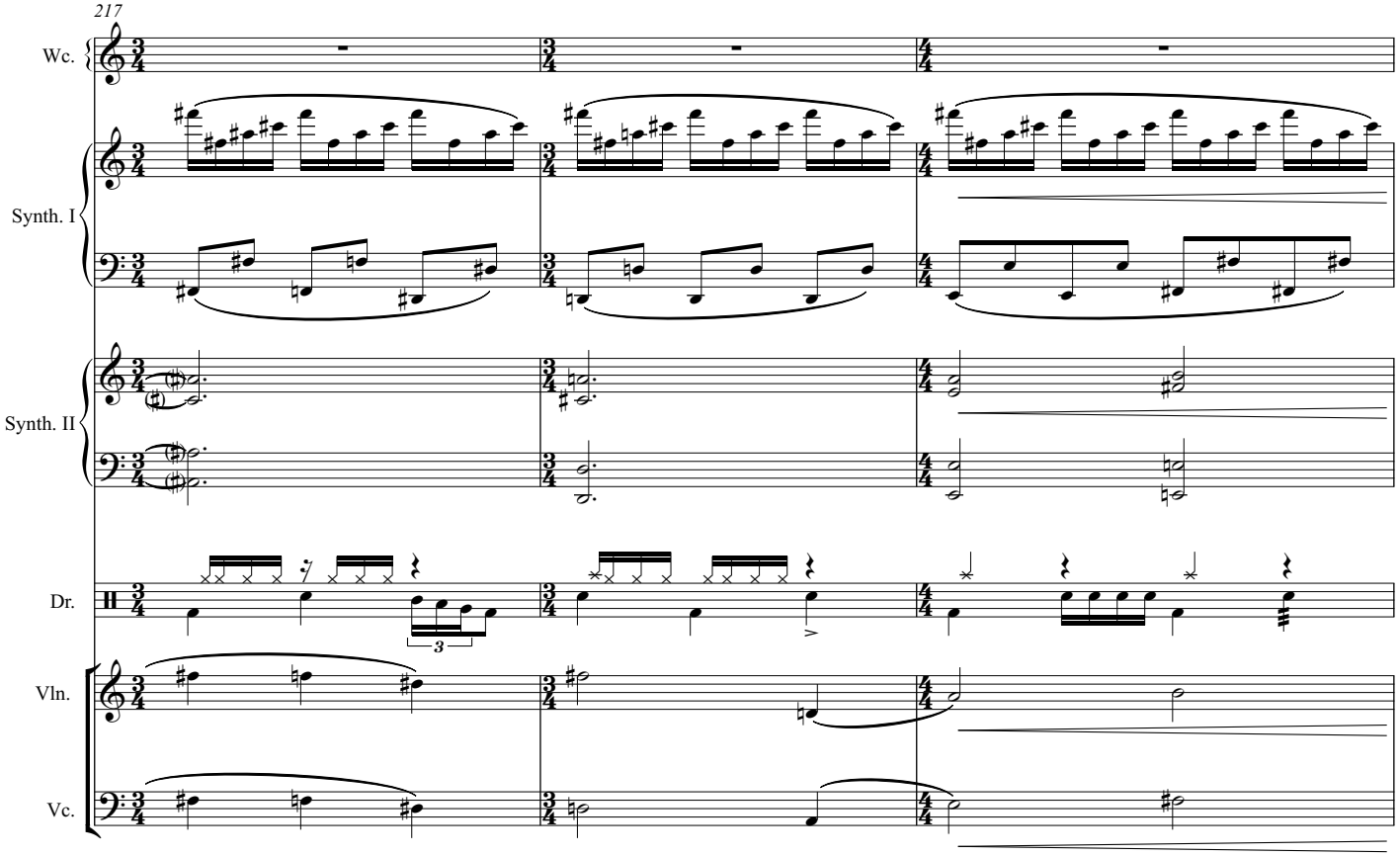
5. Battle Theme

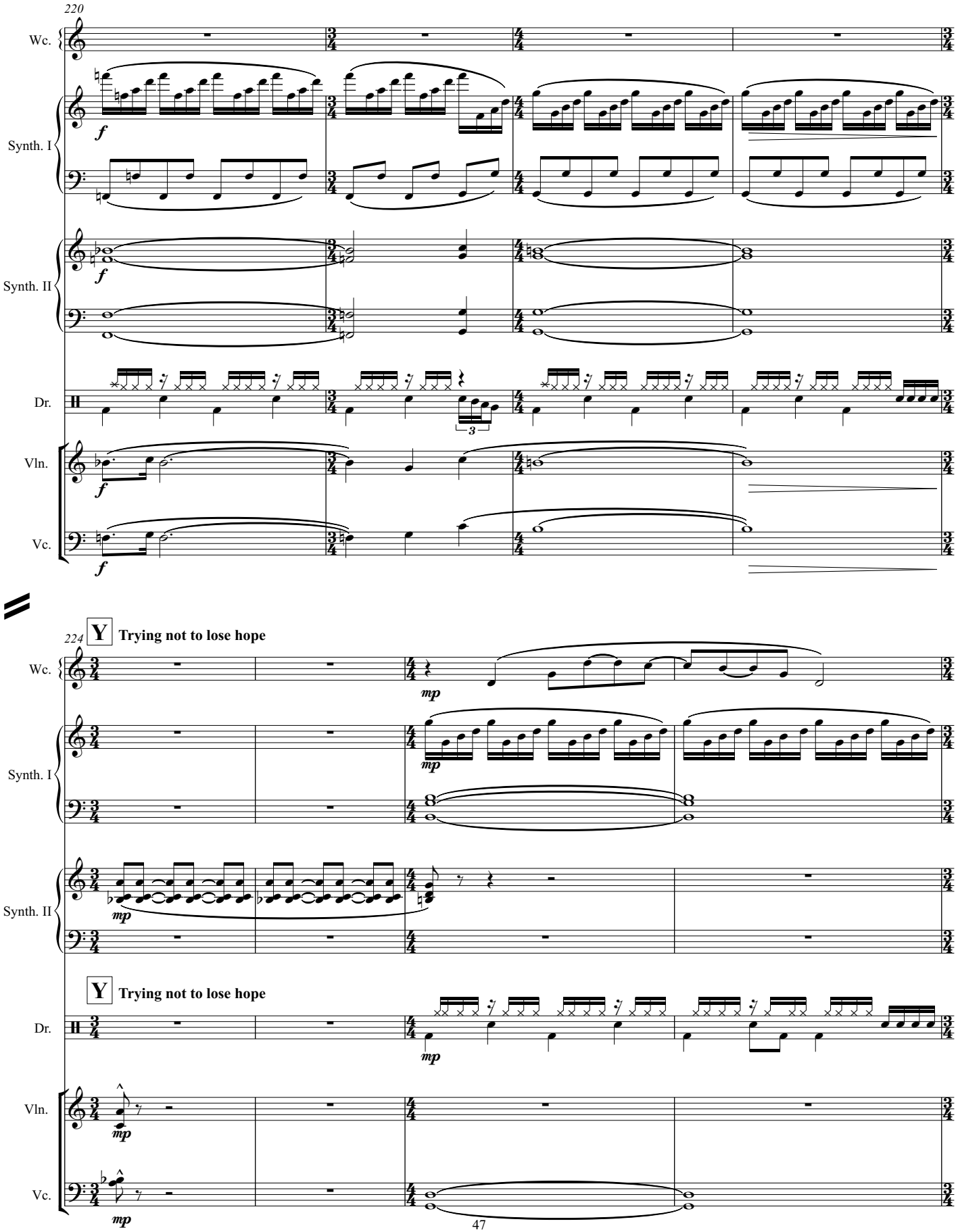


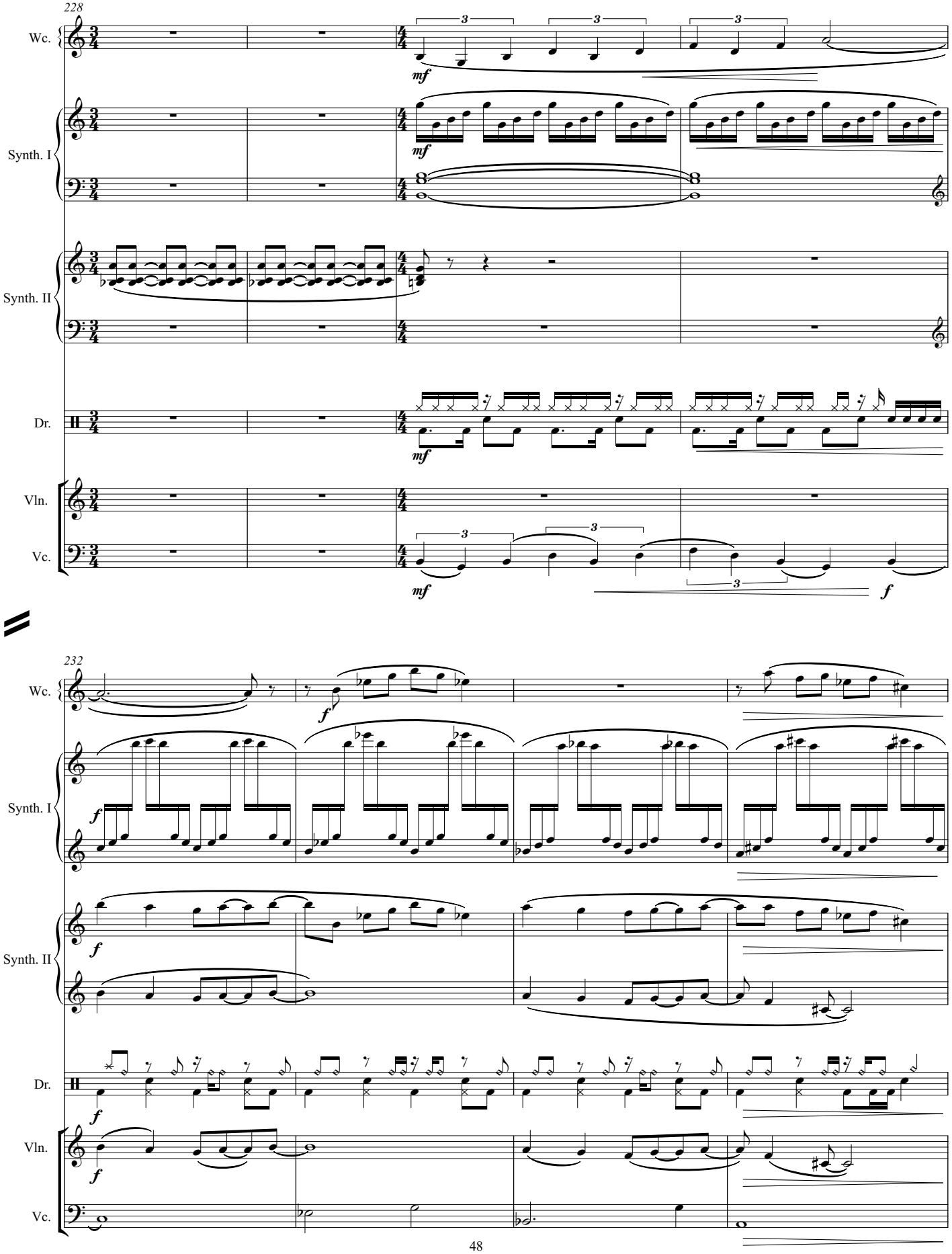

203
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.
207
X
mp
mf
X
mf

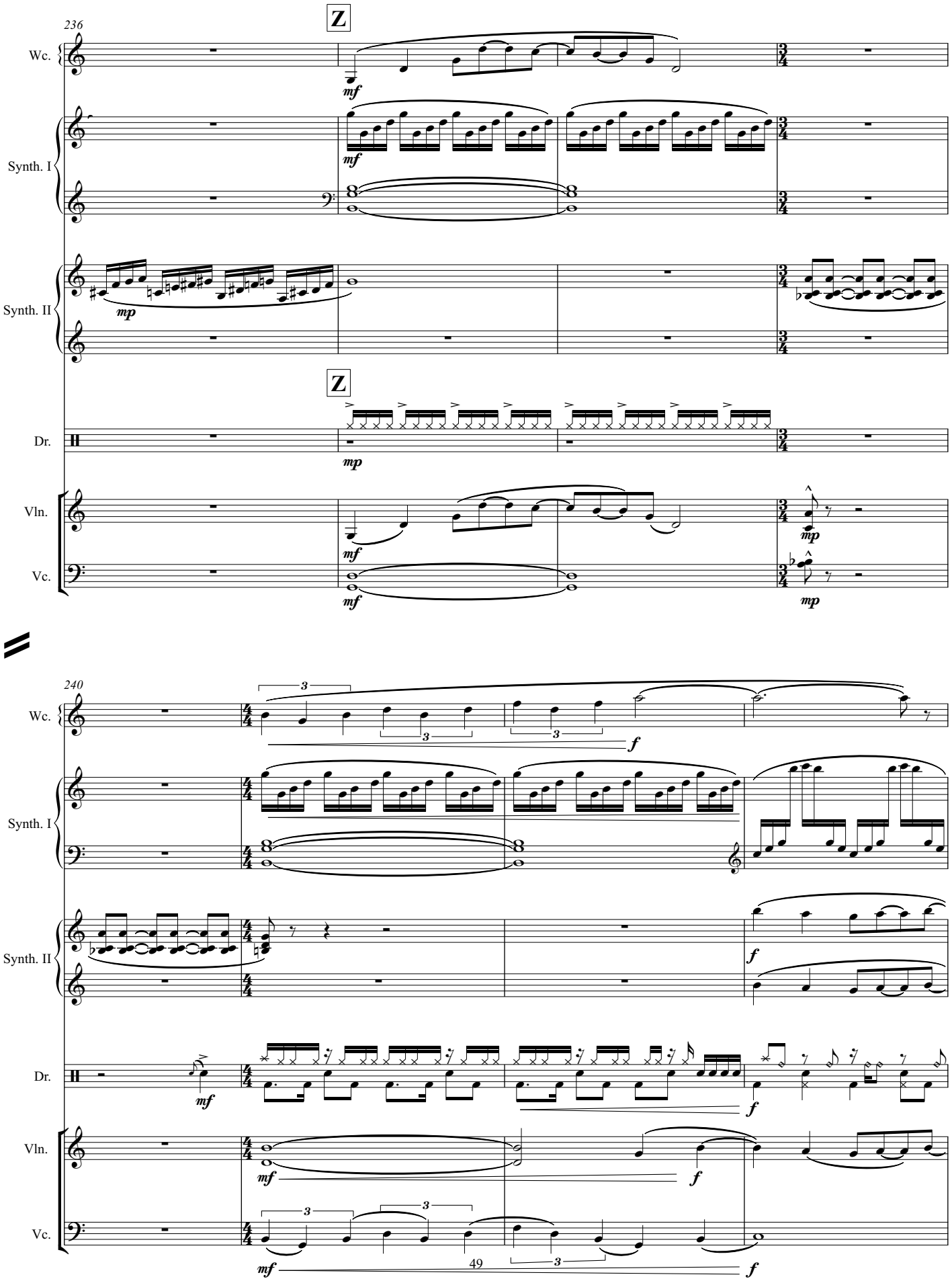

211
Wc.
Synth. I
Synth. II
mf
Dr.
Vln.
mf
Vc.
mf

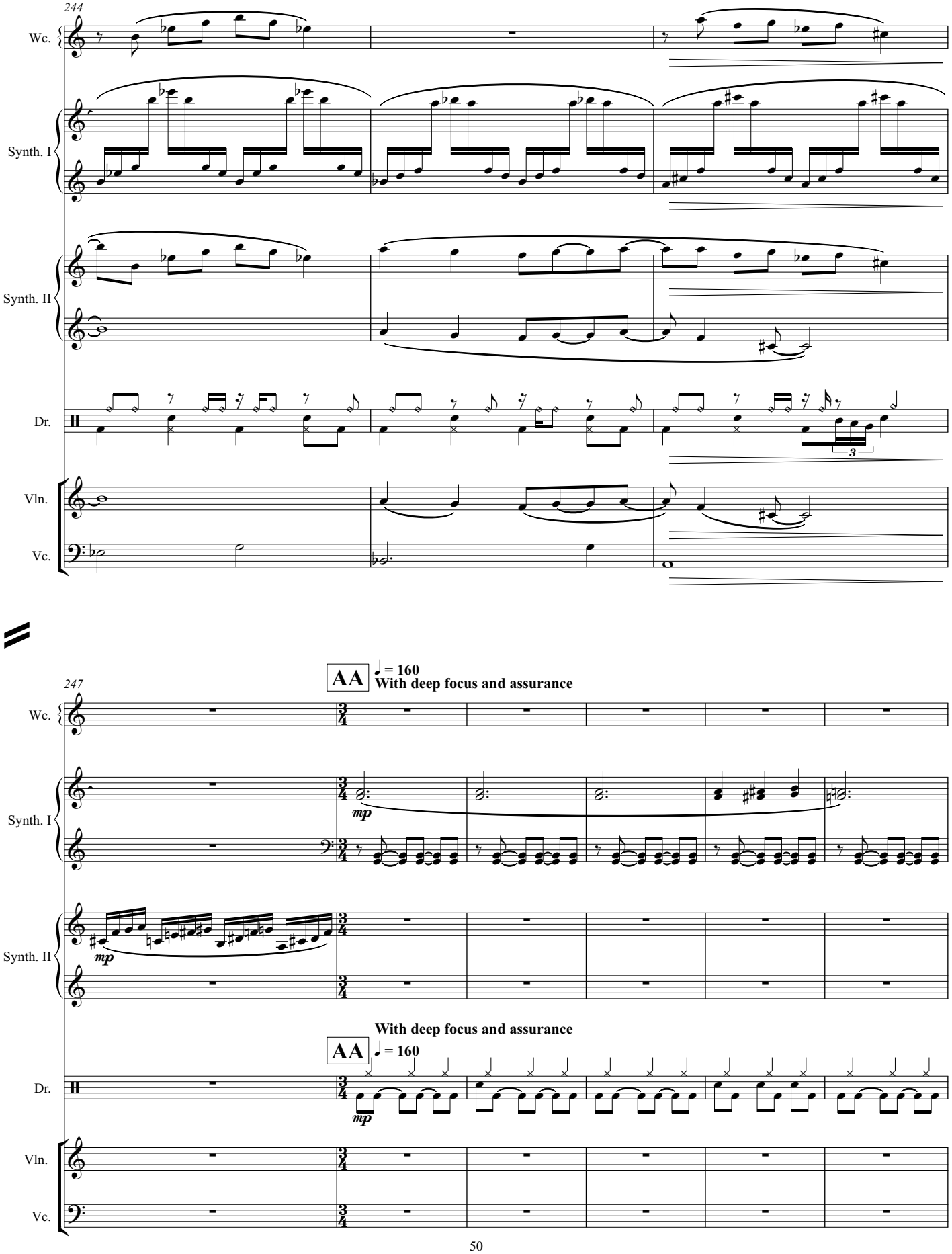

214
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.

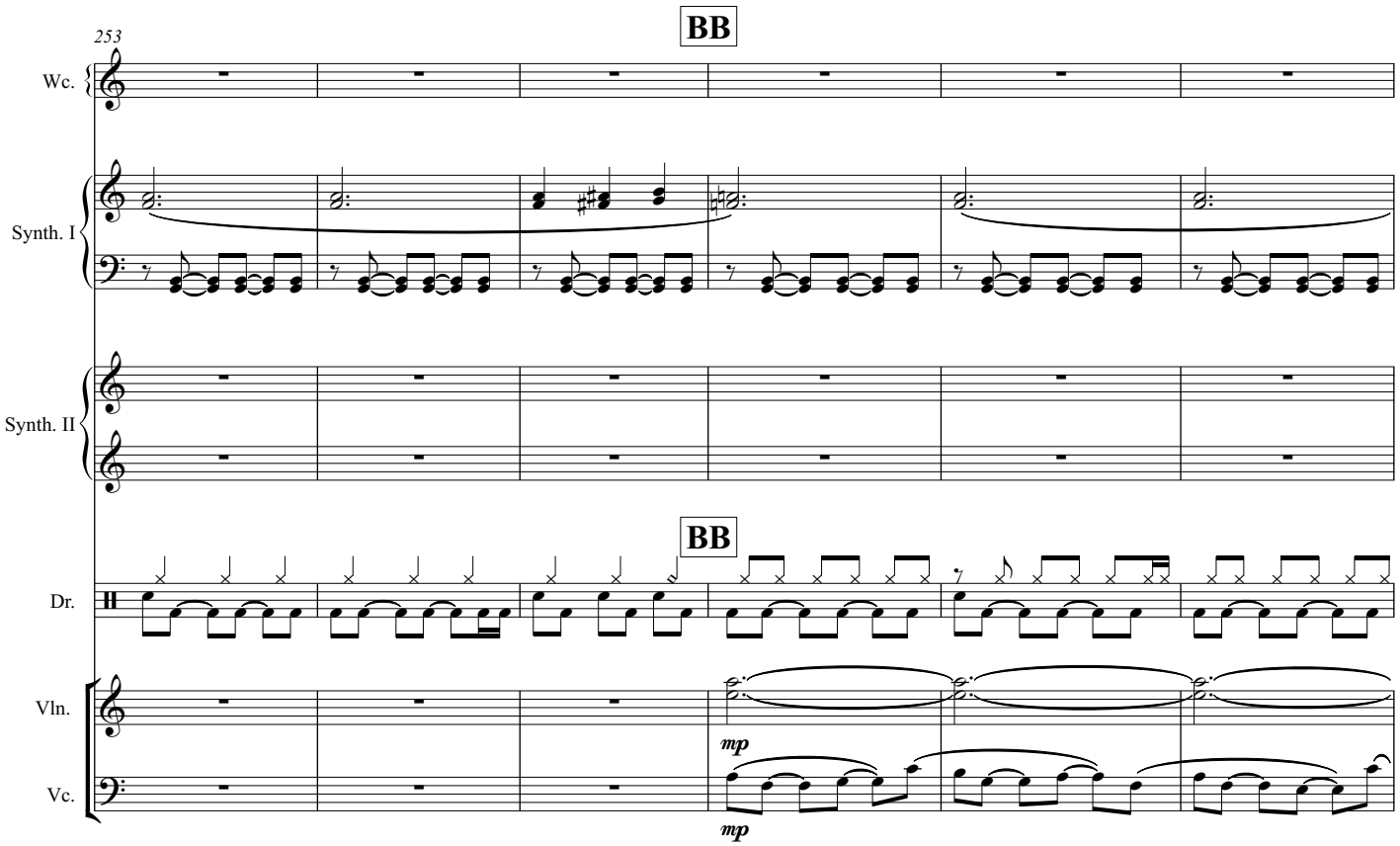

217
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.

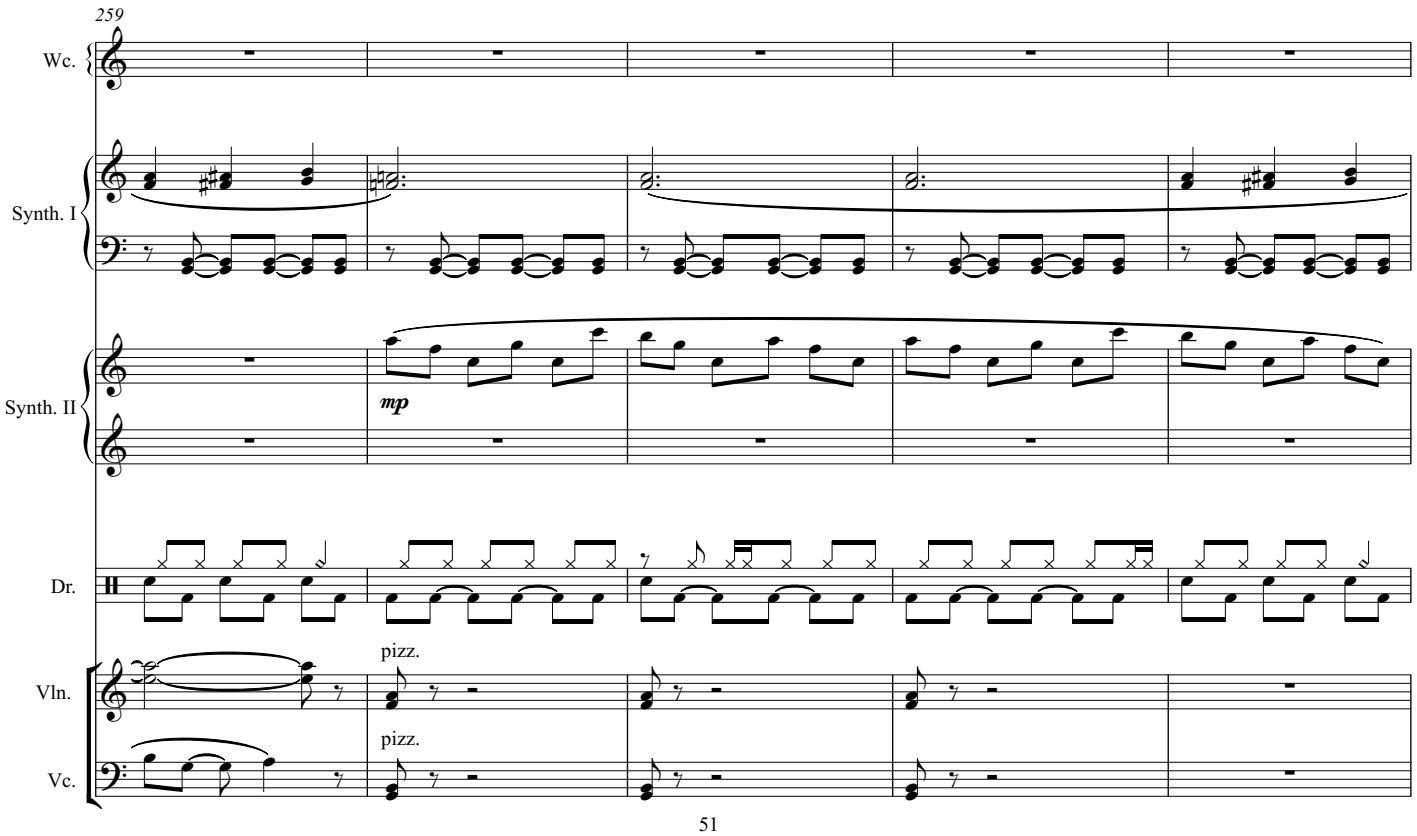

220
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.
224
Y
Trying not to lose hope
Wc.
Synth. I
Synth. II
Y
Trying not to lose hope
Dr.
Vln.
Vc.

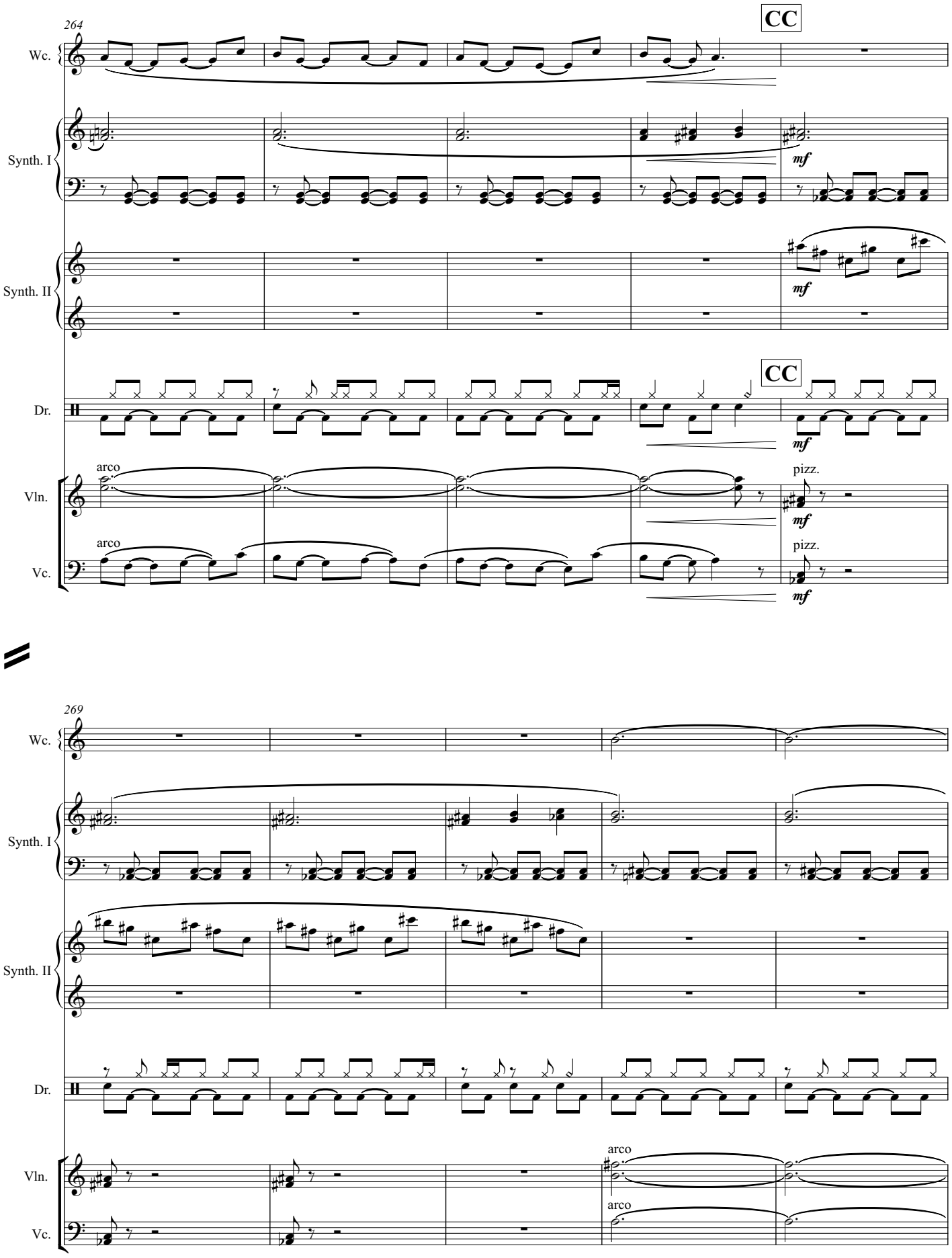

228
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.
mf
f
232

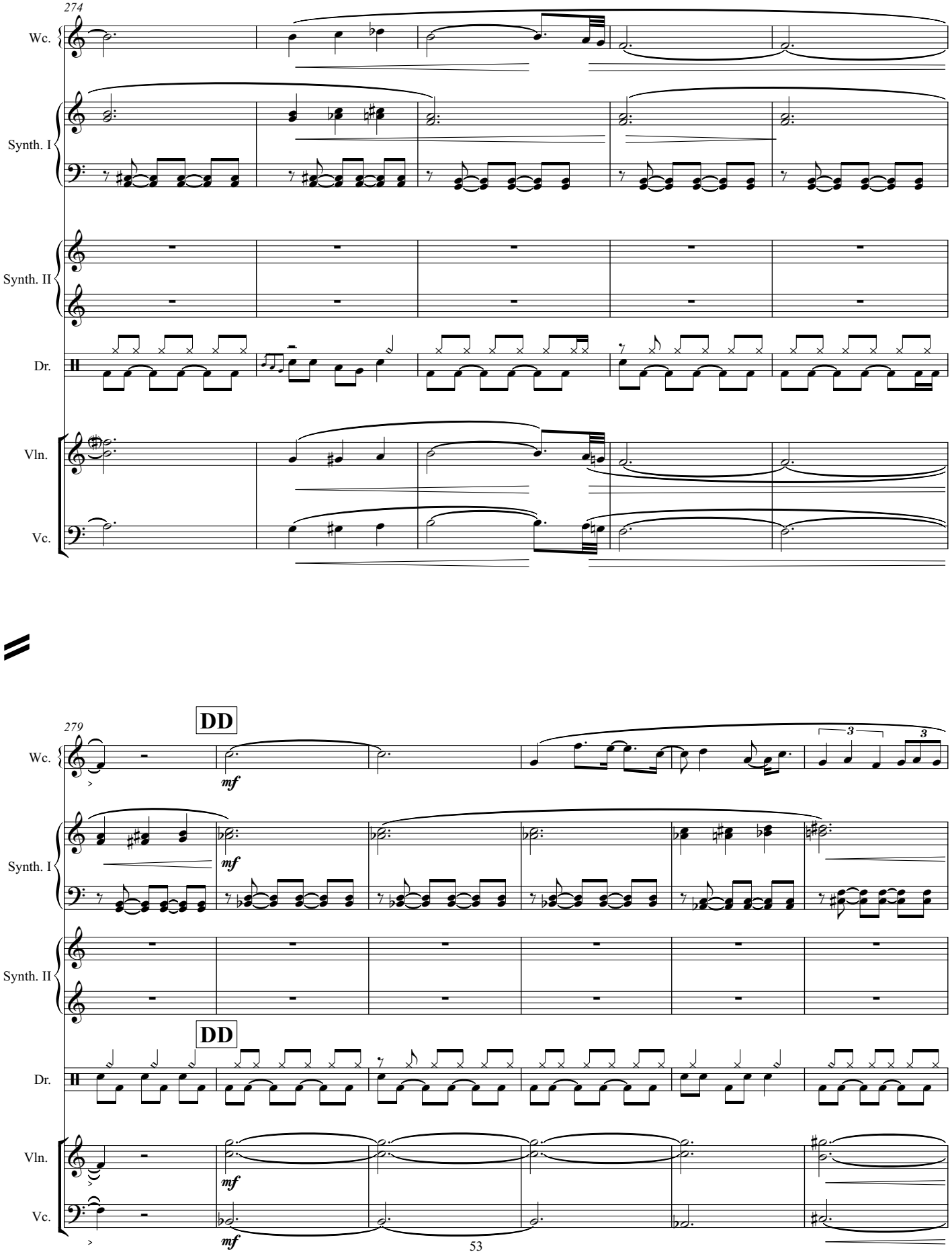

236
Z
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.
mf
mp
240
f
49


244
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.
3
247
AA
♩ = 160
With deep focus and assurance
mp
mp
With deep focus and assurance
AA
♩ = 160

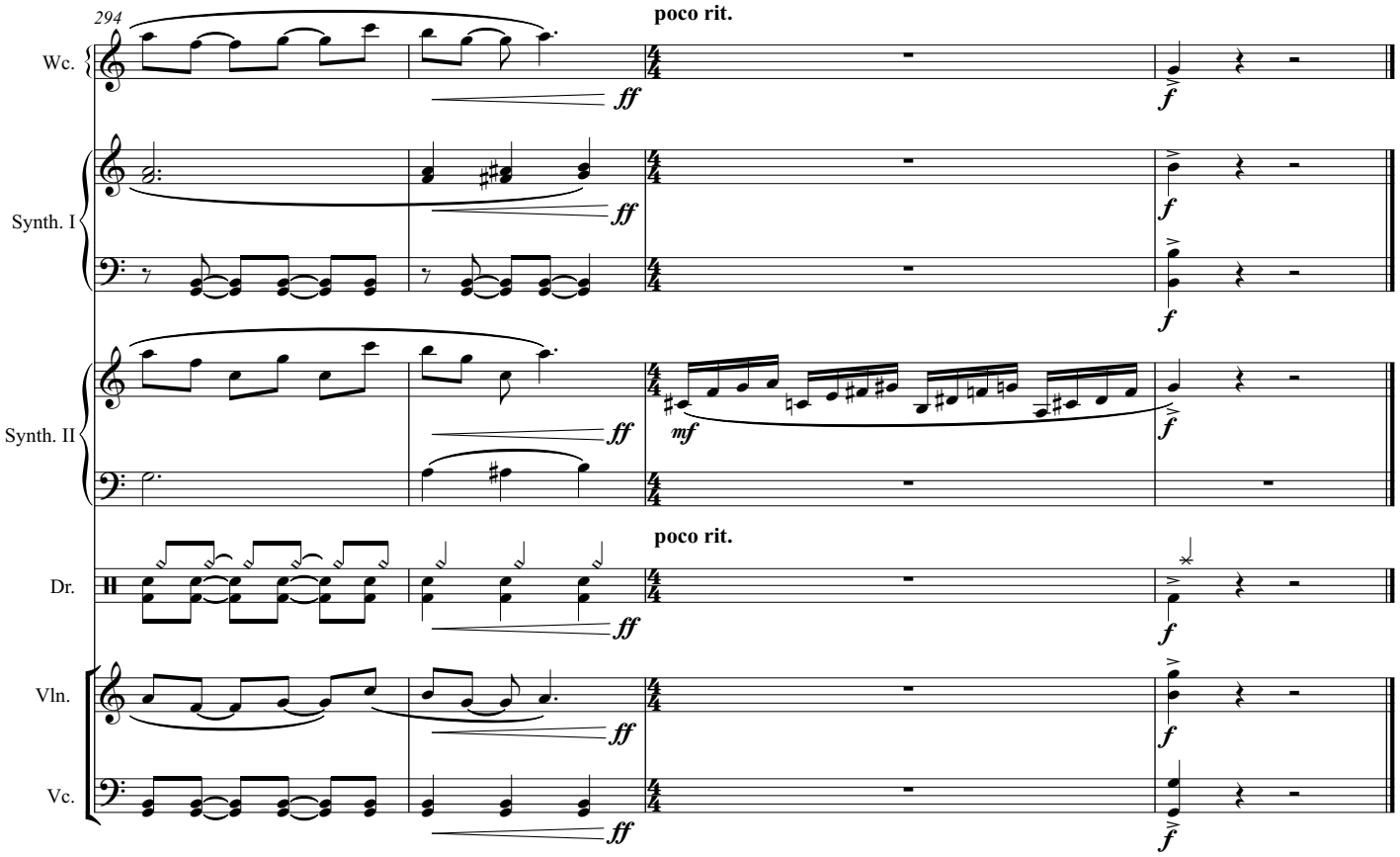

253
BB
Wc.
Synth. I
Synth. II
BB
Dr.
Vln.
Vc.
mp
mp


259
Wc.
Synth. I
Synth. II
mp
Dr.
Vln.
pizz.
Vc.
pizz.


264
CC
Wc.
Synth. I
mf
Synth. II
mf
CC
Dr.
mf
arco
pizz.
Vln.
mf
arco
pizz.
Vc.
mf
269
Wc.
Synth. I
Synth. II
Dr.
arco
Vln.
arco
Vc.


274
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.
279
DD
DD
mf
3
3
53


285
EE
Triumphantly
Wc.
3
f
Synth. I
Synth. II
Dr.
Vln.
Vc.
290


294
poco rit.
Wc.
Synth. I
Synth. II
Dr.
Vln.
Vc.
ff
mf
f