MUSIC, ARCHITECTURE, and NEW YORK CITY
Layers of Expression

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Undergraduate Thesis

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ISSUES AND POSITIONS:

Preface:

The beginning of this book should begin with a disclaimer! That is, any thesis project created within a limited time frame and having changed, mutated and developed as much as this one has will likely produce more questions than it answers. However, I do my best to cover material most relevant to the design study of music and architecture. Both music and architecture are disciplines that exist within a wide range of issues (some of them spanning the artistic “language gap”) that creators use to develop meaningful art, influenced from other disciplines and sources. Now, I’m not proposing an eclectic design approach to architecture; however, I recognize that there is no pure architecture without a fusion of ideas and influences from other sources. Every art, music or architecture, however unique, is created out of a vast ocean of knowledge, pooling ideas from the past into new forms suitable for the present, and sometimes projecting current ideas into the future. This thesis deals with the aesthetic “principles” that allow for design responses appropriate for a particular culture (in this case Punk Rock). Now, I tried to avoid covering all of the intricacies of music theory, most of which I’m unqualified to discuss at length, and many of which are unrelated to issues regarding Rock culture, however, certain theories of artistic language and musical perception were investigated to find a design approach suitable for this project. In this thesis, music is used as a means to express the superficial and spatial relationships of architecture. At the same time, elements of the musical notation study became a way to fill certain voids in the architectural translation. I focused on a common process of creation by which both the architect and musician operate. Here, the design process begins with a generalization about a specific culture’s purpose (a motive), an analysis of a culture’s identity by making reference to its musical identity (an image), and finally integrating issues of program and context into a design that relates a rock culture’s attitudes of itself into a particular place for its expression (motion). At the same time I tried, to a greater or lesser extent, to involve the process of play—a kind of jam session to explore architectural possibilities. However, the design process was never clear from the start, design processes are never perfectly clear, but there is always a clear goal. This goal is to create a unique design (a kind of performance space) with a clear unity of its concept and form.

Thesis Premise:

As mentioned before, this thesis is dealing with relationships between musical and architectural expression in design, and perceptions of style and identity within musical culture—cultures that have the tendency to invade the very privacy of our daily lives and influence our behavior. Whether we like it or not, if our personal disposition is rooted in traditional forms, ideas and behaviors these incidental shock waves of styles, attitudes and cultural fashions seem like termites attempting to destabilize the foundation of advanced civilization. However, there is a part of human nature that must reinvent itself, not to destabilize anything, but to reinterpret the values of past generations and to create a new identity for itself. In architecture, there is a reluctance for change, because the nature of the profession is exclusive and conservative partially from the degree of sophistication required for architectural design, but also from technical, political and economic issues make it difficult to push its limits of its expression. However, every century or so, with the aid of new technologies and a receptive clientele, architects seem to reinterpret the modern paradigm. Despite what advances in architectural theory and design have occurred, in the beginnings of change architecture still holds onto its past prejudices longer than other art forms (and I must admit that past preconceptions are difficult to stray from when concerned with issues of economics and build ability). As stated by the architect and author Edward Ford, “If contemporary architecture has adapted a radically different set of images in the last ten years, it has brought with it the same old prejudices regarding construction that monolithic construction is good, that layered construction is bad, that anything that is revealed is virtuous, that anything that is concealed is wrong, that good building consists of massive solid load-bearing concrete walls, that bad construction consists of masonry-clad steel frames (Ford xi).” In contrast, music, a profession that benefits from less practical constraints, has the tendency to reinvent and restyle itself in a much shorter time frame and with a much greater degree of completeness than architecture has previously done. In Elizabeth Martin’s, Pamphlet Architecture 16, “Breaking the Cage,” Marcos Novak points out that when discussing issues related to music and
ISSUES AND POSITIONS:

architecture there needs to be the obvious, but often overlooked question: “What Music? What Architecture? The topic of music and architecture is an ancient one, and any attempt to broach the subject that fails to acknowledge and account for the changes that have occurred and are still occurring is sure to be full of unintended but inevitable erroneous resonances (Martin 71).” Novak also goes on to say, “music has reinvented itself in far more profound ways than architecture has dared...What is the emancipation of noise?, the emancipation of dissonance? What does it mean to carry architecture through a parallel series of emancipations? (Martin 72).” Whether architecture should reinterpret itself like music is questionable, however I feel that there are many ways in which a study of music can inform the design process. Therefore, the intent of this thesis is not advocating architectural emancipation for the “take of” emancipation thereby reinterpreting modern paradigms, nor is it about the egocentrism of seemingly every architect who must proclaim his own new and profound style!
This thesis does accept emancipation as an inevitable and purposeful response for every new set of design challenges, and that a kind of liberation of thought about form is necessary to generate a responsive solution for each unique program and client. However, before I go into detail discussing the particulars of my design process, I’d like to briefly share the beginnings of my study, the preconceptions I had of the relationship between music and architecture, and some early thoughts on the possibilities of translating the musical identity of a culture into an architectural expression.

Bridging the language barriers

Some of the problems in discussing the relationships between music and architecture deal primarily with the conception of each other’s materialized form and differences in language. Oftentimes, the language between professions is similar in concept, but words and their meanings can be vastly different. This leads many theoreticians interested in both topics to avoid tempting any possible connections because of the unknowns or elements of each which are difficult to translate verbally, and can require “leaps of imagination” to make the connections (leaps that by no means are too subjective to articulate in other ways). Therefore, my first intention before concerning myself with design analysis was to find ways to express some of the similarities of terms and theoretical constructs in each profession, as well as researching some of the past views of musical translations in architecture.

One of my first studies was to catalog a list of terms that are frequently used to describe notation, or some of the “morphemes” (names for words that carry meaning) used interchangeably in music and architecture when discussing issues of composition.

There are six primary categories of language used to describe musical and architectural composition, but they are also used in a general sense to interpret and to describe the perceptive experience:

Form

Dynamics

Hierarchy

Fig. 4. Dynamic notation. Illus. Manoff.

Fig. 5. Synthesis and order of components. Illus. Manoff.

Fig. 3. Harmony vs. melody. Illus. Manoff.

Fig. 6. A sense of instability by manipulating a center point. Illus. Manoff.

Fig. 7. Variable rhythmic patterns. Illus. Manoff.
THE PERCEPTIONS OF LANGUAGE.

Most of these words and categories are familiar to most people not educated in either music or architecture, and they often are used loosely to describe perceptive experience. However, here are some definitions that I interpreted from various sources like Webster’s dictionary and various architectural and music books (referenced below) that describe each of the general categories and their associated terms. Keep in mind that some terms overlap or occur elsewhere in the thesis and they can have different meanings depending on their relative circumstances.

**Form:** The shape or outline of a person, place or thing. The perception of the interconnectiveness or growth of a short-range detail into long-range design. Mostly referring to the overall gestalt of patterns.

**Architecture**

**Solid/Void:** (S) A mass without openings (V) An opening, opposite of solid.

**Motif:** a single repeated design, or thematic element.

**Geometry:** Mathematical relations between points, lines, planes, and angles
A patterned design element.

**Surface:** The inherent qualities or properties of a material plane. The matrix of particles within a plane that give it unique physical character and strength.

**Music**

**Phrasing/Cadence:**
(P) A musical moment (or group of notes combined together) of motion toward a moment of rest. (C) A moment of rest. A pause or break in the musical phrase.

**Motive:** A reoccurring phrase or figure that is repeated and developed throughout a musical composition. A reason to act.

**Shape:** Often referring to melody and phrase, the up and down patterns created by successive tones of measurable interval.

**Tone:** A combination of timbre and pitch producing a sound perceived as musical. A combination of notes with identifiable qualities.

**Dynamics:** A moving or driving force. The active, forceful sense of energy.
The relative loudness, softness and quality of playing notes described in musical notation.

**Architecture**

**Color:** A type of hue. A sensation of the change in light and dark of things known to have a perceived color quality.
One of the 6 basic colors of both light and pigment that combine to form different values: i.e., Red, Blue, Green, Yellow, Violet, and Orange, etc...

**Texture:** A surface quality of objects that applies to the tactile sense, a Described in words like “rough, smooth, grainy, etc…”

**Light/Shadow:** Manipulation of light and shadow over objects. Light, referring to natural light. Shadow, referring to voids to achieve a sense of depth and clear volume of a shape.

**Intensity:** The relative sharpness of a texture. The perceived lightness or darkness in a color of a measurable degree.

**Chromata:** A kind of saturation or intensity of combining separate tones to produce overtones. The sensation of notes played within a particular intensity and pitch range. The Chromatic scale.

**Timbre:** The characteristic quality of a sound source. Ex. “a flute has different timbre from a guitar. Timbre is often described as rich, thick, mellow, or shrill…”

**Tonal:** The attraction of musical sounds, and modulation of a key musical phrase around a specific or center point. The reference type of tonal music: music with tones that occur in specific intervals, composed in phrases to achieve a sense of depth.

**Volume:** The relative highness or lowness of perceived loudness in a pitch or series of sounds. A degree of measurable loudness. (i.e. decibels). Often referred to as intensity.

**Hierarchy:** Any group or series of things that are arranged in ascending or descending order. A particular placement or grouping of things because of related patterns, qualities or degrees of importance.
THE PERCEPTIONS OF LANGUAGE

Architecture

Proportion Type: A comparative relationship of ratios between things. A pattern of things in relation to each other in size, symmetry and interval. A classical notion of harmonic balance. Ex: Platonic ratios, Golden Mean, etc...

Volume: The measurable area within a three-dimensional space.

Proximity: a degree of closeness between objects or patterns.

Layering: A series of superimposed elements of specific form but different purpose that define a space. A design technique of combining objects, patterns and textures for an illusion of depth.

Orientation: The position of groups of objects and patterns in relationship to other groups and patterns. Often relating to a scale or compass, or a measurable degree of distance and direction. The position of the body in space.

Architecture

Reference points: (more specific is a Focal point) a compositional device to emphasize a certain area or position of self within spatial context.

Scale: A perceived understanding of size and shape of objects in space. An ordered ratio of graduated quantities to maintain consistent size and shape. Elements referenced in architectural notation.

XEx: Scale: 1/4 inch = 1 foot, etc...

Music

Mode: (Referring to western Modal music) A style of musical melodies that use a series of tonal scales with prescribed intervals composed in a particular key. Ex: Major and Minor scales.

Scale: A series of notes in ascending or descending order in specific intervals. The measurable magnitude of a series of notes, within the range of an octave.

Contrapuntal: The technique of creating polyphony. The term often used in place of polyphonic. The superimposition and combination of different textures and melodies.

Rhythm: (General definition) Rhythm is action in time. Everything that moves or sounds has rhythm. (Musical definition) A specialized action in time. In music, rhythm describes how musical events are perceived in relation to time, silence, and other patterns.

Music (Orientation cont.)

Foreground/Back: Usually distinguished between harmony and melody, where the harmony occupies a supportive background role, and the melody a foreground role. The implied relationship of active and passive space in homophonic textures.

Architecture and Music:

Meter: Organization of the Pulse into regularly repeated groups. Referred to by time intervals.

Pulse: A periodic rhythm that underlies the beat and repeats in a steady or even manner.

Beat: A series of regular pulses or rhythms composed in a specific pattern. A rhythmic motif.

Tempo: The speed of the basic pulse. Often indicated with tempo markings, it describes how fast or slow the music moves through time. Ex: Accelerando, Moderato, Largo, etc...

Time: A physical quantity of events of measurable duration. Measured in minutes, seconds, etc... In musical notation, referred to by time signature, a ratio which denotes the tempo. Ex: 4/4 time, means 4 down beats per 4 measures, which translates to 4 beats per measure. 3/4 time, means 3 beats per measure (the pulse of a Waltz).
TEXTUAL MAPPING: PATTERN TRANSFORMATIONS

The list on the previous page is a kind of "coming to terms" (so to speak) with the ways that architects and musicians discuss their work. However, I knew from the beginning that this form of study was only to eliminate certain issues, but I also knew it wouldn’t take me where I wanted to go in design. I didn’t want to make part of the thesis a kind of language game, one that would have been too abstract to relate to architecture, but I needed this list as reference for dialog about music. I didn’t exactly know at the time what the focus was. I certainly knew it was not about words, their structure and their grammar. My intentions here were less concerned with the way people interpret the properties of language, and more concerned about the thinking process involved in the exploration of ideas—the means to resolution between the motivic purpose and its patterned expression. I decided that both music and architecture are composed around an audio-visual/abstraction process. That is, the composer first has an idea—perhaps about an experience. Then the composer begins to give form to his experience, he begins to think about all the details of the experience he can express musically. Finally, the composer takes all of the details, all of the pieces of the experience and fits them together into a unified whole; by the end of the piece he has told us a new and profound something that we can relate to our own experiences. In musical terms, this initial idea could be called a motive. In this case, a motive both a general term and a musical term that represents a musical identity; it is a representation of an experience, desire or action (architecturally it can be thought of as a program's contextual identity). In musical terms, a motive is a musical motif, an abstract representation of a concept that becomes the unit of musical form. Next, the composer will create a cycle of repetitive motifs, ones that begin to modulate around a central key (an overall harmony that gives the listener a sense of orientation between high and low voices). And finally, the composer must make sense of the individual patterns, he needs an overall structure to bind the composition together. From this generalization, the process can be simply stated as a process from a Motive (Thematic concept), to a Motion (modulation of individual patterns) and finally to the Image (the overall working gestalt and its Form). Architecturally, it's a kind of inside-outside design process, or one with classical references to a schematic layout of tension, development and resolution. Another process important to music, however, is one of improvisation around a predetermined structure. This process is more difficult to translate architecturally, but I believe it can be achieved as a free-span construction, with the internal experience focused on the event. This kind of composition is seen more in Jazz and Rock and Roll, whereas the former is more classical and tripartite. The improvised design, however, still contains a motive, motion and image, but parts of these are less literal and direct, and are often based on a feeling rather than a concept or theme. Therefore, I decided that a way to visualize the relationship between the motive (a conceptual, musical identity) and the architectural expression was to study different types of music and try to translate them into graphic patterns. I regret to say that most of this study was 2 dimensional representations, but I later focused more on model exploration when I decided on the exact thesis topic. My first graphic study was to take a section of a classical score (in this case Beethoven’s fifth symphony) and to translate the musical notation into a graphic pattern.
**TEXTURAL MAPPING: PATTERN TRANSFORMATIONS**

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**Long Range Design Analysis.**

--Beethoven used Key contrasts within a piece to create a sense of unresolved tension. The Fifth Symphony begins on a minor key (which has a feeling of incompleteness—a slight disharmony), which he resolves the tonal conflict by inverting the relationship of Minor key to Major key by the end of the symphony.

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**Fig 10. Schematic design layout of Beethoven's Fifth. Illus. Pete McCallister**

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**Fig 12. Tonic resolution. Illus. Manoff**

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**Exposition (opening number)**

Range of Instrumentation. Measures: 1-10
Number of parts per instrument.

<table>
<thead>
<tr>
<th>Measures:</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Range</td>
<td>1 Fugotti</td>
</tr>
<tr>
<td>Middle Range</td>
<td>2 Clarinet in B. 3 Violin, Cb. 1 Viola</td>
</tr>
<tr>
<td>Low Range</td>
<td></td>
</tr>
</tbody>
</table>

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**IMAGE**

1. Sensations
   a. Light/Shadow
   b. Texture
2. Objects
   a. Objects as Group patterns
3. Forms
   a. Solid/Void Relationships
   b. Geometric Details

**MOTION**

1. Repetition as Habit
   a. Repetitive Processes
2. Rhythm as Movement
   a. Sequencing Space
   b. Spatial Intervals
3. Magnetism of Force
   a. Dynamics of Music
   b. Weight of Form

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**MOTIVE**

1. Generation of Desire
   a. Expectation of Continuity
2. Participation of the Ego
   a. Self-Identification and Reward
   b. Psychological Closure
3. Orientation in Space
   a. Perceived direction of Motion
   b. Reference points
The next study I became involved with paralleled the first study, but I became concerned that the Beethoven study (which was a wonderful graphic representation) didn’t really explore how the listener would experience it. The Beethoven study gave a good schematic layout of the organization of the first 21 measures, but it was non-experiential. Therefore, I wanted to create a study where I abstracted a photographic representation of space, and broke the planar surface to create an illusion of depth.

In this study, which is difficult to experience as a caption in a book, was created with a photograph of O’Hara airport terminal in Chicago. I took this photo to show the gestalt of patterns and people that intersect a public space. Using this image, I scanned it into a computer and used a program that would abstract the image into black and white patterns (positive and negative space). I then cut both the negative and positive images into evenly spaced strips and combined them by alternating each positive and negative strip on the face of a folded surface.
On this folded surface I glued the positive image (the darker image) on the left face of each fold, and I glued the negative image (the lighter image) on the right side of each fold. The result was an image that almost scintillated and transformed between the two sides. If one were viewing the work, standing on the right side, it would appear as the negative image. But, if the person were moving toward the left the patterns between both images would begin to fuse together and shift, transforming until the person reached the far left side, viewing the positive image. The success of this graphic piece was that it metaphorically represented the experience of each viewer as unique, just as the experience of each person listening to an orchestra is unique; the graphic patterns changed depending on the viewer’s body position in space—in a sense (visually) it created its own musical experience and it engaged the body in the experience, two characteristics I wanted to design for in architecture.

This study began to focus the thesis toward a particular sort of music, something more attuned to modern culture, as well as modern movements in architecture. It began to look at architecture as more a layered experience: an inner architecture where the workings between the walls and columns became an opportunity for expression. I knew I wanted the thesis project to become more than just a loose theoretical expression, it had to be manifested into a designed product. But I found that classical models of music were insufficient to serve the needs of modern culture, and classical models were imbued with theoretical implications that would take more time than I had to spend to work out all of the subtle details, so I focused on something more direct and explicit. I found that an architecture serving a music genre of excess could be the key. Modern developments in music culture seemed to narrow the topic towards a late 1970’s movement known as punk rock, which later split into various branches called grunge, alternative and industrial rock. Punk Rock, not only seemed like the perfect program type for modern culture, but it imbued a form of energy that began to transform my thinking from a restrained and boring approach, to one that infused a life into my project.
The existence of punk rock is one where the essence is farther reaching than the actual movement itself, which, in its prime, only lasted four or five years. However, it seemed fitting that the movement would explode onto the music scene as quickly as it died down, but its influence had changed the way people experience the concert performance, and reoriented the way musicians thought about musical expression. Punk Rock originally began as a response against the Progressive rock era, a popular style that valued complexity and virtuosity over simplicity and direct emotion; however, punk rock later became focused on political issues. Musical song prowess had become a prized possession in the late 1970’s, and the seriousness of the music profession seemed to strip rock and roll’s humble beginnings into an “adult medium (MTV)”. At that time, the early 1960’s “fun” rock became almost obsolete. Musicians couldn’t learn only a few chords and be performing on stage within a week, the music had to be “sophisticated.” In many ways, rock music had forgotten much of its spontaneity and expressiveness, and many rock musicians began serious studies of classical compositions, which many tried to make into rock songs. For many rock musicians, the classical attempt completely failed. It seemed many musicians forgot that the essence of rock and roll isn’t focused on composition, but performance and perception. In a recent important document, describing the aesthetics of Rock music, Bruce Baugh explains:

“Traditional musical aesthetics is concerned with form and composition, whereas rock is concerned with the matter of music...the way music feels to the listener, or the way it affects the listener’s body...An important material aspect of rock music is the way an individual tone sounds when played or sung in a certain way, which is why in rock, as in blues and jazz, it is the singer and not the song which is important. But it is also true in the case of the electric guitar, an instrument which takes on the expressive function of the voice in much of rock music.”

Baugh also goes on to explain that the primary principles of Rock music are materiality of tone, loudness and rhythm. And that, “these material or ‘visceral’ properties of rock are registered in the body core, in the gut, and in the muscles and sinews of the arms and legs, rather than in any intellectual faculty of judgment, which is why traditional aesthetics of music either neglects them or renders them as having no musical value...which, “is crucial to the success of a rock music performance, a success judged by the feelings produced in the listener’s body (Baugh xx).”
Fig 18. Framed imagery can often enhance the perceptual emotion.
Here, high contrast, rare color and dominance of the frame, portray feelings of frustration, anger and outcry.

In response to all of what seemed like musical elitist nonsense and "with a fear of it (rock) becoming just another leisure industry," a new energy of "garage-style" bands emerged from the depths of underground scene to rescue modern rock from inevitable blandness (MTV 2). This new style attacked mainstream music and popular culture with more an attitude to diversify than with any musical talent. However, this strange aggressiveness, combined with their shoddy musicianship, blended together in an odd way to be given a unique identity, called Punk Rock. Punk Rock, which eventually broke into various branches called Grunge, Alternative, and Industrial Rock in the late 1980's, expressed their "over the top" attitude behind a music of noise. Punk Rock's first attempt at acceptance in the United States was appropriately responded to by a reverberation of dissonance from a wary and unfamiliar public. However, after some time of development in Great Britain, Punk Rock had focused its energy behind a simple musical structure, which framed the often untidy presentation into a series of short, direct anecdotes that people could relate to (like boredom and depravity), in a way that seemed almost tribal and untamed. The first attempts of Punk Rock were short lived, and transformed by other musical styles, like reggae, but after nearly a decade of assimilation into the American conscience, the early 1990's became the new era of punk styles, and it has become an accepted form of musical expression on American airways. This new mainstream style is no longer for the passive audience, but one that requires full body participation between the performer and crowd. The "garage-style" bands are no longer playing in the back-filled alleys, or ghetto warehouses, but are playing in prime venues. The new question therefore becomes, does architecture need to respond to this alternative form of expression: one in which the spectator is central in the act of performance? In order to test design strategies for an alternative performance experience I needed a site, and I found what I needed in New York City—the birth place of punk rock.
Fig 20. Skyline New York City. Photo by N. R. Faut.

Fig 21. The center of New York is layers of activity and advertisement.
Reasons for Choosing New York

By now, it may seem like the notion of mixing music, architecture and New York City together is a common cliche, but I chose the city for reasons befitting the music type I involved in design. In any case, the history of the city within the last two hundred years, and especially since the beginning of this century, New York city has been a place thriving with diverse cultures, ethnicities, social developments and creativity. What better a place to find music appreciation of all kinds ushering to a large population within such a small area. It seems the layers of life, culture, music and architecture are endless. It is a mini-universe melding all extremes: from the rich and glamorous to the poor and dirty, all coexisting within the same 300 square miles. The beginnings of punk rock all started in small clubs on what is known as, "the sleazy end of the Bowery," in East Village, Manhattan. Here, a number of groups were finding inspiration from 1960's garage bands like the Kirks, and began to invent their own songs. The songs that groups like, Lenny K. and Patty Smith, and later the Ramones, "were short, simple, and most of all easy to play (MTV 3)". Clubs like CBGB's on the lower east side of the Bowery, was one of a few clubs that allowed more experimental groups to play on stage. In this area of Manhattan, I found a site that seemed appropriate for my project.

The Site

The site is located in a warehouse district in South Seaport, Manhattan, on the corner of Peck Slip and Water Streets. The site is on the west side of Peck Slip, and contains 3 properties with one vacant building. There are two empty lots on this site, both of which supported buildings that have long since been removed. The existing building was built in 1888, designed by the architect Carl F. Eisenach, it contained ground floor retail and upper floor apartments. This five story brick building is one of the more handsome examples of late 19th century architecture in this area, built of load bearing masonry walls, heavy timber frame and enlivened with terra cotta foliage details. The proportions of this building are very classical: it is organized into a tripartite systems of base, middle and top; the first floor is articulated with 4 large arched doorways, supported on a corbelled base; the middle section is simple and is seen as a facade with a partially symmetrical arrangement of windows, and the upper part is designated by a change in pattern detail and banding, with a corbelled entablature. The edge of the building are simply detailed by chamfered corners, and upper floor windows have a unique head detail of terra cotta faces, looking out onto the street below. All of the stonework on the street fronting the building are of original cobble stone construction, which is currently under reconstruction. The site itself is small, and Peck Slip street fronting the lots is over 80 feet wide, and is used mostly for parking. Therefore, I intended to convert some of this open space into the building program, inhabiting all 3 properties (dimension 24 feet by 48 feet each) and an additional 20 feet of street space into the program.

Fig 22. Corner building on site. 251 Water Street. Photo by. Edmund V. Gillon, Jr.
Fig 23. Terra cotta detail from door archway. Photo by. Edmund V. Gillon, Jr.
Fig 24. South Seaport and Site. View towards Brooklyn Bridge. Photo by. Robert Cameron.
SITE ANALYSIS AND CONTEXT

Reasons for Choosing The Site

I chose the site for its unique location within the context of New York City. New York City has a history of neighborhoods and prime social destinations to move around and find new and exciting places within the city to reinvent itself. This site I projected to be a new place for clubs, nightlife and tourism. The area is currently under redevelopment and is being considered for revitalization because of its historic value and its prime location to the fish markets and business districts. It is also central to several neighborhood and apartment complexes, a 10 minute walk from pace college, a 5 minute walk from the subway terminal, one block away from the popular Paris Club, 2 blocks away from the Fulton fish market, and virtual spitting distance from the Brooklyn Bridge. There are also several museums in the immediate area, as well as a few factory and warehouse businesses. In the larger context, the site is a kind of crossroads between the Wall street district on the west, residential apartments and colleges to the north, a market place and seaport to the south, and Brooklyn to the east. It is also not far from the lower east side of the Bowery. All south seaport seemed to need was a program scheme and a development to generate a music culture with permanent residence in this area.

Fig 25. Site Analysis showing access to site, and traffic patterns.
Fig 26. Map of South Seaport. Showing dominant landmarks and destinations in relationship to the site.
Fig 27. Darker buildings Residential. Lighter buildings business adjacent to site.
Fig 28. Early sketches of design ideas. These elevations are thinking about a relationship between the site and the Brooklyn Bridge. A building that has an internal structure suspended by cables and piers.

Fig 29. Interior of a performance space. Looking at patterns of light and shadow breaking up the flatness of a simple volume of space.

EARLY DESIGN STUDIES

--These early design studies were conceptual representations of musical ideas. This project became an initial study model to test the building program on the site. Even though these early models were not totally representative of the final design, they gave me a first glimpse into the design constraints and architectural vocabulary necessary to design. In this case, it showed me that the program was too large for the site. Therefore I either needed to enlarge the site or shorten the program. Because the site, which contains two empty lots, one vacant building and much parking space, I had much room to expand the site into the street and to create a public plaza. These early studies, architecturally, began to shape my aesthetic vocabulary into prisms and parts. It began to look toward a layered architecture, one where the structure is like an exoskeleton and frees itself from the confines of a heavy masonry wall.

Fig 30. Exterior walkway over a colonnade connecting the old building to the new on the opposite end on the block. An external movement pattern.

Fig 31. Early sketch model, studying the overall design and its material transformation between the more "classical" or existing building and the "exposed" modern building.
### Program Elements:
(Indoor Space)

**Floor 1**
- b. Performance stage (18’ x 28’): 448 sq.ft.
- d. Addtl. performance floor space and hallway: 990 sq.ft.
- e. Shipping/receiving space: 108 sq.ft.
- f. Main kitchen space and food prep.: 697 sq.ft.
- g. Retail shop and office: 945 sq.ft.

Subtotal: 6,003 sq.ft.

**Floor 2**
- a. Restrooms Male (17’ x 12’): 204 sq.ft.
- b. Restrooms Female (17’-6” x 17’): 297.5 sq.ft.
- c. Hall space: 828 sq.ft.
- d. Body Art Studio: 945 sq.ft.

Subtotal: 2,274 sq.ft

**Floor 3**
- a. Bar Space: 1,964 sq.ft.
- b. Hall space: 828 sq.ft.
- c. Performance cage floor: 527.33 sq.ft.
- d. Office space: 945 sq.ft.

Subtotal: 4,264.33 sq.ft.

**Floor 4**
- b. Hall space: 828 sq.ft.
- c. Performance cage floor: 527.33 sq.ft.
- d. Radio Station (lower lvl): 945 sq.ft.

Subtotal: 3,391.33 sq.ft.

### Floor 5
- a. Performer Prep space
  - i. Lounge space (19’-6” x 24’-6”) 477.75 sq.ft.
  - ii. Addtl. space 267.25 sq.ft.
  - iii. Restroom (11’-6” x 9’-0”) 103.5 sq.ft.
  - iv. Changing room (11’-6” x 12’) 138 sq.ft.

- b. Back hall space 828 sq.ft.
- c. Radio Station (upper lvl) 945 sq.ft.

Subtotal: 2,759.5 sq.ft

### Basement
- b. Mechanical room A: 608 sq.ft.
- d. Restrooms Female: 372 sq.ft.
- e. Lower Kitchen
  - i. Potwash: 512.22 sq.ft.
  - ii. Dry storage: 200 sq.ft.
  - iii. Refrigerator: 368 sq.ft.
  - v. General storage: 100 sq.ft.
  - vi. Elevator Mech: 45 sq.ft.
- f. Additional space: 590 sq.ft.

Subtotal: 4,258 sq.ft.

Total Building area: 22,951.13 sq.ft

### Outdoor
- a. Performance Stage/Dining: 1,201.75 sq.ft.
- b. Floor 3 balcony (Bar lvl): 570.75 sq.ft.
- c. Floor 4 balcony (loft): 570.75 sq.ft.
- d. Floor 5 balcony (Prep): 237.5 sq.ft.

Subtotal: 2,580.75 sq.ft.

### Program Objectives:
- a. Create a club that will attract a diverse interest to southeast Manhattan. A new type of facility directed toward a musical audience and a participatory experience.

- b. The Club should be multipurpose, flexible and able to change its interior arrangement to accommodate different types of art installations and performance settings. It should be a "self-sufficient" venue, and sustain itself on a diverse market of goods and services.

- c. It should provide the opportunity to move the underground music scene to a place that will provide a higher profile and visibility to the general public (even though this may undermine the attitudes of some musicians), this should benefit both the musicians and the club, in general, as a marketing device.

- d. The club should be designed sensitive to the context, not only within the immediate site, but it should reflect the context and identity of the greater New York city area.

- e. This facility is a testing ground for young musicians and new talents. The general intent of this facility is to provide a concert setting for musicians, but it (metaphorically) will act as a kind of cultural bridge between notions of traditional culture and punk rock culture.
ORCHESTRATION OF THE PROGRAM -- DEVELOPING MATERIAL IDENTITY

Fig 35. Early Elevation study. Looking at program relationships in section and thinking about the materiality of form. In this case, thinking about a steel tube framed performance space with hanging acoustic panels for sound control, as well as a garage/warehouse motif.

Fig 32. An image of the type of stage setting appropriate for this project. An ideal look. From Video: Filter.

Fig 33. A loose study of an interior stage setting. Using various grating and gridded structure for aesthetic effect and for hanging props and lights.

Fig 34. Same as 33. Material selection is seeking metal panels, exposed steel framing, and contrasting colors.
**DEVELOPED DESIGN STUDIES**

**Fig 36.** First Layout attempt in plan. Looking for a boxier form, and simple scheme.

**Fig 37.** The model following plan 1. (Fig 36). In the process I found the box to be boring and intersected the box with curving metal panels.

**Fig 38.** Similar to plan 1, this is the expanded version as I expanded the program needs.

**Fig 39.** Kept a similar layout as in plan 1, but I located the performance space in the center, and extended the egress outside the confines of the cube.

**Fig 40.** Midterm design revision. Made some radically different changes technically, but kept the same general arrangement of program spaces.

**Fig 41.** Sketch model following midterm plan (fig 40). I decided on a central axis, an element that relates to the Brooklyn Bridge structurally, metaphorically and visually. I use upper level balconies to extend the interior space.
Fig 42. Final model of the grunge club integrated into the context of south seaport. In background, views of World Trade Center and Woolworth building.
Fig 43. One of my first sketches that conceptualizes a simple open frame plan with internal elements breaking the boundary. Preludes closely to the finalized design.

Fig 44. Interior view of cavity, without central beams and hanging platforms. Looking North.

Fig 45. Same as Fig 44, looking south.

Fig 46. First floor, showing an inside space condition.

My final solution is both simple and expressive. The design is simple, but based on a complex network of patterns, program types and ideas. The predominant design idea is transparency, using a layered system where people who intersect the space create their own perceptive dynamic. Each floor is thought of as a free-floating plane that extends inside and outside the building, creating a diverse and exciting spatial weave. The flexibility of the system is based on its construction concept: that is, the frame is rigid, but the floor, and most wall planes are removable panels, facing and grates, and interior floor planes that hang above the central space can be raised and lowered by an overhead mechanical system.

The formal parts (fig. 52) show how the plan relates to the context, then breaks away to rotate 90 degrees. Each hinge point in the rotation acts as a transition space.

Fig 47. Showing interior cavity. Performance floor and overlooking balconies.
Fig 48: Bird's eye view of building in relationship to the site. Showing extensive balconies and the central axis.

Fig 49: Site map showing contextual layout of other properties.

Fig 50: Close-up site map showing new facility within the streetscape.

Fig 51: Part showing Building axis, direction of transformation and exterior spaces.

Fig 52: Part showing schematic organization.
Fig 53. The crowd becomes part of the rock performance.

Fig 54. Diagram showing people density in a concert condition.

Fig 55. The active performance space. The mouth pit becomes the event that activates the space.
Fig 50: Building section A, showing the internal structure.
Fig 58. East elevation showing material type transformation from the existing building to the new.
Fig. 59. Similar to the Beethoven study. This diagram shows the musical patterns and orchestration of facade elements (the image).
Fig. 60. Looking out from back hallway into the performance floor space. The internal gestalt of overlapping positive and negative space, structural systems and people form individual perceptions of that space.
RESOLUTION OF A PROCESS.

Fig 61. Model looking northwest along Peck Slip. Showing the relationship to the context as well as its separate identity to the punk rock music genre.
Floor 3

a. Bar Space 1,964 sq. ft.
b. Back hallway 828 sq. ft.
c. Performance cage floor 527.33 sq. ft.
d. Office space 945 sq. ft.

Subtotal: 4,264.33 sq. ft.
Floor 2

a. Restrooms Male (17' x 12') 204 sq. ft
b. Restrooms Female (17'6" x 17") 297.5 sq. ft
c. Hall Space 828 sq. ft
d. Body Art Studio 945 sq. ft

Subtotal: 2,274 sq. ft
Sources:


