Strained + Spliced

Lina M. Stapleton

Masters of Architecture The University of Detroit Mercy School of Architecture ARCH 5100, 5110,5200 & 5210 Will Wittig, Associate Professor 30 April 2010

Contents

005	Abstract
007	Thesis Paper
023 025 027 029 031 033	Precedent Studies Villa de Murph S(ch)austal Nomadic Museum Manufactured Sites: Tijuana The Heidelberg Project
039 049 057 063	Material Studies Enclosure for the Self Installation Chandelier of Life Installation T-Shirt Design
065 067 069 071	Site Considerations Center St. + Hemlock Ave. E. 36th St. + Cedar Ave. E. 38th St. + Cedar Ave.
073	Site Documentation of Ashland Rd. + Longfellow Ave.
085 093	Site Analysis Building Analysis
101 121 123	Preliminary Designs Program Design Building Design
129	Final Building Design
149	Conclusion
151	Endnotes
152	Bibliography



Strained + Spliced

A woven piece is composed of a warp and a weft. The warp is the portion that is taut and the weft is the portion that is interwoven with the warp. As the final woven piece ages, some sections of it could become strained, and may not function as well as the entire piece. One can remove this strained section of the woven piece and replace it with new sections of unstrained material. This idea can be metaphorically applied to the urban fabric of a city at a variety of scales.

At the small scale of the urban fabric this metaphor has a relationship to the materials that are used to construct the buildings in a city. There are large amounts of materials that are taken to waste sites without having the opportunity to be used. Some abandoned buildings have materials that are still suitable for re-use, but are forgotten and never re-used. Buildings are made up of materials that are woven together to function as one inhabitable place. Old strained materials from these abandoned buildings could be removed and replaced with new functioning materials to create a place that can once again become full of life. This then has a positive effect on the communities surrounding these buildings, which then leads to a positive effect at the larger scale of the urban fabric, the city. Every city can be seen as a rich tapestry consisting of many different programs, building types, transportation routes, people, communities, and vacancies intertwined together. Sometimes there are strains and

tears in sections of the fabric that offer an opportunity for a patch or a suture. These new sections could be new programs inserted into different re-usable spaces or buildings, transformations of abandoned buildings, or re-use of local materials to create a more viable city. Through the re-use of space and the re-making of that space the fabric of the city could be mended incrementally, one small section at a time. This exploration will focus on the forgotten areas of the city and the possibilities that the re-use of these spaces can provide for the urban fabric.

"Weaving creates surfaces and volumes by the regular interlacing of pliable strands... No material is completely inert, and under pressure from the environment, all materials deform. When deformed, many materials are elastic; they retain some memory of their prior state and will strain toward their original plane unless restrained."¹

-James Timberlake

Thesis Paper

Successful urban environments are created by a series of complex interactions, which can be reduced into six main elements. These elements are organized by scale, and can be divided equally into two groups - static and dynamic (or PLACE and PEOPLE). The three static elements are, from smallest to largest, material, building, and neighborhood. The dynamic elements are people, exchange, and activity (program). Urban spaces can be considered to be a fabric composed of these six elements. If one were to follow the logic of the textile metaphor then static elements make up the warp of the fabric, and dynamic elements makes up the weft which is woven through the warp.¹ A weft with no warp (PEOPLE with no PLACE) would become a culture of nomads; a warp with no weft (PLACE with no PEOPLE) becomes urban desolation. When woven together these elements are difficult to completely separate. When an urban fabric begins to disintegrate, it frays, or develops holes. Weak spots in the fabric may be PATCHED or RESEWN. STRAINED spots can have new elements SPLICED in, repairing the damaged urban fabric and creating a new architecture.

The three static elements are defined as materials, buildings, and neighborhood. Materials are considered to be building materials, land, improvements to land, nature - anything found on site that can be used. Buildings are defined as a space for a person or people that can provide shelter and may accommodate a particular use. A neighborhood is a defined space 00

composed of a group of buildings, primarily for people. This can be a soft space or a hard space, diffuse or clearly edged by urban elements. Neighborhoods are made up of buildings.

Dynamic elements interact with static The three dynamic elements elements. have been defined as person, exchange, and program. Exchange is any connection between two persons - verbal, physical, social, cultural, financial, etc. Speaking, touching, gathering, expression of self to others, or buying, selling, and giving of goods are all examples of exchange. Program defines a space, but does not limit it to a specific action involved with exchange. For example, the primary purpose of a market is the exchange of goods or money - but many other activities occur in a market including verbal and cultural exchange.

Different types and uses of materials affects the experience of a space. Materials dictate the structure and the makeup of the space that surrounds the building. In the same way that materials dictate the structure and the makeup of the building and the surrounding space, the number and types of buildings in an area define a neighborhood. A neighborhood, as previously defined, is a defined space composed of a group of buildings, primarily for people. Neighborhoods can be categorized as being desolate or as being vivacious. A neighborhood without people becomes a neighborhood that is desolate. If there are no people, then there is no possibility for any form of interaction or exchange.

The type of programs translates into the type of building that is needed for that particular program. Different buildings are designed to house different programs. For example, the main purpose for a library is a place for people to have access to literature, a quiet place to study. A library does not however have a purpose for a dance hall or a restaurant. In the case of the influence and connection between a building and an exchange, there is not a specific connection between the type of building and a specific type of exchange. A bar for example can be a space for verbal, physical, or even social exchange and not just for one type of exchange. A person has an initial response to the type of building that houses a program, then they connect with the type of program that is within the building, which then sparks some form of exchange with other persons.

Often times the reason that neighborhoods suffer and become desolate is because people start leaving the area because of the lack of exchange. Since there is no exchange or program happening, the buildings become abandoned and then demolished, leaving the neighborhood in a state of abandonment.

In order to mend the areas of the urban fabric people need to be reintroduced. In order for people to interact with the neighborhood and with other people, programs need to be in place so that they can exchange with one another. This will all translate into the need for a specific building. As this interaction progresses, the people, the different forms of exchange, the programs, and the buildings will all fill in the vacancies of the neighborhood. All of these actions would be considered a form of patching a part of the urban fabric such as an abandoned neighborhood.

Infilling these types of desolate areas with what was once there can be compared to the act of re-sewing. By re-sewing the same programs, same types of exchanges, same materials, and the same types of buildings, the neighborhood will not transform and will stay once again to its current state of desolation.

Throughout the years a large number of people have been leaving urban neighborhoods. One reason for this may be the lack of jobs in the area, the level of crime in the area, the lack of amenities, or personal reasons. As a result of this change more areas become desolate, neighborhoods become a place for unwanted activity and unwanted individuals, and buildings become abandoned. These kinds of neighborhoods then start to become a place that no one wants to be a part of. Houses and other buildings become worn down because of the lack of care, then demolished, and what is left are vacant lots without any purpose. Instead of infilling these abandoned areas with new housing or other new buildings there needs to be a new and higher level of development in order for the area to grow. A couple of questions to ask that would aid in this process are: What needs to be done to add life into the neighborhood, to transform How can the re-use of abandoned it? neighborhoods and buildings aid in the

transformation of these forgotten areas?

The largest static element is the neighborhood. There are different stages of evolution for any neighborhood. One of these stages can be where the buildings in the area have already been demolished because of the lack of use and care which creates voids in the neighborhood. These voids can be thought of as opportunities for new growth and vitality with the introduction of new programs and new activities. Instead of inserting new buildings and new housing units which will most likely have the same outcome, the idea of re-using the abandoned and vacant buildings in the neighborhood for the new programs goes beyond that and looks at the interaction between groups of people in order to change the area.

The new programs and new activities can then reach out to the people in the community, bringing them together to aid in the process of transformation. Some ways of achieving this can be by converting the vacant plots of land back into natural landscapes that can act as a park, or creating community gardens so that the people in the surrounding area can come together to care for them.

In order for this change to be successful one needs to address the stage of abandonment, the opportunity for change, the surrounding neighborhoods, the different types of activities that are provided within the immediate site, and the different types of exchange within and around the declining neighborhood. The type of exchange is key because it is the connection between the surrounding neighborhoods, people, and activities. All of these aspects of the neighborhood need to be addressed in order to identify the best possible solutions that can aid in bringing new life into the neighborhood.

Looking at the next static element, the building scale is important to the mending of a neighborhood. In an area with many abandoned buildings, the re-use of these types of buildings can act as a foundation for new types of programs that can attract new people that can interact within that space. Buildings can house new programs and even programs that already exist within the surrounding neighborhood.

The connection between new and old programs can act as an initiator of new forms of exchange. As more people start to interact with re-used spaces, a new form of exchange happens which supplies the programs with more energy, and then supplies the neighborhood with more life and action.

One example of there-use of a building was performed by fnp architekten titled S(ch) austall. This architectural piece was a 230 year old pigsty that was transformed into a unique shelter. During World War Two it was partly demolished and uninhabitable. The architectural firm, fnp architekten, created an insertion that made it possible for it to be used as a house and it provided people with the opportunity to initiate any form of exchange.² This new insertion, which was offset some distance from the existing structure, expresses the transformation of not only the building, but also the purpose of the type of program within. It also expresses that it now is not a building that used to house pigs, but that it is now a place where people can interact with one another. Another specific element that was used to express the transformation of its purpose was the use of light shining on a pure material as wood. The use of these two elements creates a change in perception from viewing something as dirty and old, to something that is clean, pure and inhabitable.

The next step in the transformation process is the integration of the different types of materials within the building and with the surrounding area. The process of acquiring re-used materials may also lead to a form of exchange with the different people in the area and it can provide a form of work for these people.

In this example the re-use of material can assist in the creating of new forms of shelter for the markets that would sell the produce from these gardens. These market spaces could act as the next stepping stone towards the building form. Since there would be an accumulation of people from the garden stage to the market stage, there would be a need for a larger gathering space that would be able to house large amounts of people.

An example of this is the Nomadic Museum by Shigeru Ban. This fortyfive thousand square foot museum was designed to temporarily house Gregory Colbert's "Ashes and Snow" exhibit, and was temporarily located on Pier Fifty-Four, in Chelsea on the West Side of New York City. It was constructed out of one hundred and forty-eight re-useable shipping containers that were stacked thirty-four feet high, cardboard trusses and columns, and a handmade curtain that was made out of used tea bags.³

This museum acted as a building type that housed a specific program that had specific intentions. This building type created a space for people to view art and to react to them in different ways, such as verbally, socially, or even physically. It was successful because it brought people together to take part in a specific program, which then created different forms of exchange between people. The presence of people, a program, and forms of exchange made this a space that is inviting.

Another example of materials being implemented into an area is The Heidelberg Project in Detroit, Michigan. This project was started by an artist named Tyree Guyton with the help of his former wife Karen Guyton, and his Grandfather Sam Mackey.⁴ Over the years this area, like many other areas in Detroit, has become abandoned. The loss of people has created a domino effect in the entire area. As more people leave, more houses become abandoned and then demolished, which then leads to the vacant lots seen in the area.

The integration of Tyree Guyton's art into these vacant lots aided in the visual transformation the street from a street of abandoned homes into a well kept street filled with art and expression. Not only did it visually transform the street and people's perception of the street, it brought people together and created a place for conversation and interaction with others. The following quote by Marion E. Jackson explains the transformation of this street in a more profound way:

> Tyree, Karen, and Grandpa Mackey cleared the brush from vacant lots. swept sidewalks, planted flowers, created magical paths of crushed rock, and improvised playgrounds, complete with rope swings and tunnels of tires through which neighborhood children could jump or crawl. This threesome worked hard at transforming the neighborhood, and people began to respond. Children began to use the new playground and to add their laughter to the reclaimed space; neighbors felt safer walking in the neighborhood; drugs and drug dealers became less of a presence. Some neighbors began to pay more attention to the appearance of their own properties, painting, cleaning, and planting gardens.⁵

The Heidelberg Project focuses on the different static and dynamic elements such as material, building, neighborhood, people, exchange, and program. It is an outdoor art museum that uses the vacancy as a place to display art that is created from debris that is found in the neighborhood. The materials are used as a form of art that also creates a gathering space. Even though the area is composed of several vacant lots, the use of this space does not require the addition of a building type. An idea that will possibly improve the Heidelberg Project is to create a type of building that will house the types of programs that they provide the community with. This will then create more interaction between the people who are visiting and the people who live in the neighborhood, which would then transform this desolate neighborhood into a successful one.

The Heidelberg Project has lowered the crime in the neighborhood, but it has not revitalized the aesthetic or the community interaction of the neighborhood. In order for the area to change significantly, specific actions between the people and the art cannot be a hope, it should be expected. There is no real permanence and there is no visible change with the neighborhood through this display of art on Heidelberg Street. It does aid in the change of a person's perception of the area, but it does this for only a short time. The Heidelberg Project is a form of art and has no real permanence, as described by Marion E. Jackson, "A work of art is not a fixed object but rather a fluid locus for creative dialogue and exchange; this creative dialogue is collaborative, actively involving both artist and audience and enabling both to transcend convention and to see the world anew." 6

People who come to see the artwork usually only stay for a short amount of time and then leave. These people may only interact with each other rather than interacting with people who live in the neighborhood. So one may ask, is this a successful way of initiating a conversation between the people in the neighborhood and the visitors? In order for the program to realize its intent of changing the neighborhood into a better community, there needs to be a form of exchange that happens between the visitors and the people who live in the neighborhood. Since

this is not the case, people tend to pass through without even getting out of their car or having any impact on the neighborhood.

What can be done to create some form of permanence and create a greater exchange between people? One way may be to create a space that shelters from the weather and that has a defined purpose. This then creates a gathering space for the visitors and the people who live in the neighborhood to exchange ideas, past experiences, their knowledge on certain events that happened in the area, and information about themselves. The initiation of exchange between people based on a certain program creates an opportunity to use materials in the area to create some form of shelter, which will finally aid in the definition and transformation of the neighborhood within Heidelberg.

The Heidelberg Project re-uses materials from the neighborhood to create artwork on the vacant plots of land. Connecting this idea with the idea of reusing materials to aid in the construction of an addition to an existing building is one way the abandoned neighborhoods be revived using what they have. The abundance of vacant buildings and vacant land provides the neighborhood with a framework to work off of. The vacant buildings have their history restored and additions of the present give life to it. By providing an unusable building with a new layer of skin, the buildings would not be forgotten and would become a part of the neighborhood once again.

The intention of this thesis is to convert what is considered a LOSS into OPPORTUNITY through the interweaving of threads and through the PATCHING of different STRAINED threads in the urban fabric. By re-using materials and abandoned buildings, and inserting new community programs the neighborhood then becomes patched; over time the different areas around the neighborhood create a patchwork, the city then becomes mended. Through the interaction of the static and dynamic elements, an area can become a more viable place to work, live, and learn through the act of doing and interaction with the people in the neighborhoods.

Endnotes:

1 Naumann, Rose. The Off-Loom Weaving Book. Scribner, 1973

2 "fnp architekten." S(ch)austall. Web 12 Oct 2009. <http://fnp-architecten.de/>

3 "NewYork Architecture." Nomadic Museum. Web. 12 Oct 2009. < http://www.nyc-architecture.com/CHE/CHE-037.htm>.

4 Guyton, Tyree. Connecting the dots. Wayne State Univ Pr; May 22, 2007.

5 Guyton, Tyree. Connecting the dots. Wayne State Univ Pr; May 22, 2007.

6 Guyton, Tyree. Connecting the dots. Wayne State Univ Pr; May 22, 2007.















Villa de Murph

Architectural Firm: bldgs: Brian Bell and **David Yocum** Location: Atlanta, Georgia

From 1947 until 1992 this building had been an automotive electric parts area that is 850sf.^{2,3} This is a great [re]use warehouse. When this building was found of an abandoned building. Many parts of by the Architectural firm "bldgs" it had the existing were kept and made part of been abandoned for seven years. One of the new use of bldgs studio. There is also a the many things that they found was that distinction made between the new and the the roof had collapsed. This firm worked old. The new additions are white and the with what was left: the existing walls, existing areas are left with rust to show aging.

the roof joists, and the front canopy. This [re]used building has two different main sections, a studio that is 1000sf. and a living





S(ch)austall

Architectural Firm: fnp architekten Location: Germany

when fnp architekten claimed it as theirs distance from the This building was party demolished during World War II and ever since then everyone left it alone until fnp architekten decided to create a building that blended modern and aged architecture together.⁴

This old pigsty was 230 years old The new wooden insertion is offset some existing structure and transformed it into a unique shelter. expressing an untouched transformation.





Nomadic Museum

Architectural Firm: Shigeru Ban Location: Pier 54, Chelsea, West Side, New York

Nomadic Museum was created out of 148 [re] usable shipping containers that were stacked 34ft. high, cardboard trusses and columns, and a handmade curtain that was made out of used tea bags. This museum housed Gregory Colbert's "Ashes and Snow" exhibit.⁵

The forty-five thousand square foot It was beautifully lit from the interior, had no form of insulation, and had a majestic ambiance even though it was created out of [re]usable materials. At night the materials take on a different feel expressing their history and their new presence in the building.





Manufactured Sites: Tijuana, Mexico⁵

Architect: Teddy Cruz Location: Tijuana, Mexico

ways to survive. They use San Diego's wasted materials to create a form of housing. Teddy Cruz and his group of designers may not function very well, but the idea design different ways in which these materials could be used. The idea behind this project was to use materials like garage doors as walls, rubber tires as retaining walls,

The people in Tijuana find different and wooden crates as housing units to create dwellings out of [re]usable materials. This may not be pleasing to the eye, it behind it is thought provoking and it could serve as a catalyst for other projects.





The Heidelberg Project

Artist: Tyree Guyton Location: Heidelberg St. Detroit, Michigan

The Heidelberg Project was started by the artist Tyree Guyton with inspiration from his grandfather Sam Mackey. This project focuses on the unappreciated and forgotten spaces of Detroit by using art and debris to transform the neighborhood.⁷ These installations bring people together, blacks and whites, young and old, rich and poor. The art creates a basis for conversations, either against it or for it. It also has changed the perception of how people view this area; once they enter this space they forget that they are in an area of abandonment and of crime.

The installations that are displayed on Heidelberg Street are primarily created by Tyree Guyton with the exceptions of sculptures created by artist Tim Burke, Ernie Warrick, and people of the surrounding communities.⁸





In the Heidelberg Project there are no boundaries, no one keeping you from imagining, no limit to what can be created, and no designated canvas to express a message. Every surface becomes a canvas that relays a message to the people visiting. These surfaces create a way for people to interact with the project; from the exterior of the houses to the pavement. These artists create works of art from forgotten materials from the surrounding area.





"He had some wisdom about old houses as well. He told me the problem with people was that when they looked at an old, broken-down house, all they saw was an old, broken-down house: a pile of broken bricks, weathered boards, torn shingles, and empty windows blocked with plywood. It was, he said, a lot like the way some people looked at old folks- seeing nothing but the outside and not what was really important. There was life in those houses once, he said. People just see what's left and forget about the families who lived there; they forget that there was love inside those walls, a place where children laughed and babies were born and where people got old and died. Not just a bunch of old sticks. Maybe there was pain and sadness in them too, but that also was a part of living." Neal Shine quoting Sam Mackey⁷


H e i d e l b e r g InstallationProposals

The focus of these studies was on abandoned homes near the Heidelberg Project and what could be done to transform them from their current state of abandonment. It also focused on how the material would visually transform the home and how the home dictated the way the material would change. There is so much that is forgotten about these homes, like: the different events that happened inside, joy, sadness, and the families who lived in these homes. With these installations the act of filling in the broken windows and any

other opening with a material it expresses the life that once was housed in this space from a state that is intangible to tangible (see images on page 26).

The images below (from left to right) express the integration of a material on a house that has its roof burned off, and when the roof is intact but the first floor walls were burned off leaving behind the structure. The addition of the "new" material creates a space within a uninhabitable house that can be used once again.





Material Studies

The following material studies explore how different materials react to each other and how existing forms dictate how the "new" material would change. The use of reused materials, light, and human interaction play a big part in how we perceive the new forms. This will later influence the proposed final building design. Recycled materials used: Thin Plexi glass and Nylon string

This was an exploration to see the way the nylon dictated how the plexi glass was going to change. The use of light and the creation of shadows were important in this exploration. The idea will tie into the expression of the existing structure lit from behind the plexi glass addition.



The images below show how the light plays a large part in the alteration of the re-used plexi glass.



Recycled materials used: White elastic material, nails, wooden board.

This was an exploration to see how the white elastic material would be changed by placing them on the board of nails.



The nails act as an existing structure in which the elastic material has to be placed on. Depending on what way one tugs on the elastic material, the end result is always different from the one before. This will also relate to the idea of having the addition conform and squeeze into the spaces that are between the existing trusses.



Recycled materials used (from left to right): Plaster, chip board strips with holes; latex tubes, plaster, dirt and grass seeds.

Creating new forms of art and new uses for these new objects. These were some explorations on how each separate material would react when another material was added.



(From left to right)

The plaster was pressed onto the chipboard and it expresses how the plaster conforms to the structure of the chipboard. The accumulation of thin tubes placed in a bundle changes as one adds more. As the tubes are placed into the plaster, the plaster fills in the interior of the tubes creating a different type of landscape. The tubes create a new type of container to grow grass





Recycled materials used: Long strips of chip board with holes.

Exploring with the layering of these strips and the use of light created different beautiful products. When this material is layered, depth within these strips is created and a change in view occurs. Light and shadow were also important in this exploration.







Enclosure for the Self

Recycled materials used: Strips of chip board, natural fiber string.

Location: Main hallway of the School of Architecture

Use of the existing structure, light and shadow, and layering were all factors of this exploration. The strips of chip board changed as they were placed in the slot of the columns. This material, the strips of chip board, was initially flat, but once it was placed within the columns the material changed its initial form.

This area of the hallway is currently a space that is not always used for seating. By creating this installation, it added a level of interaction with fellow colleagues, and a level of intensity and curiosity to the space.

This is an example of re-using an existing structure and incorporating re-used material to change the space. The structure dictated the change in the strips, and the spaces where one can occupy.













0 m 62 m

055





"Life Bulbs"

Recycled materials used: Light bulbs, dirt, grass seeds, ornament hooks, fishing line.

Location: Main hallway, conference room, and elevator in the School of Architecture

This installation was designed and installed by Noel Rivard, Johanna Allan, Nick Moriarty, and myself. The idea was to use as many re-usable materials to create this chandelier of life to attract people to certain unappreciated areas within the architecture building. These "life bulbs", composed of layers of dirt and seeds, began to dramatically change in a few days as the seeds actually sprouted.

These light bulbs which were filled with life brought curiosity to the space and created an unexpected interaction between strangers.















T-Shirt Design

Recycled materials used: T-Shirt, spray paint, elastic material

This design focused on the re-used elastic material, and the positive and negative form of it. The elastic material was used to act as a stencil (the negative) and it was used to connect the missing sections of the shirt.

The elastic material was used as an aesthetic addition to the T-shirt and it acted as a patch for the areas which were removed. Even though the elastic material is not the same type of material as the T-shirt, it semi-covers that specific area of the body.

This relates to the main thesis idea of splicing strained areas of a city with different programs and buildings. This T-shirt still could be used as a T-shirt even if it was patched with a different material; a city can still be a city even if certain areas are changed from its original state.



Site Considerations

The city that was chosen to study was Cleveland, Ohio (see image on the left). The criteria in choosing a site were: the site had to be in a non-thriving neighborhood surrounded by industrial facilities; schools; homes; and easily accessible by any mode of transportation.







Located at the intersection of Center St. + Hemlock Ave. in the Flats of Cleveland, Ohio. Surrounding this building there is retail, heavy and light industries, and commercial areas to the North, multifamily housing, and institutional facilities to the South. This vacant building has potential because of its location and the surrounding amenities. Most of the area surrounding this site is in decline, but there are some areas that can have a positive effect on the possibilities for this site. The program that will be housed by this building will hopefully try to make a positive impact on the surrounding residential area and the commercial and retail facilities. This site was not used for the final project because the land around the vacant building was not large enough to provide for any additions to the building. Also, the existing building was surrounded by too many industrial buildings and not enough residential units.









Located at the intersection of E. 36th St. + Cedar Ave. This small building has potential to house community facilities. Observing the surrounding areas, there are several nice residences and some abandoned homes, and a community garden to the west. It is also surrounded by a mix of some light industry, commercial, retail, office and institutional facilities to the North. To the South there are some multifamily, two family, and single family housing, some vacancies, and retail. This second site was not selected because the building was not large enough to enclose large groups of people. There also was not a strong connection between this site and the surrounding buildings in the neighborhood.









Located at the intersection of E. 38th St. + Cedar Ave. This abandoned church seemed like it could provide an opportunity to re-use and transform it to provide a space for the community. This site is located two blocks to the East of the previous site. Like the previous site, this church is also surrounded by a mix of some light industry,

commercial, retail, office and institutional facilities to the North. To the South there are some multifamily, two family, and single family housing, some vacancies, and retail. This site was also not chosen because of its location and its weak connection to a strong program in its surrounding neighborhood.




Site Documentation

The proposed site is located West of E. 55th, and between Cedar Ave. to the North, and Central Ave. to the South in Cleveland. Ohio. This site screams for attention, yet it has been forgotten many times. This neighborhood has only two dozen homes remaining where there once were as many as forty homes. There are also many vacant lots, abandoned buildings, and alleys that are hardly being used. It is bordered by heavy and light industries to the North and East, train tracks to the East. This neighborhood, unlike the surrounding neighborhoods, did not have new houses added to the vacant lots. These areas were in a state of abandonment and needed to be repaired. The city of Cleveland was given a sufficient amount of money to build new houses for low income residents for only three of the four neighborhoods.

These neighborhoods that we revitalized was in the same state as this documented neighborhood. The areas that were focused on were: the neighborhood to the West and the Projects, Southern neighborhood, and Eastern neighborhood, but this neighborhood in the center was left untouched. Since there wasn't enough money to rebuild new homes in this area nothing was done to it.

The Vocational Guidance Services is a large part of the surrounding neighborhood (see image 2). VGS provides a learning environment for people who have disabilities. Some programs that they offer are: Food Service training and Wait Staff training, Textile Services training, and Customer Service Certification training.⁸ These students are trained to work in factory type settings and no further.



Lonely alleys that once were used are now overgrown and barely accessible. These alleys could be used as a connection route between neighborhoods, but unfortunately are not.





Abandoned cars, homes, bicycles, materials, are left for the taking. Many of the homes in this neighborhood are not well kept; eventually people leave and the homes are left empty for some time.



This alley, image seven, seems like it can connect to the neighborhood to the south, but it is blocked by a warehouse. Some of these alleys lead to a specific place, but the destination is not visible, or it is inaccessible.





The neighborhood to the south is composed of new homes provided by the city. The care that the owners take in keeping their property adds a sign of hope, and change for the area.



The neighborhood to the south is composed of new homes provided by the city. The care that the owners take in keeping their property adds a sign of hope, and change for the area (see image 10). The neighborhood to the east is composed of new homes and previously owned homes. The change is great and it adds a sign of hope and change for the rest of the community (see images 11-12).



All of the surrounding neighborhoods including the projects (see images below) have improved the image of the neighborhood. It also has made people question why the neighborhood in between is in a state of complete abandonment.













Site Analysis

Located around this forgotten neighborhood are an abundant amount of churches (in yellow), schools (in white), and a few community centers (in green). It is also surrounded by low income residents who live in newly constructed houses and apartments.

It is very interesting to note that most of the activity is along the border of the abandoned neighborhood. The activities range from a city maintenance facility directly to the north of Cedar Ave., activities at the Vocational Guidance Services, and the local schools. (All of the places with different activities taking place are expressed in the study model below.)





The study model to the left expresses the movement of the people if they were to take a direct route to the building that would be converted into a building which would house a next level of education to the Vocational Guidance Services students. This study will aid in determining the possible main entrances to the proposed building within the neighborhood and the carving in the landscape.



The model to the left is an experimentation with the existing conditions and the deformation of the site. This is an analysis on the vacancies within the forgotten neighborhood and the surrounding area, and the barriers that the major buildings create. These barriers are thought to have had an impact on the current state of the forgotten neighborhood.



The site investigation to the left is an analysis of the current condition of the neighborhood. It also expresses the possible contributions the surrounding neighborhoods can have. The red areas signify the strained sections of the site which then are mended by the placement of the contributions made by the people from the surrounding neighborhoods.

The site investigations below express the possible placement of the proposed programs within the site. The blue areas indicate the market space, the green areas indicate the infill of an apple orchard and produce gardens, and the yellow areas indicate clothing boutiques.





From ar scale, the nex building scale. building is that the Cleveland a new owner it. When it wa Railway Co. it u

Building Analysis

From analyzing the neighborhood scale, the next step is to zoom into the building scale. A brief history about this building is that it was previously owned by the Cleveland Railway Co. and now it has a new owner that has not yet renovated it. When it was owned by the Cleveland Railway Co. it used to be used as a repair shop for street cars in the 1930's and 1940's. The cars would be brought in through an opening that was equipped with a garage door and then placed above openings in the floor. In dealing with the renovation and restoration of some parts of this historical building there are some important questions to ask: what is necessary to keep? How can these existing spaces be accentuated in the new design by expressing the difference between the new and the old materials?



The entire exterior of the building is well detailed, from the different designs of brick, to the spacing left for the placement of the gutters.



The interior of the building has long spanning steel trusses, clerestories to provide the building with sufficient amount of light, and the existing furnishings.



Existing front facade.



Existing North facade.



Existing South facade.



Existing Floor plan.







Preliminary Design



The Vocational Guidance Services is located within this abandoned neighborhood off of East 55th Street in Cleveland, Ohio. This facility is a strong part of this abandoned neighborhood because it can provide a connection between the students of VGS and the people in the The VGS has surrounding communities. different programs that teaches people with disabilities how to be able to work in a day-to-day working environment. These disabilities range from amputees to the people who are disabled at birth. Some of the programs that they provide their students are: culinary training; customer service training; and textile training. The students who participate in these programs graduate and then work in a factory type The program proposal for this settina. specific site is to provide the VGS students, who are capable of going to the next level of education, with a chance to learn more and experience more in their field. Instead of them learning these trades and working in a factory they can come to this building cook in a restaurant setting, deal with real customers, deal with new ways of preparing food, create their own style of clothing and then sell it to the people in the area. Some other programs that would start to connect the neighborhood with the programs that VGS provides are: Community produce gardens and markets. These gardens would be located on the vacant plots of land and

then spread to the yards of the people in the neighborhood. The students from VGS would learn how to take care of these types of gardens and then teach the community how to care for them. The produce that would be grown in these gardens would supply the restaurant with the necessary produce needed for the meals and the produce would be sold at the markets so that the people of the community would be able to purchase these goods. The markets, as it will be explained more in depth later in the book, would be located along an abandoned alley. This market would act as a connector for this abandoned neighborhood and the neighborhood to the South.

These programs will start to transform thisneighborhood and bring peopletogether. The neighborhood that would be able to connect with this neighborhood the best is this neighborhood to the south. This is one of the neighborhoods that was transformed with the help of the city. So connecting the abandoned neighborhood with the neighborhood to the south, will create more activity within the forgotten neighborhood.



One way of connecting the Southern neighborhood to this forgotten neighborhood, and then to the building is by creating a type of market space within these unused alleys that already act as a potential connection route from the southern neighborhood to the forgotten neighborhood. These markets, would provide the community and the VGS students the opportunity to sell their goods (see images on pages 108-111). A few boutiques are being proposed to be located along Central Ave. providing the students and the local communities with jobs, and a connection between Central Ave. and the entrance to this community (see image on page 112). Not only is it important to connect these two communities together, it is important not to forget about the community to the east and to provide these vacant spaces with nature. One way of creating a connection that breaks the barrier that the train tracks create. would be by creating an apple orchard. This apple orchard acts as an insertion of a product of nature that is planted by man, and acts as a landscape that will produce food for the people in these communities and act as a connection route for these two neighborhoods.












The image to the left expresses the connection of the market space within the abandoned alley and the orchard. This space provides the people of this abandoned neighborhood to create different types of exchange with their neighbors and other people from nearby neighborhoods. These alleys transform from being unused spaces to an interactive market space.





The image to the left expresses the connection between the southern neighborhood and the abandoned neighborhood through the development of boutiques. The image below shows the site in section and the activity that would happen in the abandoned alley that leads from the southern border of the abandoned neighborhood to the proposed building (see images on pages114-119). Programs shown: the market space and the proposed building which houses a restaurant and a clothing boutique.





Programs shown: the market space and the orchard.





Programs shown: the market space, the orchard, and the clothing boutique stores.





Images below show the path in which a VGS student may take if they graduate from the main VGS school.



Program Summary

Restaurant	2000ft ²
Restrooms	9 3ft ²

Clothing Boutique	2150ft ²
-Restrooms	93ft ²
-Dressing Rooms	93ft ²









Preliminary Building Design

For the new design of the building, the building is going to have light wells (indicated with the number 1) and an elevator in the floor openings (indicated with the number 2), stripping off the floor material in this area but keeping the structure visible (indicated with the number 3), and a mezzanine on this area (indicated with the number 4). The light wells and the elevators create a flow of light and energy from the mezzanine to the basement. In the areas where there would not be any transformation to the openings in the floor, the acknowledgement of these historical openings would be expressed with the insertion of new material. Taking a look at the layout of the programs in the building, the idea is to have the restaurant dining area on the mezzanine level, the kitchen and clothing boutique on the main floor, and the storage, supply and sewing rooms in the basement. A large emphasis will be made on the connection between new and old and expressing the historical nature of the building by keeping specific parts of the building untouched.



These two images below are analyses of the different types of exchange that can already take place (in red) and the addition of another form of exchange, a market space and boutiques (in yellow). The other analysis is expressing the location of buildings that could supply the new proposal with materials (in blue). These influenced the path connecting the market space with the existing building and its landscape.



These two images below are produced by the layering of the different lines of exchanges that are shown on page 124. The lines dictated how the form was going to look like.



Below are sketches of how the proposed addition would move throughout the interior of the existing building. The sketches also informed how the addition would look as though it was trying to escape.









Final Building Design





Daytime Rendering



Interior Perspective

To accentuate the new within the old one needs to look at the existing condition of the building and decide what needs to be removed or altered. As for the South facade, the brick would be removed leaving the existing structure exposed, keeping the structural components of the existing building, replacing the windows, painting the interior of the existing building white, and removing part of the floor on the main level. There would also be two elevators in the existing floor openings. The elevators



would create a flow of light and energy from the mezzanine to the basement, and from the boutique to the basement. The new addition to the existing building houses the restaurant and dining area, it expresses a flow of energy coming from within the existing building and flowing out. This addition is created by steel member tubes, furring strips, a secondary framing in the opposite direction, roof decking, rigid insulation, and to finish it off with re-used sheet metal cladding on the exterior. For

Basement Plan 🔿









the interior of the addition the interior finish is gypsum board with white paint finish, then it transitions to translucent plexi glass that is illuminated from behind to express the shadows of the structural components. This addition is interwoven with the existing trusses, and then being exposed at the roof creating a skylight, allowing for daylighting (see page 145 for a detailed section of the addition).

At the opposite end of the building, where the clothing boutique is located, the



floor is removed to expose the making of the clothes which is located in the basement. This opening in the floor will expose the existing floor joists and the existing conditions in the basement as seen in the image to the left.

Not only is the existing building altered, the land located around the building needs to be altered. The walkway up to the building starts at the market space and gradually slopes up to the building and then is intertwined with the existing concrete flooring of the existing building (see image on

Mezzanine Plan 🕕



 \bigcirc



142

page 139). The walk way is made up of re-used wooden planks that would be taken from salvaged warehouses, demolished homes in the area, and recycling centers nearby. These wooden planks on the immediate site will be polished and well kept, but then as you make your way to the market the wooden planks start to interweave with the land and then with time they would slowly dissolve to become part of the natural landscape.

Section B Θ

















Conclusion

With the re-use of space, land, neighborhoods, buildings, and materials and stitching them together along with new programs, one can alter that space without completely eliminating what was once there. This thesis explored how the combination of re-use of materials, buildings, and neighborhoods can have a positive impact on a forgotten neighborhood. It also provides the people of the forgotten neighborhood a new future and a new form of interaction with other people in the area. By providing the students from VGS a next level of education and by creating a connection between stronger surrounding communities the with this neighborhood, this proposal will transform this forgotten space into a usable, valuable part of the entire area. This proposal brings together the new, old, nature, manmade objects, and people from different communities to one area.

Endnotes

1. Kieran, Stephen, and Timberlake, James. "Architectural Weaving". KieranTimberlake Associates. 2009 http://www.architectureweek.com/2003/0423/building_1-1.html.

2. "bldgs." Villa de Murph. Web. 12 Oct 2009. < http://bldgs.org/projects/villademurph/text. html>.

3. Viladas, Pilar. "Second Life." New York Times 2 March 2008: n. pag. Web. 12 Oct 2009. <http://www.nytimes.com/2008/03/02/magazine/02Style-t.html?ex=1362027600&en=17e15 d2b9151dfe0&ei=5124&partner=digg&exprod=digg>

4. "fnp architekten." S(ch)austall. Web. 12 Oct 2009. < http://www.fnp-architekten.de/>.

5. "New York Architecture." Nomadic Museum. Web. 12 Oct 2009. <http://www.nyc-architecture.com/CHE/CHE-037.htm>.

6. The new mix: culturally dynamic architecture. / guest-edited by Sara Caples and Everado Jefferson. Chichester: Wiley-Academy, 2005.

7. Guyton, Tyree. "Connecting the Dots: Tyree Guyton's Heidelberg Project. Wayne State University Pr; illustrated edition edition (May 22, 2007)

8. http://www.heidelberg.org/FAQ.html

Bibliography

Frampton, Kenneth. *Studies in the Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture.* Cava John. Cambridge, MA: Massachusetts Institute of Technology, 1996.

This book focuses on the architectural qualities of structures and how they were constructed.

Guyton, Tyree. "Connecting the Dots: Tyree Guyton's Heidelberg Project. Wayne State University Pr; illustrated edition (May 22, 2007)

A book of art that expresses the ideas of the artist, the reasoning behind the project, and of a few guest writers.

Kieran, Stephen, and Timberlake, James. "Architectural Weaving". KieranTimberlake Associates. 2009 < http://www.architectureweek.com/2003/0423/building_1-1.html>.

This online article gave examples of how weaving would translate into an architectural piece.

Mathews, Neelam, and Murdock, James. "Perkins + Will Debunks Antilia Myths". Architectural Record. 2009 < http://archrecord.construction.com/news/daily/ archives/071018perkinswill.asp>.

The firm Perkins + Will created a mixed use building with the use of weaving.

Naumann, Rose. "The Off-Loom Weaving Book". Scribner, 1973. Understanding how to weave without any form of structural support, and weaving in different ways was the main point in this book.

Nesbitt, Kate. "Theorizing a New Agenda for Architecture: an Anthology of Architectural Theory". New York, New York: Princeton Architectural Press, 1996.

This book is comprised of writings from many architecture masterminds. The writings are about the theory behind architecture, the making, the meaning, and the history behind designs.

Semper, Gottfried. *Gottfried Semper Style: Style in the Technical and Tectonic Arts; or, Practical Aesthetics.* Francis Harry, and Robinson Michael Los Angeles, CA: Getty Publications, 2004.

Textiles, ceramics, and masonry are some types of art styles that have been used and translated into architecture and how it changes over time are the focuses of this text.

Seymour, John. The Forgotten Arts and Crafts. DK Adult, 2001.

This text is composed of the history and process behind the making of human scale forms such as chairs, baskets, cabins, canoes, etc.

Shipman, Wanda. *Animal Architects: How Animals Weave, Tunnel, and Build Their Remarkable Homes.* Stackpole Books, 1994.

Understanding how people are influenced by nature and how animals create their own shelters is such a fascinating subject, and this book does a great job explaining it.

The new mix: culturally dynamic architecture. / guest-edited by Sara Caples and Everado Jefferson. Chichester: Wiley-Academy, 2005.

This article focuses on the transformation of a site in Tijuana, Mexico with the use of debris.

The Heidelberg Project. http://www.heidelberg.org/FAQ.html