CINCINNATI SHUFFLE
DYNAMIC SUBHIERARCHIES IN THE STAGNANT GRID
RICE UNIVERSITY | M.ARCH THESIS SUBMISSION | AMY WESTERMeyer
Cincinnati Shuffle: Dynamic Subhierarchies in the Stagnant Grid

by

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Master of Architecture

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ABSTRACT

CINCYNNATI SHUFFLE:
DYNAMIC SUBIERARCHIES IN THE STAGNANT GRID

This thesis investigates the use of an operational formal architectural strategy to reinvigorate instances of failing city fabric. By introducing hierarchy and nodal destination elements into the urban grid, the existing field is transformed into a network of catalytic centers. Frame is employed as a permeable mediator between the existing grid and insertion, creating a permeable superblock that is both contextual and stimulating.

The Over-the-Rhine district in Cincinnati, Ohio, is one of these failing city fabrics. Directly adjacent to downtown, this once vibrant neighborhood has experienced massive depopulation and deterioration. It’s population has dropped from 45,000 to less than 5,000. Currently, 66% of the buildings in the area are vacant or have been demolished.

Over-The-Rhine lies between downtown and the University of Cincinnati. There is potential in creating a growth corridor between these two poles through Over-The-Rhine, stimulating the stagnant grid. A nodal infrastructural transit corridor is inserted between Downtown and the University of Cincinnati. Stops along the corridor act as point insertions in the fabric, forming nodal hierarchy.

Incision activates the existing context through connection, deploying both a top down and bottom up approach. It creates a large centralized entity framed by and connected to context. It creates a range of scales, allowing for programmatic variety, an urban characteristic that the enclave lacks. It is strategic in working with the fabric, mediating flows and taking advantage of the porous grid condition.

Each incision, in order to successfully attract from both downtown and the university, contains programmatic elements from each pole. This integration creates a complex interaction of program, as well as new partnerships between Downtown and University entities. It is a new approach for both Downtown and the University to address the failing fabric between.
I would like to acknowledge my thesis advisor, Troy Schaum, for his guidance, and Scott Colman, for maintaining our sanity.
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Cincinnati, Ohio provides the ideal site for investigating a precise contextual intervention. Its city center, long depopulized due to advent of the motor vehicle and the postwar suburban boom, provides a testing ground for methods of urban revitalization. Once a dense repetitive grid, an aging building stock has left the city with remnants of the grid. The grid and the nonhierachical organization of the city center no longer contain enough potency to attract growth and form a sense of community. This is due partly to the aging and unmaintained building stock. This is also due to a lack of identity within the grid. The grid is stagnant, it needs a kickstart.
CINCINNATI, OHIO

Cincinnati, like most American cities, has become a city of sprawl due to the introduction of the highway system. Many have left the center for surrounding suburbs, leaving the center unoccupied. Cincinnati is not a failing industrial city like Cleveland or Detroit. It has a diverse and growing economy. There is sufficient population to reinvigorate the center, but its deteriorated state provides a major deterrent.
A HISTORY OF SLOPED TRANSIT

Cincinnati has a history of transit corridors. Located in the Ohio River Valley, the area is known for its hilly terrain. Inclines acted as methods for connecting the parts of Cincinnati, but became defunct with the advent of the automobile. There is potential in revisiting this notion of the transit stop corridor as a strategy for inserting hierarchy.

LATE 19TH CENTURY INCLINES

The terrain in Cincinnati forced the use of stairs and inclines throughout the grid, creating a subhierarchical network placed against the neutral grid. This project aims to capitalize on this existing notion and create a network that blends the context neutral grid and the insertion of nodal stimuli.
GROWTH

Over-The-Rhine lies between Downtown and the University of Cincinnati. Both districts have rapidly grown in the past decade due to initiatives by the city. Downtown has had a 30 percent increase in population. Over-The-Rhine, however, has seen little growth. By connecting Downtown and the University of Cincinnati, there is potential in creating a growth corridor through Over-The-Rhine, stimulating the stagnant grid.

EXISTING FABRIC

NEIGHBORHOODS

CORRIDOR OF RECENT GROWTH

VACANT BUILDINGS
POTENTIAL GROWTH CORRIDOR

The university becomes the source for stimulus in the failing fabric. A nodal infrastructural transit corridor is inserted between Downtown and the University of Cincinnati. Stops along the corridor act as point insertions in the fabric, forming nodal hierarchy.
The Over-the-Rhine district in Cincinnati, Ohio, is a failing city fabric. Directly adjacent to downtown, this once vibrant neighborhood has experienced massive depopulation and deterioration. It’s population has dropped from 45,000 to less than 5,000, leaving much of it’s fabric unoccupied. Currently, 66% of the buildings in the area are vacant or have been demolished.

The grid in Over-The-Rhine has deteriorated from solid blocks to objects in field. There is a lack of order, identity, and hierarchy in this field. Vacant buildings and unoccupied lots make up a large portion of this district. The insertion of hierarchy into this deteriorated field would create identity, order, and stimulus for growth.
OVER-THE-RHINE

POPULATION: 4,900
% CITY POPULATION: 1.2%
AREA: .64 mi²
BUILDINGS VACANT: 66%

STAGNANT GRID

EXISTING GRID
VACANT BUILDINGS
VACANT + OPEN LOTS

OTR HISTORIC POPULATION

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
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<tr>
<td>1900</td>
<td>44,475</td>
</tr>
<tr>
<td>1960</td>
<td>30,000</td>
</tr>
<tr>
<td>1970</td>
<td>15,025</td>
</tr>
<tr>
<td>1980</td>
<td>11,914</td>
</tr>
<tr>
<td>1990</td>
<td>9,572</td>
</tr>
<tr>
<td>2000</td>
<td>7,422</td>
</tr>
<tr>
<td>2007</td>
<td>4,900</td>
</tr>
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URBAN FLIGHT
2001 RIOTS
DETERIORATION=POTENTIAL

There is potential in taking advantage of the permeability of the field. Flows through the fabric can be directed through these openings. There is also great potential in utilizing the vacant structures. The existing fabric does not have to be seen as a burden, nor does it have to be razed entirely; it can inform the formal qualities of the interventions, adding a richer connection to context that mediates transition and growth. Over-the-Rhine has a strong historic identity. Late nineteenth century Italianate buildings comprise most of the architectural style within the district. This powerful identity can be transformed and enhanced.
The deteriorated grid allows for insertion of the new. Incision allows for the insertion of nodal centers without disrupting the extant fabric. Flows continue, or are enhanced. The character of the community remains. The insertion is not disruptive, it enhances the grid and provides the basis for hierarchical organization, a variety of amenities, and identifiable centers.

Incision activates the existing context through connection, deploying both a top down and bottom up approach. It creates a large centralized entity framed by and connected to context. It creates a range of scales, allowing for programmatic variety, an urban characteristic that the enclave lacks. It is strategic in working with the fabric, mediating flows and taking advantage of the porous grid condition.
INCISION

The strategy I am employing is one of connective incision. To the left, the bottom up existing buildings in the fabric lack the scalar quality for larger program to exist. In the center, the insertion of a typical superblock project lacks contextual interaction and permeability. It creates a closed system; it is a top-down approach. Incision, to the right, activates the existing context through connection, deploying both a top down and bottom up approach. It creates a large centralized entity framed by and connected to context. It creates a range of scales, allowing for programmatic variety, an urban quality that the enclave lacks. It is strategic in working with the fabric, mediating flows and taking advantage of the porous grid condition.
SUPERBLOCK UNBOUNDED PERMEABLE FRAME POINT INSERTION
+ PERMEABLE FRAME
+ TRANSIT CONNECTIVITY

NODAL HIERARCHY

NODE APPROACHES

UNBOUNDED

SUPERBLOCK

PERMEABLE FRAME

POINT INSERTION

+ PERMEABLE FRAME
+ TRANSIT CONNECTIVITY
PRECEDE NTS

There are several examples of incision. The buildings on the left are much more conscious of their context. They use operational techniques to transform existing contextual identity. Caixa Forum uses a stacking technique, cutting the building at various levels to insert new language, transforming identity. It removes the existing structure from its base, freeing the context and allowing for it to become a malleable part of the project. The Morgan Library Addition, at a small scale, acts as infill between several buildings, creating a larger entity from several smaller entities.

The projects on the right are operating at a larger scale, something the projects on the left are not. They include several blocks and create an identifiable district. However, they employ a tabula rasa approach, ignoring context, instead focusing on iconicity and singularity of objects.
INCISION

This project employs strategies of operative contextual incision similar to the Caixa Forum and Morgan Library Addition, but at a scale similar to the tabula rasa Lincoln Center and Dallas Arts District. This will create a range of hierarchical scales within the project as well as mediate flows through from the context through operated context.
OVER-THE-RHINE
EXISTING OPERATIONS

There have been numerous transformations of the existing fabric in the area. Most have had their bases transformed to accommodate commercial outlets over the years. This precedent contains great potential for contextual transformation.
This project is more strategic in creating a contrasting and identity forming transformation that goes beyond the facade facelift. Insertions into, on top, or below existing structures transform the old, creating new spatial conditions within the existing as well as creating a identifiable language for the overall node. With removal from the base, the context becomes malleable. It is not fixed, it is seen as new.
Each incision must contain programmatic complexity in order to successfully foster growth and attract users from beyond the immediate context. The two poles, Downtown and the University of Cincinnati, provide the core elements for each node. Each node, to successfully address and blend contextually, must contain elements of the local. This blurs, and therefore enhances, the heavy institutional elements into a complex programmatic entity that serves various levels of the city seamlessly.
CINCINNATI SHUFFLE

Each incision, in order to successfully attract from both Downtown and the University of Cincinnati, contains programmatic elements from each pole. This integration creates a complex interaction of program, as well as new partnerships between Downtown and University entities.

There will be four nodes. One that combines a Center for the Arts with an extension of the College of Design, one that combines an Urban Farm and Market with university agricultural labs, one that combines an outdoor performance stage with a convention center for both downtown and university use, and one that combines a corporate headquarters with an alumni and internship center.
NODAL CORRIDOR

This project aims to introduce hierarchy and identity through a series of permeable framed incisions along an infrastructural corridor. It will employ formal operational strategies on existing structures to mediate contextual connection and create stimulus. It is new approach for both Downtown and the University to address the adjacent failing fabric between the poles.
INCISION
Combining a college of design with a center of the arts allows for collaboration between amateur and professional entities.

Combining urban farm, market, and agricultural labs allows for urban and university produce to influence local consumers.

Combining an outdoor stage with a university convention center creates an outlet for large events affecting both poles.

Combining corporate headquarters with an alumni center allows for direct job connections for university students.
This node combines urban programs, the urban farm and market, with agricultural labs associated with the university. This instance explores the opportunities in operating on an existing fabric, allowing for urban flows at the ground level and the formation of district identity and connectivity through the raised center. This incision maintains the contextual frame with limited incisions that connect and form an identifiable center and multiple hierarchies that allow for complexity of program and use. This center acts as a charged stimulus for the stagnant grid.
The logic behind the incision is a juxtaposition of center and permeable frame. The frame is placed over multiple blocks, allowing for flows through this center. The transit stop is located here.

To create permeability, vacant buildings in the frame are demolished in order to allow for further flows into the center.

Rotation of buildings directs users toward the center.

To create scalar complexity, or hierarchies, existing buildings are connected to create a centralized catalyst for large inserted...
Program from both poles is stacked and integrated into the contextual incision. Primary program remains in the large central spaces created by the connective incision. Secondary program is placed in the surrounding contextual buildings through incision. Arms connect these secondary elements to the primary elements. Program not related to the larger thematic programs, yet still essential for urban complexity, are placed in the periphery frame.
Selective operations on context with a large connective identifiable center allow for hints of identity on the periphery while immersing the user entirely in the new once inside the incision.
Urban flows are mediated through the permeable contextual frame. Tower elements and the grand stair act as vertical connectors. The grand stair is an urban gesture to promote collectivity and visual connectivity.

Hierarchical space is created through connective insertion. Smaller primary program is connected to this center, secondary urban program remain unattached.
OPEN BASE

Open ground flow allows for urban continuity and various modes of flow into the center.
Contextual rooftop operations allow for unique views of the city. The biolab extensions of the towers allow for separation from the more public elements of the node. These towers peek above the rooflines of the contextual frame, reasserting identity without overpowering context.
INTERSECTION

The large connective center acts as a staging ground for various urban events, specifically for an urban farmer’s market that utilizes the produce grown on the rooftop garden as well as various other farms in the area. The rooftop is seen as a raised urban event plaza.
OCCUPIED ROOF
CINCINNATI SHUFFLE
By introducing hierarchy and nodal destination elements into the urban grid, the existing field is transformed into a network of catalytic centers. Frame is employed as permeable mediator between the existing grid and insertion, creating a permeable superblock that is both contextual and stimulating. Each incision, in order to successfully attract from both downtown and the university, contains programmatic elements from each pole. This integration creates a complex interaction of program, as well as new partnerships between Downtown and University entities. It is a new approach for both Downtown and the University to address the failing fabric between.

IT IS THE CINCINNATI SHUFFLE.