

# North Dakota State University Graduate School

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**Title**

A TRANSLATION OF ART: HOW ARCHITECTURE INFUSED WITH MUSIC  
EDUCATES HUMANKIND

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**By**

Kamryn Nicole Brecht

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The Supervisory Committee certifies that this *thesis* complies with North Dakota State  
University's regulations and meets the accepted standards for the degree of

**MASTER OF ARCHITECTURE**

**SUPERVISORY COMMITTEE:**

Stephen Wischer

Thesis Coordinator

DocuSigned by:

Stephen Wischer

CBA6CA6223024AC...

Stephen Wischer

Primary Advisor

DocuSigned by:

Stephen Wischer

CBA6CA6223024AC...

**Approved:**

05/09/2024

Date

DocuSigned by:

Susan Schaefer Kliman

C9FF1C4ACFB7438...

Department Chair



A TRANSLATION OF ART: HOW ARCHITECTURE INFUSED WITH MUSIC EDUCATES  
HUMANKIND

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## **ABSTRACT**

During the 18th century, humans started to perceive the world around them differently. Structures were designed with the assumption that the meaning of the building would follow afterwards, instead of building with initial purpose. The world we reside in is now full of buildings that are cheaply constructed, unaesthetic, and not serving the needs of a site or its corresponding community. To return to architecture with meaning, architecture must once again be used as a narration for human life. This thesis is a study on how the art of music can be translated into the field of architecture in a way that both educates on the significant effects music has on the individual and the importance of having architecture embodied with meaning. Incorporating music into design could help us return to structures that allow for the discovery of stories, moods, emotions, and showcase the current and past human experience.

## ACKNOWLEDGEMENTS

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I would like to say thank you to my sister, Kasidy, for always looking up to me and believing in me whenever I pursue something new.

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I would finally like to thank my dear friends Kaitlyn, Meghan, Mariah, Caitlyn, Samuel, Cody, and Cole. As we all transition to the next phases of our individual lives, I will always remember the precious memories that we created while completing our degrees together.

## **DEDICATION**

I would like to dedicate this thesis to my fiancé, Joshua. Without him, both my undergraduate and graduate experience here at North Dakota State University would not have been nearly as successful, memorable, or enjoyable. I would like to thank him for all the consistent and unending support that he has given me throughout my academic journey over the last five years. I do not know what the field of architecture will hold for me once I graduate, but I do know that he will always be by my side, no matter what happens in the future, and I will never be able to say thank you enough for that.

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# 1. INTRODUCTION

## 1.1. Problem Statement

Music is something that is deeply connected to human experience. Its origins parallel that of the time of the Greeks, specifically participating in the art of theater and performance. In Alberto Perez-Gomez's book *Chora Seven: Intervals in the Philosophy of Architecture*, there is a chapter titled "Chōra before Plato: Architecture, Drama, and Receptivity" that was written by Lisa Landrum. Landrum's article talks about music's origins being tangential to participation in Greek theater. People used to visit the Theater of Dionysus to participate in and watch plays. The theater hosted many events over the years and became the stage for many different plays. The plays and stories that took place there were affected by the location of the theater, but the theater was also simultaneously affected by the plays (Landrum, 2016). To understand this unique relationship between stories and locations, we first need to understand the concept of Chora. In this article, Landrum, defines Chora as "formless open entity that receives, nurtures, and sustains all things and all change" (Landrum, 2016, p. 330). To explain how Chora interacts with stories and locations, Landrum then goes on to say that:

Chora takes on layered and reflexive significance due to a basic situational duplicity inherent to dramatic representation. Performers often present the "land" in question as "this land," thereby implicating not simply the play's (often remote) geographical setting... but also, somewhat paradoxically, the very land within and upon which the performers were acting... (Landrum, 2016, p. 336).

Landrum then also goes on to say that locations "bore layered significance for the people gathered in the theatre, as each feature was in some way tied to familiar myths, historical events,

and common civic practices.” (Landrum, 2016, p. 336) and explains that when participating in one of these plays, you see both the current physical location and the location that is being represented as well. This interaction between Chora and other context gives these historical stories a unique perspective because even though the story stays the same from performance to performance, it also changes due to the physical location influencing it (Landrum, 2016). This concept is important to keep in mind for the field of architecture. When designing, you should always take into consideration the specific history and the unique stories of the site you are working with because they are an integral and crucial part of the site itself. No building exists in a void; it will always fit into a larger context or story that is the location it exists in. Every building will influence, and therefore reversely, should be influenced by, the larger narrative.

Analogous to how architecture was created to showcase stories and their underlying meanings, musical works were created for a purpose as well. In the book, *Timely Meditations Volume 2: Architecture as a Performing Art*, written by Alberto Perez-Gomez, it was stated that musical works did not just exist because. They were created in relation to a specific event or function, like a party or funeral, and then performed at that specific event or function (Pérez-Gómez, 2016b). These musical works were special partially because they were temporary and related to a particular event in history. Being temporary and specified made these musical works unique in a way. Human life, as well as architecture and theatrical performances, also take on this same special characteristic of temporality.

At some point during time, there was a shift in the world. A shift away from highlighting specific purpose and meaning. People started to build for function and efficiency as opposed to building for telling and creating stories. Alberto Perez-Gomez, in his book *Chora Volume 1: The*

*Space of Architectural Representation*, breaks down the idea that sometime around the 18th century, people started to perceive the world differently and people would build structures and assume that the meaning of the building would follow afterwards instead of building with an initial purpose (Pérez-Gómez, 1994). The world around us is now full of buildings that are cheaply constructed, unaesthetic, and not serving the needs of a site or its corresponding community. Many of us can most likely think of a variety of examples that fall under this description. To return to architecture with embedded meaning, architecture needs to once again be thought of as a way to tell stories. Architecture should once again be used to narrate the uniqueness that is human life.

## **1.2. Objective**

This thesis is a study on how the art of music can be translated into the field of architecture in a way that both educates on the significant effects music can have on the individual and the importance of having architecture embodied with meaning. Creating a building that showcases the narrative and importance of music will educate people about music's place in our world. The building will aim to provide a place to experience live music in the city of Austin, Texas. Visitors can both experience live music performances here and learn about the history and significance of music throughout human history. Residents can not only learn about music's history but also its particular impact on the city of Austin and its culture to better understand how music fits into the specific context of a location. This research and building design will be meant to prompt people to consider how atmospheres, the creation of which can happen through space and architecture, can influence and individual's emotions and moods, and

therefore, also potentially influence an individual's perceptions of the interactions and world around them.

## 2. BACKGROUND

### 2.1. Music in Our World

Music is something that relates to human beings both on an individual level and also a cosmic, or more general, level. Music can be very personal to each individual that experiences it. What types of details one person focuses on when listening to a certain piece of music, whether that be a specific instrument, a tempo, a harmony, or something else, could be completely different than what someone else will hear when listening to that same piece of music. Individuals can also enjoy a variety of different songs and specific genres. Each of us can listen to, and enjoy, music in a vastly different way from those around us.

The idea of music, and harmony, also relates to human beings, and our world, in a much grander sense as well. In the book, *The Harmony of the Spheres: A Sourcebook of the Pythagorean Tradition in Music*, written by Joscelyn Godwin, one big idea that is frequently returned to is the idea of a cosmic harmony in our universe. We do not hear sound in space because there is no atmosphere for the sound waves to travel through, but all the planets, moons, and stars are moving through space. The presence of movement means the presence of sound, therefore, Godwin's book discusses the idea that space is full of sound and harmony, and we are simply unable to hear it (Godwin, 1992). This cosmic sound or harmony would mean that music and sound have a deep connection to all human beings on Earth, even if you are just a casual listener of musical pieces. Sound would also have a deep connection to not only us as living things, but to the very world and universe that we are all apart of.



Figure 2.1. (Kircher, 1650)

Another way that music relates to all human beings is through the concept of String Theory, specifically the subset of Superstrings Theory. Superstrings Theory is a theory that everything in the universe is comprised of tiny strings that vibrate both individually and in relation to each other. Superstrings Theory accounts for both bosons and fermions. For simplistic definitions, fermions are the basic particles that make up all matter, and bosons are particles that carry forces. (Kuma, 2016). If Superstrings Theory is truly how our universe operates, that would result in music and sound relating to human beings on a fundamental level. Our world would be made up of vibrations, paralleling how sound and music are made up of vibrations. In

Superstrings Theory, different modes of vibration relate to different particles. This concept, again, parallels music with different speeds or modes of vibration directly relating to the tonality of the sound or the pitch. All the strings in our universe, in Superstrings Theory, vibrate in relation to each other to create the world that we reside in. (Mattson, 2021). In music as well, there are many perspectives, voices, and instruments that are coming together to create an overall piece where everything works in harmony. You can listen to the individual parts that comprise a piece of music and you can also listen to the overall creation that is the full piece of music, where all the parts are working in relation to one another.



Figure 2.2. (Kiefer, 2019)

Music and sound are present everywhere in our world. No matter where you go, there are background sounds that are constantly surrounding you, even if you are not consciously perceiving them all the time throughout your lived experiences.

There is a chapter titled “Architecture as Communicative Setting 1: Premodern Musical Atmospheres” in the book *Attunement: Architectural Meaning after the Crisis of Modern Science*, which was written by Alberto Perez-Gomez. In this chapter, Marcolio Facino (as cited in Pérez-Gómez, 2016a) states that:



The eye sees nothing else except the light of the sun, for the shapes and colors of bodies are never seen unless they are illuminated with light...The eyes, with the help of a certain ray of their own perceive the light this imprinted: the light itself cannot be a body, since it fills the whole world instantaneously from east to west penetrates the whole body of air and water everywhere without obstruction. (p. 51)

Similar to how light lets us perceive the world that we exist in, sound helps give meaning to our experiences by shaping and adding context to our perceptions. Just like in a piece of music, our senses are working together to create and influence our perceptions

The book, *Attunement: Architectural Meaning after the Crisis of Modern Science*, also talks about the concept that architecture's main job is communication through atmospheres. Architecture is meant to give purpose or meaning to specific actions or events. This concept is similar to how musical works used to be written for specific actions or events like parties or funerals and were performed in those particular contexts. Architecture and music both have a unique capability to create atmospheres that affect people's perceptions (Pérez-Gómez, 2016a). Music and sound can also have an impact on how we perceive certain spaces because it is directly related to our senses. The book, *Metaphor and Musical Thought*, by Michael Spitzer, discusses the concept that since music, and sound, is directly related to our senses, music can both be perceived as spaces and simultaneously influence how we perceive spaces. If you ask an individual how they visualize a high note or pitch in terms of space, they will most likely tell you that they perceive it as a space that is small or tight. On the opposite end of that spectrum, that same individual will most likely tell you that they perceive a low note or tone as a large or empty space (Spitzer, 2015). Spitzer's book unravels the idea that we are constantly approached by sound, whether we realize it or not and that these sounds are predominantly perceived

automatically. This means that we may not even realize the effect that music or sound is having on our perceptions or lived experiences (Spitzer, 2015). Sound is a part of life, so one could then make the argument that music is also a part of life. Music and architecture both have the ability to affect our perceptions and lived experiences through moods and atmospheres.

## **2.2. How Does Music Relate to Architecture**

So how does the art of music relate to the field of design, and more specifically, architecture? Both music and architecture have strong connections to history and past stories. Both are capable of creating strong atmospheres and strong emotions. Both have a relationship with the idea of harmony and dissonance, music's being auditory harmony and architecture's being visual harmony. Architecture and music both have a unique capability to create atmospheres that affect people's perceptions. Music and architecture can be created with the intention to convey specific moods or stories. Human life, musical works, and architecture are all special partially because they are temporary. Yet, they can all relate to very particular events or stories from our history and create those moods and atmospheres that can impact individuals.

Someone who has explored the concept of different arts being related to each other before is Daniel Libeskind with his "Chamberworks" collection which was created in 1983. Libeskind created a collection of twenty-eight black and white drawings that are meant to be visual translations of music. In the book, *Daniel Libeskind: The Space of Encounter*, Libeskind discusses the relationship between music and architecture:

Now, the discursive nature of architecture doesn't really think, it speaks. And yet, as it has been pointed out, speech in all languages is itself constructed out of geometrics, out of consonants and vowels. It has even led some to believe that speech is a secret form of music that has been forgotten. So, in one sense we are immersed in music, the all-

encompassing dimension of reality, to the point that there are those who claim that tonality itself is the basic foundation of the material world. (Libeskind, 2000b, pp. 51–52).

Sound and music, being something that is all around us in the world, could help create architecture that is, once again, embedded with meaning and story.



Figure 2.3. (Libeskind, 2000a)

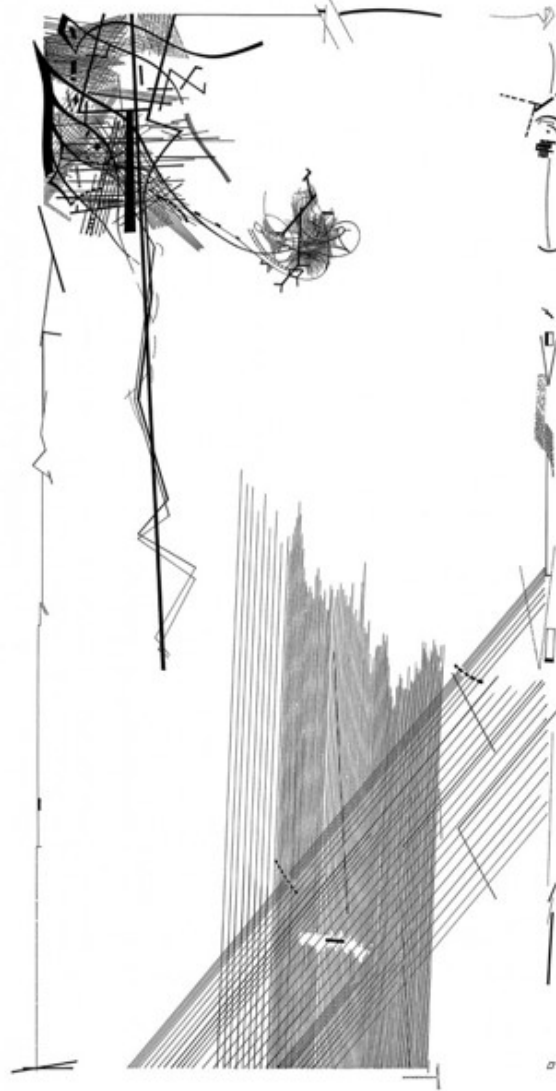


Figure 2.4. (Libeskind, 2000a)



Figure 2.5. (Libeskind, 2000a)



Figure 2.6. (Libeskind, 2000a)

### 2.3. Literature Review

The book, *Attunement: Architectural meaning after the crisis of modern science*, predominantly talks about the concept of atmospheres and how these atmospheres are able to impact us as individuals. This book also talks about the fact that the best fields of art for communicating these atmospheres and moods are music and architecture. Atmospheres can be created through various works of art. These atmospheres are then able to affect people's moods and emotions when they interact with said art. This is a specific ability that both music and architecture have. Pérez-Gómez's book points out a variety of connections between the field of architecture and the field of music. It provides perspective on how to view these two separate fields to better form a translation between them. Insight can also be gained on how to potentially create more specific atmospheres in an architectural work by utilizing the power that music can have over people's emotions and moods (Pérez-Gómez, 2016a).

*Chora: The Space of Architectural Representation (Vol. 1)* is a book that was written by Alberto Pérez-Gómez. Pérez-Gómez's book outlines the definition of the word "Chora" and why this concept is so important to the field of architecture. Pérez-Gómez discusses how architectural works used to be embedded with stories and meaning, but now, as a culture, we have shifted away from this way of designing. The meaning of a building should not come after.; the building should exist to showcase a pre-existing meaning or story. This specific book is important when looking at the connection between music and architecture because it talks about

how architecture can be a representation of something else. Architecture has more meaning when the structures stand for something, whether that be a story, a piece of music, a culture, or something else. To properly connect the art of music and the art of architecture, a designer needs to make sure they are properly representing the concept of music in an architectural design (Pérez-Gómez, 1994).

Another book written by Pérez-Gómez is *Chora: Intervals in the Philosophy of Architecture (Vol. 7)*. The chapter that was especially helpful is called “Chōra before Plato: Architecture, Drama, and Receptivity” which was written by Lisa Landrum. This chapter in Pérez-Gómez’s book explains the concept of Chora and discusses how the concept of Chora ties into not only Greek performance and theater but also modern-day time as well. A brief overview of the history of Greek theater is also explained by Landrum in this chapter (Landrum, 2016).

The book *Metaphor and Musical Thought*, written by Michael Spitzer, outlines how the arts are connected to each other more than people realize and also how they are connected to an individual’s perceptions of the world that they move through. This book explains how music can be perceived or translated into other senses or mediums that people experience, like physical space, taste, or color. Spitzer’s book also mentions the idea that because our world is made of movement, music and harmony are important in our world and also that sound influences and individual’s perceptions more than they probably realize (Spitzer, 2015).

*Timely Meditations, vol.2: Architectural Philosophy and Hermeneutics (Selected Essayson Architecture) (Vol. 2)* is another book that was written by Alberto Pérez-Gómez. This work of Pérez-Gómez outlines the issue that we are facing within the field of architecture in our modern society. The book explains that structures used to have more meaning behind them, and people would, in the past, participate in events like Greek theater to gain understanding of the

world around them. That has shifted now and not only are our structures less focused on giving perspective, but people are also less interested in gaining perspective. There was a shift in how individuals viewed the world around them. Pérez-Gómez also discusses the uniqueness behind things that are temporary or specific to the passing of time, like human life and the creation of architecture (Pérez-Gómez, 2016b).

*The Harmony of the Spheres: A Sourcebook of the Pythagorean Tradition in Music* was written by Joscelyn Godwin. Godwin's books unpack a variety of topics that relate to ideas of music. Some of the topics most relevant to this area of research specifically are vibrations, cosmic movement, ratios and intervals, and the idea of cosmic harmony. Godwin's book discusses these topics and more, and outlines how these topics relate to us and the world that we reside in (Godwin, 1992).

The book, *Daniel Libeskind: The Space of Encounter*, is a literary work, written by Daniel Libeskind himself, that discusses a variety of Daniel Libeskind's pieces that he has created throughout his lifetime. The Libeskind collection that specifically was helpful to this thesis process was the "Chamberworks" collection. This collection is a series of twenty-eight different drawings that Libeskind created that were inspired by pieces of music and were described in his book (Libeskind, 2000b).

#### **2.4. Project Type**

The project type for this thesis will be a public building where visitors can experience and learn about music. Orchestral theaters and live music arenas already exist throughout the United States of America, but this structure will incorporate ideas of storytelling and music itself to provide a new perspective on the art of music. Researching how the art of music can be translated into the field of design, and more specifically, architecture will demonstrate that the

arts are not, and do not need to be, separate. Different areas of artistic creation like architectural design, literature, sculpture, painting, drawing, and many more are not isolated from one another. The arts can interact and layer with each other to help better tell specific stories of people, locations, and communities. In our current society, buildings are often designed and constructed with little thought or care put into them. Infusing architecture with the art of music can help to tell a specific story and once again have structures with meaning behind them. The site of this thesis project used to have a strong connection to both music and the history of the city itself before it was redeveloped. The structure designed as a part of this thesis will not only confront the issue of buildings without meaning but will also address the disconnect that now exists on the site and reintroduce the important context of music that is currently absent.



### **3. METHODOLOGY**

#### **3.1. Approach**

When starting the design process of this thesis there were a variety of things that were considered from the beginning. When choosing a site, the location needed to have a history that was rooted in music. This would allow a deeper connection between the design of the building and story of music. The story and history of music itself was also something that heavily influenced design decisions throughout this process.

#### **3.2. Project Location**

The site of this thesis is in the city of Austin, Texas within the United States of America. Austin gave itself the title of the “Live Music Capital of the World” in 1991 (Buchele, 2016). The city has over two hundred and fifty live music venues that showcase a wide variety of musical genres and performers (Morthland, n.d.). A number of these music venues have been established in the city of Austin since the 1900s, leading to a strong connection between these locations and the culture of Austin and its residents. A variety of different music festivals and music-related events are hosted in the city as well because of its strong connection to music and history of live performances (“Music of Austin, Texas” 2024). Austin, Texas was researched and chosen because of its connection to music and because that connection encompasses a plethora of musical genres. This broader musical context was preferred over a city that specializes in a more specific type of music like New Orleans, Louisiana which has a history based in jazz and blues or Los Angeles, California which is widely known across the country for its production of predominantly pop music.

### 3.3. Specific Site

This thesis site is specifically at the intersection of South First Street and Barton Springs Road in Austin, Texas. This location used to hold the Armadillo World Headquarters, which was an old National Guard armory that was then turned into a concert hall and beer garden in the summer of 1970. This concert hall was the first really successful live music hall in the city of Austin and helped catapult the city into the now nationally recognized city of music that it is today. Armadillo World Headquarters would eventually be demolished in 1981 and replaced with a thirteen-story office complex (“Armadillo World Headquarters,” 2024). The building that is designed as a part of this thesis will sit directly across the street from where the Armadillo World Headquarters building used to reside, at the intersection of South First Street and Barton Springs Road. This site is currently an unkempt grade-level parking lot and is surrounded by predominantly office complexes, apartment buildings, hotels, and small restaurants.



Figure 3.1. (Yaetes, 1997)



Figure 3.2. Site Context Map

### **3.4. Precedents**

#### **3.4.1. The Berliner Philharmonie**

A structure that I drew inspiration from throughout the process of this thesis is The Berliner Philharmonie. The Berliner Philharmonie is a concert hall that is located in Berlin, Germany. It was designed, by Hans Scharoun, to replace the original philharmonic structure that was destroyed during the events of World War II and opened to the public in 1963 (Kroll, 2019). This building is not only known for the many famous performances that have taken place there over the years, but also because of its design and how space is experienced by the individual inside. The Berliner Philharmonie has spaces that are unexpected or unorthodox. Spaces are large

and open where you would not anticipate it and vice versa (Zohlen, n.d.). This forces visitors to contemplate the use of space and how these spaces are potentially influencing their perceptions of those particular spaces. This emphasis on space interacting with an individual's perceptions is something that should be focused on when designing for this thesis.



Figure 3.3. (Gora, n.d.)

### **3.5. Artefact Creation**

During this thesis process, I created an artefact to explore both the story of my research and the story of my particular site. The artefact I have created is a physical manifestation of music and its strong effects on both a micro and macro scale. The artefact first begins with a poem titled “Light and Gold” written by Edward Esch.

This poem was then translated into Latin by Charles Anthony Silvestry at the request of Eric Whitacre. Eric Whitacre is a composer who then wrote a piece of music based on the specific language of the original poem. This choral piece is titled “Whitacre: Lux Aurumque” and has a very unique backstory. “Whitacre: Lux Aurumque” was created by a virtual choir. The song is comprised of one hundred and eighty-five different singers from countries around the

world. People sent in video clips of themselves singing individual parts of the song, and then Eric Whitacre compiled all of the parts together to create a choral piece made of individuals from all over the world who had never met each other before (“Lux Aurumque,” 2023). When this song was first released in 2009, it gained a lot of popularity in the music world and beyond because of its ability to ignore or surpass the physical boundaries that music can occasionally have. The poem that “Whitacre: Lux Aurumque” is based on can seem very simplistic, but it showcases different mediums of art’s ability to interact with each other.

The next translation of art is the work that I did in the process of this artefact. I decided to create a series of watercolor paintings that were influenced by Eric Whitacre’s song that he composed. Watercolor was chosen as a medium because of its never-ending ability to be dynamic. One can always continue to add more color to a watercolor painting. One can also choose to remove pigment by just adding water to the piece. The piece of art that is being created is, in theory, never fully finished; the piece can always continue to change. This concept mirrors the fact that human emotion, and how music impacts a specific individual, is never static in our world. This series of watercolor paintings would also be a continuation of connecting different artistic mediums. First there was a poem, that was then translated into a song, that was then translated into paintings. The first series of paintings that were created are nine variations of the same abstract visual. Each of these individual artworks are, at face value, the same piece, but each one has a plethora of small changes depending on how the song affected the atmosphere and my mood at the time of creation. Some of the paintings were created in the morning, some late at night, and some were created when I was experiencing very strong emotions such as intense joy or stress. Every time I created a new painting, I listened to Eric Whitacre’s song throughout the entire length of the painting process. Each work manifested slightly different

because of how the song interacted with the context of that particular day and influenced my emotions at the time of creation. Each work is specific to the passing of time, which makes the piece unique.



Figure 3.4. Phase One Watercolor One



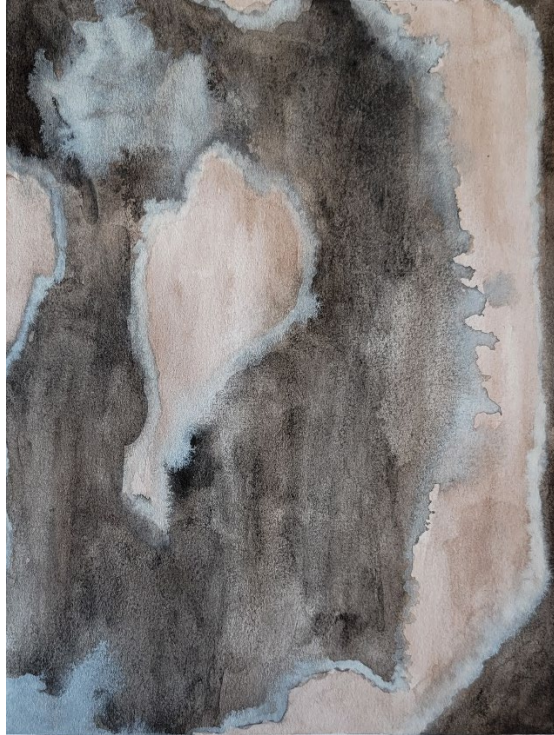


Figure 3.5. Phase One Watercolor Two

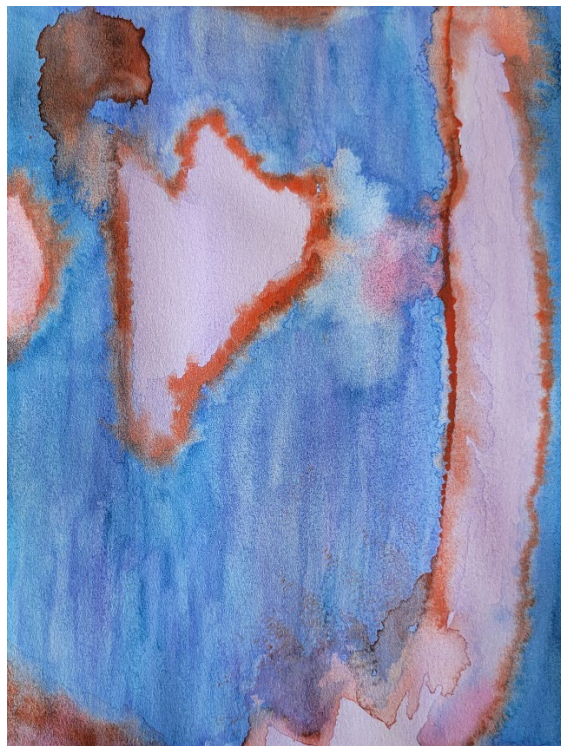


Figure 3.6. Phase One Watercolor Three



Figure 3.7. Phase One Watercolor Four



Figure 3.8. Phase One Watercolor Five





Figure 3.9. Phase One Watercolor Six



Figure 3.10. Phase One Watercolor Seven



Figure 3.11. Phase One Watercolor Eight

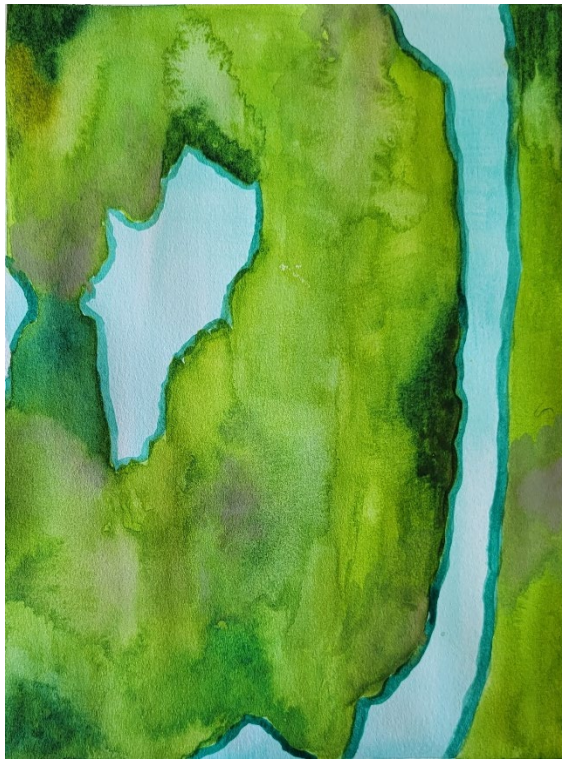


Figure 3.12. Phase One Watercolor Nine

People could then view this collection of the "same work" that was created more than once and start to gain understanding on how music interacted with the specific Chora of that space and moment to create a work that is slightly different than the others in the collection. This opens up a conversation for people to have about how music and Chora could be affecting their everyday interactions, potentially without them even being conscious of it happening.

I then moved on to creating more watercolor paintings at a larger scale. I created a variety of sporadic paintings that, once finished drying, had evenly-spaced slits cut into them. Same as the process followed with the first series works, I listened to Eric Whitacre's song while creating these paintings. Due to the innate flexibility of paper as a medium, and the slits cut into the paper, the paintings can be manipulated by an individual to create a never-ending amount of patterns, volumes, and spatial representations. This flexibility the unique ability that music has to constantly be dynamic and evolving. How a piece of music might influence someone on a specific day in time might not be how that piece influences that person later in life, or a different person entirely.

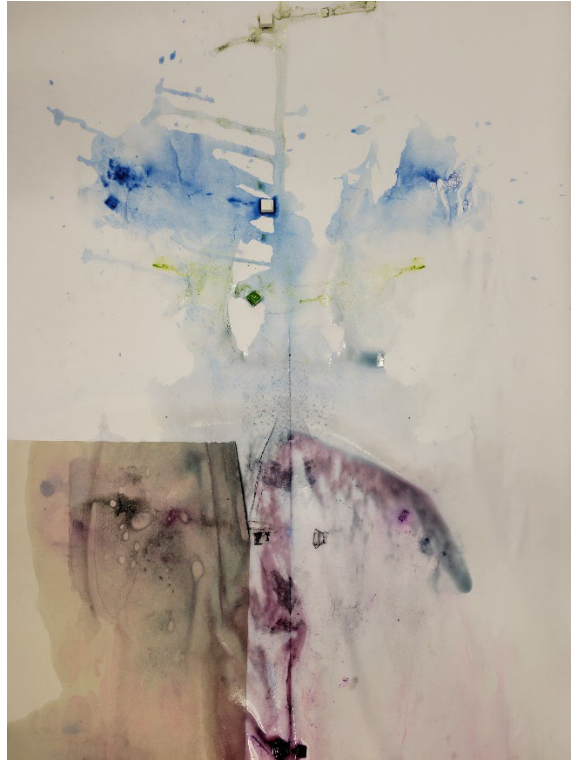


Figure 3.13. Phase Two Watercolor One



Figure 3.14. Phase Two Watercolor Two





Figure 3.14. Phase Two Watercolor Three

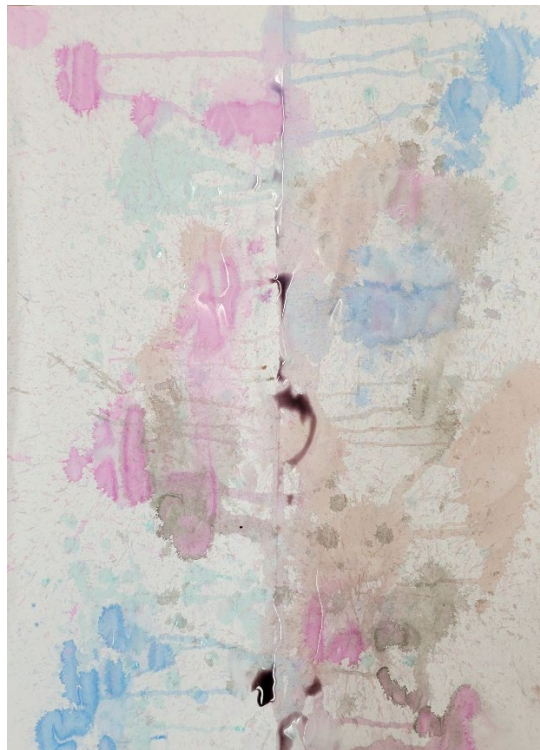


Figure 3.15. Phase Three Watercolor One

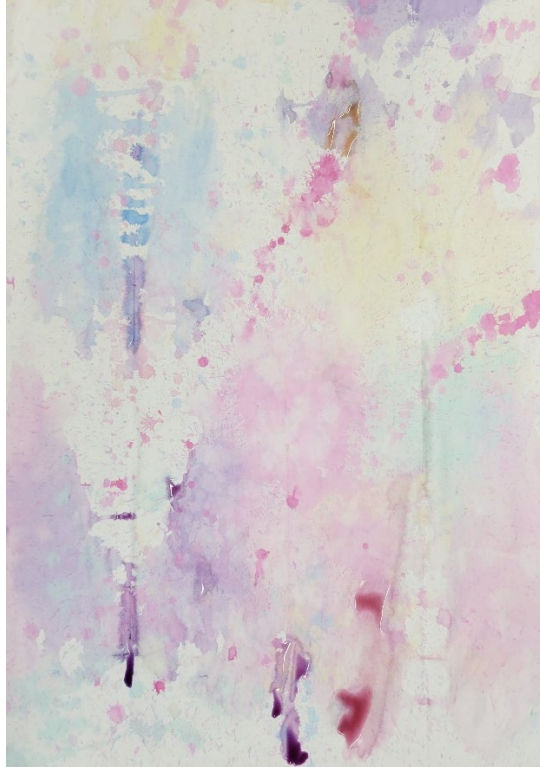


Figure 3.16. Phase Three Watercolor Two



Figure 3.17. Phase Three Watercolor Three

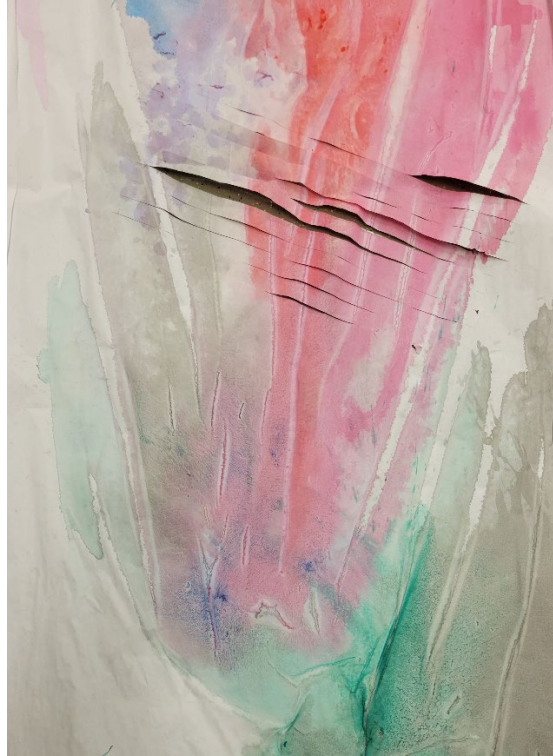


Figure 3.18. Phase Three Watercolor Four



Figure 3.19. Phase Three Watercolor Five

This artefact moves through micro and macro scales as it explores the music ever-present in our world. The first set of watercolor paintings are a representation of how music, and its interaction with Chora, can impact a specific individual's emotions. The following watercolor paintings showcase the concept of music on a macro scale. These pieces show how the moods and vibrations of music throughout our world could potentially physically manifest. Music is something that encompasses our world as a whole yet is so specific to each human being that experiences it. This artefact tells that unique story of music and helps people to understand how music fits into their personal lives. Overall, this artefact's purpose is to invite people in to reflect on music and how music potentially influences the story of their own life.

### **3.6. Gaps in Research**

The design of this building is focused on how to not only let individuals experience live music but also how to educate those individuals on how and why music has an influence on their moods and emotions. This was done through specific design elements of the building as well as through the types of spaces that are available in the structure itself. If given more time to continue researching these topics and designing further, more research would have been potentially done in the areas of specific theater design, acoustical design, and potentially Greek theater design versus modern-day theater design. The building narrates the story of music, but knowledge of, and use or avoidance of, these tangential design topics could potentially help tell that story even more effectively.



## **4. RESULTS AND CONCLUSIONS**

### **4.1. Final Project Description**

This building is a mix of an orchestral theater and a museum. The building will hold an orchestral theater for a variety of live music performances, an orchestra practice room, smaller practice spaces for individual or small group practice sessions, and exhibition space. The orchestral theater in this building has two floors of seating and can hold around 200 visitors. The orchestral theater would be a place for people to visit and both experience music and learn about music and its impact on human beings.

People can visit this building to experience live music performances, more closely interact with people within the field of music, take classes on how to sing or play an instrument, participate in a community band or orchestra, interact with people within the community of Austin, Texas, learn about how music and sound relate to all human beings, and learn about how music is capable of impacting people's emotions and moods through the creation of atmospheres. The human experience can have an effect on art, but the relationship can also work the other way around. Art, similar to music and architecture, can have an effect on human beings as well.

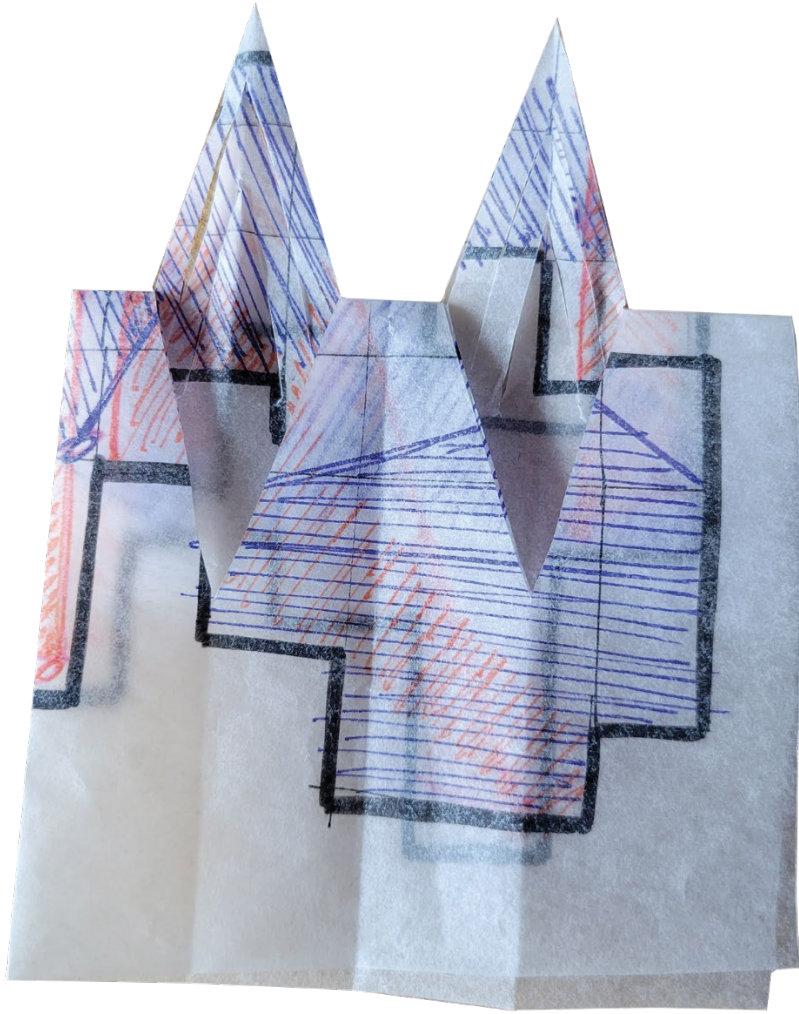


Figure 4.1. Process Sketch of Tension and Layering

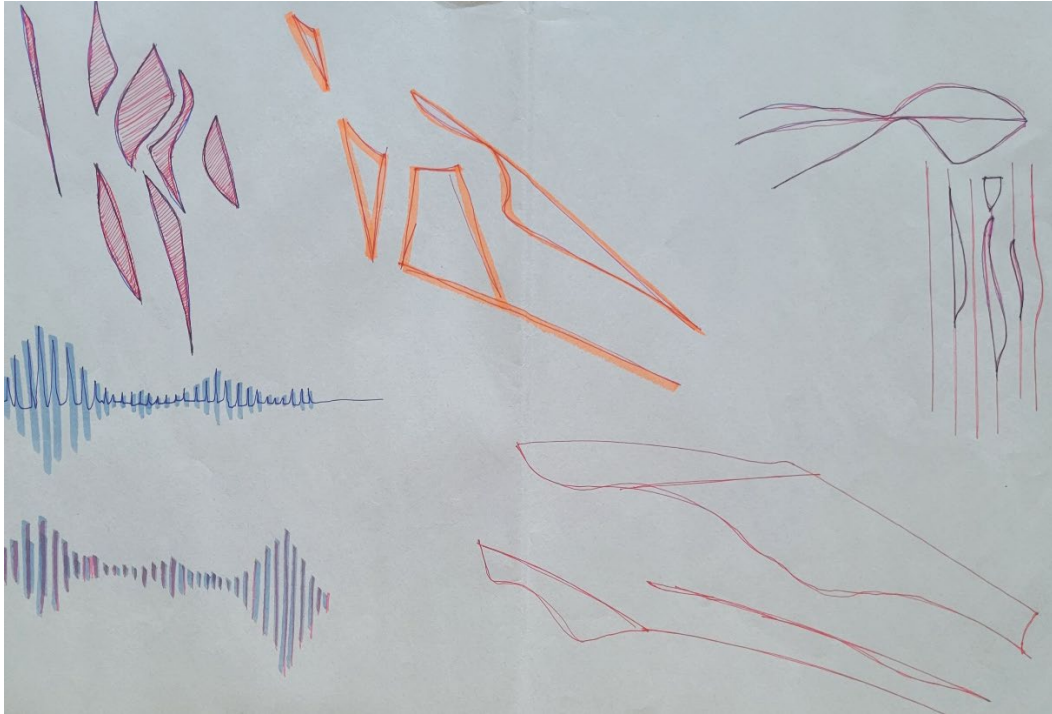


Figure 4.2. Process Sketch of Musical Forms

#### 4.2. Project Design and Documentation

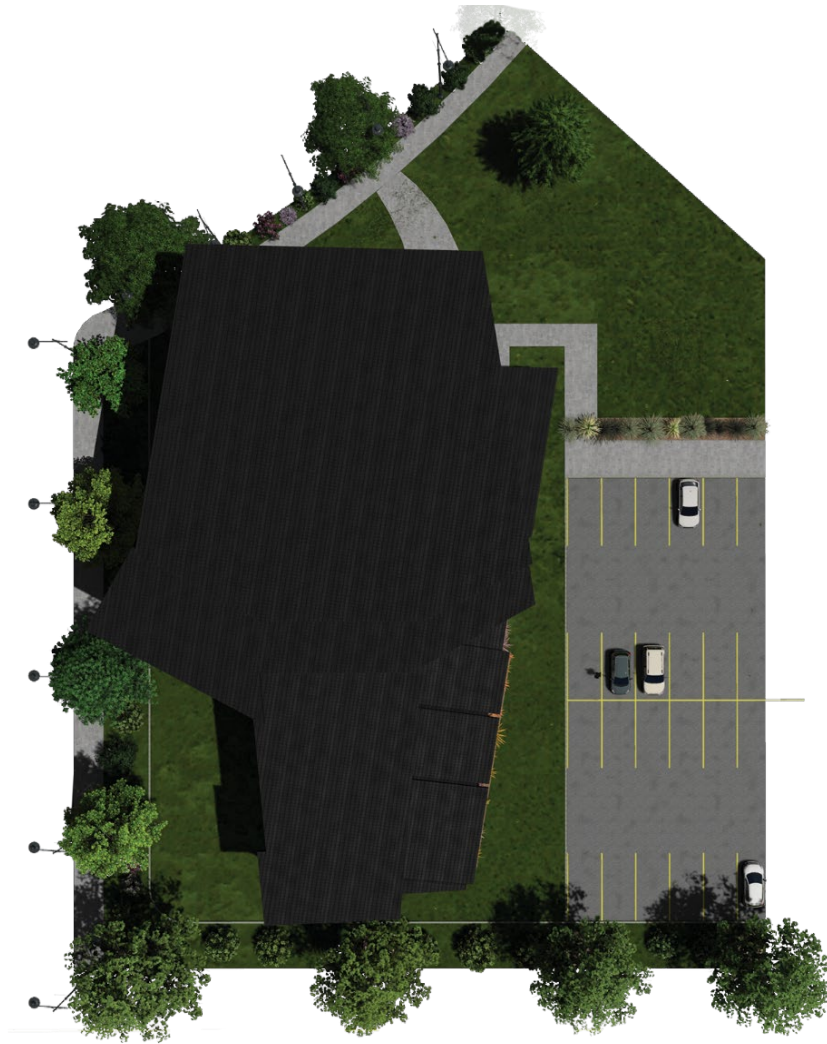


Figure 4.3. Site Plan

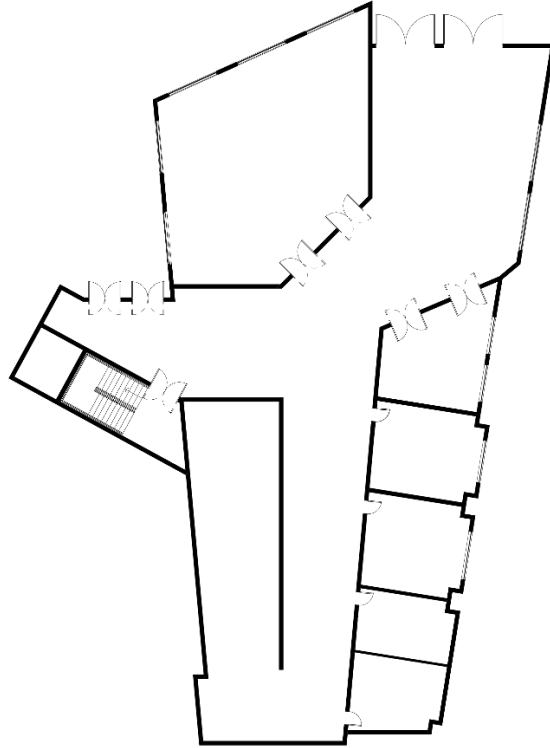


Figure 4.4. First Floor Plan

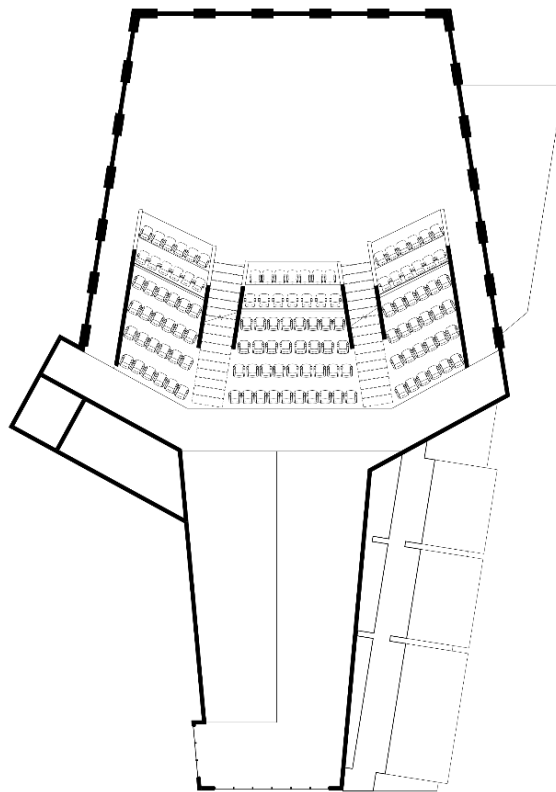


Figure 4.5. Second Floor Plan

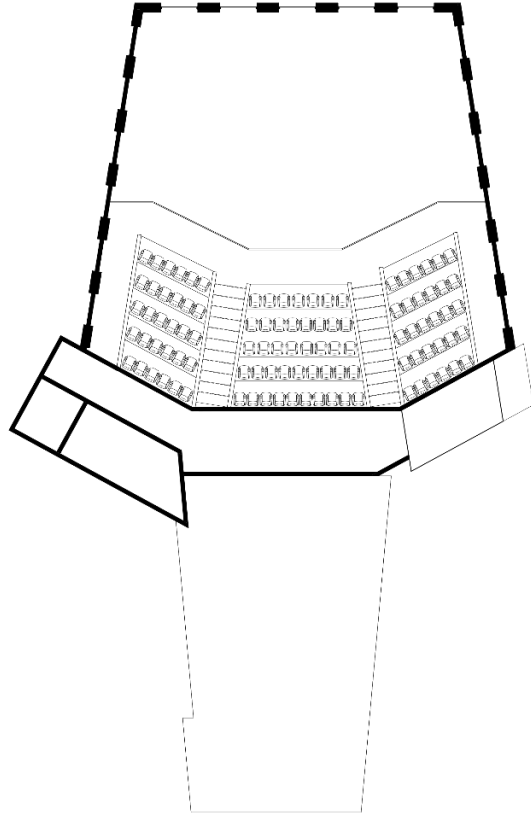


Figure 4.6. Third Floor Plan



Figure 4.7. North Section Cut



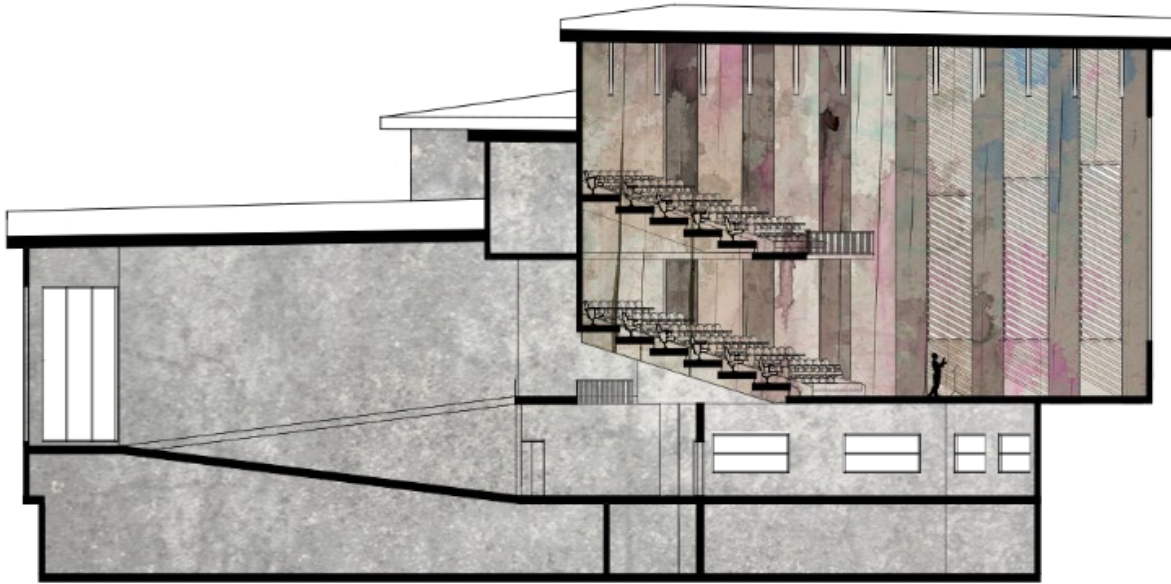


Figure 4.8. West Section Cut

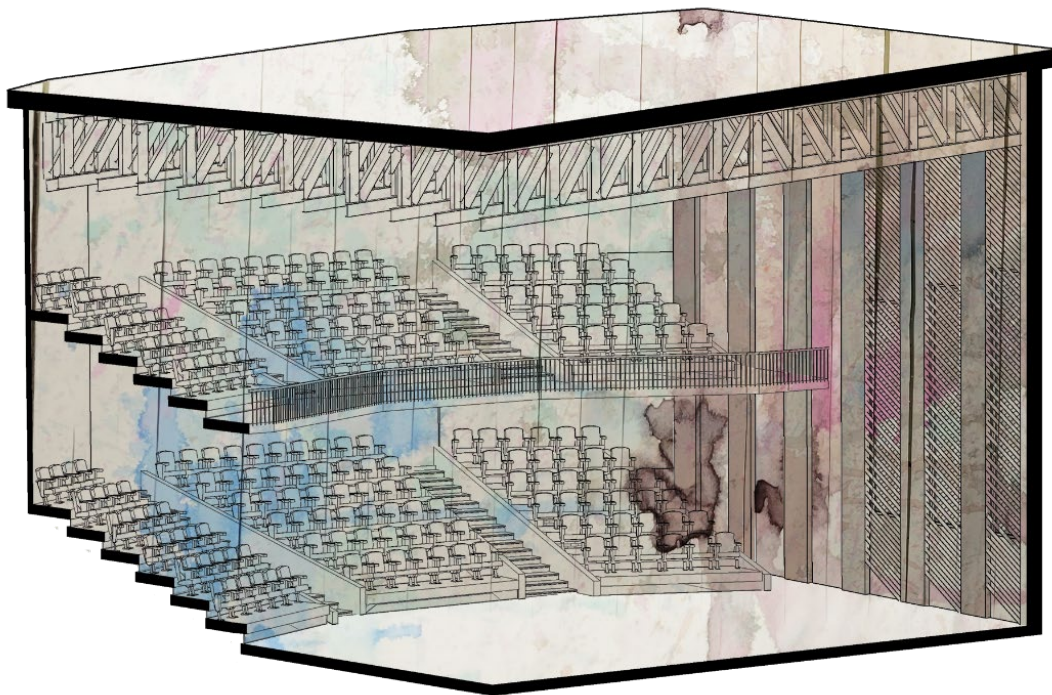


Figure 4.9. Orchestra Theater Section Perspective



Figure 4.10. First Exterior Perspective

All the separate materials of this structure are working together to create a feeling of dissonance. The layers of different spaces and floors create visual friction and tension between each other from both the exterior of the building and the interior. The materials are meant to showcase the feelings of friction and tension that can sometimes be felt when listening to a piece of music. Light-colored and natural materials were chosen to mirror the materials visible in other buildings throughout the city of Austin, Texas.

Where there used to reside a grade-level parking lot, green space was re-introduced to the site to break up the sea of concrete and asphalt of the surrounding context. A variety of local trees and landscaping plants add new life to the site. A path extends from the entrance of the building out towards the direction of the site that used to hold the Armadillo World Headquarters building, to show and highlight where the story of music first started unfolding in this city.





Figure 4.11. First Interior Perspective

When entering this structure, you enter in from beneath the orchestral theater. As you progress further into the building and up the ramp to the second floor of the building, you are surrounded by exhibition spaces that communicate the historical context and significance of music itself. Proceeding into the building and up the ramp creates a feeling of tension as your space slowly gets smaller and smaller. Most of the walls in this structure not being perfectly parallel or perpendicular with each other slowly starts to create more feelings of tension and friction while exploring inside.

When looking up, you will see and hear slits or cuts of both light and sound through the various tiers of seating that make up the orchestral theater located directly above you. This allows you to view glimpses of the unique experiences that will come once you've arrived in the orchestral theater. Shadows and outlines of the individuals above you, moving around in the space and preparing to sit down, are apparent through the seating tiers that are constructed out of

translucent concrete to showcase that music is not something that should ever be isolated. There is a duality in your consciousness being present where you currently are and also in the space you will eventually take up space in, which parallels the Greek theater being simultaneously both its own physical location and the location it is meant to represent during a performance.

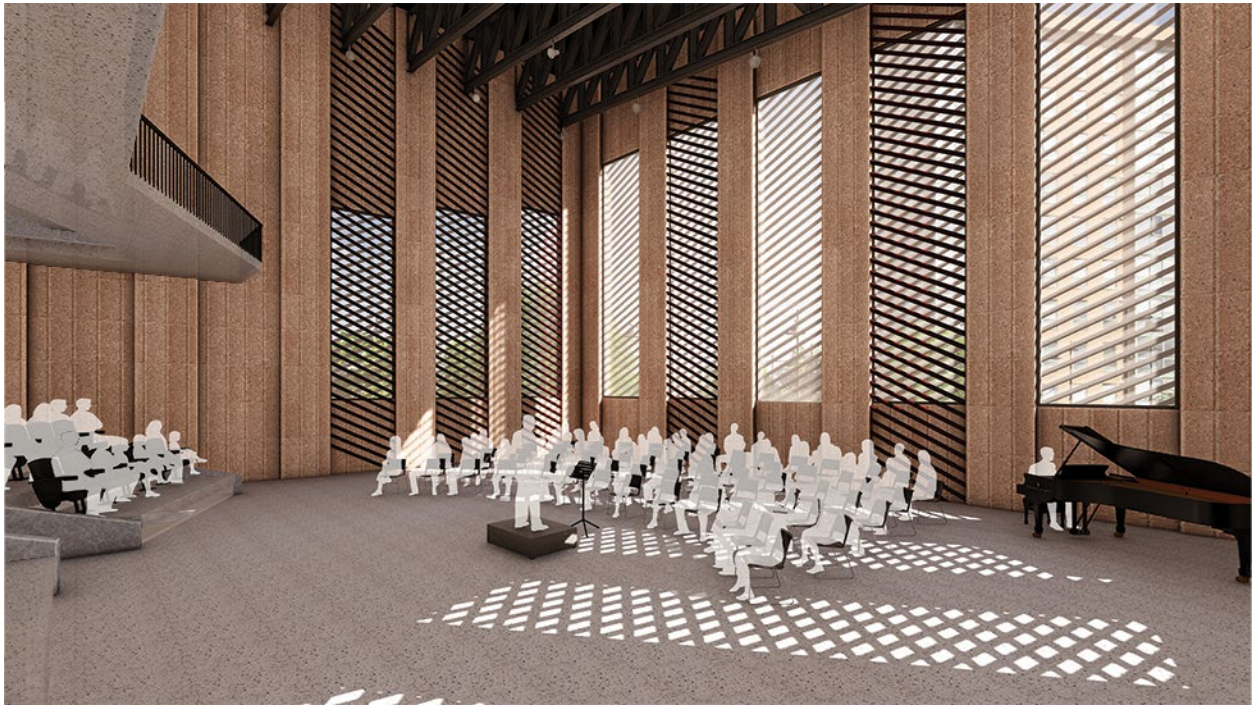


Figure 4.12. Second Interior Perspective





Figure 4.13. Third Interior Perspective

Once your journey of progression finally ends at the orchestral theater, the visual tension is released, and you can once again see shadows and outlines of the floor either directly above or below you through the translucent concrete tiers of seating. All the tiers and floors of seating are layered upon each other, perfectly parallel, to work in visual harmony with one another. When looking towards the North and North-West walls of this orchestral theater, you will be able to view the site where the Armadillo World Headquarters music hall used to reside before it was eventually demolished. Being able to view the surrounding context of the site allows performances taking place in this building to be unique and specific to this location in Austin, Texas. The time of day, specific weather, current season, potential wildlife, and local community members or visitors present outdoors at that moment in time all have a direct impact on the performance that is taking place, similar to how the performance is impacting all of the individuals that are experiencing it inside.



Figure 4.14. Second Exterior Perspective

### **4.3. Concluding Thoughts**

This orchestral theater and museum through its unique materiality, specific spaces available, progression through certain spaces, and its connection to its site offers a new way to experience live music in the city of Austin, Texas. This building also educates people on the importance of music in both their individual lives, and the greater context of the universe that we all have the opportunity to exist in together. Visitors will be able to gain a new or more thorough understanding of how their perceptions are formed and influenced by their experiences and the context that is constantly surrounding them. Individuals will also have a more well-rounded understanding of how moods and atmospheres are created through architecture, how these atmospheres can dramatically influence the perceptions that they have, and that the arts are capable of interacting with one another.

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