



Remixed Architecture

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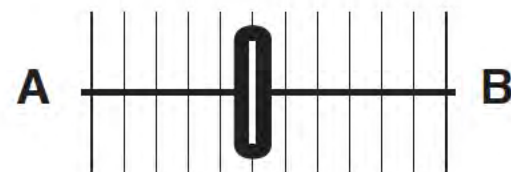
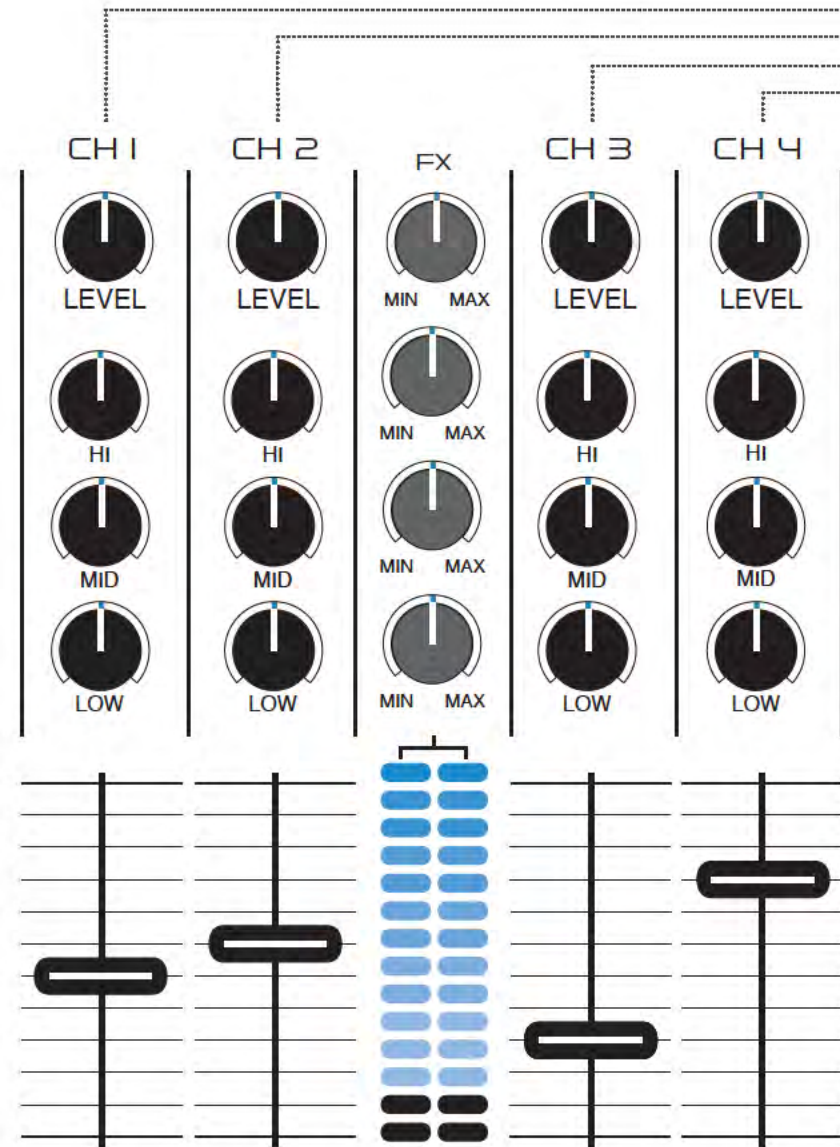
Mark Farlow, Graduate Thesis Advisor

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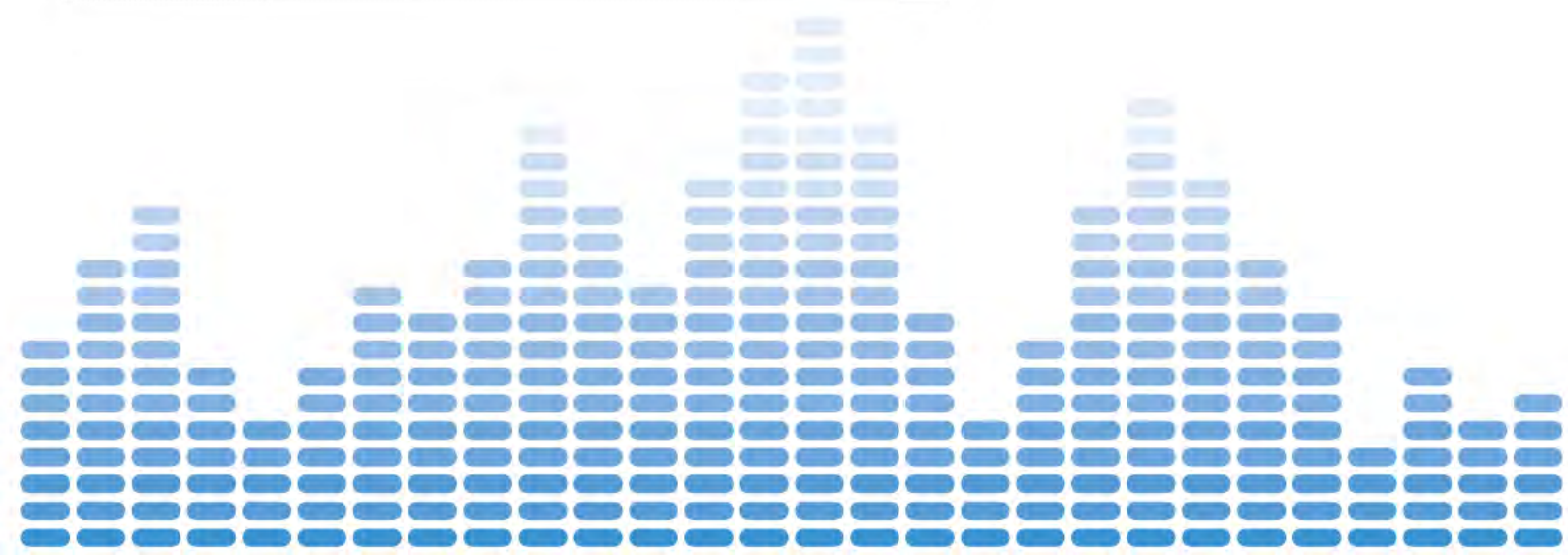
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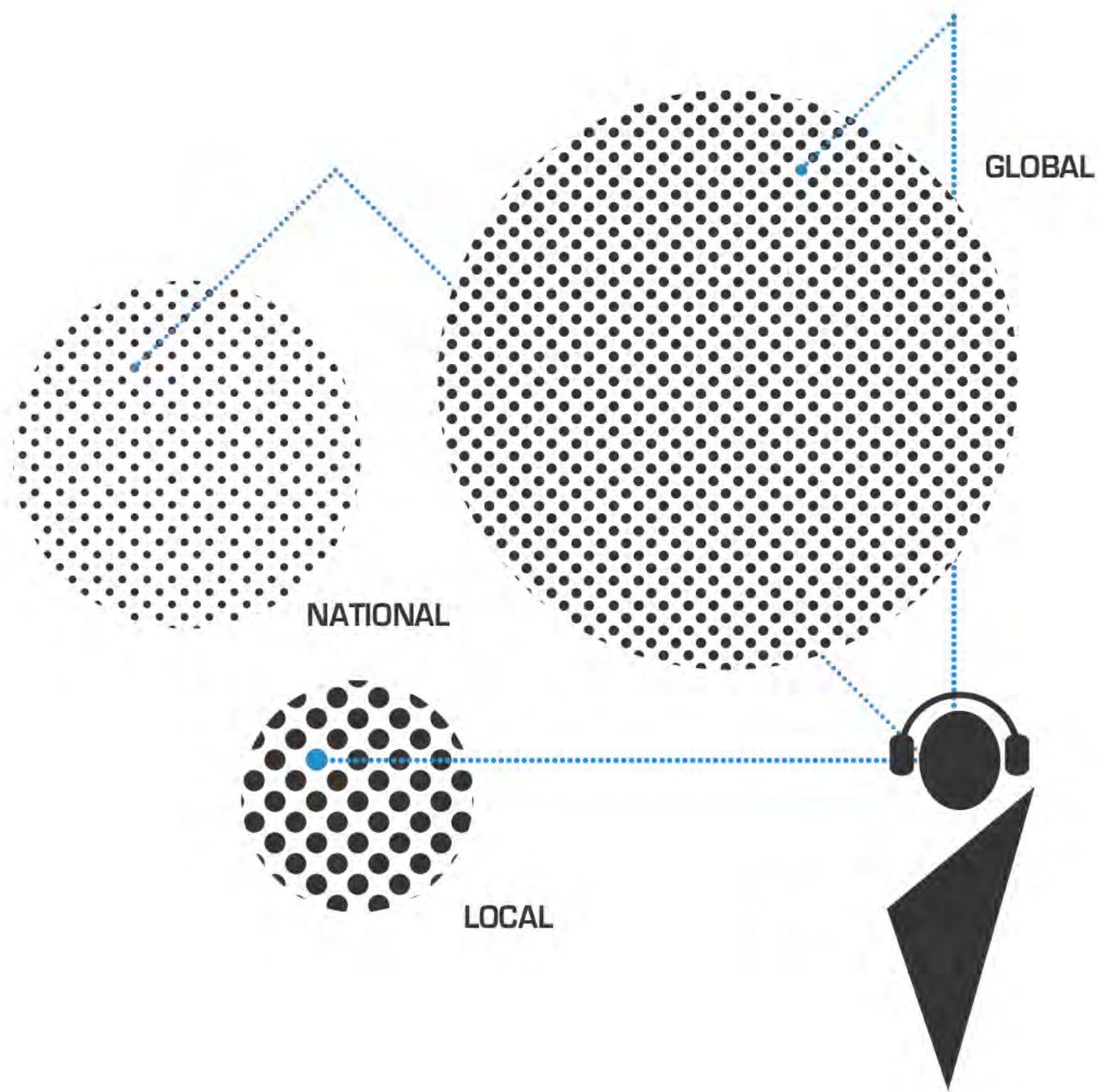
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FOREWORD

A contemporary disc jockey, while having the tools to manipulate the frequencies of sound, does not always manipulate the sound, but simply alters the way in which the music is presented; in other words, he/she is controlling the way in which it is heard by the person or people within space. Architecture parallels this idea in the geometric forms that it takes. As an example, Italian renaissance architects Vitruvius and Palladio both manipulated geometrical proportions to control musical harmonies.¹

Music can be broken down and reduced to its fundamental elements that relate to artistic fundamentals such as rhythm, repetition, and harmony. Do these correlating elements translate into architectural design of space? Literally, or metaphorically?

In this discourse the intertwining fields of music and architecture will be explored; the art of music and its production will be studied as a means to examine the effects of music on the person and on the design of space.

According to Daniel Liebeskind, music is much like architecture and the two fields correlate and

inspire one another. Music and architecture are both static and kinetic; music is written on a staff and architecture drawn on paper, frozen.²

Music flows from note to note, melody to melody, just as architectural elements draw one's eye from corner to corner, edge to edge, and space to space in a rhythmic harmony.

Music can be broken not only into elements but also by the major frequencies: bass, treble, and mid-tones, which are essential to the perception of sound. Controlling such frequencies allows for the disk jockey to alter the aural perception of sound. Does architectural space also control frequencies and thus the perception of sound?

In the realm of remixing music, changes to such frequencies as well as splicing, layering, reconfiguration, condensing and expanding of musical elements seek to alter a song for a specific purpose, most often dance. The melodic alterations seek to change the experience of a space. Do these changes between original and end-product in the fields of music and architecture share similar concepts, or theories?

The aural aspect of space is often cast aside during the analysis of a predominantly aesthetic field of architecture. Unless specifically designed as a venue for music, the acoustical quality of space is overlooked. Aural architecture exists both in a physical form as well as a virtual form. In the recording studio, space is created within a spatial synthesizer where the physical environment is completely controllable.³

How does the architectural space influence the perception of sound, live or recorded? Can a space work similarly to a spatial synthesizer providing live manipulations to space to enhance space for the perception of sound or music?

This thesis attempts to analyze and question the art of music as well as the production of music as a means to explore a remixed architecture. In viewing the realm of architecture through the scope of the disc jockey, one can begin to draw parallels between music and architecture. Respectfully, the DJ and the architect may be one in the same.

WHAT IS MUSIC?

Music is defined by many different sources and yet there is no unanimous way to explain it. Music is, “the science or art of ordering tones or sounds in succession, in combination, and in temporal relationships to produce a composition having unity and continuity,” “an agreeable sound,”⁴ or “...to produce beauty of form, harmony, and expression of emotion.”⁵ Music is both personal to oneself as well as within an ordered social group, territory or region.

Noise and sound, although potential components of music, present their own unique phenomenon; the sound of a stream flowing along jagged rocks or the whisper of the wind in a meadow could be considered music. The clashing of garbage bins and the smashing of glass bottles can create music. Music is subjective. This subjectivity can explain why some people listen to rock and others heavy metal or Beethoven’s ninth.

Musicologist Jean Jacques Nattiez states that, “The border between music and noise is always culturally defined—which implies that, even within a single society, this border does not always pass through the same place; in short, there is rarely a consensus ... By all accounts there is no *single* and *intercultural* universal concept defining what music might be.”⁶

If there were one fact about music that is more or less commonly accepted, it would be that music is intrinsic to the human condition and it is the subjective qualities of music that determine whether music is enjoyable to oneself.

In acoustics, subjective values were first introduced by Leo Beranek in 1960 and are still in use today. It was his intention to translate the qualitative values of musical enjoyment into quantitative measures utilizing what he deemed: intimacy or presence, liveness or envelopment, warmth, loudness, clarity or definition, and brilliance—each of these factors being measurable in terms of reverberation, sound reflections, and spatial volume.⁷ Intimacy or presence refers to music sounding as if it is being

played in a smaller space. Liveness or envelopment refers to the persistence of sound used to encapsulate the listener. Warmth relates to strong bass tones and long reverberations and loudness refers to the volume of sound. Clarity allows one to hear intricacies and complex patterns while brilliance refers to how well those sounds persist in space.

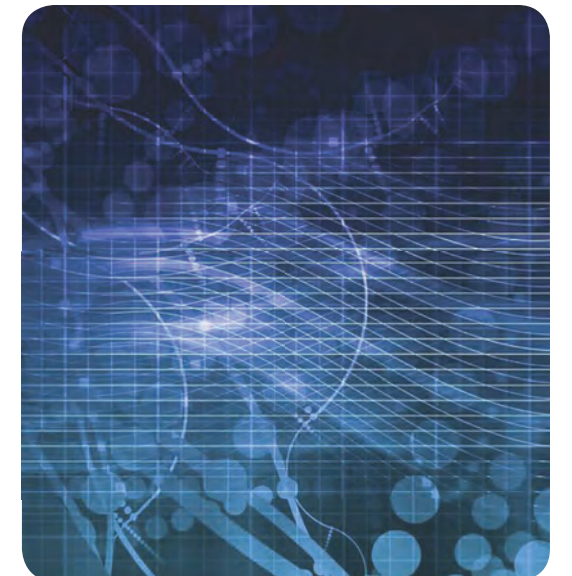
Beranek developed his measures largely from the subjective qualities involved in acoustic performance halls and yet the measures are applicable to most, if not arguably all, spaces. For example, one still analyzes how well one’s voice can be heard within a classroom or lecture hall (clarity); how one’s steps are heard within a hallway (brilliance); and how one’s home theater system captures reality (intimacy & envelopment).

However, it is ultimately biology and upbringing—nature versus nurture—that determines whether a sound is pleasant or unpleasant and therefore responsible for what one’s preference for music may be. The acoustic qualities of music combined with one’s mental associations lead to one’s feelings about a particular song and that reaction is almost immediate. It takes milliseconds for the human mind to judge sound and only about half a second to form an opinion that would likely be the same as the opinion after listening to the entire length of a song. Aside from loudness, the timbre (distinct character of sound) is the first part of sound to be recognized. This is largely due to our innate survival instinct. Timbre allows you to recognize the sound of your mother’s voice and distinguish it from a stranger’s as well as whether or not you are being scolded or praised. Every sound has a unique pitch and intensity that helps establish mood.⁸

In parallel to acoustic qualities, mental associations and memories determine the feeling one has toward a song in question. A song or sound within a musical composition can remind one of a particular moment in time at which they felt a particular way. That emotion affects the reaction. Similarly the memory of place can affect how one responds to music.

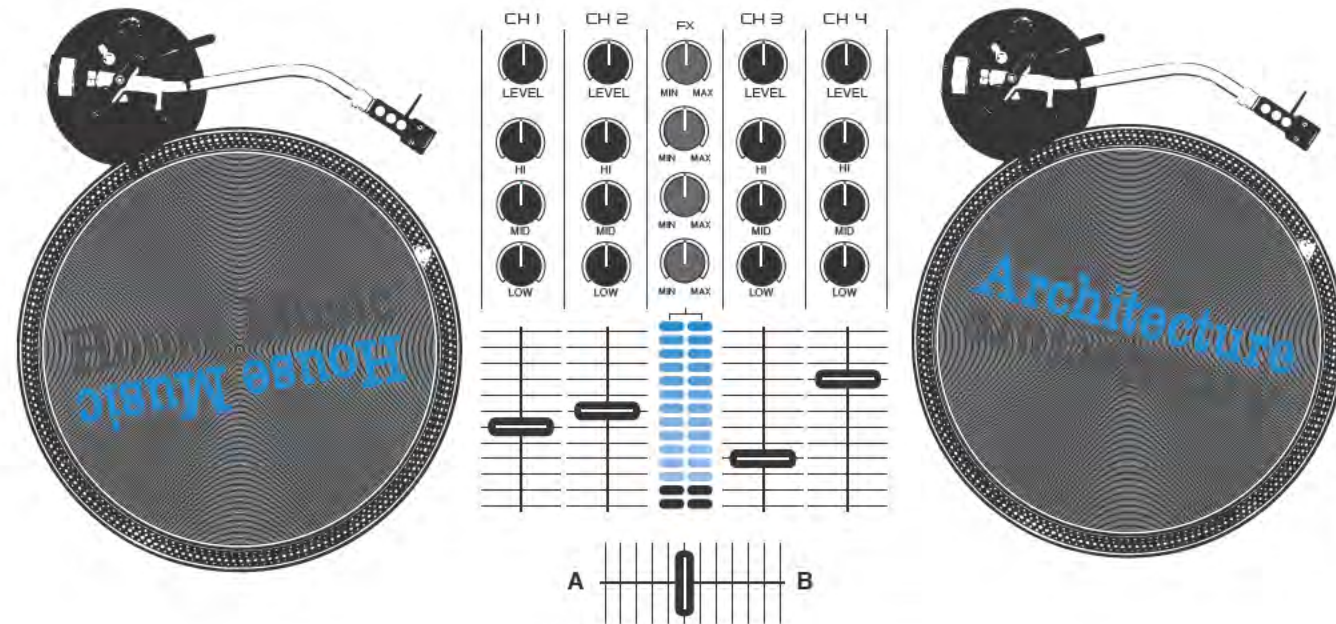
“The border between music and noise is always culturally defined—which implies that, even within a single society, this border does not always pass through the same place; in short, there is rarely a consensus ... By all accounts there is no single and intercultural universal concept defining what music might be.”

-Jean Jacques Nattiez



Author J. Christopher Jaffe speaks on “musical memory,” a phenomenon that links the perception of sound to place. A renovation of Carnegie Hall during the summer of 1966 to improve the brilliance among other acoustical properties led to disdain among musical critics and the audience of the symphony orchestra. He goes on to show that the particular acoustic qualities vary from performance hall to performance hall and that these particular qualities of each space determine the subjective quality of good or bad acoustics.⁹

It remains evident that, although the factors of association, biology, and acoustic qualities can determine how well one listens to and reacts to music within spatial volumes, musical enjoyment is largely subjective to the individual. Why then, should music play a role in the act of designing architecture? ■



WHY MUSIC?

In part, the mere fact that music can be defined by a multitude of ideas makes it an intriguing concept on its own. The cultural impacts along with the pure territoriality of music presents an investigation and these derivatives will be the driving force of this dissertation. In parallel to music, architecture is an all-encompassing discipline heavily tied to the values, traditions, and expression of each society in which it is practiced, by architects or by people and the vernacular.

Today's society is one that prefers visual stimulation. Although we perceive the world with all senses, the visual perception has become “disproportionally favored, and this has been at the expense of depriving ourselves from the potential capacity of other senses.”¹⁰ Some may argue in fact that hearing is the most dominant sense for one can never truly turn off hearing for even thoughts linger.

Architecture of today is largely based on the sense of sight and concentrates on the aesthetic appeal to the masses. Architecture is glorified in the magazine; an abstract of reality posed for the visual pleasure of the viewer.

It seems that today's globalizing society has come to prefer, in many situations, the simulation of reality. To give one example, we can look at the game of football or the growing market of eBooks. In addition, Many people today prefer to watch a sports game at home because the simulation offers them more than the experience itself in certain respects. It offers the play-by-play, multiple camera angles, expert commentary, and so on. Many people now receive digital copies of books, newspapers and magazines in the growing eBook marketplace. Publishers and web developers have even attempted to simulate reality in creating false shadows and animating the physical process of turning pages with movement and sound.

It may be the case that this cultural force is taking our society from a mass society towards a more individualized society. In

this modern day society moving towards social isolation, why is it that music remains one form of entertainment—or art form rather—that brings people together?

Music historically has brought and kept people together. Examples include folk songs, military drill and march songs; all of which involve social or cultural interaction. In today's globalizing society music has moved toward a more individualized activity with the advent of technologies. Along with this divergence remains the aspect of mass gathering among individuals. Music concerts draw hundreds of thousands of people from different social classes, genders, ethnic backgrounds, etc. for a common purpose: to experience the art of music.

Architecture can be considered a hub, or central gathering point, at which many cultural or social interactions have occurred. The built space has succinctly accommodated events such as religious ceremonies where the architecture and music are cohesively linked.

Architecture presents a unique opportunity to explore the senses, specifically the combination of the aural and visual. The sense of hearing is less often considered openly in design however remains as a subliminal existence; it is always present but is rarely brought to attention. The aural qualities are more often neglected unless one is considering the acoustics of a performance venue in which case the sound reflections and absorbance are considered.

In what is described as aural architecture, one can find that sound influences our spatial awareness. The very surfaces, their geometry, and the objects within space create the environment for hearing. These components affect how we navigate through space and how we feel about such spaces. Every surface that one walks creates a sound that presents aural cues that contribute to sensory awareness. An aural environment can produce feelings of grandness, such as that of a gothic cathedral, claustrophobia in the case of an elevator cab, or feelings of freedom or insecurity in spaces such as an



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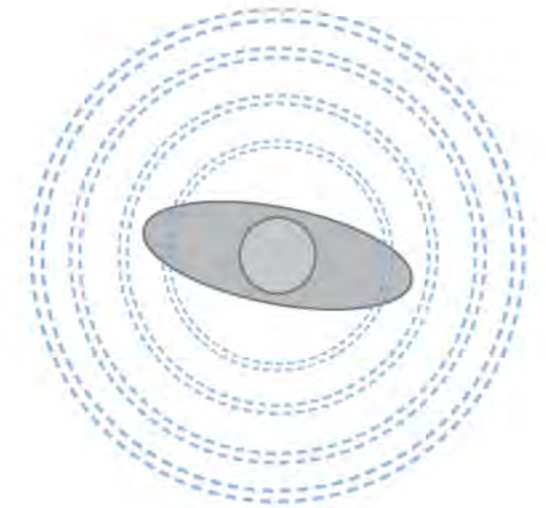
open area.¹¹

So why is music important? And why should music play a role in the design of architectural spaces? Music is a phenomenon experienced by the person, social group, and culture. The overlapping of the arts of music and architecture creates rich and dynamic experiences of space.

Music does not often pervade space in the form that one may think about—in the form of rhythms, melodies, and notes—however all spaces provide one with cues in the aural form. The surfaces within space reflect sound which in turn assist in way finding and contribute to one's emotional attitude of the built environment. While music remains subjective, these sounds are for the most part objective. To some, the energy found in a high-rise building lobby is musical; the sound of the people interacting within space becomes the utmost contemporary music piece.

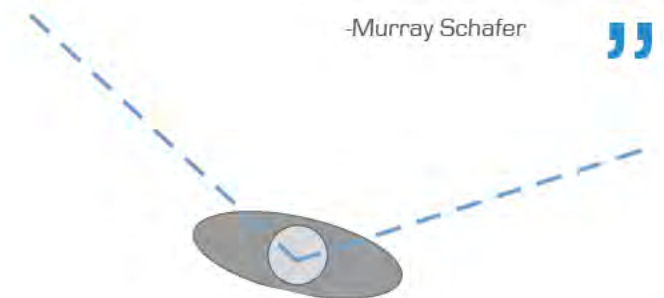
A musical space, rather than an ordinary space, begins to create a more unique case for the development of phenomena within space. The subjectivity and cultural influences of music allows for the designer to begin to play with the ideas of social territories and the creation of boundaries and thresholds.

Every form of music has a particular identity associated with it that in part helps to define whether one will enjoy what they are listening to. But what happens when that identity is manipulated, altered, or spliced? Does this change how we feel? This act remixing presents one with an opportunity to create a dialogue between architecture and its perception within spatial volumes.



Auditory space is very different from visual space. We are always at the edge of visual space, looking in with the eye. But we are always at the center of auditory space, listening with our ears...Visual awareness faces forward. Aural awareness is centered.

-Murray Schafer



BERNHARD LEITNER: SOUNDCUBE

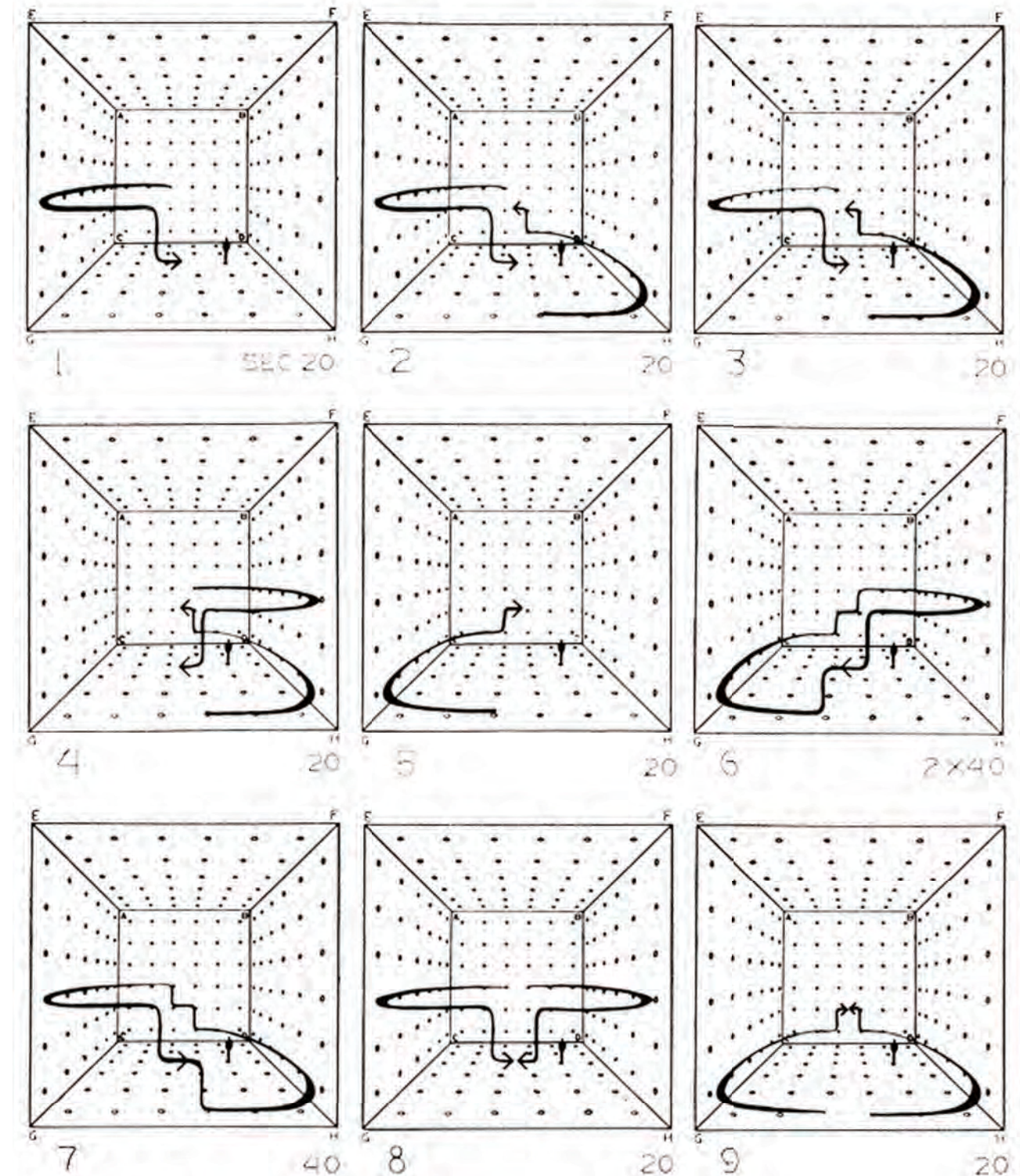
This study began with looking at the phenomenology of sound and its influence on perception of space and how space could be created through sound within an architectural framework.

In Leitner's work entitled Soundcube the focus was on creating a perception of space utilizing sound moving through a grid work of speakers placed equidistant within a cube. It was his intention to create the perception of a space through the projection of moving sound and music played at varying speakers in succession within the space. ■



[left] 1984 Tom Raum (Soundspace)
Technical University Berlin.

[right] concept sketches.



THE REMIX + MUSIC PRODUCTION

Music has grown with society and has become more individualized over time. Music began as a cultural or ritual practice in which all members participated, and then moved toward the appreciation of skilled persons which led to the separation of performer and audience within space.¹² In looking at performance halls, the technology has allowed for spaces to accommodate growing audiences and today the technological advances with electronic sound reinforcement one can sit at the back of an outdoor lawn and experience practically the same aural experience as one at the front and center position; as is the case at the Pritzker Park Pavilion in Chicago's Millennium Park.

The Pritzker Pavilion achieved what architect and composer Iannis Xenakis never thought possible. In Xenakis works he explored the idea of the immersion of persons and music. A focus of his work was to decentralize the aural and visual experience of space and in doing so create architecture that altered the perception of space. His view was such that, "By consequence one has to listen like a recording engineer, who, screening the individual parts separately on his mixing table, mentally reconstructs the musical edifice."¹³

Recording technology allows for the separation of the aural and visual experiences. Early forms of music production deal with the recording of music with the intention of producing an experience that captures the illusion of a concert hall performance. This was the case for classical music and early forms of jazz music. However with the genre of rock, the translation became more imperative in creating the mood in a virtual space that was the record. Rock music required the producer to capture the timbre and rhythms of the performance: a process that elevated the need for more intricate technological recording.¹⁴

The shift from the production of music from replicating a performance to creating music within the studio began with producer Brian Eno. In Eno's work the studio became a musical

instrument for the first time. Prior to his work, the role of the producer was to work with artists in recording live music. In a revolutionary move, Eno began the concept of the production of music being an experience to be heard in one's private space.¹⁵

Disco became the first genre of music to be produced almost entirely in the studio; it became known as "the producers genre." With the advent of this, the discotheque was born. The first discotheque was seen during WWII in Paris France. Dancing at these discotheques, according to Erika Haa, was at the time a protest against the German occupation of France and provided an emotional release for the French people.¹⁶

With this new genre an opportunity arose for a new profession: the disc jockey, or DJ. The first DJs worked behind the scenes much like a movie theater projectionist but as the discotheques rose in popularity so did the presence of the DJ and he or she took center-stage. A good DJ can create a continuous rhythm by structuring the flow between songs and keeping a pace for the audience to dance to through the use of the infamous quarter note kick drum beat.¹⁷

The DJ in an effort to make songs more danceable and easier to mix, or blend together, introduced what has become known as a remix. The DJ, through the remixing of music, became a producer with "the ability to recognize, to reimagine, and recontextualize tracks evolved through a synergy of technology and imagination."

The contemporary architect works much like the DJ. Technology within the computer realm has advanced the field, and will continue to do so, allowing the architect to manipulate and alter built or un-built space (as is the case with three-dimensional computer modeling and analysis) to suit a particular purpose or experience of space.

A remix is a rearrangement of a recognizable track or a

“

By consequence one has to listen like a recording engineer, who, screening the individual parts separately on his mixing table, mentally reconstructs the musical edifice.

-Sven Sterken

”



reinterpretation thereof. The practice of remixing has roots in Jamaican music of the 60's and began with 70's disco music in New York City and spread as a global phenomenon.¹⁸

There are several variations of a remix that can be categorized into extended, selective, reflexive, and regenerative remixes according to Eduardo Navas, researcher of art and media culture. Each method takes cues from the original and musical beats are added, subtracted, re-organized, deleted, or altered in some form while maintaining a playful relationship to the existing identity of the song. Extended remixes are simply longer versions of the original track with added instrumental sections making the song easier to mix. Selective remixes are those that add or subtract material from the song. Reflexive remixes are those that challenge the feel of an original through splicing and sampling several sources; the finished product claims autonomy from the original track yet relies on the cultural recognition of the name. A regenerative remix is one that is under consistent change.

Navas speaks of a regenerative remix in terms of social media with examples such as Wikipedia and YouTube. The idea that something is in a state of flux—a freedom to change at any moment; any user can go in and edit a Wiki article with the intention of improving or damaging the entry. The user in turn is claiming autonomy towards the piece's identity or meaning.

The process involved with adaptive reuse of architecture is a form of regenerative remixing and may very well become the future of built space with the advancement of building information modeling (BIM). Consider this scenario: a warehouse building is built today that has been design using BIM software. The building 10 years later is no longer suitable to a future owner. The architect can now seek out the building model and adapt the building to meet the new purpose utilizing the original design.¹⁹

It is in the identity of place that one begins to realize remixed architecture. In remixing, the authority and value of the new composition relies on the identity of the original

song. Architectural parallels can be drawn to this concept. Consider the urban condition of old town European cities or classic Victorian towns; the character of the facades is strictly maintained in order to appease tourists yet the interior condition may be completely modernized ■

TERRITORY

Just as music is intrinsic to the human condition, territory is a necessity as well. One creates and observes boundaries consciously and unconsciously throughout the course of a day. Harry Witchel, Ph.D. states:

“...there seem to be many examples where music is used to define a space – to say who should be there, what is going on, and what behaviors you should adopt. In many cases music plainly does have a territorial function...”²⁰

Music creates not only personal territories, but also social and cultural boundaries; being those of displays, marking, and gathering. Social territory is to say who is included or excluded in a group of two or more persons and music has the power to bring people together or push them apart.²¹

Music and territory align in the sense that they both are subjective constructs rooted in biology. Dr. Witchel asserts that “territory is not a place – it is a state of mind, which encompasses a varied but important inner experience.”²² One's preference for music is unique to the individual and in the overlapping of musical 'taste' allows for the creation of a social grouping based on musical territory exemplified by dance.

Dance music aims to create a territory for the appreciation of the body whether that is of oneself or of others. The dance floor creates a unique social territory. Personal territory can take a dramatic shift and the combination of personal spaces can be observed when two or more people embrace one another in dance.



Gradually, the DJ became a producer in his own right: the ability to recognize, to reimagine, and recontextualize tracks evolved through a synergy of technology and imagination.

-Virgil Moorefield



“

...there seem to be many examples where music is used to define a space – to say who should be there, what is going on, and what behaviors you should adopt. In many cases music plainly does have a territorial function...

-Dr. Harry Witchel

”

It is the role of the DJ to create the atmosphere, which can be defined as a territory for purposes of this argument that invites people to dance. Music played by the DJ is an expression of personal taste as well as popular culture. The selection and manipulation of the music in turn defines who will enter this newly created social territory.

Gilles Deleuze and Felix Guattari propose the concepts of deterritorialization and reterritorialization in *A Thousand Plateaus*²³ as a recurring theme. Deterritorialization is defined as taking the control and order away from a land or space that is already established; or simply put, to undo what has been done. Reterritorialization is the restructuring of a place or territory that has experienced deterritorialization; to produce an aspect of popular culture in the context of a local culture, thereby making it his or her own.²⁴

The spread of music from city to city, society to society, etc. is a process of deterritorialization and reterritorialization. The spread of disco from its origin in New York City to Chicago and other cities around the world represents this process; the music is established in a new place giving it new identity within another culture or social group.

Deterritorialization and reterritorialization work together simultaneously and cannot be separated. The moment a song is vocalized language is deterritorialized and reterritorialized by the ear of the listener. Music in itself is a force of this phenomenon.²⁵

In a remix these forces are active. A large aspect of deterritorialization and reterritorialization involves identity. As previously mentioned, a remix relies on the identity of the original track to establish authority or claim autonomy over it. The remix breaks the identity of original song, deterritorializing it, and at the same time establishes a new identity, reterritorializing it.

In the creation of built space, the architect injects his or her own style fused with the ideas of the client and in some fashion, cultural expressions. Much like the DJ, this act is an act of establishing territory (although in a more tangible manner) and at the same time a means of deterritorializing and reterritorializing space.

The very process of taking raw material and transforming it to create the building blocks of architecture, such as with the case of wood or stone, begins a duality of these processes. The act of change, transformation, or remixing within all actions (not solely architecture) is always a derivation of the processes of deterritorialization and reterritorialization.

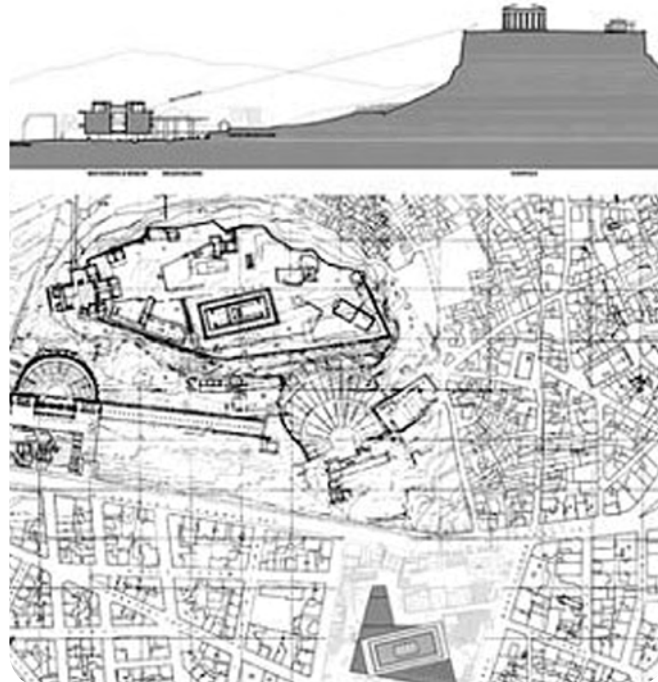
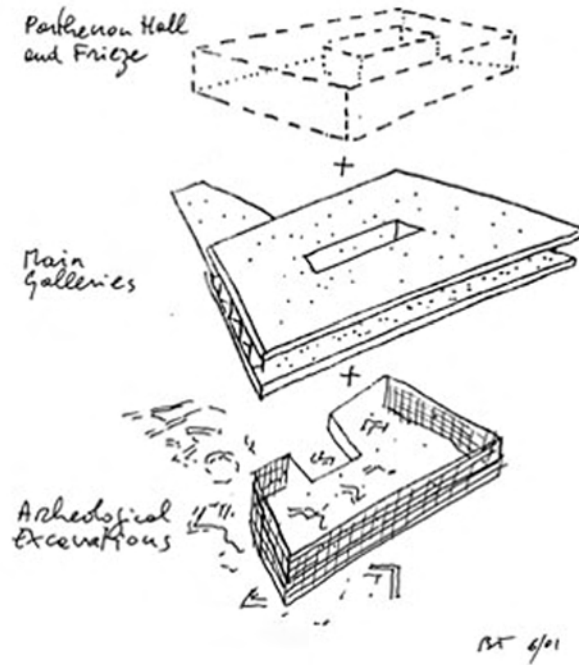
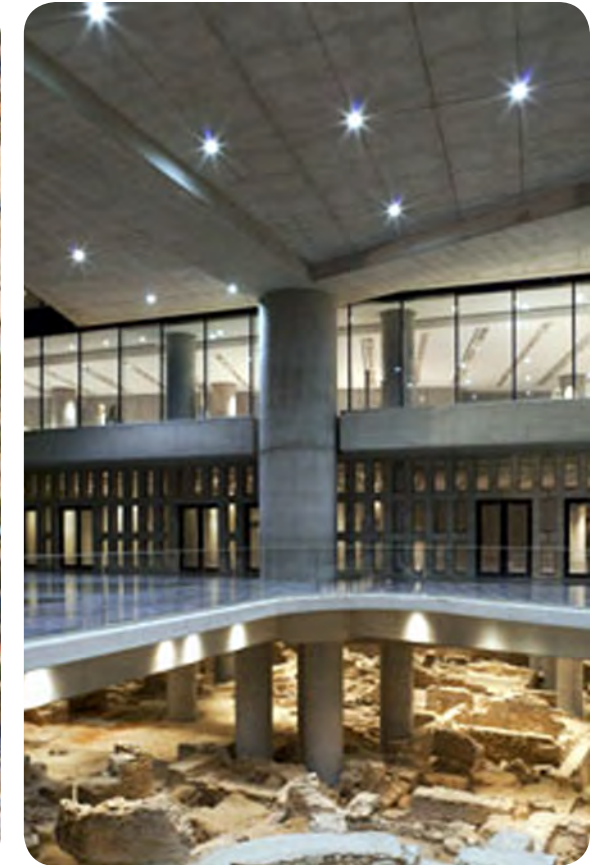
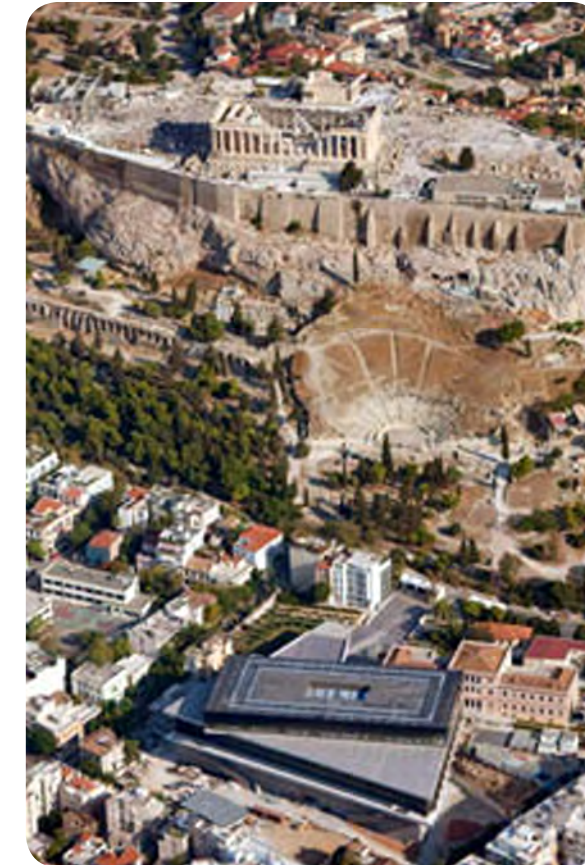
In the remixing of an existing space or site, the identity of space is altered claiming autonomy with the intervention. As an example, within adaptive reuse or remodeling, moments are created where the new intersects the old; metaphorically during the design process, beats are added, subtracted, re-organized, deleted, or altered in some form all in a playful dialogue with the built space.

In the appropriation of program to space, the architect, much like the DJ, determines what will happen within particular spaces. That determination is based on client needs, just as the music a DJ plays is based on the bar/club owner's desire ■



BERNARD TSCHUMI: new acropolis museum

Tschumi's work provides an architectural example into the concepts proposed by Deleuze and Guattari. The built space functions as a museum atop ancient archaeological ruins; the forces of reterritorialization and deterritorialization are in effect here—the ruins lose a sense of place however, the architecture reframes them giving them a new identity and in the process they become reterritorialized.



[top left] the new museum sits just below the acropolis.

[top right] the architecture frames archaeological ruins below.

[bottom] elements of the frieze of the parthenon



AFTERWORD

The study of the intersections of architecture and music is far from being unordinary. Many have given their interpretations, translations, and manifestations of the combined visual and aural arts. Whether the work of these previous designers is seen as successful remains with the subjective nature of music and of the opinions of critics. Moreover, the study remains and will continue perpetually to be open to interpretation: it is a progressive work that involves the duality of evolving arts—a “work in progress,” says Elizabeth Martin, author of *Architecture as a Translation of Music*.²⁶

Avenues such as mathematics, acoustics, instrument, fundamentals, and layered relationships between the disciplines have been explored among others. Territory and architecture as it relates to the field of music may be an avenue not yet approached and will be explored in this thesis. While territory may be explicit within built architecture, the social territory is implicit within such space. Through the understanding of how territories are these territories are created, the built environment can respond and therefore create an enriched spatial experience.

Remixed architecture is the process of creating or repurposing space for a particular need responding to the territorial social nature of the program involved; in the modification of space the forces of deterritorialization and reterritorialization work to establish richer environments. Remixed architecture is thoughtful to include the sensory modalities, primarily involving the aural and visual in the creation of a dynamic space. ■

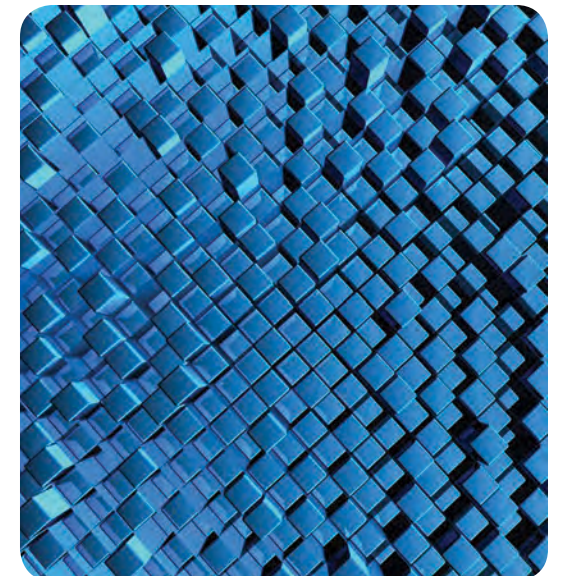
Remixed architecture is...

...the process of creating or repurposing space.

...a deterritorializing and reterritorializing force seeking to create richer environments.

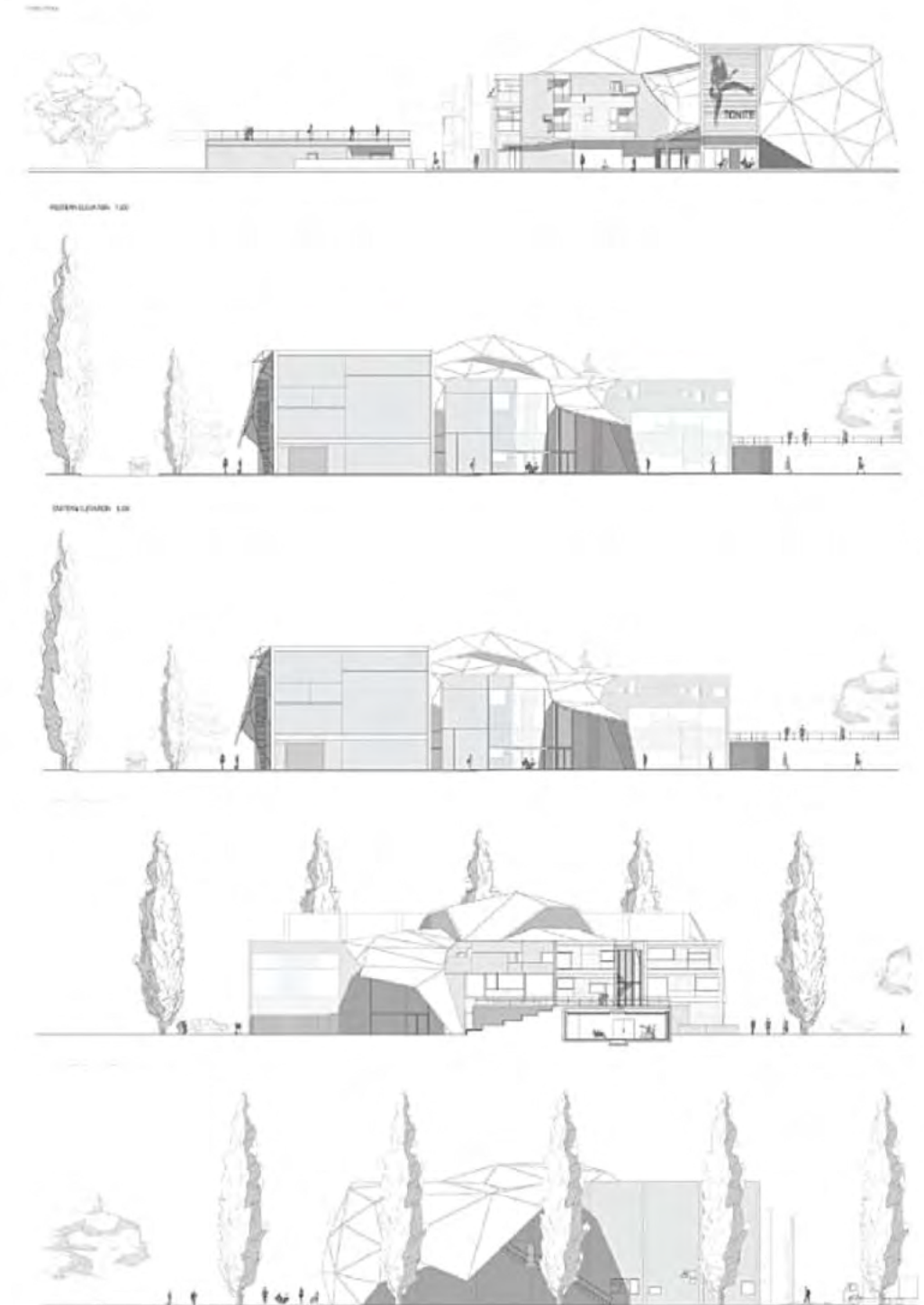
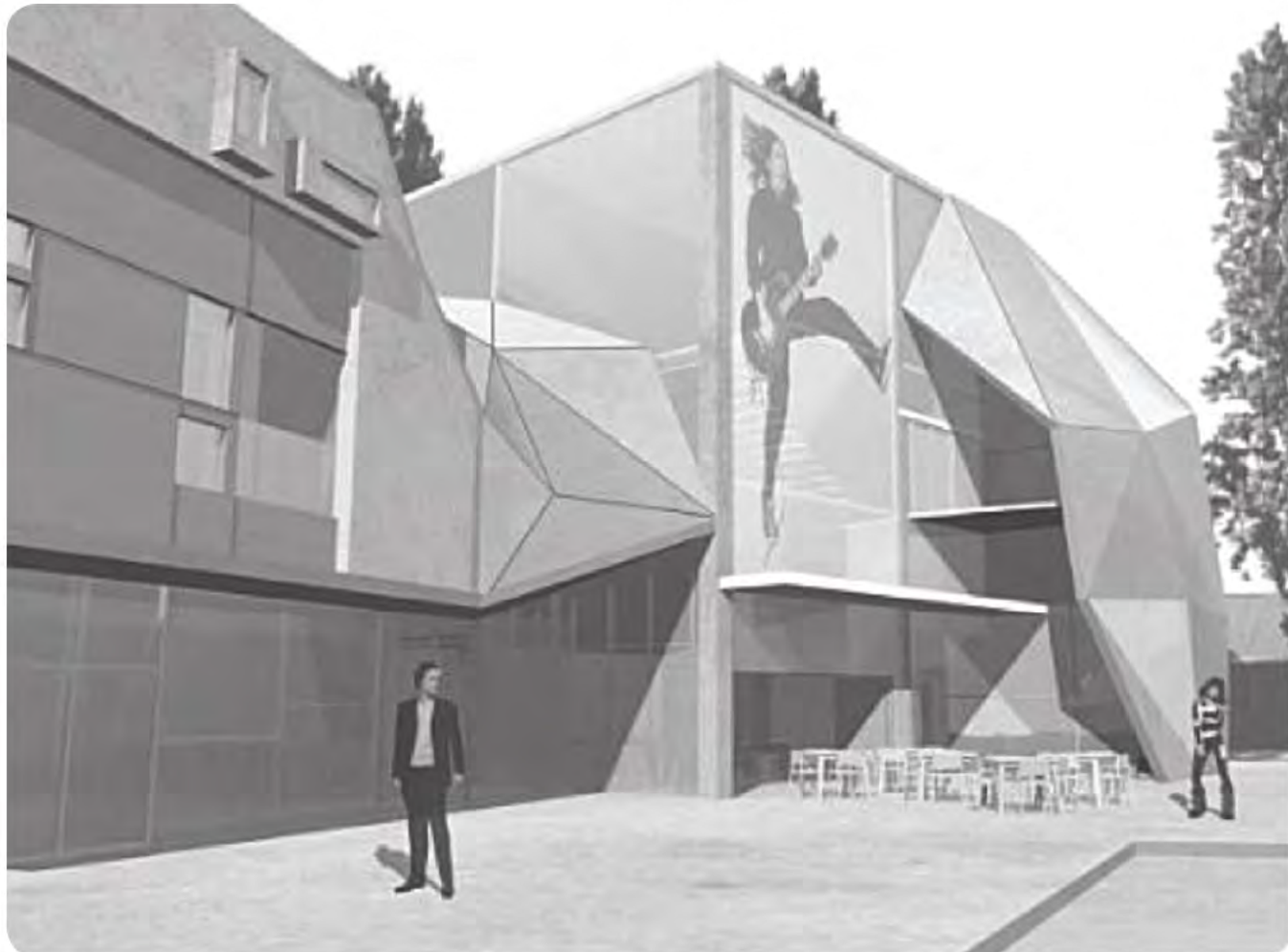
...a process that responds to the territorial nature of the social qualities of program.

...a means to combine the aural and visual sensory modalities.



GARTH ANCHOR: SCHOOL OF CONTEMPORARY MUSIC PROPOSAL

In a conceptual project, Anchor explores the idea of translating the intangible qualities of jazz-rock fusion into a built architectural form. The qualities of improvisation, spontaneity, randomness, and live performance found in the genre were expressed in the structure, form, and materials used within the space ■



[top] front section elevation.

[second] side section elevation.

[third] side section elevation.

[bottom] side section elevation.

HOUSE MUSIC

House music is an original form of electronic dance music born from the combination of disco and synthetic beats. Originally formed in Chicago, house music is fundamentally the combination of the four-beat drumbeat, bass line, melody, and vocals and early Chicago house utilized this along with gospel vocals and piano melodies.

“House music is not a break with the black music of the past, but an extreme re-invention of the dance music of yesterday,” According to Frankie Knuckles, the godfather of house music.²⁷ Frankie began playing what became known as house in a small club outside the downtown center of Chicago in the industrial west loop, called the Warehouse, where the genre got its name.

With roots in the gay Black and Latino communities, house music can be viewed as an underground cultural force. In a time where it wasn't necessarily viewed as socially acceptable to be homosexual, house music as well as the venues where it was played became a gathering place for the gay community. The music in time drew white crowds, erasing cultural barriers and ultimately house music has become a global sensation still at large today. House music of today has evolved into numerous subgenres and often is so tightly integrated with pop music that it becomes unrecognizable to the average ear. ■



SITE

The Warehouse was located at 206 S. Jefferson Street and has since been converted into an office building with numerous tenants. It is located in the west loop district of Chicago just west of the river and blocks from union station. The site was once a manufacturing district and has now become a mixed-use district with a large amount of residential and commercial ventures. The Warehouse club building still exists and presents a unique opportunity of connecting a historical building with a new architecture. In reconnecting to the history of house music, the original building will be utilized; by means of remixing architecture to reterritorialize the existing condition it is intended that a new identity for the site be created which has roots in the aspects and social culture of house music. ■

[below] 206 S. Jefferson;
existing condition 2011





[left] surrounding context photographs.
[right] building site context photographs.
[bottom] figure ground analysis diagram.

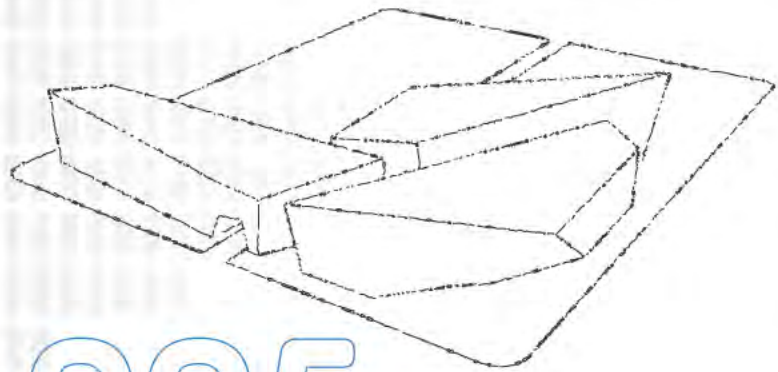


■ BUILDING FOOTPRINT ■ PROJECT SITE ■ SURFACE PARKING ■ GREEN SPACE ■ ROADS

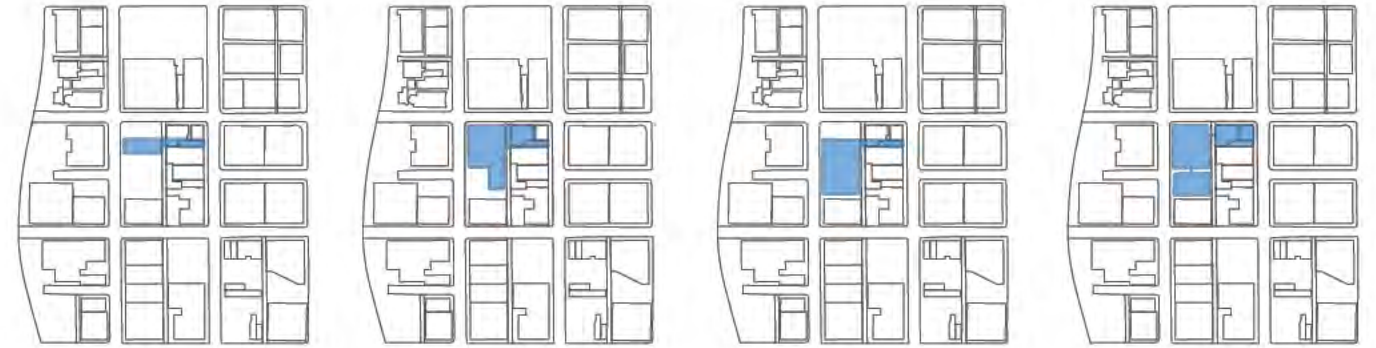
PRELIMINARY DESIGN SCHEMES

The program for the site consisted of a campus for the appreciation, creation, and study of music which included a museum of house music, a boarding school of music production, and a nightclub as well as supporting retail and restaurant functions to activate the site at all times of the day

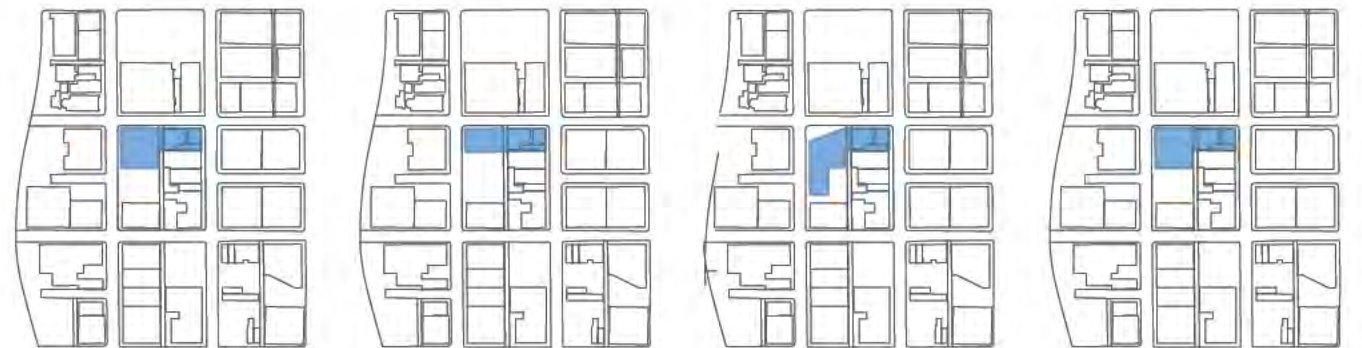
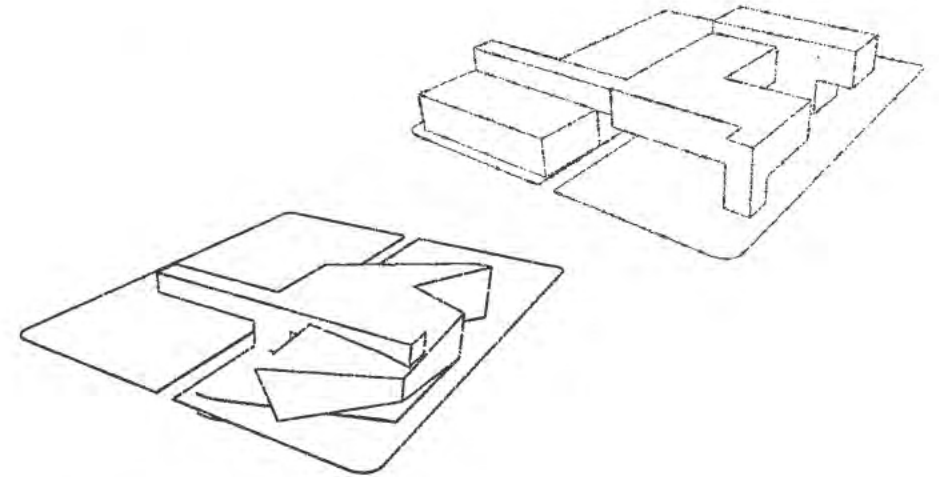
These initial schemes explored the idea of house music as an underground cultural force that served to break tradition and discriminatory boundaries. In thinking of the urban form of the site, the schemes focused on the connection between the existing warehouse building and new development. Metaphorically the form was based on breaking the highly gridded street facade allowing for the expression of desire path as a means of expressing the cultural roots of house music ■



005



[top] floor plate/building footprint scheme.
[right] massing sketches.
[bottom] floor plate/building footprint scheme.



DEVELOPING DESIGN STRATEGIES

Moving forward, the design scope was narrowed to focus on the nightclub as a means of testing Remixed Architecture. The forces of deterritorialization and reterritorialization are explored in creating a new identity for the city block corner which serves as the new site for the Warehouse.

SOCIAL EXPECTATIONS / NEEDS

- DANCE
- SEATING/STANDING
- CONVERSATION
- SOCIALIZING

ARCH. TRANSLATIONS

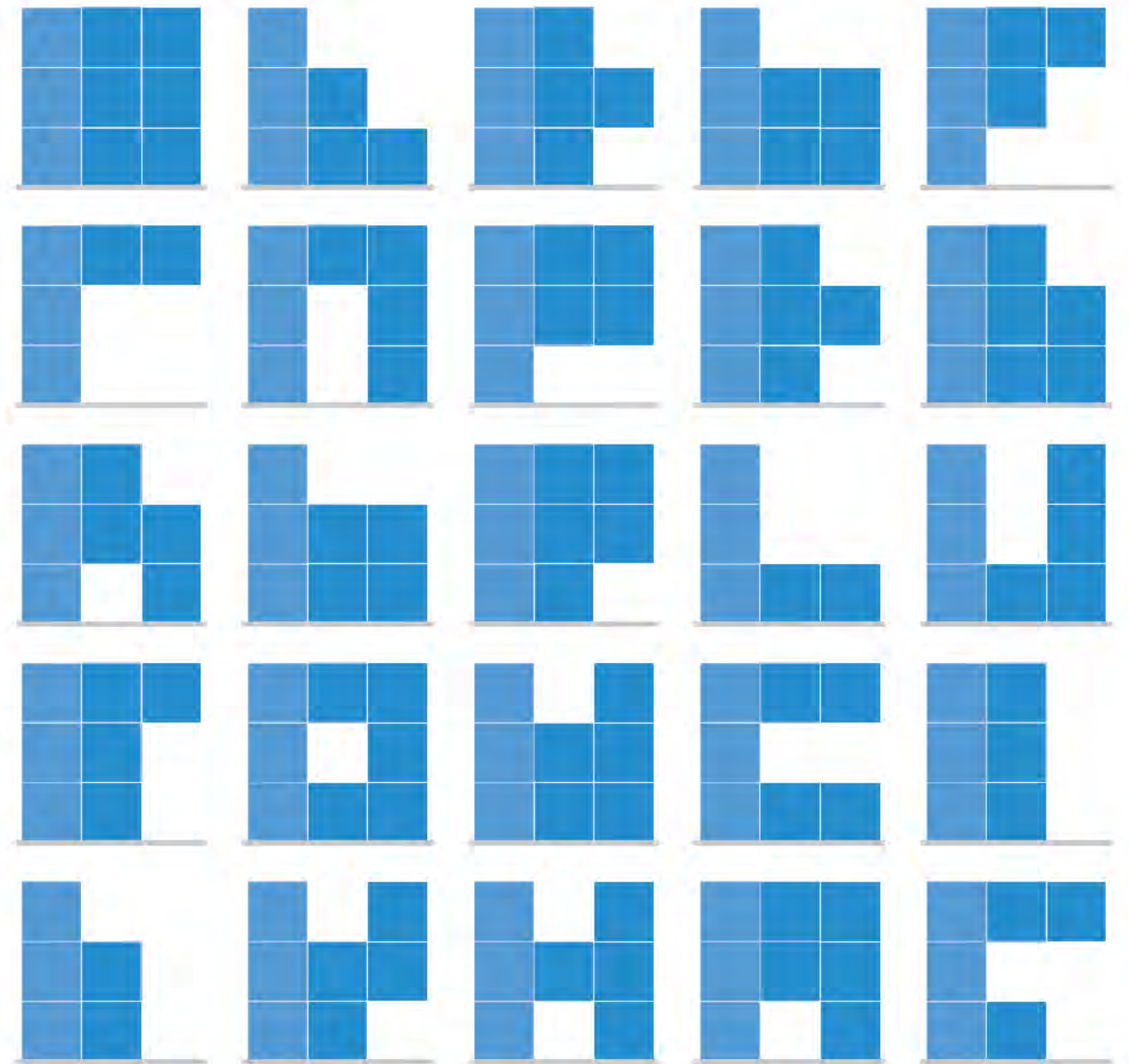
- DJ BOOTH
- SOUND BOOTH
- BARS
- SEATING
- LOUNGE AREA
- COAT CHECK
- VIP ROOM
- ANICLLARY SPACES
- RESTROOMS

- DISPLAY (STAGE)
- LIGHTING
- MUSIC



[right] section elevation diagrams exploring connections to the existing building.

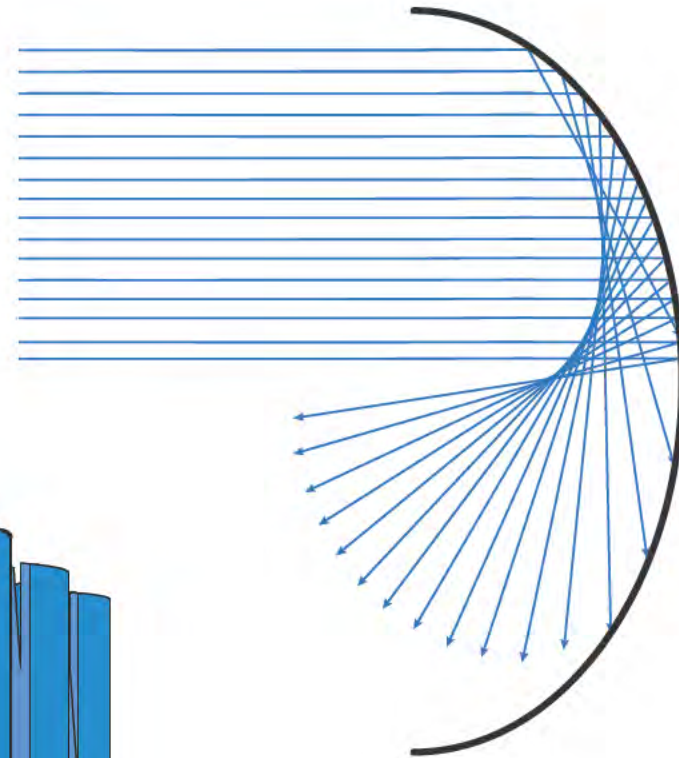
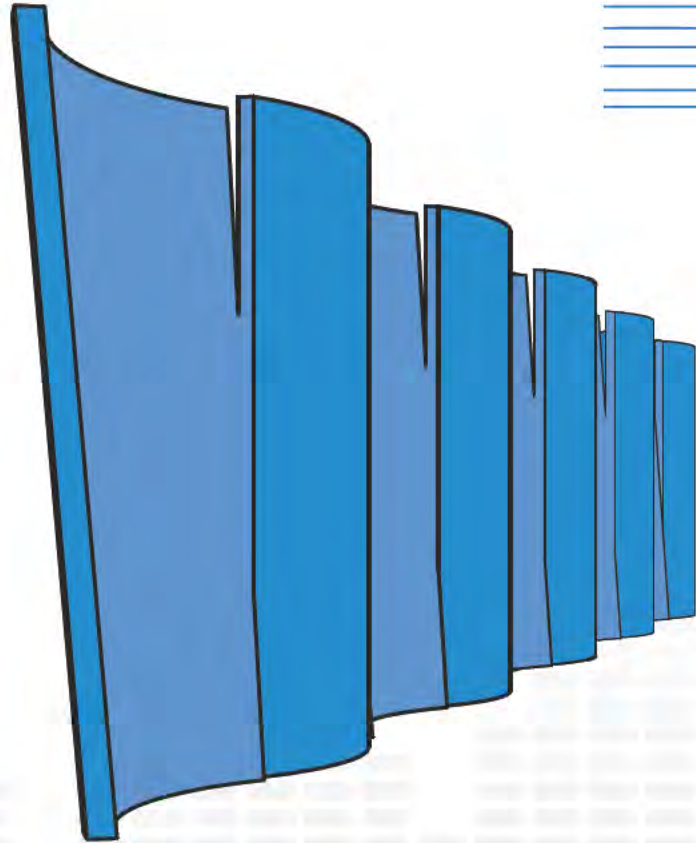
[below] final site selection.



006

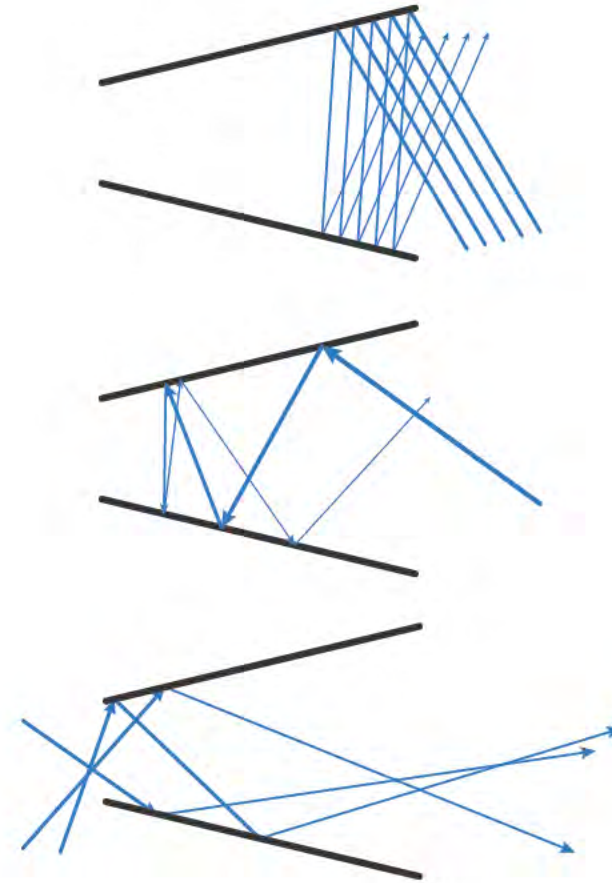
SOUND STUDIES

In exploring the experience of sound, the principles of acoustics became prevalent to the design. In these studies, the basic mechanics of sound reflection were utilized in abstracting the "wall" within architectural space to create unique and useful sound reflections that would enhance the experience of the person.



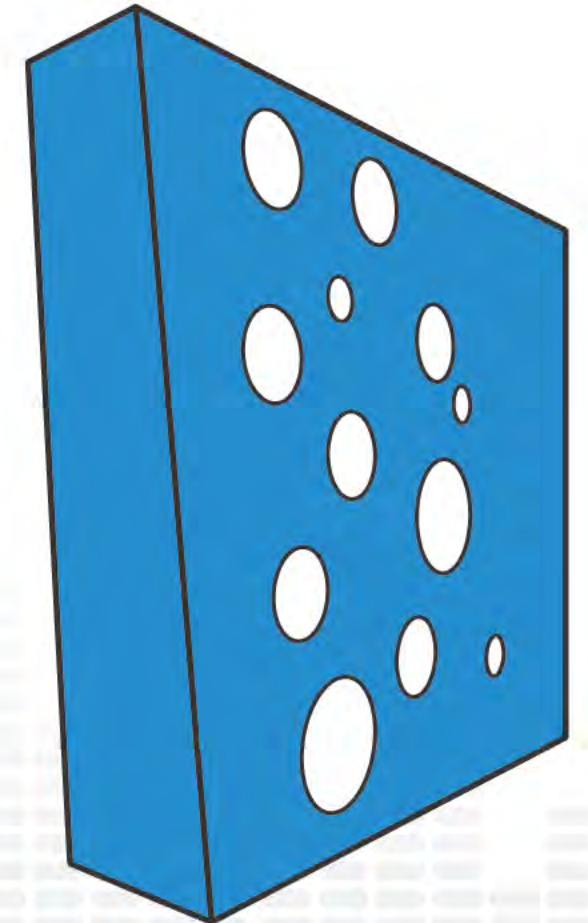
[top] concave sound reflection diagram.

[right] concave/convex sound wall scheme.



[top] sound funnel diagram.

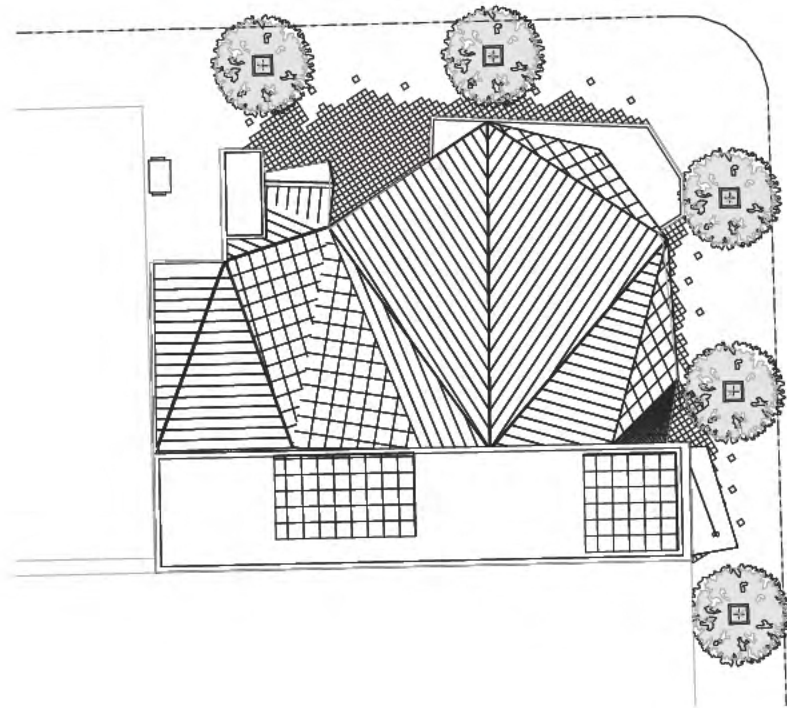
[right] sound funnel wall scheme.



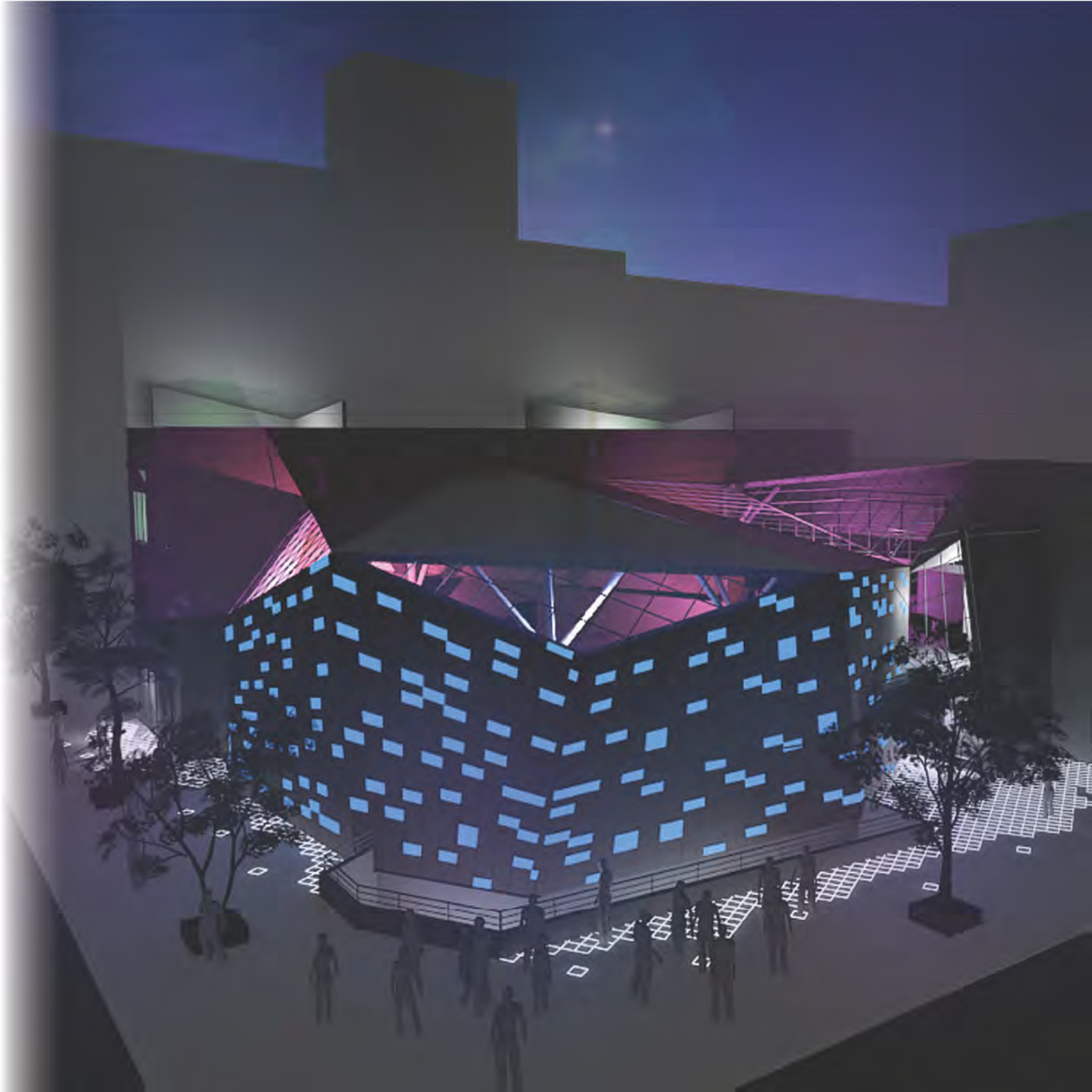
FINAL DESIGN

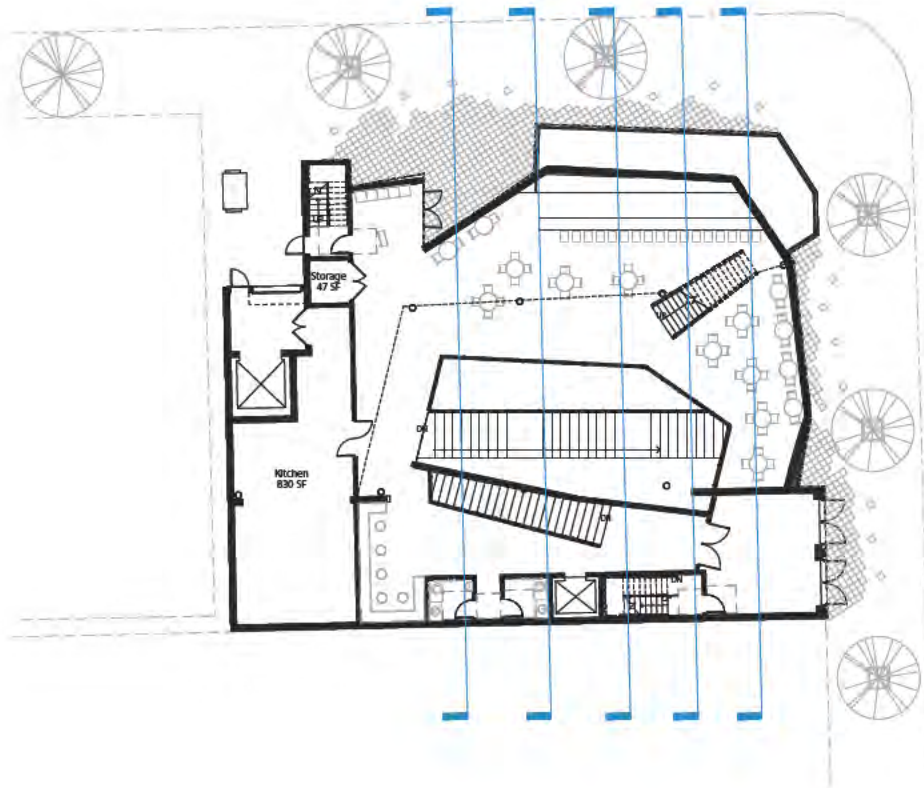
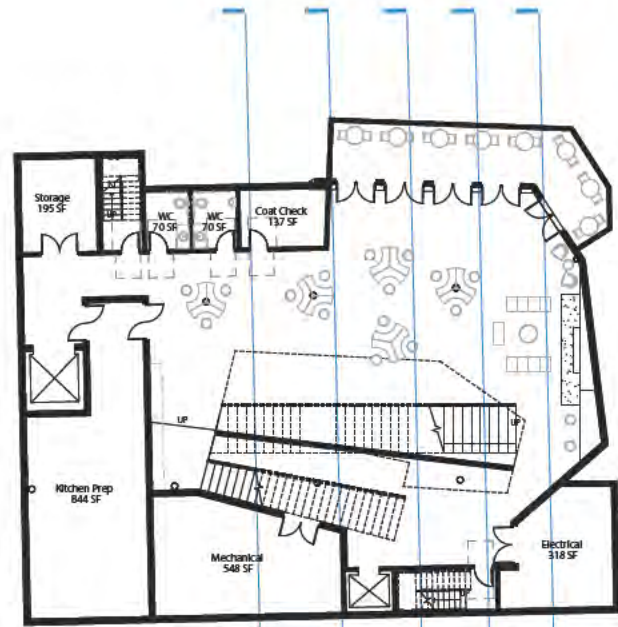
The final program for the site melds and creates tension with the combination of a nightclub, restaurant and hostel functions that cater to the young generation that house music focuses around. As a means of fulfilling the requirements of Remixed Architecture, the design serves to utilize sound and visual stimulation to create social territory as well as a dynamic user experience

By symbolically playing with the forces of culture set up by the house music movement, the building reterritorializes the site. The dynamic building form breaks the highly gridded street facade as a means of expressing the underground movement of house rising to become a reckoning force within the music industry. The form allows for useful sound reflections in focusing sound internally to meet the social space requirements of the user. ■

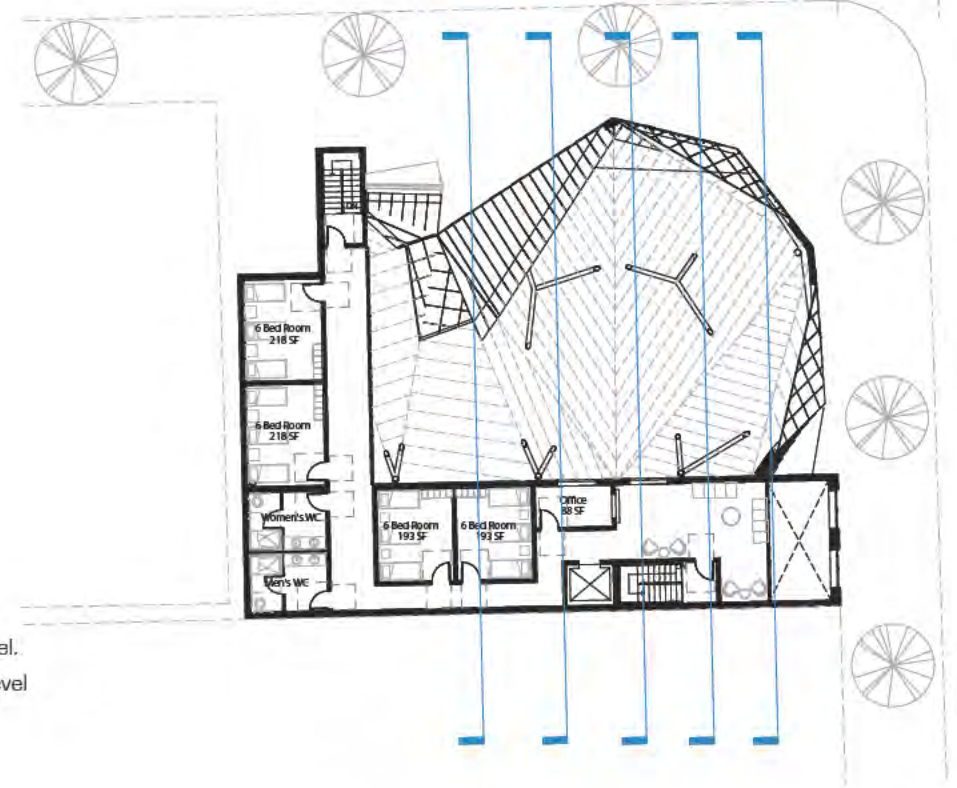
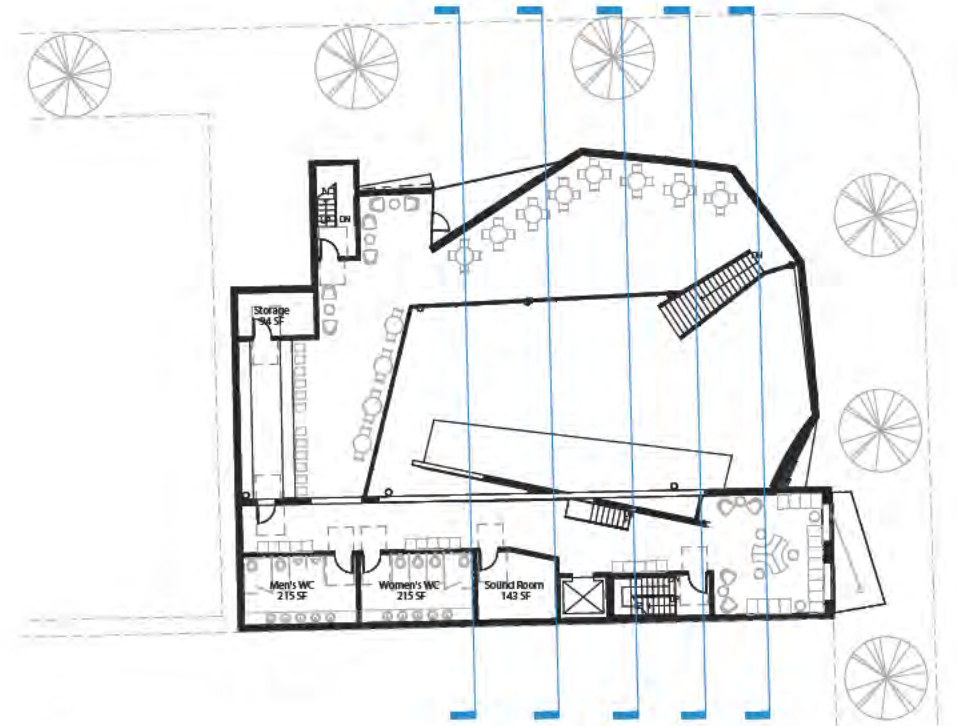


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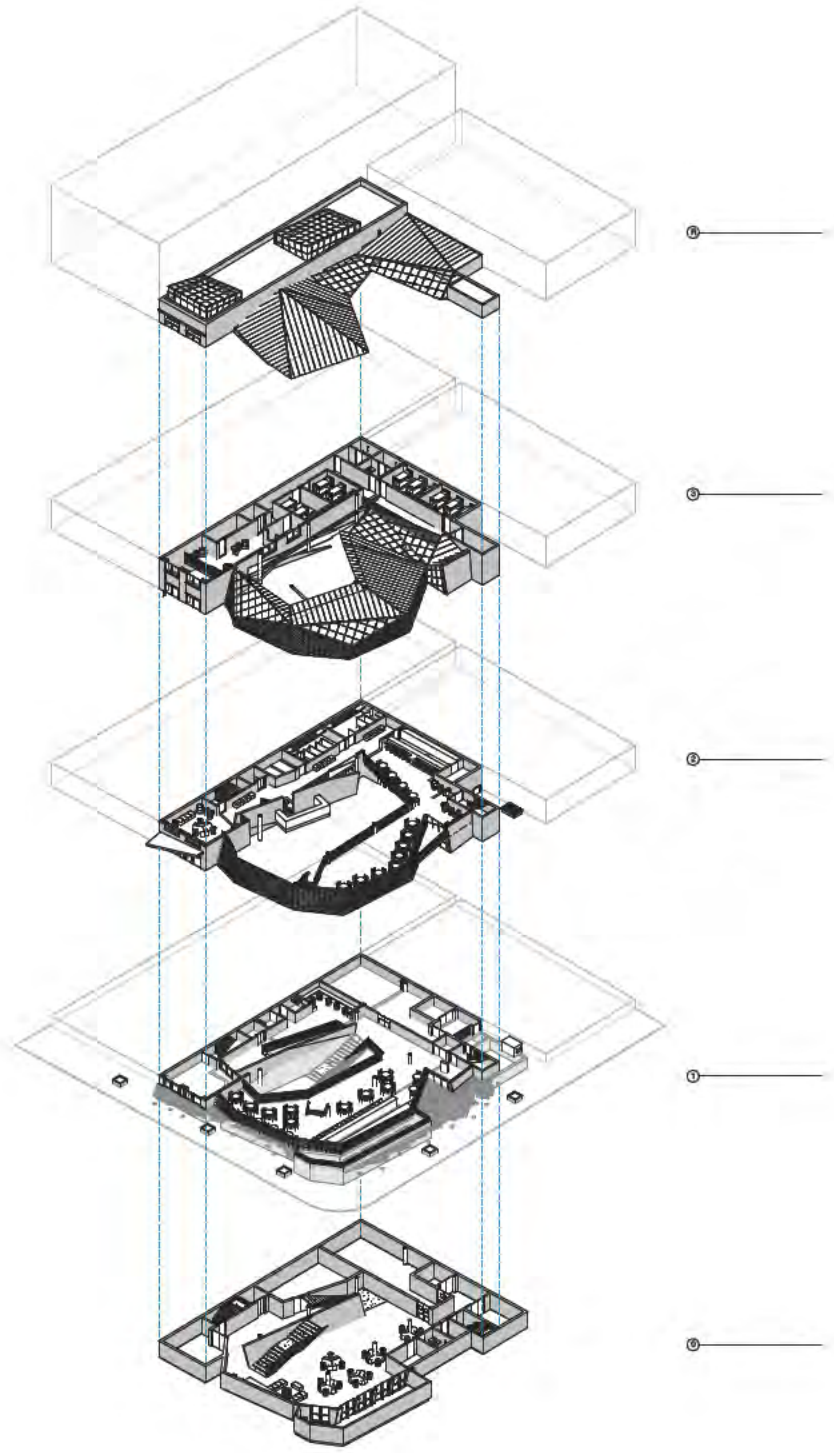




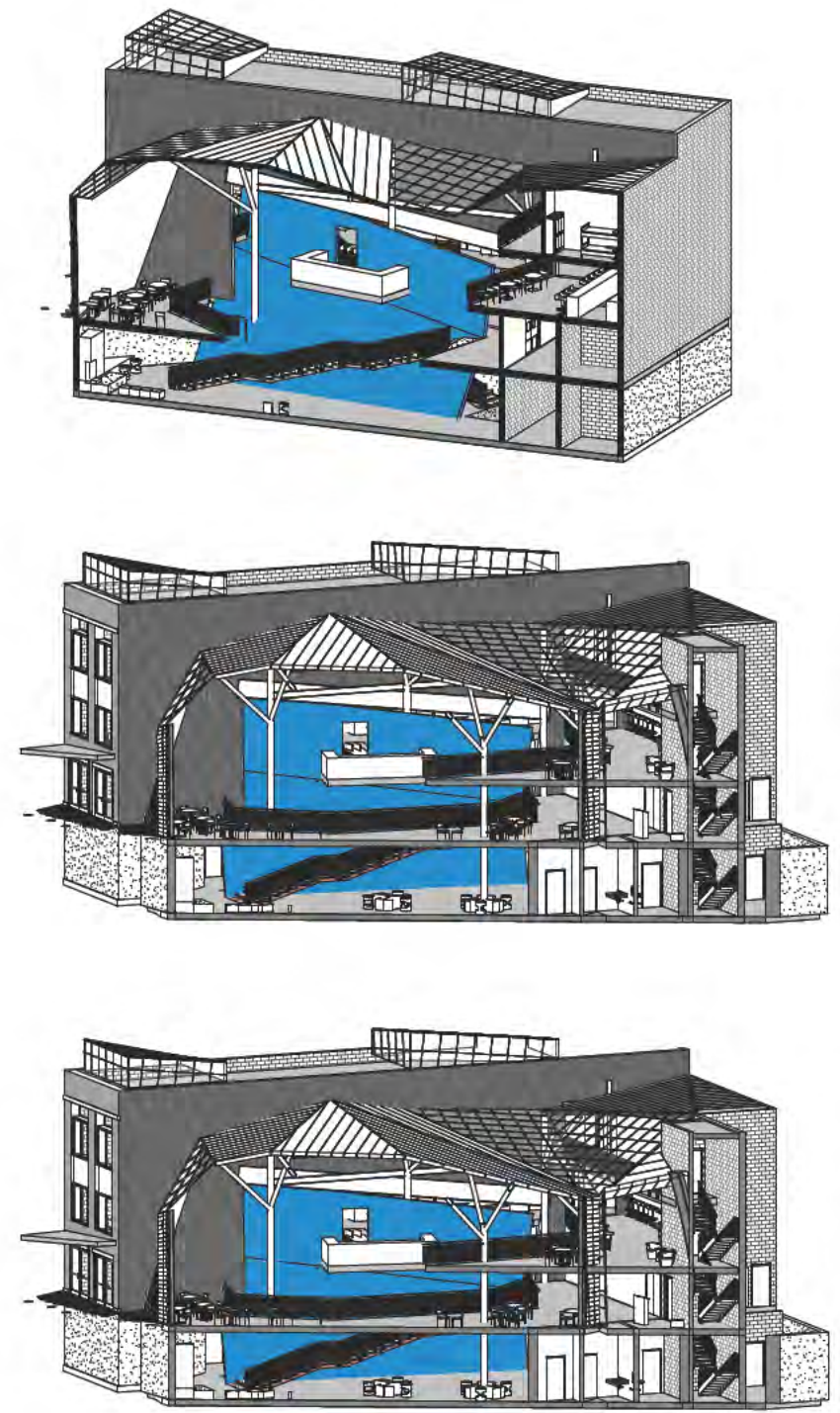
[top] floorplan lower level.
[bottom] floorplan first level.



[top] floorplan second level.
[bottom] floorplan third level.



[left] construction isometric drawing.



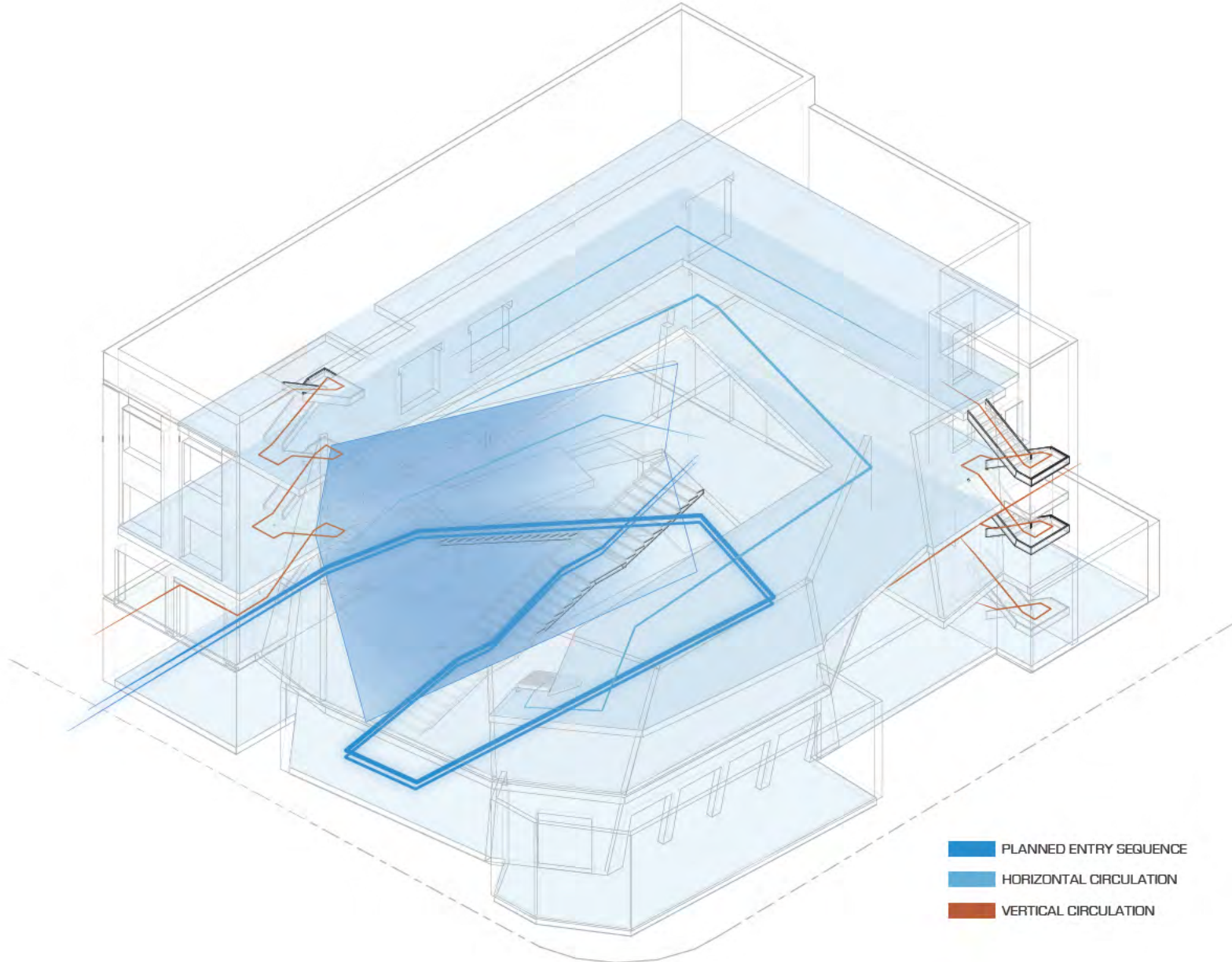
[top] axonometric section.
 [middle] axonometric section.
 [bottom] axonometric section.



entry sequence

The circulation as one moves through the building works as part of a dynamic experience. Gesturally this initial sequence is symbolic of the house music movement; the person enters through the original building doors and is invited to pass underground and enter the master lounge on the lowest level with sightlines of the DJ floating upon a grand wall that marks the unification of the historic and modern constructions; one is then able to rise up on the grand staircase and enter into the main bar and dance floor areas on the first and second floors.

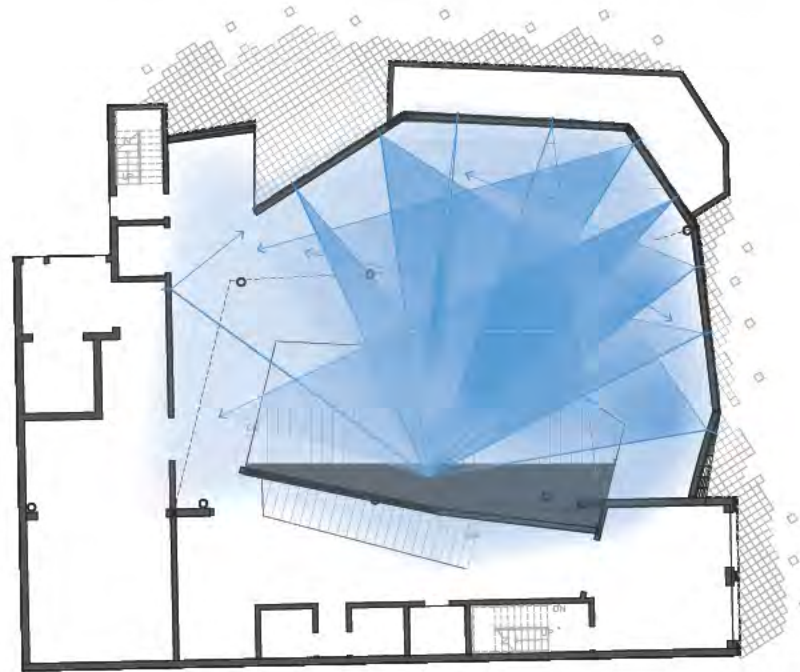
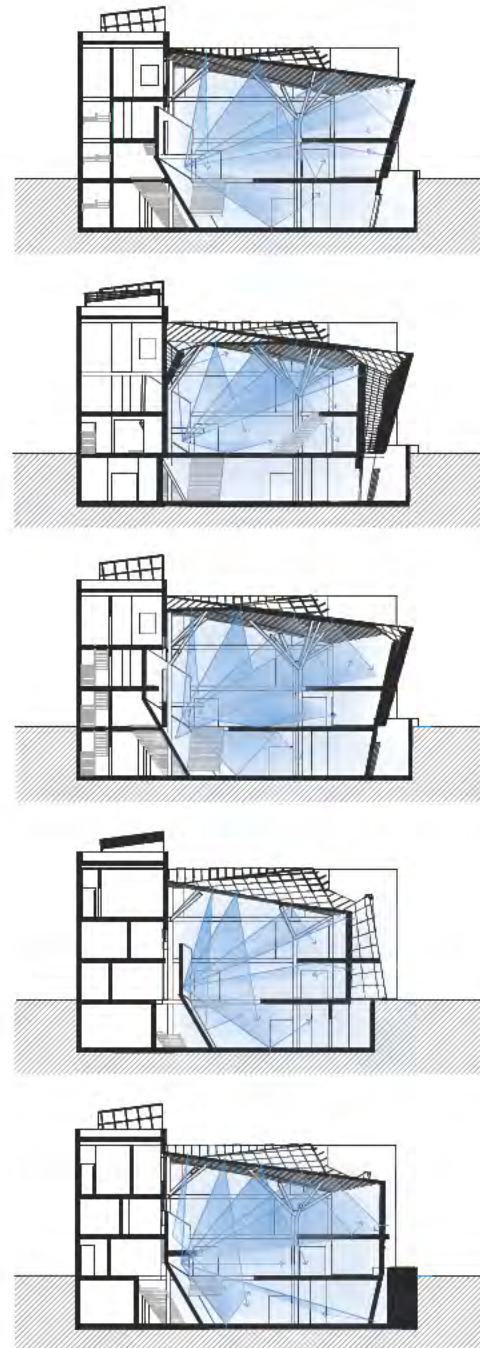
[top] entry hall and staircase.
 [middle] lower master lounge.
 [bottom] view from third level.



- PLANNED ENTRY SEQUENCE
- HORIZONTAL CIRCULATION
- VERTICAL CIRCULATION

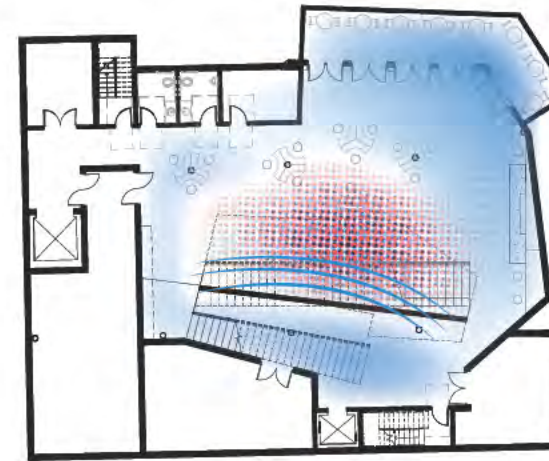
TERRITORY

The form of the building serves to provide various social spaces which are influenced by focused regions of sound. The reflections created by the walls of the building provide multiple levels of loudness and clarity of sound within each space. The main wall which unifies the existing shell and the new volume becomes the main source of sound and also divides the more private lounge areas and hostel spaces from the more public spaces. Volume is reduced within the bar areas and is quietest in the lounge spaces ■



[above] acoustic floorplan ray diagram analysis.

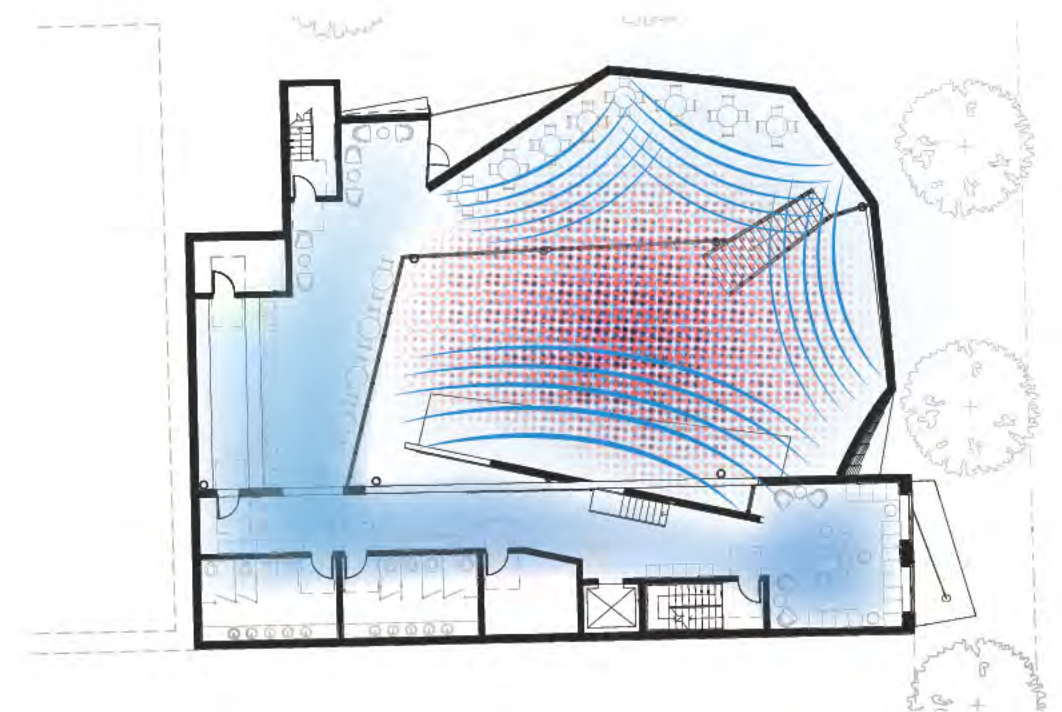
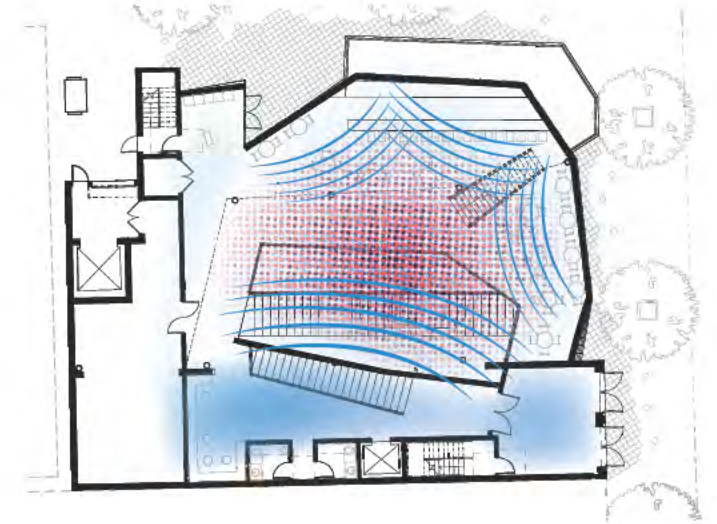
[right] acoustic section ray diagram analyses.



[top left] soundscape volume diagram lower level.

[top right] soundscape volume diagram first level.

[right] soundscape volume diagram second level.





WORKS CITED

- 1 Sheridan, Ted, and Karen Van Lengen. "Hearing Architecture: Exploring and Designing the Aural Environment." *Journal of Architectural Education* (2003): 37-44. Print.
- 2 Liebeskind, Daniel. "Proms Lecture 2002: Music and Architecture." Lecture. British Broadcasting Corporation. Web. 31 May 2011. <<http://www.bbc.co.uk/radio3/architecture/ram/apromslect02.ram>>.
- 3 Blesser, Barry, and Linda-Ruth Salter. *Spaces Speak, Are You Listening?: Experiencing Aural Architecture*. Cambridge, MA: MIT, 2007. 6-8. Print.
- 4 "Music." *Merriam-Webster Online*. Web. Jan. 2012.
- 5 "Music." *New Oxford American Dictionary*. 2nd ed. Oxford University, 2005. Web.
- 6 Nattiez, Jean Jacques. *Music and Discourse: Toward a Semiology of Music*. Princeton, NJ: Princeton UP, 1990. 48-55. Print.
- 7 Jaffe, J. Christopher. "Where Music, Acoustics, and Architecture Meet." *The Acoustics of Performance Halls: Spaces for Music from Carnegie Hall to the Hollywood Bowl*. New York: W.W. Norton &, 2010. 29-36. Print.
- 8 Witchel, Harry. "Why Do Some People Love Beethoven and Others Rap Music." *You Are What You Hear: How Music And Territory Make Us Who We Are*. New York: Algora Pub., 2010. Print.
- 9 Jaffe, J. Christopher. "Musical Memory." *The Acoustics of Performance Halls: Spaces for Music from Carnegie Hall to the Hollywood Bowl*. New York: W.W. Norton &, 2010. 61-67. Print.
- 10 Mavash, Kourosh. "Site + Sound: Space." Ed. Miriam S. Zach. *Essays on the Intersection of Music and Architecture*. Ed. Mikesch W. Muecke. Ames: Culicidae Architectural, 2007. 53-75. Print.
- 11 Blesser, Barry, and Linda-Ruth Salter. "Introduction to Aural Architecture." *Spaces Speak, Are You Listening?: Experiencing Aural Architecture*. Cambridge, MA: MIT, 2007. 1-9. Print.
- 12 Blesser, Barry, and Linda-Ruth Salter. "Aural Arts and Musical Spaces." *Spaces Speak, Are You Listening?: Experiencing Aural Architecture*. Cambridge, MA: MIT, 2007. 129-33. Print.
- 13 Sterken, Sven. "Music as an Art of Space: Interactions between Music and Architecture in the Work of Iannis Xenakis." *Essays on the Intersection of Music and Architecture*. By Mikesch W. Muecke and Miriam S. Zach. Ames: Culicidae Architectural, 2007. 21-52. Print.
- 14 Moorefield, Virgil. Introduction. *The Producer as Composer: Shaping the Sounds of Popular Music*. Cambridge, MA: MIT, 2005. Xiii-ix. Print.
- 15 Moorefield, Virgil. "The Studio as Musical Instrument." *The Producer as Composer: Shaping the Sounds of Popular Music*. Cambridge, MA: MIT, 2005. 43-78. Print.
- 16 Moorefield, Virgil. "The Producer Takes Center Stage." *The Producer as Composer: Shaping the Sounds of Popular Music*. Cambridge, MA: MIT, 2005. 79-111. Print.
- 17 Ibid.
- 18 Navas, Eduardo. "Remix Defined." *Remix Theory*. 2006-2010. Web. 2011. <http://remixtheory.net/?page_id=3>.
- 19 Dietrick, Mark. "BIM: Fridays @ 5 Lecture Series." University of Detroit Mercy School of Architecture, Detroit. 24 Feb. 2012. Lecture.
- 20 Witchel, Harry. Preface. *You Are What You Hear: How Music and Territory Make Us Who We Are*. New York: Algora Pub., 2010. 1-4. Print.
- 21 Witchel, Harry. "Why Do We Listen to Music." *You Are What You Hear: How Music and Territory Make Us Who We Are*. New York: Algora Pub., 2010. 5-21. Print.
- 22 Ibid.
- 23 Deleuze, Gilles, Félix Guattari, and Brian Massumi. *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota, 2011. Print.
- 24 "Reterritorialization." *TheFreeDictionary.com*. Farlax, Inc. Web. 2011. <<http://encyclopedia.thefreedictionary.com/reterritorialization>>.
- 25 Deleuze, Gilles, and Felix Guattari. "Becoming-Intense, Becoming-Animal, Becoming-Imperceptible..." *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota, 2011. 301-06. Print.
- 26 Martin, Elizabeth. *Architecture as a Translation of Music*. New York: Princeton Architectural, 1994. Print.
- 27 "History of Chicago House Music." *Globaldarkness.com*. 2002. Web. 2011. <http://www.globaldarkness.com/articles/history_of_chicago_house.htm>.

WORKS CONSULTED

- i. Adamo, Marc, and David Felton. *The Secrets of House Music Production: A Reference Manual from Sample Magic*. London: Sample Magic, 2010. Print.
- ii. Betsky, Aaron. *Queer Space: Architecture and Same-Sex Desire*. New York: William Borrow and, 1997. Print.
- iii. Deleuze, Gilles, Félix Guattari, and Brian Massumi. *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota, 2011. Print.
- iv. Frankie, Knuckles, Rebecca Ortiz, and Phill Cheeseman. "References and The History of House Music." *Digital Vinyl Recordings*. Web. 2011. <http://www.digitalvinylrecordings.com/about_02.html>.
- v. Gil-Manuel Hernández I Martí. "The Deterritorialization of Cultural Heritage in a Globalized Modernity." *Institut Ramon Llull*. Web. 2011. <http://www.llull.cat/rec_transfer/webt1/transfer01_foc04.pdf>.
- vi. Harley, Maria Anne. "Music of Sound and Light: Xenakis's Polytopes." *Leonardo* 31.1 (1998): 55-65. *JSTOR*. Web. 09 Sept. 2011. <<http://www.jstor.org/stable/1576549>>.
- vii. Holland, Eugene. "'Deterritorialization': From the 'Anti-Oedipus' to 'A Thousand Plateaus'" *SubStance* 3rd ser. 20.66 (1991): 55-65. *JSTOR*. Web. 25 Sept. 2011. <<http://www.jstor.org/stable/3685179>>.
- viii. Imaah, Napoleon Ono. "Music: A Source of Inspiration and Harmony in Architecture: An African View." *International Review of the Aesthetics and Sociology of Music* 35.2 (2004): 169-82. *JSTOR*. Web. 09 Sept. 2011. <<http://www.jstor.org/stable/30032149>>.
- ix. Joseph, Branden W. "John Cage and the Architecture of Silence." *October* 81 (Summer 1997): 80-104. *JSTOR*. Web. 28 Sept. 2011. <<http://www.jstor.org/stable/779020>>.
- x. Leitner, Bernhard. *Ton, Raum = Sound, Space*. New York: New York UP, 1978. Print.
- xi. Massumi, Brian. *A User's Guide to Capitalism and Schizophrenia: Deviations from Deleuze and Guattari*. London: MIT, 1992. Print.
- xii. Moorefield, Virgil. *The Producer as Composer: Shaping the Sounds of Popular Music*. Cambridge, MA: MIT, 2005. Print.
- xiii. Mortensen, Matt. "Examining Deterritorialization in the Architecture of Las Vegas." *Helium*. Helium Inc., 3 Dec. 2007. Web. 2011. <<http://www.helium.com/items/722707-examining-deterritorialization-in-the-architecture-of-las-vegas>>.
- xiv. Muecke, Mikesch W., and Miriam S. Zach. *Essays on the Intersection of Music and Architecture*. Ames: Culicidae Architectural, 2007. Print.
- xv. Navas, Eduardo. "Regressive and Reflexive Mashups in Sampling Culture." *Remix Theory*. 2010. Web. 2011. <<http://remixtheory.net/?p=444>>.
- xvi. Suwa, Junichiro. "Music as Territory: Aksim Siming and Stringband Music in the Madang Area." *Perfect Beat*. 197-219. *Equinox Online*. Equinox Publishing, 2009. Web. 2011. <<http://www.equinoxjournals.com/PB/article/viewFile/6033/4993>>.
- xvii. Young, Gregory, Jerry Bancroft, and Mark Sanderson. "Musi-Tecture: Seeking Useful Correlations between Music and Architecture." *Leonardo Music Journal* 3 (1993): 39-43. *JSTOR*. Web. 09 Sept. 2011. <<http://www.jstor.org/stable/1513268>>.