



# Rhythm and Resistance:

## Spatial Design Strategies for Cultural Resilience in Gentrified Areas

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A. H. W. ROSS BUYS HOTEL  
THE PURCHASER OF THE  
ROSSONIAN HOTEL

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This is an unusual occurrence in business when failures were rampant on all sides. This condition did not happen—it took brains, honesty and hard work to create such progress and success.

This Beautiful Impressive Hostelry  
changes hands to one of our leading  
Rase Business Men

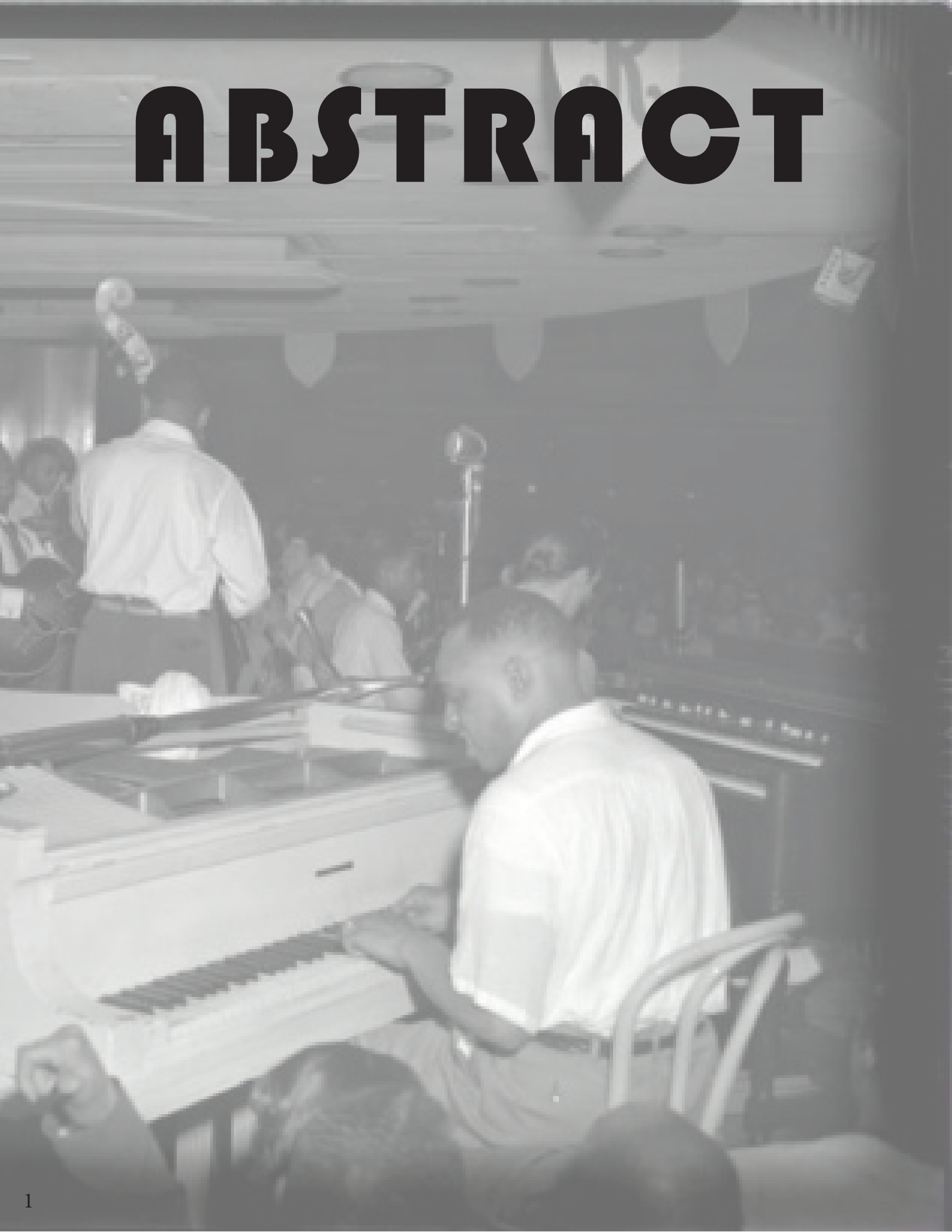


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# ABSTRACT





This thesis focuses on the intersection of Jazz composition, Architectural design, and African American culture. I examine the neighborhood of Five Points, a historically Black neighborhood in Denver, Colorado. The area was once known as the “Harlem of the West” due to its prominent Jazz culture. From the 1920s to the 1950s, the neighborhood became a Jazz hotspot, hosting influential musicians such as: George Morrison Sr., Ella Fitzgerald, and Duke Ellington, in iconic venues like the Rossonian Hotel. Jazz spaces were not only places of entertainment, but also where the Five Points community could gather freely, despite widespread racial segregation.

Jazz in Five Points symbolizes creative expression, resilience, and community. However, in the face of recent development and gentrification, the neighborhood has struggled to maintain its ties to the African American community and many culturally significant Jazz venues face demolition.

To begin my research, I focus on the current neighborhood social climate. I interview multiple past and present residents to gain a comprehensive understanding of the history and trajectory of the area. Additionally, I analyze historical photography and musical composition to understand Five Points in relation to its rich Jazz History. The culmination of this preliminary research showed a severe disconnect between the History of Five Points, and current development trends.

To reinvigorate Jazz culture in Five Points, I seek to move beyond the idea of preservation as a static act of ‘freezing the past’. I propose a living, dynamic approach that captures the improvisational, evolving spirit of Jazz translated into spatial design.

To do this, I propose a new design methodology driven by explorations of Architectonics of Music, and musical composition. I apply my findings to a case study where I reimagine Jazz space within the Five Points neighborhood. My process combines oral histories, historical archives, building documentation, and parametric design.

Essentially, I utilize Jazz compositions to draw parallels

between music and architecture to create a form that is constructed with the same principles that composed the song. For this project, I utilize a song composed by Five Points native, George Morrison Sr. called “Every time I Hear the Spirit” as a case study for my methodology.

I break down the Jazz strategies and compositional decisions that define the piece. I then take these strategies and apply them as a physically represented form within the built environment.

**Key words:** Jazz, Gentrification, Cultural preservation, Historical Preservation, Architectonics of Music

# INTRODUCTION

## Five Points, Jazz, and Redlining



Music and architecture are consistently intertwined throughout history. Both art forms serve as creative expressions of human experiences, evolving together and embodying the values and sentiments of each era. They serve as tangible manifestations of common sentiments of the time.

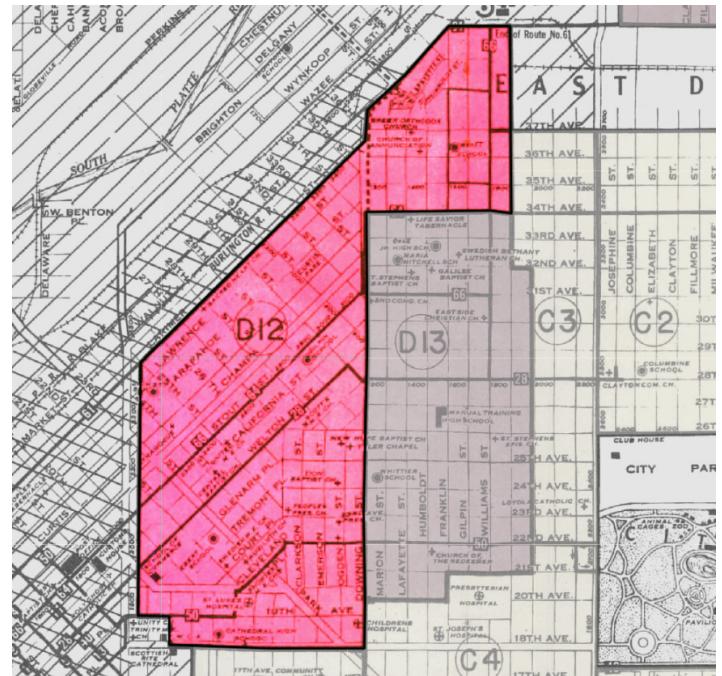
For example, Gothic churches tower high to invoke a sense of awe and to subdue parishioners. These emotions were mirrored and enhanced through Gregorian chants, with repetitive and meditative qualities designed to entice churchgoers under the word of God. Baroque era architecture focused on opulence and grandeur, ornate detailing and colorful palettes. Musicians of the same time focused on similar elements, with composers such as Johann Sebastian Bach creating intricate compositions highlighting multiple instruments.

Additionally, music and architecture have both been used as a response or pushback to social movements. Art Deco and Streamline Moderne architecture are direct critiques of traditional architectural methodologies. They showcase new technologies that arose after World War I and reject past styles of architecture ornamentation. In a similar vein, Jazz music calls attention to discrimination against African American communities as a rejection of Westernized musical compositions. In the face of adversity, it was a form of self-expression for African Americans, empowering them to speak about their hardships.

One such hardship in recent years has been the historical implications of gentrification. With a national rise in urbanization, urban African American communities are faced with unprecedented challenges involving historical and cultural preservation. The dramatic transformations of these neighborhoods displace long-standing communities. Developers often cater to wealthier, predominantly White, clients. In addition to marginalized community displacement, the emergence of mass development companies has been detrimental to historical architecture preservation and resilience.

The popular 5-over-1 construction strategy has dominated once culturally vibrant areas by scrapping regional architecture in favor of generic construction. To better understand this pattern, the Five Points neighborhood of Denver can be used as a case study.

In the early 1900s, Denver faced a large influx of urbanization and industrialization after the First World War and the rise in the automobile industry. This brought about a large wave of people and ideologies that swirled through the once sleepy town. Historical maps of Denver show the prominence of “redlining” to define neighborhood borders. Redlining is a predatory lending practice where banks would categorize neighborhoods to avoid giving loans to ‘high risk areas’. Oftentimes these ‘high risk areas’ were decided based on racial majorities.



(Denver Public Library: Form 8, 1937)

The D12 Section, also known as Five Points, was one of these areas deemed ‘high risk’. Local surveyors at the time noted that “Detrimental Influences of the area include Negro and foreign infiltration and commercial encroachments”(NS Form 8, 1937).

These observations and social sentiments show an obvious bias that continued to affect the neighborhood for years to come.

Once home to Denver’s largest African American population, Five Points thrived as a musical community in the 1900s. In the 1920s, more than 90 percent of Denver’s African American population lived within Five Points and the adjacent Whittier neighborhood. The famous Welton Strip housed many vibrant Jazz clubs featuring all of the up-and-coming artists of the time such as George Morrison Sr. with Morrison’s Jazz



NS FORM 8  
10-1-37

AREA DESCRIPTION - SECURITY MAP OF Denver, Colorado

1. AREA CHARACTERISTICS:

a. Description of Terrain: Level.

b. Favorable Influences: Utilities - adequate transportation - schools.

c. Detrimental Influences: Negro and foreign infiltration - commercial encroachments.

d. Percentage of land improved 99 %; e. Trend of desirability next 10-15 yrs. Down

2. INHABITANTS:

a. Occupation Laborers; b. Estimated annual family income \$ Under 1000

c. Foreign-born families 55 %; Mexicans predominating; d. Negro Yes; 1 %

e. Infiltration of Foreigners; f. Relief families About 300

g. Population is increasing -; decreasing -; static Yes

3. BUILDINGS:

	PREDOMINATING <u>99 %</u>	OTHER TYPE <u>1 %</u>	OTHER TYPE <u>- %</u>
a. Type	<u>Single</u>	<u>Two-family, terrace units.</u>	
b. Construction	<u>Brick, few frame</u>		
c. Average Age	<u>41</u> Years		
d. Repair	<u>Poor</u>		
e. Occupancy	<u>99 %</u>		
f. Home ownership	<u>50 %</u>		
g. Constructed past yr.	<u>None</u>		
h. 1929 Price range	<u>\$ 400-850</u> <u>100 %</u>		<u>100 %</u>
i. 1937 Price range	<u>\$ 500-2000</u> <u>70 %</u>		
j. 1939 Price range	<u>\$ 500-2000</u> <u>67 %</u>		
k. Sales demand	<u>\$ Poor</u>		
l. Activity	<u>Poor</u>		
m. 1929 Rent range	<u>\$ 6 - 25</u> <u>100 %</u>		<u>100 %</u>
n. 1937 Rent range	<u>\$ 5 - 20</u> <u>80 %</u>		
o. 1939 Rent range	<u>\$ 5 - 20</u> <u>80 %</u>		
p. Rental demand	<u>\$ 10</u>		
q. Activity	<u>Good</u>		

4. AVAILABILITY OF MORTGAGE FUNDS: a. Home purchase Limited; b. Home building -

5. CLARIFYING REMARKS: This section, bordering the heavy commercial district to the west and northwest, is an old area now occupied by a combination of Negroes, Mexicans and a transient class of workers. The west and northwest part of it is Denver's closest approach to a slum district. Shacks, largely held by speculators, rent for as low as \$5 per month. Negroes occupy the eastern and better part of the area. Cheap houses in the area have a good rental demand. A poor 4th grade section.

6. NAME AND LOCATION Denver, Colorado SECURITY GRADE D AREA NO. 44

(University of Richmond, NS Form 8, 1937)

Orchestra, and Jimmie Lunceford. The majority of the businesses on the Jazz Strip were Black-owned.

In recent decades, gentrification has transformed Five Points, bringing in new development, higher property values, and an influx of predominantly White residents. African Americans make up only 10 percent of the same total area population in 2023. This change in demographics mirrors the loss of Jazz culture with over 85% of historically renowned Jazz clubs in the area experiencing demolition, foreclosure, or rebranding in the past 25 years (Denver Public Library, 2022). The effects of losing these vibrant Jazz oriented community spaces can be felt throughout the decline of local architectural characteristics, and through past resident recollection.

Many residents understand and value the collective

ability for Jazz venues to unite the neighborhood. They emphasize that, more than ever, it is important to pay homage to spaces that have historically connected the community. To preserve and reinterpret the influence of communal Jazz spaces in the face of gentrification, it is vital to understand the convergence of Jazz music, African American identity in Five Points, and Architecture.

This leads to three central questions that must be asked:

**How have both Jazz and Architecture shaped the cultural landscape of the Five Points area?**

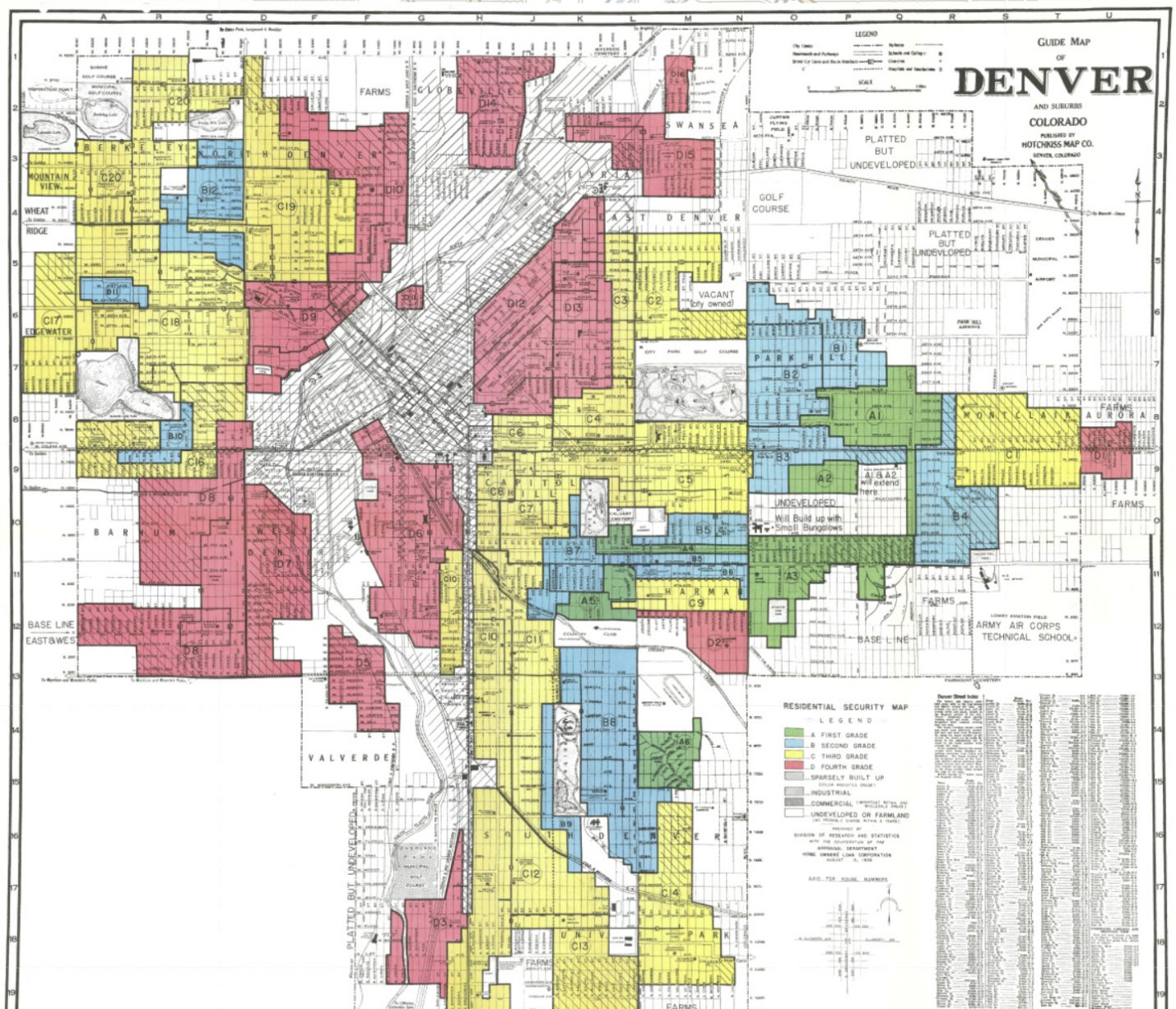
**How has gentrification changed the neighborhood identity?**

**How can technology and design be utilized to shift the neighborhood narrative to honor its original identity?**

These questions act as a guiding force throughout the research process of this project.

Jazz music, at its core, is a language between the listener and the musician. The improvisational structure and adaptivity of Jazz composition serve as a metaphor for resilience and transformation within the African American community (Haidet, 2015). In turn, the architectural spaces in which these musical exchanges happen can also reflect cultural movements. In recent years, a few architectural pioneers have examined the connection between music and the built environment by breaking each down to the essential principles.

A term coined by Steven Holl Architects called "Architectonics of Music" emerged as a result of this deconstruction. Architectonics relates to the scientific study of architecture. Architectonics of Music involves translating a music excerpt into a tangible space, material, and form. This is done through the breakdown of musical patterns such as rhythms, rests, improvisation, and syncopation. These musical patterns start to have connections with architectural forms. For example, rhythm can be expressed through window arrangements, or syncopation could imply a repeated floor plan on the level above. While these examples are relatively rigid, the culmination of these associations leads



(University of Richmond, Mapping Inequality)

to the creation of a building that was ‘built by music’.

An understanding of the Architectonics of Music, along with historical research, anecdotes from residents, interviews with musicians and architects, and precedent analysis, creates a comprehensive overview of my research.

As a final result, I create an architectural design methodology that draws from Jazz principles to mend Five Points’ lost cultural identity. In a cyclical sense, the neighborhood culture drives music, music drives architecture, which in turn creates a space for culture to be shared.



# LITERATURE REVIEW

A black and white photograph of a man in a suit playing a trumpet. He is in the foreground, seen from the side, with his head turned towards the right. In the background, a crowd of people is visible, some looking towards the camera and others looking away. A microphone is visible in the upper left corner.

**Analyzing Precedents**

Analyzing current and past literature in the architectural and musical fields was essential to bridging the gap between architecture, music, and cultural preservation. The exploration of this topic consists of understanding literature pertaining to historical and cultural contexts, cultural identity and space, key themes and methodologies in current research, as well as gaps in literature.

## Historical and Cultural Context:

Jazz music originated as a way to protest the mistreatment of the African American community. Burton W. Peretti in his novel “The Creation of Jazz: Music, Race, and Culture in Urban America”, analyzes the effects of Jazz in the 20th century in relation to changing societal norms. The book dives into the complex interplay of race, class, and cultural identity by showcasing Jazz as a form of resistance. In the 1920s, Black communities faced with waves of racism and unjust mortgage practices found solace in community spaces such as Jazz Clubs (Peretti, 1992). The interactions and social developments within these spaces contributed to the larger African American culture as a whole.

To understand the resilience of African American communities, it is important to understand the origins of urban racial unrest. To do this, it is crucial to analyze how historically Black neighborhoods were established, their cultural significance, and the challenges they have faced. Junia Howell and Edward G. Gotez in their article titled “Redlining and Neighborhood Change in the United States, 1930-2010” examine the long-term effects of redlining on marginalized communities by looking at neighborhood demographics, crime rates, and housing values. They highlight that issues pertaining to segregation and housing discrimination tie back to the Home Owners Loan Corporation (HOLC) in the 1930s. Banks would use “redlining” as a way to categorize neighborhoods to avoid giving loans to “high risk areas” (Howell, Gotez 2017). This practice essentially allowed racial biases of the time to slip into mortgage lending, leading to an imbalance in financial wealth and the perpetuation of discriminatory cycles.

At the pinnacle of these discriminatory redlining practices, a parallel movement was happening pertaining to Architecture. Jim L Raughton in his novel titled “Whittier Neighborhood and San Rafael Historic District” examines the change in architecture during this time

using Denver as a primary case study. He details the development of the urban area of Five Points over a 100 year time period and notes the emerging styles paralleled to social movements. The study highlights the architectural diversity within the neighborhood, noting styles such as Queen Anne, Italianate, and Victorian, which reflect Denver’s architectural trends at the time (Raughton, 2004). Additionally, Raughton addresses the growing issues pertaining to cultural preservation and gentrification. He focuses on the growing challenges of preserving Denver’s historically Black landmarks with developers targeting culturally significant locations such as the Rossonian and Rice’s Taproom.



(History Colorado , Musicians perform at Rice’s Taproom )

## Cultural Identity and Space:

The built environment is a vessel for public memory in urban landscapes. Dolores Hayden in the article “The Power of Place: Urban Landscapes as Public History” examines how space becomes a cultural identity marker in the face of adversity. She states:

“Urban landscapes are storehouses for these social memories, because natural features, buildings, and streets frame the lives of many people and often outlast many lifetimes. Urban landscapes can become storehouses for shared meaning, if their stories are told and retold” (Hayden, 1995).

In a similar vein, architectural researcher Edward Soja coined the idea of a “Third space” which is the ‘real and imagined’ spatial environment. Essentially, he posits that way in which people actually experience urban spaces may contradict their designed purpose (Handel, 2016).

In the African American community in Denver, these Third spaces manifested in the form of Jazz Clubs. When there was a need for safe congregation spaces in the Black community in the early 20th century, Jazz clubs became central gathering spaces. While their original purpose was to act as a performance space, they became much more, featuring places of refuge, social gathering, and a place to share ideas.

This ties in to another theoretical architectural perspective which stems from ideas of Henri Lefebvre. Lefebvre proposed the concept of “Production of Space” in his respectively titled book in 1984. He introduces the concept of the “social production of space,” proposing that all spaces are shaped by the societies and ideologies that occupy them (Lefebvre, 1984). In terms of the Jazz clubs in Five Points, socially significant spaces are heightened and immortalized by the interactions and music that was played within them.

An additional contributor to the intersection of music and architecture is David Brown in his novel titled “Noise Orders”. The book presents theories and studies that investigate the convergence of music and architecture, specifically how spaces can embody musical principles, or how music can inspire spatial design (Brown, 2007). He connects points of Jazz rhythm, dissonance, and improvisation to social contexts rather than stagnant musical forms. In doing this, Brown has challenged traditional architectural pedagogy and has created a pathway for discussions about adaptable, inclusive design approaches inspired by Jazz. This approach is unique in its methodology. Brown’s contribution to the field stands as a valuable resource for future development of these concepts.

## **Key Themes in Relevant literature:**

A common theme throughout the entirety of the reviewed literature was the idea that Jazz music influences place-making and public space usage in urban settings. As discussed in Henri Lefebvre’s theoretical observations of “production of space”, the usage of a space can entirely dictate the user experience in a way that overrides the intended design purpose (Lefebvre, 1974). Essentially, his points solidify the notion that Jazz music has an impact on the community in terms of culture building.

Another major theme revolves around gentrification and other socio-economic presences that severely impact the cultural identity of historically Black neighborhoods. This includes predatory realty practices, the lasting effects of redlining, and general development trends.

The final observed theme is that Architecture as a form of cultural expression can capture, maintain, or even lose cultural meanings depending on the intentionality of the design. This leads to the theme of mindful design decisions specifically in relation to preserving culturally significant elements of a neighborhood.

In the reviewed literature, a variety of qualitative methods are used to gather information about the subjects at hand. For example, the use of ethnographic studies, interviews with residents and musicians, and archival research all aided in the data collection of many of the reviewed sources. Additionally, demographic quantitative research was conducted to analyze population trends.

## **Gaps in the literature:**

It is apparent that there is a lack of research at the direct intersection of Jazz, Architecture, and Cultural identity, especially in the context of historically Black neighborhoods. There are studies that touch on the connections between the three, but fail to propose methodologies of design that can be used to preserve identities. Exploring new and emerging technologies could be the solution to bridging these gaps.

Moving forward, these gaps in knowledge can act as the jumping off point for my design decisions and can aid in my contribute to the larger field of interdisciplinary architecture and design.



# RESEARCH METHODS

## Research Organization and Strategies



**A. H. W. ROSS BUYS HOTEL  
THE PURCHASER OF THE  
ROSSONIAN HOTEL**

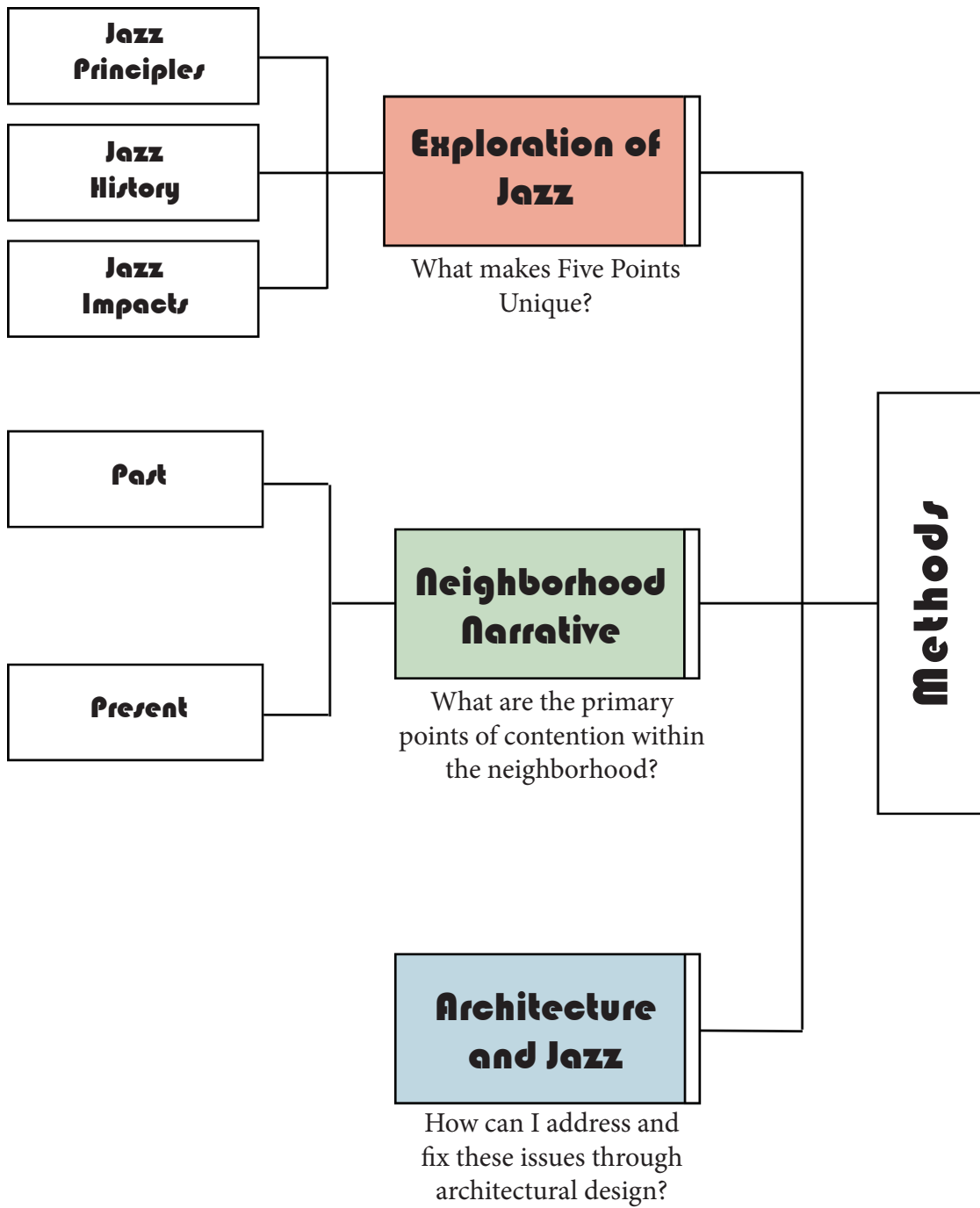
Again thru the efforts, activity and  
thoro business acumen of A. H. W.  
Ross, our attention has been called  
to the recent purchase of the Ros-  
sonian Hotel or the Dunbar Hotel as  
it has formerly existed as late. Be-  
cause of the exceptional business fea-  
ture, let us just recall for the sake  
of history a few facts concerning A.

and then work the plan by financ-  
ing the business in Denver, Colorado  
Savings Plan, and as quietly  
as it was kept he accumulated as  
much as \$20,000 in savings. During  
the process the members were per-  
mitted to withdraw at any time and  
they were not at a hitch or any trouble  
all of the depositors were paid their  
absolutely no depositor suffered any loss.  
This was a rare occurrence in  
business when failures were rampant  
sides. This condition did not  
happen—it took brains, honesty and  
hard work to create such progress  
and success.

**This Beautiful Impressive Hostelry  
changes hands to one of our leading  
Race Business Men**







Developing research methods was crucial to the progression of my research. It provided me with a framework to create a clear, structured process for investigating my research questions, gathering data, and drawing conclusions in a reliable and credible way.

I start with three guiding questions to gain a comprehensive understanding of the problem:

What makes Five Points Unique?

What are the primary points of contention within the neighborhood?

How can I address and fix these issues through architectural design?

Using these questions I built the base of my preliminary research which ultimately lead to the justification of my Design proposal.

### **What Makes Five Points unique?**

To delve into this question, I focused on the Exploration of Jazz. I conducted interviews with past and present residents of the neighborhood, many of whom are heavily involved in the music scene. I also visited multiple historical Jazz clubs in Five points, taking photographs to document preservation efforts, (or lack thereof). Finally, I hosted multiple meetings with experts in the Jazz community ranging from Jazz musicians, to Jazz historians teaching at a University level to understand how Jazz is composed.

### **What are the primary points of contention within the neighborhood?**

The second question addressed the neighborhood narrative both past and present. I explored tensions throughout the Five Points neighborhood by analyzing historical documents provided by the Blair-Caldwell Library. Additionally, I utilized social media and interviews to gain insight into public sentiments towards the neighborhood. Finally, I sifted through extensive literature reviews to understand the scope of the history.

### **How can I address and fix these issues through architectural design?**

To answer the final question, I analyzed the connection between Architecture and Jazz. I studied precedent explorations pertaining to the Architectonics of Music by Steven Holl Architects. I looked at previous examples of built projects taking into account sensory factors beyond the visual nature of architecture. I, once again, dove into literature review focusing on the novel “Noise Orders” by David Brown, to formulate my argument and design proposal.

Gaining insight into these three central questions allowed me to make the informed proposition of a new design methodology. I formulated this methodology by once again sitting down with experts, conducting interviews, and testing my methodology against focus groups and AI visualization softwares.

These research methods helped focus my inquiry, ensuring that my research questions were well-defined and answerable. They guided how my data was collected, analyzed, and interpreted, ensuring that the findings are based on evidence rather than personal bias. Additionally, the research methods also became tools for exploring complex cultural implications within the built environment and in relation to my proposal.



History Colorado, Rossonian Hotel



Self Captured, Rossonian Hotel Today

# RESEARCH DATA ARGUMENTATION

**Compiling Research to Support the  
Design Proposal**

I began my research into the Five Points neighborhood with three guiding questions: What makes Five Points unique? What are the primary points of contention within the neighborhood? How can I address and fix these issues through architectural design? These questions drove my research process and informed my final design methodology.

## **Exploration of Jazz Music:**

To begin my research, I started to build a comprehensive understanding of Jazz music as both a cultural and musical medium. I explored three categories related to Jazz. The first relates to Jazz principles; understanding the makeup of composition. The second relates to Jazz history, and the cultural implications of the genre. The third relates to neighborhood history and the impact of the Five Points Jazz community.

### **Jazz Principles:**

It is apparent that Jazz is a special art form. In the interviews I conducted with various Jazz musicians based out of the University of Colorado, each interviewee spoke with a passion and apparent love for Jazz. It's loose, improvisational form allows for musicians to have full creative control of the energy and flow of the song. This is what draws many to this genre. You could attend the concert of a Jazz band playing the same set three different times and have a different experience every time. One Jazz historian stated: "Jazz is a dance between the musician and their instrument... sometimes you may lead the instrument and sometimes it leads you".

This feeling of freedom within Jazz composition has roots in a few key patterns and principles that most Jazz compositions possess. Some of these elements can be identified as : improvisation, call and response, syncopation, swing, interplay, and polyrhythm.

Improvisation is a driving force for many Jazz compositions. It is rigidly defined as: "to create and perform (music, drama, or verse) spontaneously or without preparation" (Oxford: Oxford University Press, 200). To many musicians, improvisation is a moment when the instrument guides you. Improvisation occurs when an instrumentalist invents melodies over a harmonic progression, or in group settings, where musicians spontaneously interact and respond to each other's ideas. This interaction with other band mates is also

paralleled in the concept of call and response.

Call and response refers to the interactive nature of Jazz music. This can be expressed through instrumental dialogues, big band arrangements, and audience participation. The interaction fosters an interactive environment between musicians and the audience and creates a communal feel in performances.

By definition, syncopation is a "temporary displacement of the regular metrical accent in music caused typically by stressing a weak beat" (IEEE Pulse, 2022). In simple terms, syncopation relates to on-beat structures and off-beat structures within musician compositions. In Jazz the synching of beats along with the intentional straying from the beat creates both unpredictability and energy.

Swing is the "bouncy" feeling that many listeners of Jazz enjoy. It creates a light, uplifting tone which prompts movement and dance from the audience. Swing can also refer to the transitions between instruments. The transitional space between instruments drives the energy of the next improvisation and is central to creating 'danceability'.

Interplay is vital to Jazz music. Defined as: "the way in which two or more things have an effect on each other (Oxford: Oxford University Press, 200), Interplay is what sets Jazz apart from other traditional music styles. Many Jazz performances center around group dynamics. The way the band interacts with each other directly influences the trajectory of the song. A musician's freedom to express their own musical flare within a set, allows a dynamic where musicians can riff off each other. Each member of a jazz group contributes their own personal playing style to create one comprehensive composition.

Finally, polyrhythm refers to the layering of contrasting rhythms and musical instruments. It creates complexity and adds depth and movement to the song. Compositionally, in a polyrhythmic pattern the two rhythms operate in different time signatures but co-exist within the same beat structure. Common polyrhythms include 3:2, (triplets over duplets), and 4:3, (four beats against three) (Monson, Ingrid, 1996).

### **Jazz History:**

To examine the history of Jazz, it is important to understand its deep roots within African American history. To build this understanding, literature review and interviews with Jazz historians were key. Many historians point to the transatlantic slave trade as a driving influence of early Jazz culture. Enslaved people brought



West African musical traditions to the deep south in the 18th and 19th centuries (Hitchcock, 1969).

Many of these traditional West African songs contained principles found in later Jazz compositions such as: call and response, polyrhythm, and improvisation (Berlin, 1980). In tandem with the progression of slavery, musical expression became a release for early African Americans looking to escape the atrocities of slavery and early sharecropping.

In the early 1910's traditional African musical traditions merged with westernized harmonic structures to create Ragtime. Ragtime was considered a composition for the piano, generally in duple meter and containing a highly syncopated treble lead over a rhythmically steady bass (Berlin, 1980). Ragtime utilized a more sophisticated iteration of syncopation which would eventually become one of the most prominent aspects of Jazz as we understand it today.

As a result of the ragtime movement, Big Band Jazz rose in popularity along with the Swing Era in the 1930s. This era brought a larger focus on improvisation and rhythm within performances. The convivial nature of Big Band Jazz music and Jazz clubs created an environment free of judgement, and an escape from the political and economic turmoil occurring at the time. Many famous Jazz musicians emerged from the Big Band and Swing Era including Duke Ellington, Ella Fitzgerald, and Denver local artist George Morrison.

### **Jazz Impact:**

As a final building block in my understanding of Jazz, I explored the cultural and social impacts of the genre. Once again, literature review was crucial to building this understanding. Additionally, I focused on audience and musician testimonials to understand the personal impacts that Jazz has had on the community, especially within the African American community. One interviewee stated: "My dad was a jazzbeaux so there was never a time without jazz. It was the portal for the young mind ... it makes your heart beat faster to be able to pick out the melody."

For many, Jazz was a form of resistance and a safe haven from the discrimination of the outside world. Jazz clubs allowed attendees to freely express themselves, free of judgement. One Five Points resident interviewee stated: "... we used to go play [Jazz] after school. Sometimes we'd play for so long that our parents would

get mad." This spontaneity and creativity created a sense of political liberation intertwined within the genre. This sentiment was often met with violence and disdain from outside forces. Within the Denver area Jazz clubs were a target for the Ku Klux Klan due to their connection to the African American community. The majority of these establishments were in the Five Points Neighborhood. Additionally, influential leaders in the Jazz community were also targets. Famous composer George Morrison had his house burned down three times by the Ku Klux Klan (Raughton, 2004). Despite outside critique and violence, Jazz culture grew more prominent until it became a widely accepted mainstream art form around the 1960s. Today, jazz continues to evolve with the emergence of new technology and a greater archive of historical jazz compositions.

## **Neighborhood Narrative:**

The Five Points neighborhood of Denver is a neighborhood built on the basis of resilience. From its origin it seemed as if political powers were against the progression of the area. Five Points was named in reference to the conjunction of Denver's diagonal downtown grid with the rapidly growing rectangular suburban grid. These grids met at Washington Street, 27th Street, 26th Avenue, and Welton Street, hence the name 'Five Points'. The neighborhood was created in the early 1870s and continued to grow until the silver crash of 1893 (Raughton, 2004).

This time period saw rapid growth throughout the Denver area as historian Gunter Barth describes it as the "instant city." At the same time, a large wave of African Americans came from the midwest and the south in search of a new start driven by the silver boom. By the 1920s, more than ninety percent of Denver's African Americans lived within the bounds of Five Points and the adjacent Whittier neighborhood as a result of the nearby factories and refineries.

### **Rise of the African American Population:**

Around the same time of the neighborhood creation, a popular urban planning strategy called redlining was imposed on the neighborhood. In essence, the Bank of Colorado created a map highlighting the most affluent neighborhoods in the city. These neighborhoods had

priority when seeking loans. Due to Five Points' high density of African Americans, the neighborhood was deemed 'high risk' for loan approval. This created a cycle of financial hardship and containment within the neighborhood for the African American community. Historians Tom and Laurie Simmons state that: "by the end of the same decade black residents of Denver were confined by custom, covenant, and coercion to a fairly concentrated residential area around the Five Points intersection (Simmons, 2021). This neighborhood confinement created an area rich in African American culture, with Jazz at the forefront of neighborhood values. The 1940s and 50s were the height of the neighborhood's reign as a cultural and entertainment destination, with local night spots hosting Jazz and Blues musicians of the era. Popular venues such as the Rossonian, Rice's Taproom, and the Ex-Servicemen's club, defined neighborhood architecture and community nightlife.

Local composers rose to fame at this time, the most notable being George Morrison Sr., a jazz composer and violinist. Morrison created Big Band compositions out of venues such as the Rossonian and Rice's Taproom in Five Points. His Jazz sound drew the attention of other famous musicians such as Duke Ellington and even international listeners like the Queen of England. Morrison furthered his influence in the Denver Jazz scene in 1921, when he was able to built a house at 2558 Gilpin Street, outside the area redlined for Black residents. His monetary success was faced with backlash from members of the Ku Klux Klan who repeatedly tore down the house's foundation and burned a cross

In the face of adversity, George Morrison Sr.'s voice and advocacy for the Jazz community inspired many. Despite the backlash, Morrison was determined to create a safe place for African American musicians to spend the night when traveling through Denver. Oftentimes, these artists were excluded from local hotels due to their skin color.



(Blair Caldwell Library, Ku Klux Klan in Denver)

### Present-day Contention:

In the early 1990's Denver entered into a period of 'urban renewal'. A new sentiment of repurposing and 'cleaning up' Denver's rundown neighborhoods was popularized as factories pushed their facilities further East. Five Points was identified as one of the areas that needed renewal. Many residents of Five Points at this time were feeling the continued impacts of redlining. As wealthy developers began buying property in the neighborhood, many residents found themselves in a position where they were being pushed out of their property. Between 2000 and 2006, the neighborhood grew at a rapid rate, with a 49 percent increase in households (Noel, 2020). Developers would go door to door offering lowball offers to families they knew were in need of instant relief. This quick accumulation of property began a wave of gentrification in the neighborhood that long standing residents could do nothing about despite protest.



(Blair Caldwell Library, Ku Klux Klan in Denver)



One recent occurrence of contention stemmed from Ink coffee shop on Larimer street that posted signs outside displaying emphatic support for the gentrification of the area.

While explained away as merely a 'joke' by the coffee shop, the struggles of long standing residents in keeping up with rising prices and maintaining neighborhood character, leave little to laugh at.

One disgruntled interviewee stated: "Five Points used to be a safe space, now it's just for granola heads." Additionally, a different longstanding resident claims: "... millennials come to the neighborhood, the local mom and pops turn into cold modern spaces where coffee is 10 bucks. I'm not paying that." When questioned about the underlying causes of their expressed discomfort,

both interviewees indicated recent neighborhood gentrification and modernization of historical spaces. Many historic Jazz venues in the area also fell victim to neighborhood gentrification. Raising prices and changing demographics presented new challenges for these spaces.

In my preliminary research process I conducted photography walks to take pictures of a few of these historic Jazz venues in their current conditions. Many of them now sit vacant or have been demolished like the Rossonian and the Ex-Servicemen's club.



(Odie Anaya, Ink! Sidewalk sign)



(Lindsey Bartlett, Ink! Vandalism)



(Colorado Public Radio, Protests at Ink! Coffee)



(New York Times, Happily Gentrifying?)

## Preliminary Research Recap:

After diving into the history of the Five Points neighborhood and listening to the voices of current residents, it has become increasingly clear that the area's cultural and physical landscapes have been destabilized by urban pressures. Processes such as gentrification, displacement, rising property values, and shifting development priorities have gradually eroded the once-vibrant cultural fabric of the neighborhood. In its place, we are left with a climate of social unrest.

Historic spaces are being replaced at a rapid rate with developments that disregard deep-rooted significance. In the face of these ongoing changes, the preservation of Jazz and African American cultural heritage has become increasingly difficult. As longtime residents are displaced and cultural landmarks disappear, the neighborhood risks losing not only its built history, but also the underlying rhythms, traditions, and creative energies that have long defined its identity.



(Historic Denver, Ex-Servicemen's Club 1950)



(Self Captured, Present day Ex-Servicemen's Club)

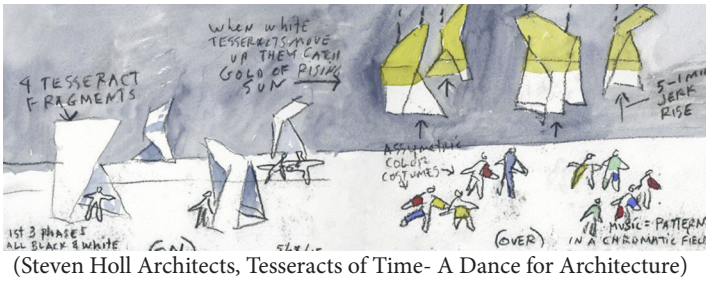
The remainder of my research focuses on exploring how architectural design can become a tool for cultural preservation, specifically by embedding Jazz culture into the design process itself. This work seeks to move beyond preservation as a static act of freezing the past and instead propose a living, dynamic approach, one that captures the improvisational, evolving spirit of Jazz and translates it into spatial design strategies.

## Architecture and Jazz:

The start of the second half of my research focuses on the connection between Architecture and Jazz. I examined the concept of Architectonics of Music through literature review, studies of precedents, design focus groups, and interviews. Defined by Steven Holl Architects, Architectonics of Music is an attempt to develop cross-disciplinary, inspiration-provoking work on new architectural languages (Holl, 2021). The goal is to merge the auditory medium of music with the visual medium of architecture. It examines their rhymes and resonances to serve as springboards for new vocabularies and forms for architecture. Dimitra Tsachrelia, a professor leading an Architectonics of Music studio at Columbia University, notes that she first encountered the idea of architecture originating from music in 2008 as a student in the "Architectonics of Music" studio where she designed a project titled, "Metastaseis". She was inspired by expressing Xenakis' glissandi in spatial terms by making light integral to the materiality, and questioning the linear perception of time (Tsachrelia, 2013).

These explorations created a foundational understanding of how music and architecture are intertwined. At its core, music composition is about organizing sound and silence, creating patterns, contrasts, and moments of auditory pause. These same principles can guide architectural sequence, spatial rhythm, and programmatic flow. For example, a steady beat can inform a structural grid, while improvisational solos might inspire unexpected architectural gestures or moments of spatial pause.





(Steven Holl Architects, Tesseracts of Time- A Dance for Architecture)



(Steven Holl Architects , Tesseracts of Time- A Dance for Architecture )

Additionally, I conducted a deep analysis on the book “Noise Orders” by David Brown to understand the relationship between architecture and music. I focused on the theoretical frameworks presented in this novel and have researched real-world applications of the presented principles. Brown focuses on Jazz music within the broad aesthetic, political, and theoretical upheavals of modern society, while proposing that modern architecture and urbanism can be strongly influenced and defined by the ways that improvisation is facilitated in Jazz (Brown, 2006). Through coding of “Noise Orders” and research into Architectonics of Music defined by Steven Holl, I was able to build a comprehensive understanding of architecture as a medium for musical expression.

In relation to the exploration of Jazz culture, African American culture and Architecture, I have sought out multiple design precedents that utilize Jazz as guiding architectural principles. A primary example has been the New Orleans Jazz Museum, which has interpreted musical characteristics through form, material, and flow to create an environment that embodies Jazz culture. The Design mission states: “Through dynamic interactive exhibits, multigenerational educational

programming, research facilities and engaging musical performances, the music New Orleans made famous is explored in all its forms” (New Orleans Jazz Museum 2024).

The building itself is housed in the historic Old U.S. Mint, strategically located at the intersection of the French Quarter and the Frenchmen Street live music corridor. The New Orleans Jazz Museum is in the heart of the city’s vibrant music scene.

Through partnerships with local, national and international educational institutions, the New Orleans Jazz Museum promotes the global understanding of jazz as one of the most innovative, historically pivotal musical art forms in world history.

I use this project as a framework for historical design and ideology preservation. The Museum embodies the spirit of Jazz in the heart of the location in which it evolved.



(New Orleans Jazz Museum, Exhibit Hall Expansion)

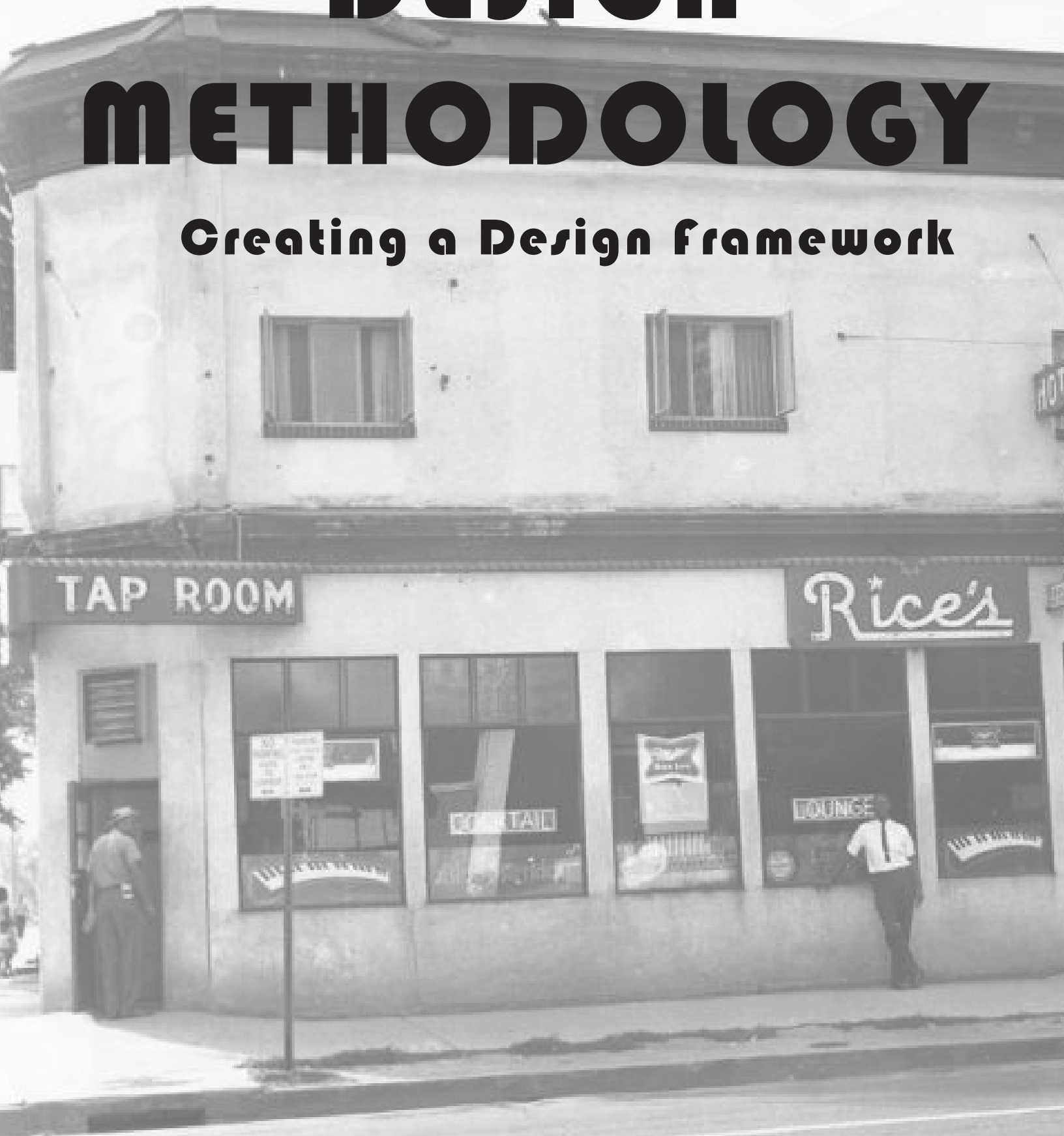


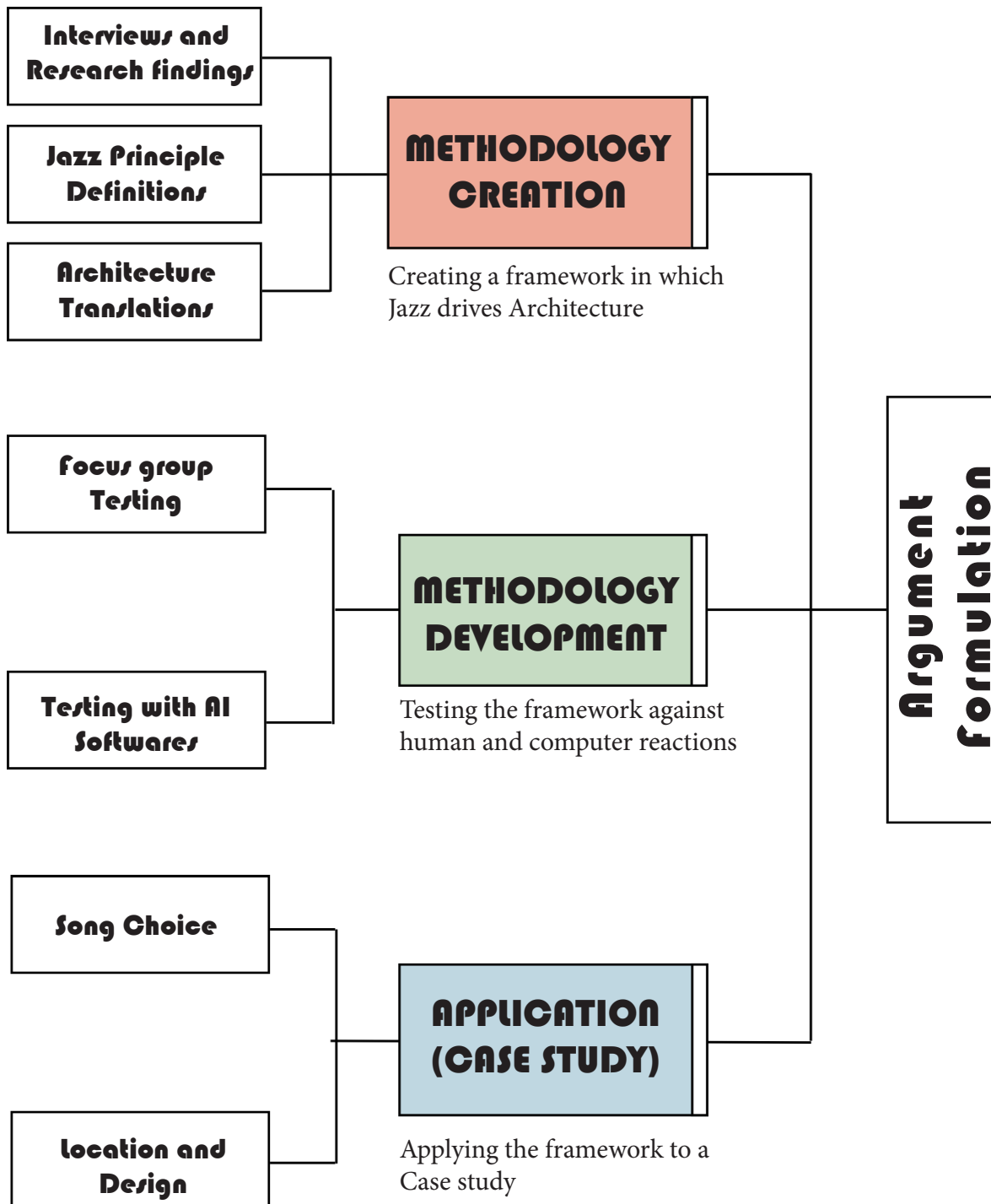
(New Orleans Jazz Museum, Exhibit Hall Expansion)



# DESIGN METHODOLOGY

**Creating a Design framework**



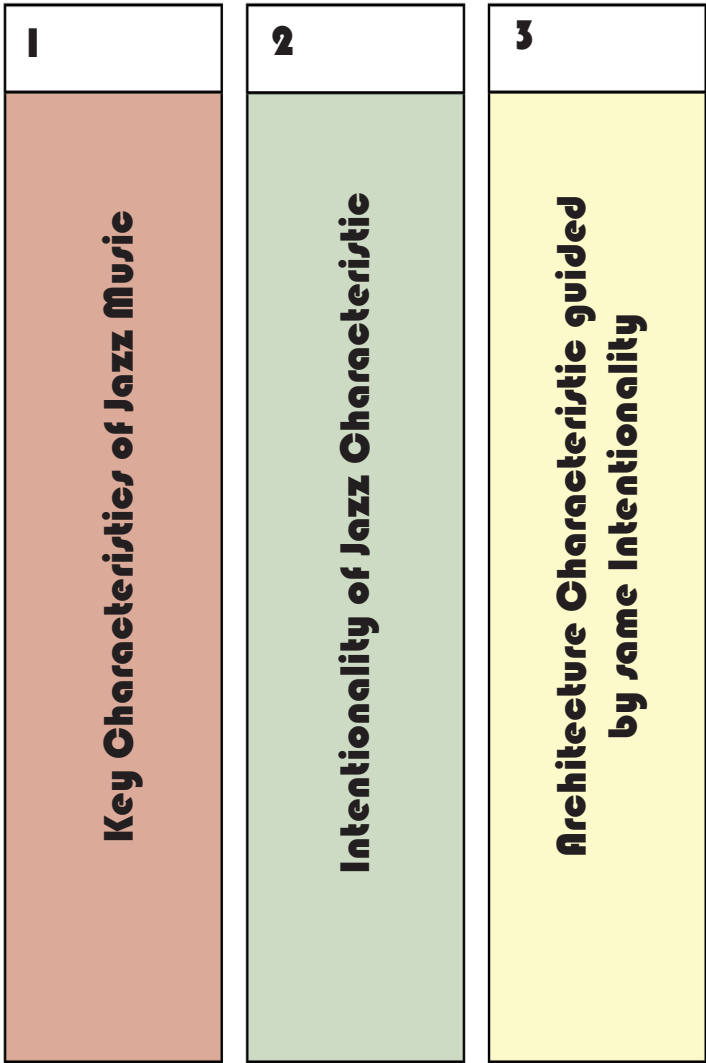




# Design Methodology Formulation:

With the understanding of neighborhood context, Jazz music, and Architecture, I began to formulate a design methodology to relate all of the elements. I conducted a series of interviews with Jazz musicians and Architecture professors to experiment with identifiable categories of Jazz and Architecture principles.

I utilized these principles to find connections between Jazz composition and physical architectural forms. These connections would be the basis of my design methodology and shaped my interpretations of Architectonics of music moving forward.



In Jazz, there are strategies and principles that are indicative and representative of Jazz culture. My brainstorming sessions with Jazz historians resulted in a list of five principles that are repeatedly found throughout every Jazz variation. These principles are: syncopation, rhythm, improvisation, polyrhythm, and call & response.

**Rhythm** is the core of all Jazz compositions. It is the basis of all other Jazz strategies and principles. Establishing a strong rhythm through beat structure is vital to listening comprehension. A strong base rhythm allows for timing shifts, improvisation jump off points, and flexibility for other jazz principles to exist.

**Syncopation** is a rhythmic structure in Jazz that places emphasis on atypical beats. This could mean emphasizing a 3rd beat in a 4/4 time signature, where traditional compositions focus on the 1st or 4th beat. Syncopation creates a sense of anticipation, tension, and movement in a song. It creates a rhythmic sway from the established rhythm.

**Improvisation** is a key part of Jazz, and arguably the most understood aspect. It refers to the divergence from the original written score, or agreed melody. Many times this manifests as solos or riffs from different instruments throughout the song.

**Polyrhythm** occurs in Jazz when there are two or more contrasting rhythms that happen simultaneously throughout a song. The goal is to create a layered complexity within the preexisting beat structures. For example, this could mean creating complexity within a 4/4 time signature by adding an additional beat structure of 2/4 to contrast. Polyrhythm creates rhythmic depth where listeners can pick apart different beats and experience the song in multiple ways based on what they are listening for.

**Call & Response** is the final key element of Jazz. It is responsible for creating audience and musician engagement within a set. In call and response, an instrument will 'call' out to another instrument with a melody or improvisation who, in turn, will respond with their own interpretation. This creates a convivial atmosphere of conversation and a distinct dialogue that keeps listeners engaged and interactive.

## Development:

After identifying the five central components of Jazz through interviews with Jazz experts, I began to simplify each term to its core purpose. The result of this exercise gave me five concise intentionalities of each Jazz component.

**The purpose of Rhythm** is to create familiarity within an arrangement that provides a framework for other jazz principles to deviate from.

**The purpose of Syncopation** is to create both variance and harmony within the arrangement, keeping listeners engaged and excited.

**The purpose of Improvisation** is to create energy and adaptability.

**The purpose of Polyrhythm** is to create complexity.

**The purpose of Call & Response** is to create dialogue between musicians and listeners

I took these identified purposes and interpreted their meanings in Architectural terms, through interviews with Architects, elements from the explorations of 'Architectonics of Music' studios, literature review, and precedent studies. This process led to me creating five central architectural interpretations of Jazz principles.

**Rhythm** is shown through repetition of forms, hierarchy in facades, and wayfinding.

**Syncopation** is seen through changes in facades and materiality.

**Improvisation** is choice, the breaking of order, and the opportunity to perform spontaneously.

**Polyrhythm** can be expressed through overlaid patterns, variation, and overlap.

**Call & Response** is created when users interact with space, it creates a ripple effect.

I then refined my interpretations by running an experiment to help formulate a connection between audio and visual interpretations. I found 10 willing participants from multiple spheres of my research. Some

were residents of Five Points, a few were Architecture Students, and others were Musicians. I gave each participant a piece of paper and some drawing materials. I then played the song "Everytime I Feel the Spirit" by George Morrison Sr. I asked each participant to "draw what they heard". I allowed the structure of this experiment to be minimally guided, as I wanted the raw interpretations of each participant. At the end of the song and the end of the drawing period, I asked each participant to explain their drawing. The drawings are as follows:



A common motif throughout the experiment was a lean towards repetitive forms. When asked about this repetition, many of the participants pointed towards the rhythmic structure of the song.

Additionally, “Everytime I Feel the Spirit” features a deviation from the original rhythmic pattern. This deviation is often identified in the drawings as an abstract, organic form that strays from the rest of the drawing. One participant stated: “the song shifted and ‘got crazy’ so I drew the crazy forms that I was hearing”. Many participants also spoke to a journey aspect of their drawings, often referring to different sections of their drawings as the “beginning, middle, and end”. This experiment was valuable in understanding the public’s understanding of the relationship between music and space. I used these drawings to inform my design methodology with many of the most repeated themes in the drawings appearing in my design methodology.

## AI Exploration:

As an additional layer of analysis into the relationship between Music and Space, I utilized the AI visualization software Midjourney to interpret different prompts related to the Architecture of Jazz. I utilized the prompts:

**Prompt 1:** “Use George Morrison’s composition of ‘Every time I Feel the Spirit’ to create an abstract form that represents the musical principles present in the song”

**Prompt 2:** “Create an abstract form highlighting the key elements of Jazz”

**Prompt 3:** “Interpret an architectural form where Jazz principles are guiding visual factors”

This exploration identified parallels between the participant observations and the computer analysis. Where these similarities overlap signify a justification for the visual expression of the musical term. I used these overlapping elements to solidify my architectural methodology.



**Prompt 1:** Image focuses on vertical and horizontal planes, repetition of forms



**Prompt 2:** Image focuses on linear forms, and shifted horizontal planes



**Prompt 3:** Image focuses on vertical elements intersected by organic diagonal forms.

My findings were as follows:

**familiarity** in architecture is created through the repetition of forms, particularly in relation to wayfinding

**Variance** in harmony in architecture is created through changes in proportion throughout space. This could mean playing with aspects of “pinch and release” or facade proportionality.

**Energy and Adaptability** are created in architecture through designs that are built to be deconstructed and reconfigured.

**Complexity** in architecture relates to moments of intrigue that are created through layering

**Dialogue** is created in architecture by responding to the needs of the users and the surrounding context of the site

<u>Jazz Principle</u>		<u>Intention</u>	+	<u>Architecture Translation</u>	=	<u>Result</u>
<b>Syncopation</b>	→	Creation of both variance and harmony	+	Changes in proportion	=	Changes in proportion create variance and harmony
<b>Rhythm</b>	→	Create Familiarity	+	Repetition of Forms	=	Repetition of forms creates familiarity
<b>Improvisation</b>	→	Energy and adaptability	+	Built to deconstruct	=	Flexible program creates energy and adaptability
<b>Polyrhythm</b>	→	Create Complexity	+	Intrigue	=	Moments of intrigue creates complexity
<b>Call and Response</b>	→	Interactions with audience	+	User response	=	User response

These interpretations act as guiding principles in the creation of my design proposal. By embedding these interpretations into my design approach, I establish a set of values and themes that influence spatial organization, material choices, and the overall atmosphere of the built environment I create.

## Final Design Methodology

<b>1. Find a Rhythm</b> Find the underlying beat and rhythm of the piece and represent it in a grid that projects the time signature. (ie: a 4:4 time signature is represented by a grid composed of 4x4)	<b>2. Syncopation</b> Extrude building forms based on moments of syncopation within the song. When harmonies are introduced, so are extrusions.	<b>3. Polyrhythm</b> Project additional grids on different planes to represent elements of polyrhythm	<b>4. Improvisation</b> Extrude forms from the poly rhythm grids in instances when time signature changes to create moments of Improvisation	<b>5. Call + Response</b> Interaction with the surrounding area through sound, energy, and movement through the site
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\*Establish a consistent way to interpret the grid. (ie: read the tiles per measure left to right)



# CASE STUDY



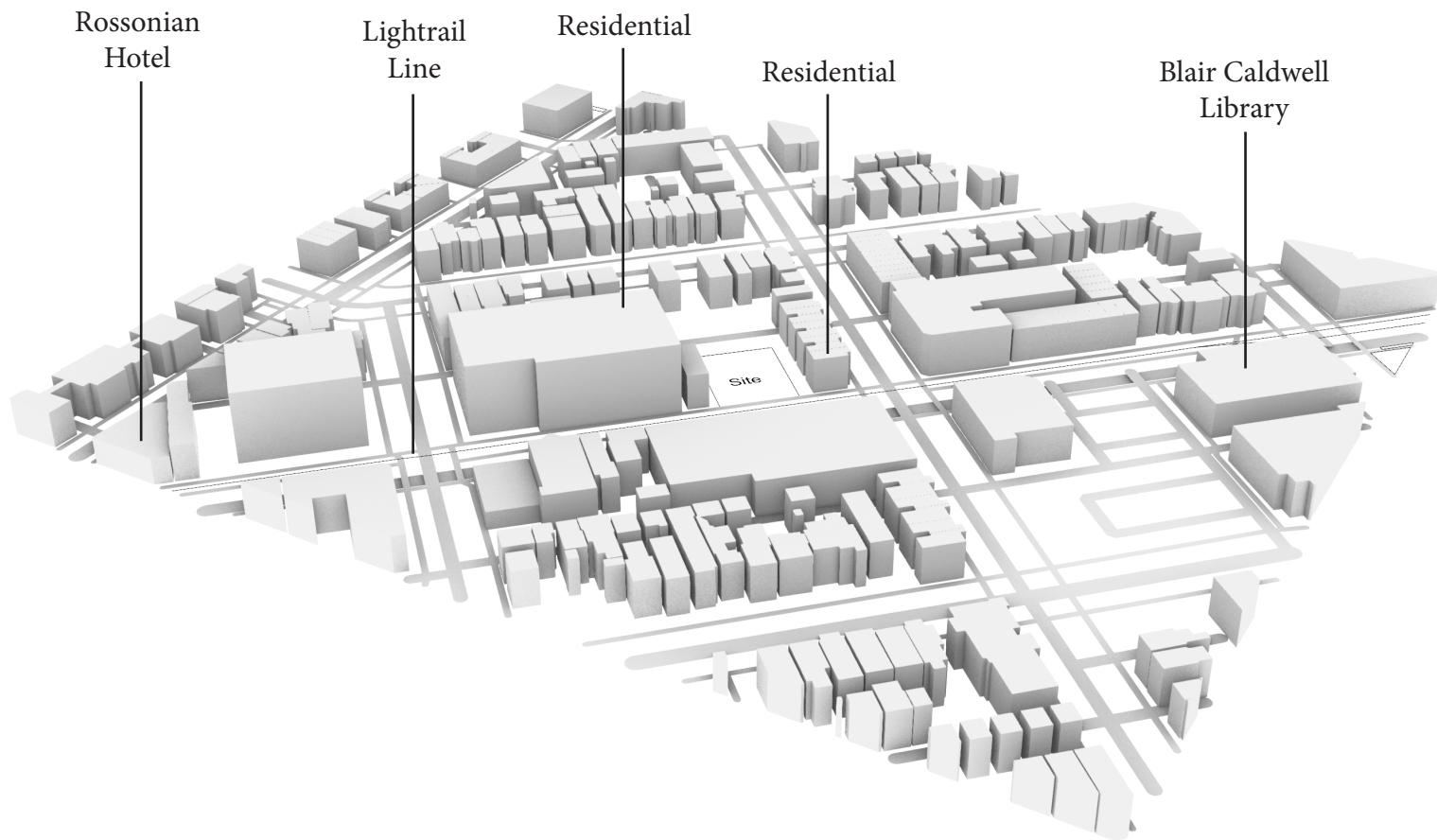
## Design Component

The culmination of my research efforts has resulted in a schematic design proposal following the methodology developed throughout my research. The proposal is placed in the heart of the Five Points neighborhood at 25th Street and Welton Street. The location sits on the Welton strip, one block from the historic Rossonian Hotel and adjacent to the 25th and Welton light rail station.

In terms of programming, the design features three distinct sections: a Jazz club and bar, a performance

space, and artist residencies where musicians can rent practice rooms. Each of these components serves a distinct function while collectively fostering a vibrant environment for music, cultural expression, and community engagement.

I utilize parametric design through the program Grasshopper to aid in the generation of form and to test the application my methodology.

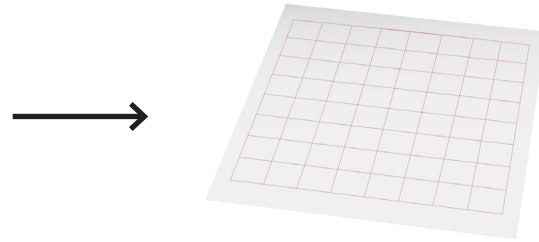




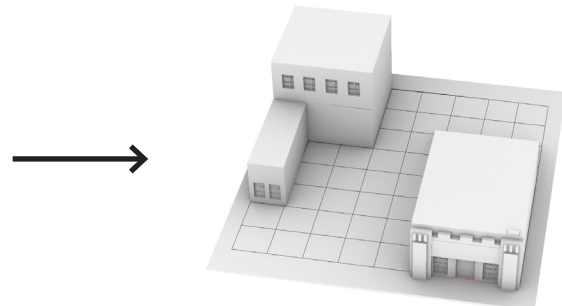
## Methodology Testing

I chose the song “Everytime I Hear the Spirit” by Five Points Jazz legend George Morrison Sr. to create the building given the historical and locational context.

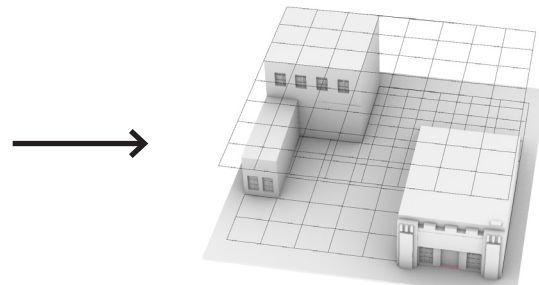
The design process begins by establishing a foundational grid, which serves as a direct translation of the song’s underlying beat or Rythm. In this case, the song follows a 4/4 time signature, meaning each measure contains four beats. To represent this, the site is divided into a grid of 4-foot square tiles, visually encoding the rhythmic structure into the physical landscape.



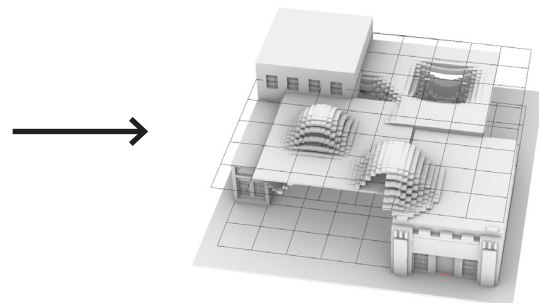
Once the grid is in place, building forms are introduced through extrusion at specific moments in the song where new instruments enter the composition seamlessly, indicative of Syncopation. Each extrusion marks the spatial arrival of a musical element, making the architecture a literal manifestation of the song’s unfolding layers. This creates a visual and spatial rhythm that mirrors the evolving complexity of the music itself.



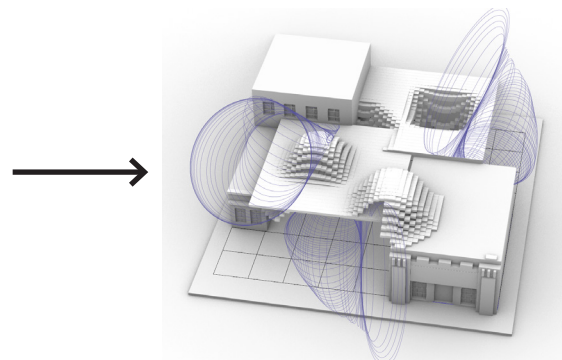
Next, the grid is projected vertically into the air, representing the overlying polyrhythms that emerge as the song progresses. This grid, layered on top of the base 4/4 beat, add richness in the form of polyrythm, which is now embedded into the spatial framework.

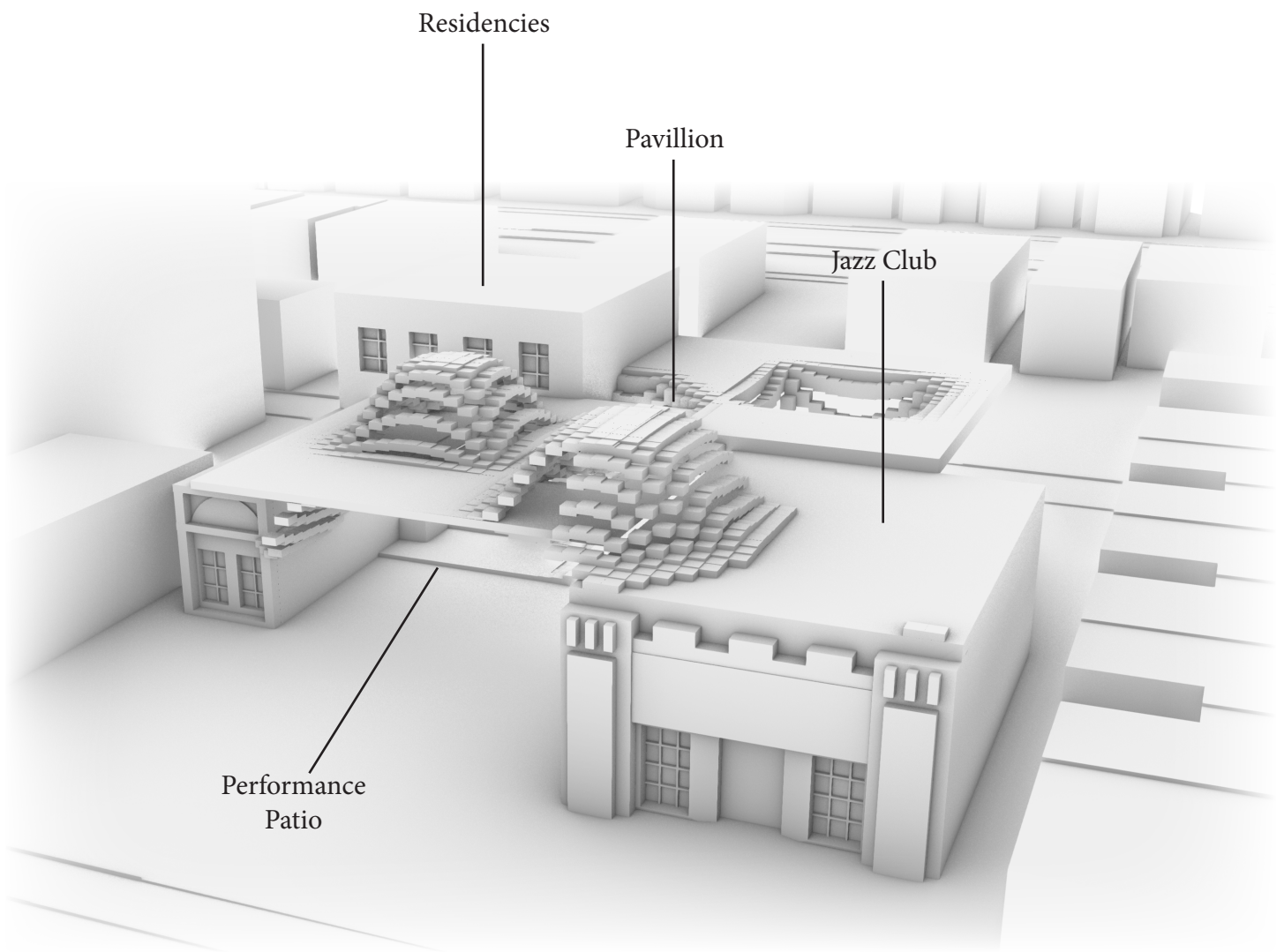


From this elevated polyrhythm grid, the building forms are further extruded either upward or downward when the time signature shifts within the song. This vertical manipulation reflects the shifts in musical structure, allowing the building to embody both rhythmic consistency and moments of improvisation.



At moments where the song moves into Call and Response, the design turns outward, expressing this dialogue through the building’s relationship to the neighborhood. Sound, energy, and movement are designed to draw users into the space, encouraging community interaction and strengthening connectivity to the surrounding context. The building itself becomes a participant in the cultural and spatial conversation, echoing the musical tradition of Five Points.







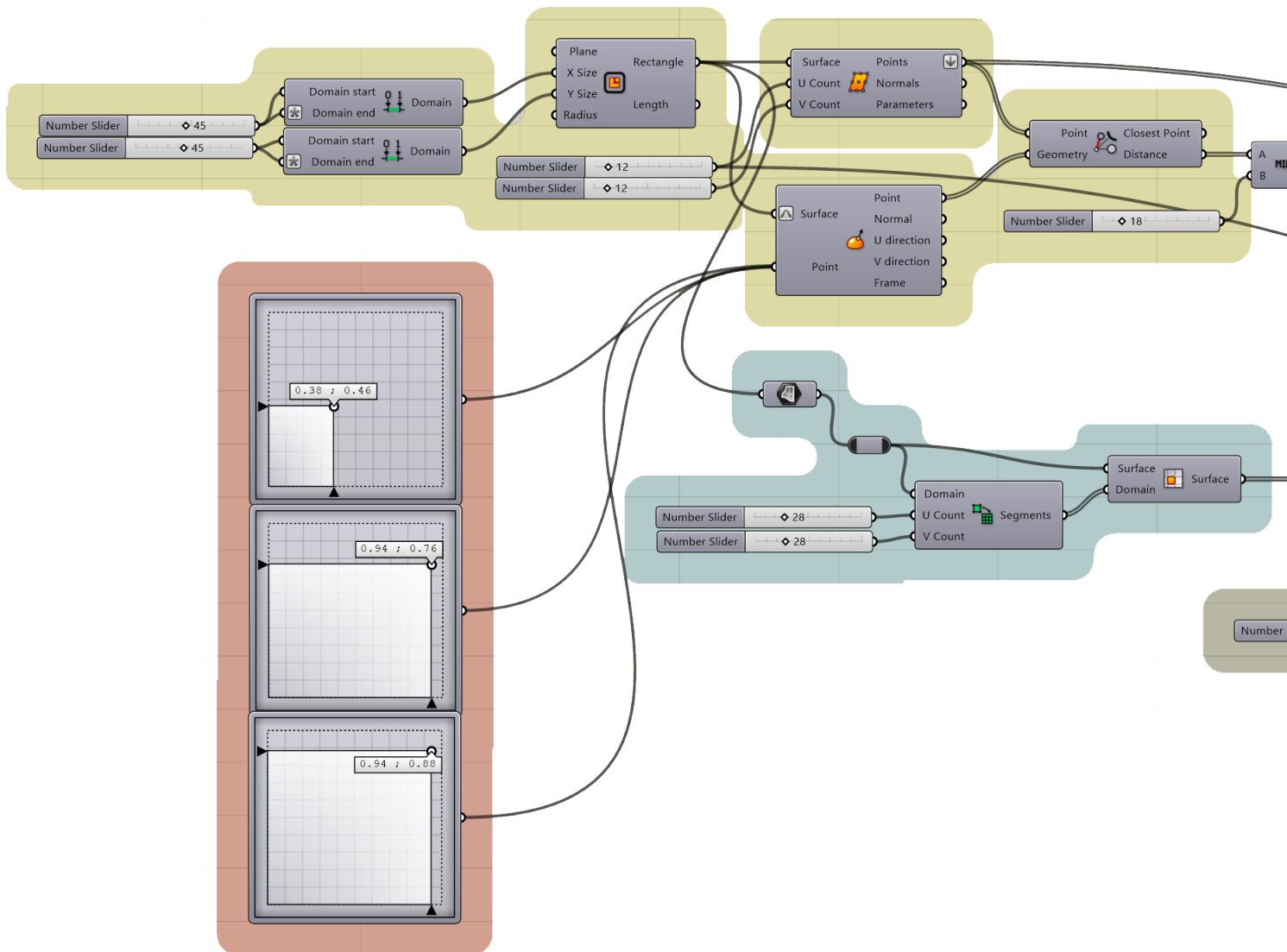
## Grasshopper Application

In this design example, I utilized the Rhino 3D plug-in Grasshopper to generate my extruded form. I used a parametric design workflow to generate a three-dimensional grid field influenced by deforming surfaces and point fields. For better comprehension, the script is organized into color-coded sections, each responsible for a specific aspect of the design process.

In the **yellow section**, the Rhythmic grid is developed. I create a 40x40 ft grid where each square represents the 4:4 time signature. Points are extracted from this surface, and their proximity to a set of attractor points

is calculated. The attractor points represent moments in the song where the composition deviates from the original time signature. This distance data is crucial for shaping the deformation or displacement of the grid.

The **green section** handles the remapping of these distance values into a new domain. Essentially, this section controls how much each point is displaced or affected by the attractor forces. I chose moments where the song is reduced to half time to extrude upwards, and moments where the song speeds up to double time to extrude downward and at a greater distance. The graph mappers allow me to extrude from the Rhythmic grid I created in the yellow section.



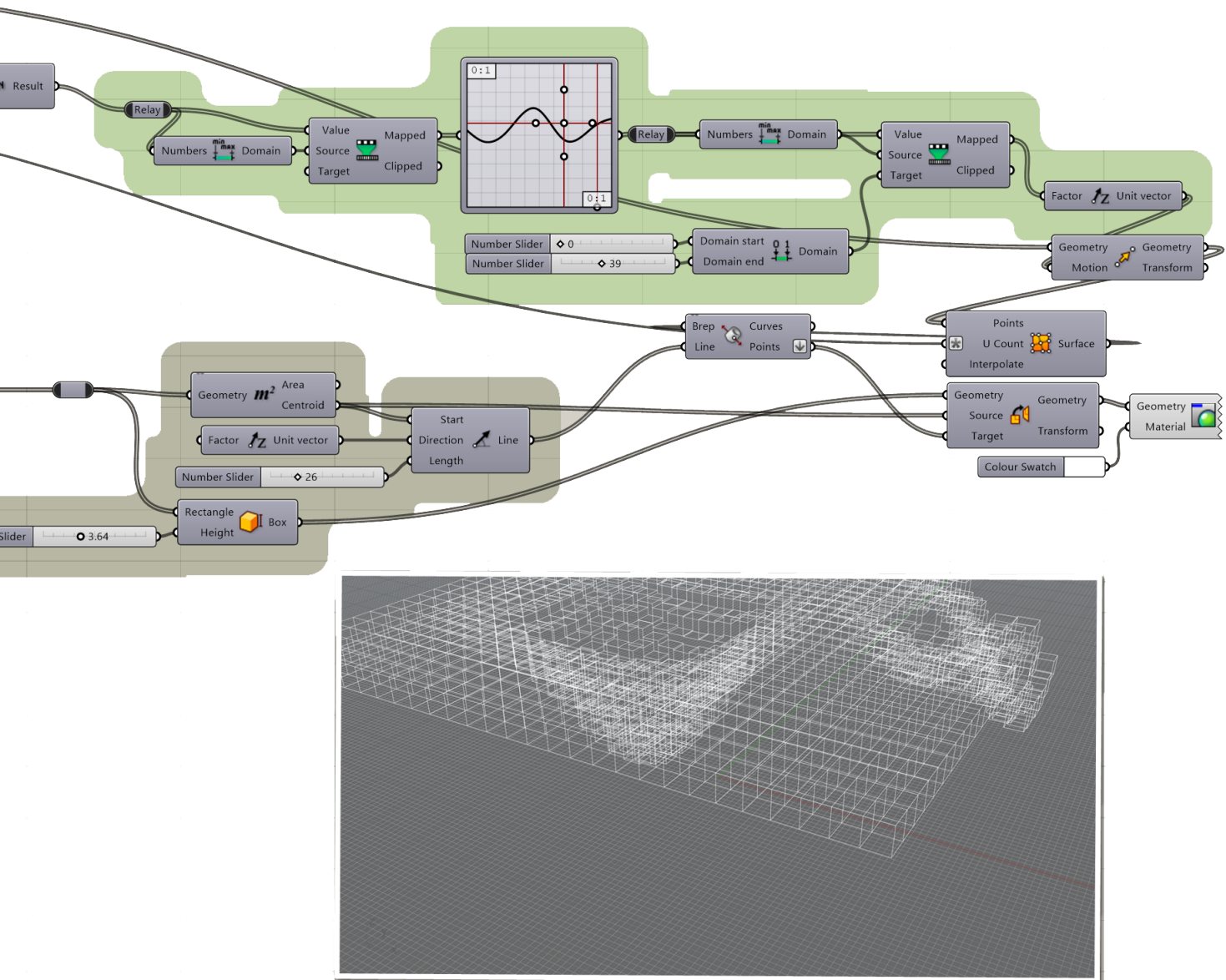
In the **blue section** the surface is subdivided into a U/V grid, which generates a field of cells. Each cell represents a beat within a measure, and its height or geometry is manipulated based on the distance values calculated earlier. This creates a topography where proximity to attractor points (or the moments where the song changes tempo) influence the volumetric grid.

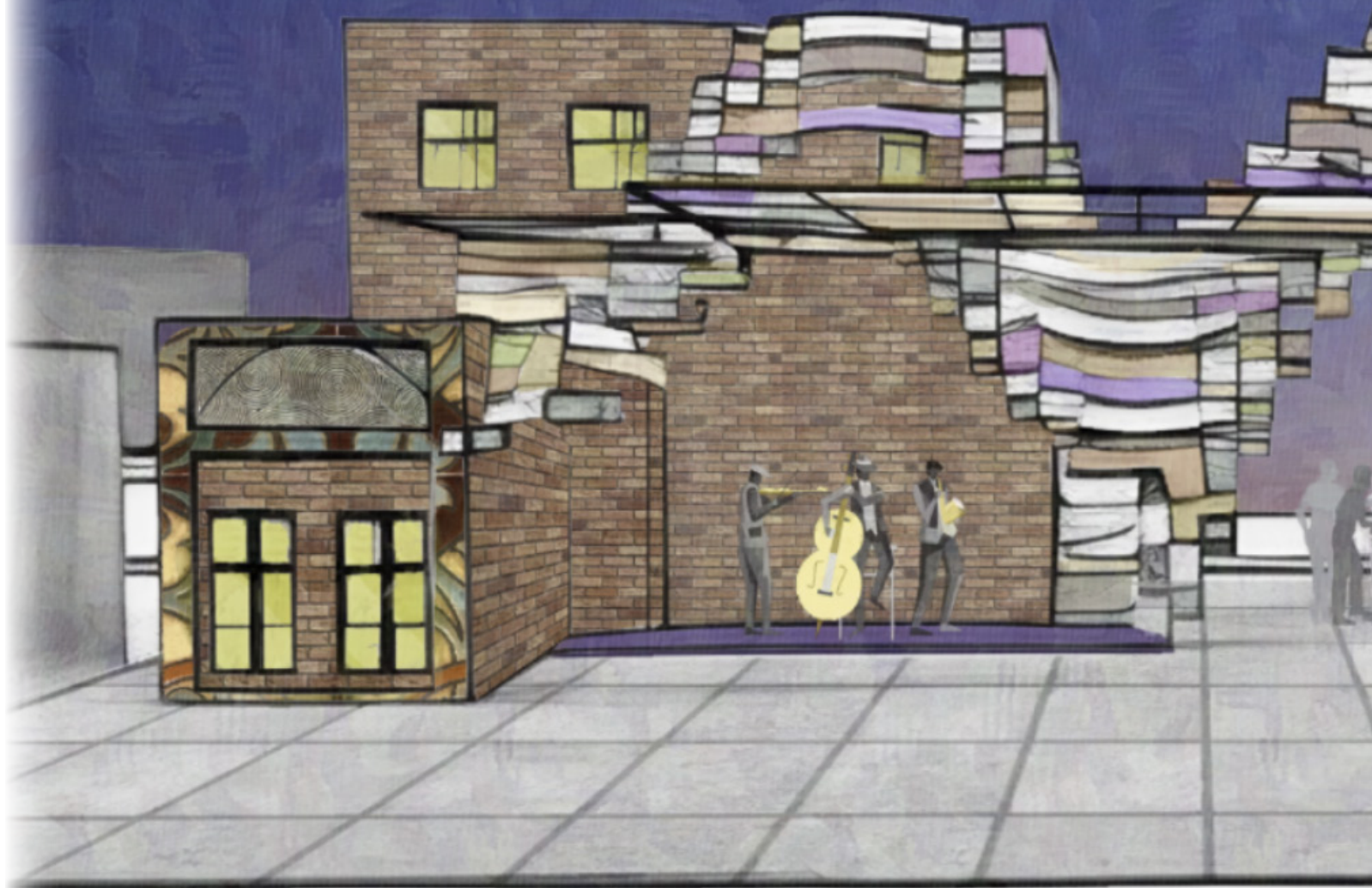
The **red section** focuses on controlling the attractor behavior itself. It allows for the curve of the extrusions to delineate the deformation of the grid pattern. This section solely adds complexity to the extrusion.

Finally, the **unhighlighted section** in the bottom right simply outputs the transformed geometry. This is

where visual factors are controlled. This includes color, dimension, and materiality.

The final result of the script combines the concepts of point manipulation, surface subdivision, point remapping, and extrusion into a parametric script. The script showcases how the basic principles of jazz can become a vessel for the creation of the built environment.





## Concluding Remarks and Implications

We live in an era that prioritizes rapid development over cultural preservation. More than ever it is important to honor the voices and stories that built our environments and recognize the deep cultural layers embedded within the spaces we occupy. In Five Points, these stories are shaped by Jazz culture and the African

American Community.

As a final result of this research, I have fostered a design ethos rooted in listening rather than imposing. This design methodology provides valuable contributions to community-driven design and cultural preservation. By intertwining cultural identity, Jazz, and Architectonics of Music, this exploration highlights the potential for architecture to serve as a medium for storytelling and empowerment. It demonstrates how music can inspire innovative designs that resonate with





the cultural and emotional needs of communities. Moreover, integrating technology into the design process opens up new possibilities for architectural practice. Parametric tools not only facilitate abstraction and invite conversations about the future of design methodologies. By bridging historical narratives with contemporary techniques, I am able to create designs that honor the past while envisioning a progressive future that apply to this case study and beyond.



# BIBLIOGRAPHY

Andrea. "The Rossonian Hotel: A Historical Icon with a Bright Future." Five Points Development Corporation, July 17, 2019. <https://fivepointsdevelopmentcorporation.com/the-rossonian-hotel-a-historical-icon-with-a-bright-future/>.

Banks, Jared. "This Is How Architecture and Jazz Relate." Shoegnome Architects, May 28, 2015. <https://shoegnome.com/2012/09/07/this-is-how-architecture-and-jazz-relate/>.

Bradley, Alexander C, Bart E Croes, Colin Harkins, Brian C McDonald, and Joost. 2024. "Air Pollution Inequality in the Denver Metroplex and Its Relationship to Historical Redlining." *Environmental Science & Technology* 58 (09). <https://doi.org/10.1021/acs.est.3c03230>.

Berlin, Ed. *Ragtime: A Musical and Cultural History*. Berkeley and Los Angeles: University of California Press, 1980.

Brown, David. 2007. "Noise Orders: Jazz, Improvisation, and Architecture." *Critical Studies in Improvisation / Études Critiques En Improvisation* 3 (1). <https://doi.org/10.21083/csieci.v3i1.290>.

Bruce, La Marr. "Interludes in Madtime: Black Music, Madness, and Metaphysical Syncopation." *Social Text*, no. 133 (December 1, 2017): 1–31. <https://research.ebsco.com/linkprocessor/plink?id=65e12174-4392-3193-8ff6-ddc21510430a>.

Cahn, Amy Laura. 2008. "Our 'Rights Are Not Cast In Stone': Post-Katrina Environmental 'Red-Lining' and the Need for a Board-Based Human Right Lawyering Movement." *University of Pennsylvania Journal of Law and Social Change* 12 (1): 37.

Connor, Rob. "Jazz and Architecture: Intersections of Rhythm, Proportions and Variations." OhioLINK ETD: CONNOR, ROB. Accessed February 2, 2025. [https://etd.ohiolink.edu/acprod/odb\\_etd/etd/r/1501/10?clear=10&p10\\_accession\\_num=ucin1148315436](https://etd.ohiolink.edu/acprod/odb_etd/etd/r/1501/10?clear=10&p10_accession_num=ucin1148315436).

Dubin, Steven C. 1985. "The Politics of Public Art." *Urban Life* 14 (3): 274–99. <https://doi.org/10.1177/089124168501400302>.

"Five Points Business District: History and Culture." five points. Accessed February 3, 2025. <https://www.fivepointsbid.com/history---culture>.

Goetz, Edward G. "The Audacity of HOPE VI: Discourse and the Dismantling of Public Housing," *Cities* 35 (2013): 342–348.

Hackett, Curry. 2024. "Notes on Acting up Collage and Quilting as Pedagogy." *JAE*. 2024. <https://www.jaeonline.org/issue-article/notes-on-acting-up-collage-and-quilting-as-pedagogy-notes-on-acting-up>.

Haidet, Paul, and Wendy S. Madigosky. "Towards an Evolution of Interprofessional Practice:

Lessons Learned from Two Jazz Piano Trios.” *Patient Education and Counseling* 103, no. 10 (October 1, 2020): 2173–77. doi:10.1016/j.pec.2020.06.008.

Handel, Jane, Jacqueline Woods, Harry Crosby, and Classic Letterpress (Firm. 2016. *The Third Space*. Ojai, California: Spider Woman Press.

Harvard Graduate School of Design. 2023. “Black in Design 2023 - Black in Design.” *Black in Design*. September 17, 2023. <https://blackindesign.org/black-in-design-2023-2/>.

“History Lesson : Communities of Color Still Breathe Denver’s Worst Air.” *Spheres*, no. 16 (January 1, 2024): 19–20. <https://research.ebsco.com/linkprocessor/plink?id=f683ff21-4c87-37bc-9790-a4fbac-31dec0>.

Hitchcock, H. Wiley. *Music in the United States: A Historical Introduction*. New Jersey: Prentice-Hall, 1969.

IEEE Pulse. “Syncopation and Its Perceptions.” *IEEE Pulse*, March 4, 2022. <https://www.embs.org/pulse/articles/syncopation-and-its-perceptions/>.

“Jazz in Five Points: A Brief History: Part Two | Denver Public Library Special Collections and Archives.” 2022. *Denverlibrary.org*. 2022. <https://history.denverlibrary.org/news/denver/jazz-five-points-brief-history-part-two>.

Katzenstein, Emily. 2023. “The Credit They Deserve: Contesting Predictive Practices and the Afterlives of Red-Lining.” *Contemporary Political Theory*, September. <https://doi.org/10.1057/s41296-023-00655-z>.

Lefebvre, Henri. 1974. *The Production of Space*. Oxford: Blackwell.

Monson, Ingrid. *Saying Something: Jazz Improvisation and Interaction*. Chicago: University of Chicago Press, 1996

Noel, Thomas J. *Mile high city: An illustrated history of Denver*. Encinitas, CA: Heritage Media Corp, 1997. *Oxford English Dictionary*, 2nd ed. (Oxford: Oxford University Press, 2004), s.v. “Improvisation.” , “Interplay”.

Peretti, Burton W. 1994. *The Creation of Jazz : Music, Race, and Culture in Urban America*. Urbana: University Of Illinois Press.

Polzonetti, Pierpaolo. 2022. “Jazz Places: How Performance Spaces Shape Jazz History.” *American Music* 40, no. 2 (June 22, 2022): 275. <https://research.ebsco.com/linkprocessor/plink?id=06df9780-b9f6-30f2-989b-f95f85ac7b64>.

Pugh, Allison J. 2013. “What Good Are Interviews for Thinking about Culture? Demystifying Interpretive Analysis.” *American Journal of Cultural Sociology* 1 (1): 42–68. <https://doi.org/10.1057/ajcs.2012.4>.

Raughton, Jim L. “Whittier Neighborhood and San Rafael Historic District” *Historic District, Inc.*, 2004

Redmond, Shana L. “Indivisible: The Nation and Its Anthem in Black Musical Performance.” *Black Music Research Journal* 35, no. 1 (March 1, 2015): 97–118. doi:10.5406/blacmusiresej.35.1.0097.

Rubino, Joe. “Ink! Coffee in Five Points Tagged ‘White Coffee’ by Vandal Following Gentrification Controversy.” *The Denver Post*, April 9, 2021. <https://www.denverpost.com/2017/11/23/ink-coffee-five-points-gentrification-controversy/>.

Seyer, Philip; Allan B. Novick; Paul Harmon (1997). What Makes Music Work. Forest Hill Music. ISBN 0-9651344-0-7.

Song, Lily. 2023. "Toward Reparative Design Pedagogies." *Journal of Architectural Education* 77 (1): 52–65. <https://doi.org/10.1080/10464883.2023.2165804>.

"Tesseract of Time - a Dance for Architecture." STEVEN HOLL ARCHITECTS, November 19, 2024. <https://www.stevenholl.com/project/tesseract-of-time/>.

Wasinger, Holly. "From Five Points to Struggle Hill: The Race Line and Segregation in Denver." *Colorado Heritage*, no. Aut (September 1, 2005): 28–39. <https://research.ebsco.com/linkprocessor/plink?id=0592c861-c8df-3200-9535-fc049e3ab0b6>.

Wyckoff, William. 2023. *Mac McCloud's Five Points*. University of New Mexico Press.

## Cover Images

Cooper, Kyle, *Historic Rossonian*, 2018; pg. 11

Hazel, Kori, *303 Magazine: The Black History of Cervantes' and The Five Points Jazz Scene*, 2018; pg. 1 & 3

Lewis, Brent, *Denver Post: Five Points Jazz Festival*, 1990; pg. 29

McCloud, Mac, *Leroy's Voters Club Denver, CO*, 1965; pg. 15

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**A. H. W. ROSS BUYS HOTEL  
THE PURCHASER OF THE  
ROSSONIAN HOTEL**

Again thru the efforts, activity and thoro business acumen of A. H. W. Ross, our attention has been called to the recent purchase of the Rossonian Hotel or the Dunbar Hotel as it has formerly existed as late. Because of the exceptional business feature, let us just recall for the sake of history a few facts concerning A.

and then worked the plan by financing homes in Denver, Colorado Springs and Pueblo, and as quietly as it was kept he accumulated as much as \$20,000 in savings. During the depression the members were permitted to withdraw at any time and finally without a hitch or any trouble all of the depositors were paid their solutely no depistor suffered any loss. This is an unusual occurrence in business when failures were rampant on all sides. This condition did not happen—it took brains, honesty and hard work to create such progress and success.

**This Beautiful Impressive Hostelry  
changes hands to one of our leading  
Rase Business Men**

