

The background of the entire image is an abstract, three-dimensional geometric pattern. It consists of several overlapping, semi-transparent planes that create a sense of depth and perspective. Each plane is covered in a fine, regular grid of small, light-colored dots. The planes are oriented in various directions, some appearing to recede into the distance while others appear to move towards the viewer. The overall color palette is a mix of light blues, greys, and off-whites, giving it a clean, architectural feel.

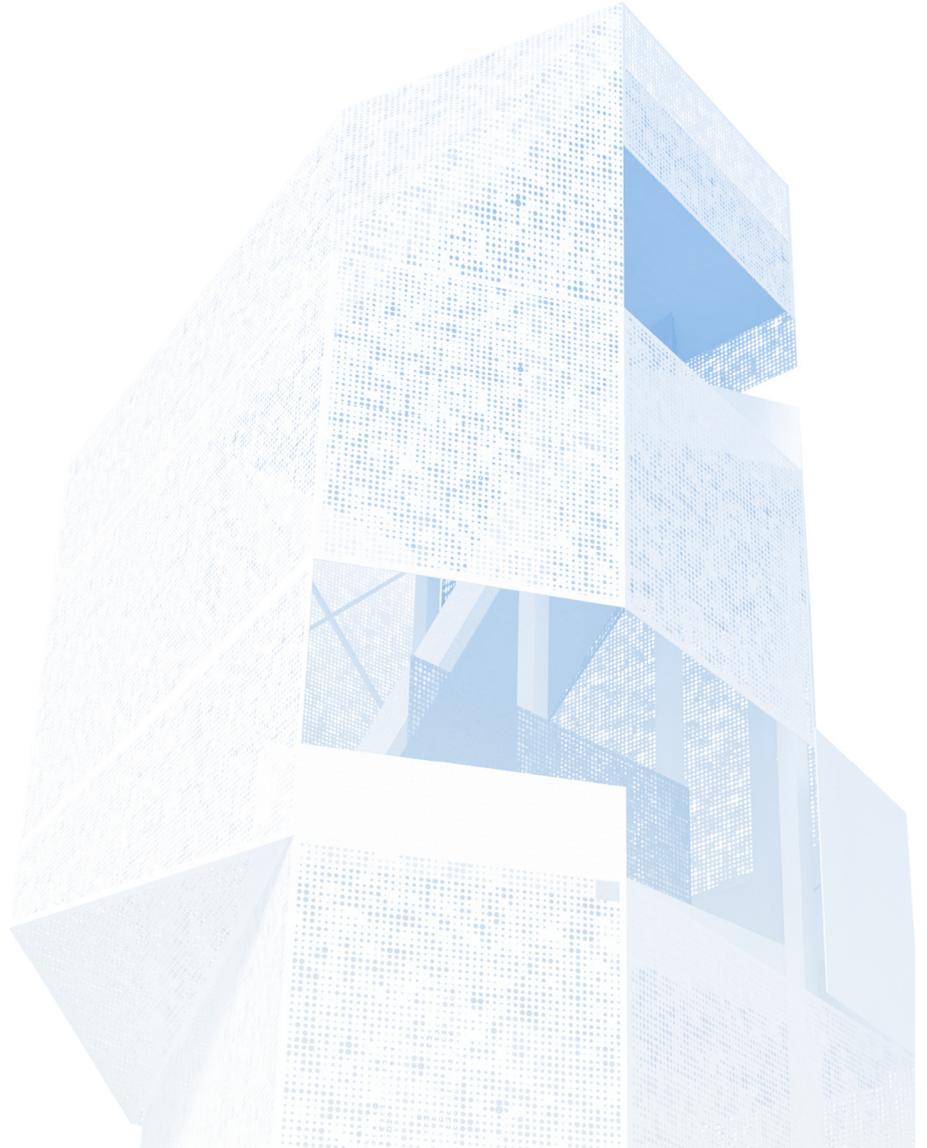
Action Space

Designing for Events in Architecture

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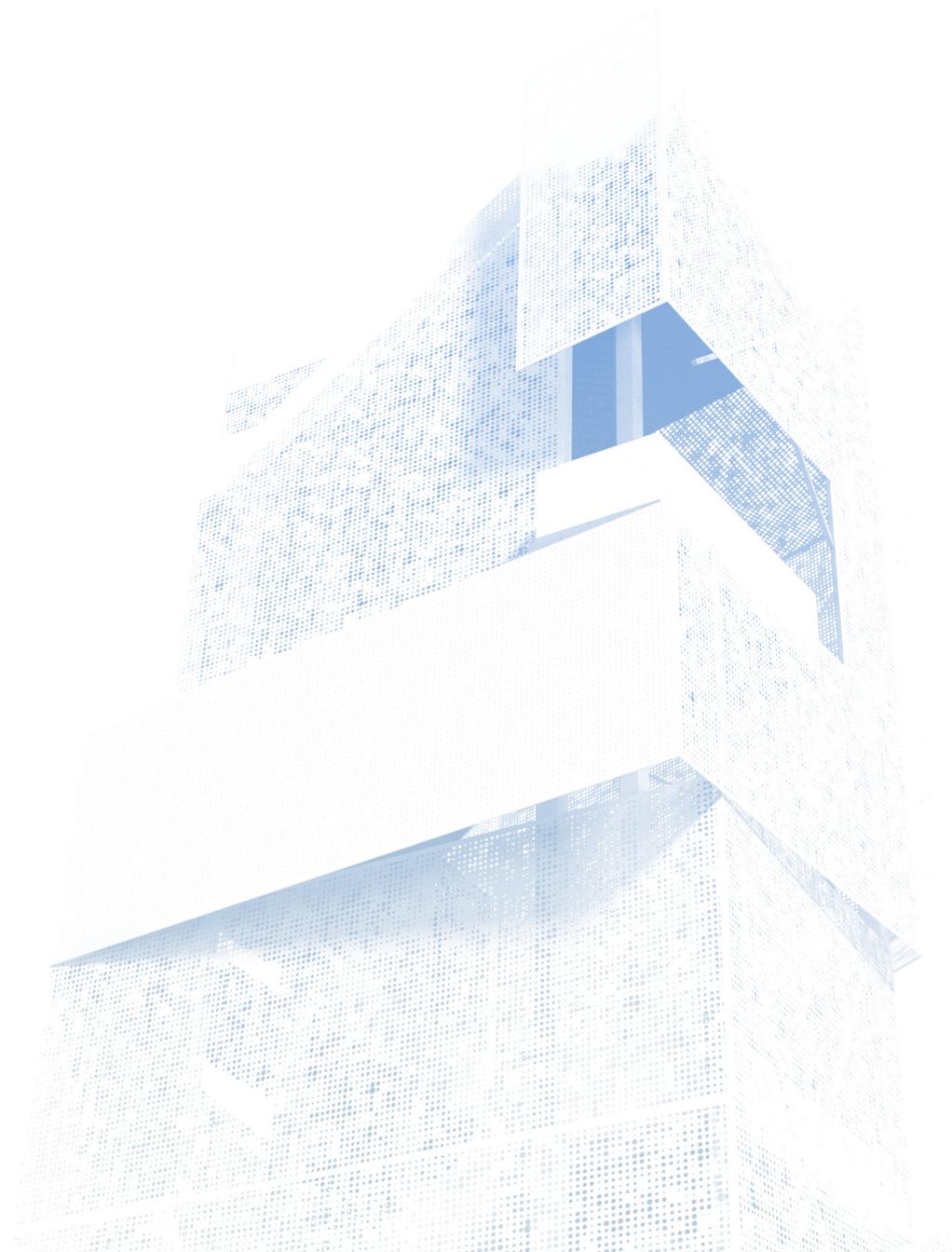
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Introduction

Architects rarely study architecture history. The ruins of Rome cannot fit in a book just as Bilbao cannot be transported to the classroom. Instead it is more convenient to study a history of architecture or art through photography, substituting photographs and words for those experiences that are not readily available.

This is true for any experience; once an event has been encountered, it only exists in memory. Memory serves as the human method for storing and accessing experience. The present is only but a brief encounter and a life's worth of experience is stored in our minds. It never returns a complete recollection but retains our experiences that are most outstanding. To access these memories, a photograph is a helpful spark but can never be a true substitution of experience for any person. The photo cannot express the soft reflection of light fluttering off Sainte Chapelle's stained glass walls. It cannot prepare a guest for the room-filling presence of Picasso's Guernica that requires a full walk across the gallery to take in completely. It will never replace the panoramic beauty that stretches in every direction atop the ridge of the Grand Canyon. So if it is not possible to accurately relay information of an experience, how do we design for it?

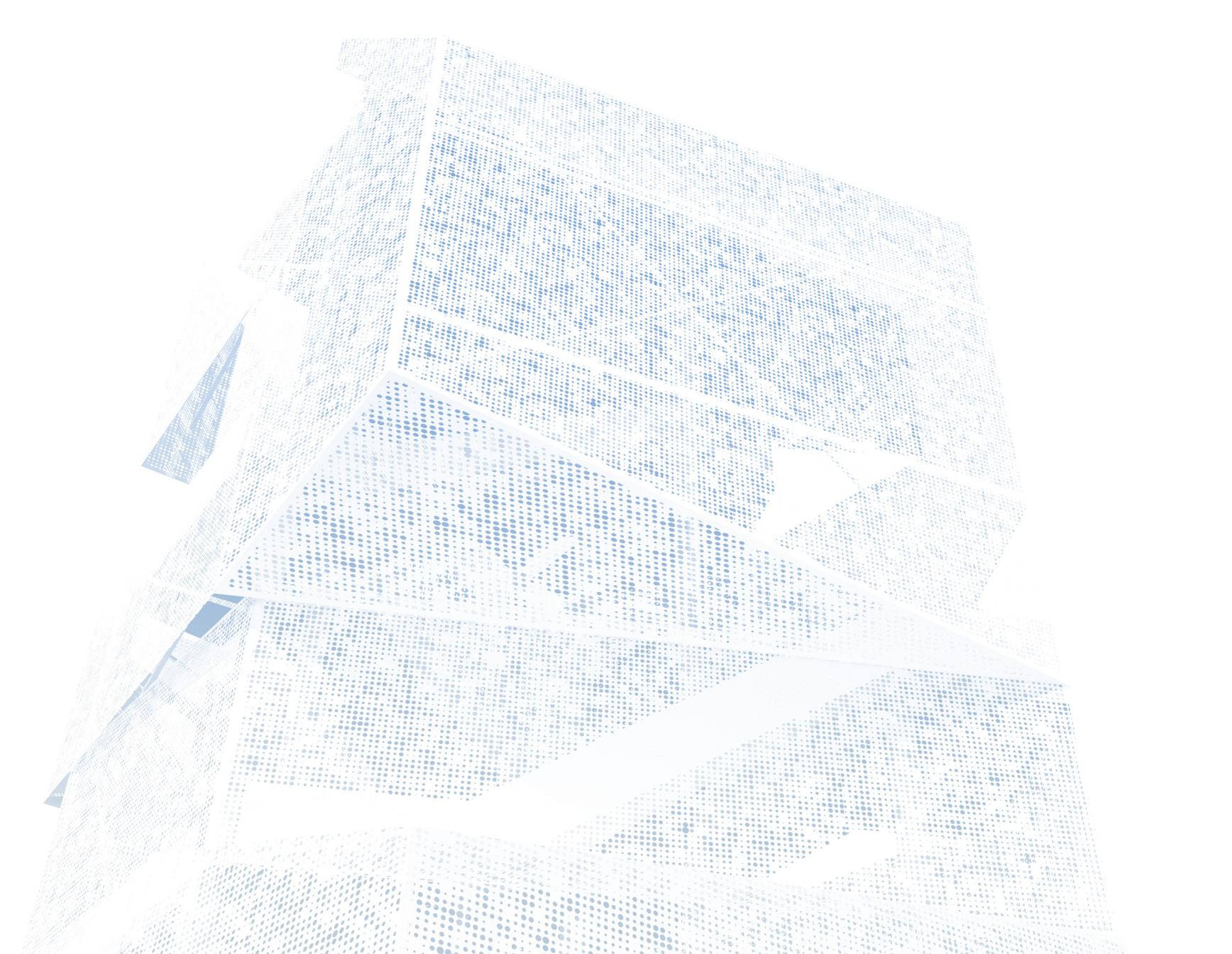


Abstract

There is a problem of discussing experiences. In architecture, the result makes for a difficult critique or discussion of experiences in the built environment. Whenever style, form, function, or materials are called into question, it is a simple task to learn from the past and move forward; but since experience is difficult to learn from (barring actually traveling to the space in question) the design process for experience and event is much harder realize. Models, plans, and sections exist without an aspect of time and the intended activities of reality can only be assumed or guessed at. This book will attempt to settle the conflict between space and event by exploring new ways to represent their relationship.

The second product of the experience problem is a built environment that is primarily underutilized in terms of experience, activity, and event. Many buildings or spaces are designed with activity being an after-effect or coincidence. All too often, the goal of architecture is to create an impressive or efficient form and the user experience suffers. Design is about people; the way that people see, touch, use, and move about architecture deserves a higher position in the realm of design. This paper will look to a site that currently neglects activity, the Detroit Riverfront, to investigate

how activity and event can be integrated into design as the principal goal of a project rather than an afterthought. Activity will be investigated at a large urban scale that presents activity in crowds or mass movement, to an architectural scale that examines the activities of individuals. The challenge in this approach is that people are unpredictable and it is impossible to anticipate all activities or events that could happen in a location. Knowing that change is a quality of the human condition, it is fitting that architecture should also make an effort to work the element of time into design. Even a structure built for longevity has the capability to be dynamic. The goals of this project are to reinterpret the relationship between space and event, propose a site and structure that embrace active experiences, and develop a design process in which activity and event have a larger role in the design process.



“I do not see [space] according to its exterior envelope; I live it from the inside; I am immersed in it. After all, the world is all around me, not in front of me.”

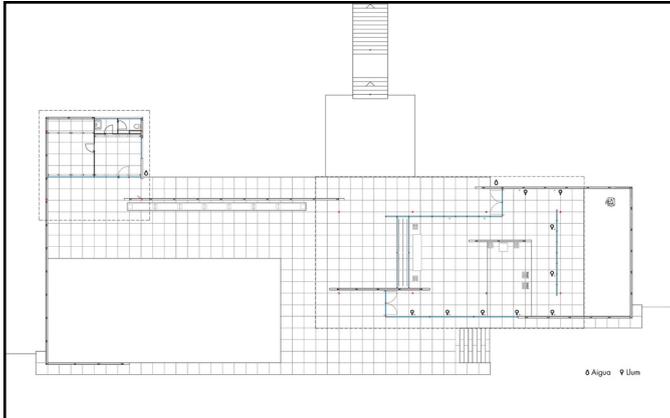
: Maurice Merleau-Ponty¹

The Problem with Experience

The overlooked presence of experience in architecture goes further than a lack of a means for discussion. The typical design process is set up against the subjective experience in more ways than one. As architects, our buildings are drafted and designed from plans or sections that, like photographs, are only representations of the space instead of an equal substitution of it. There is no way for a person to look at a plan and know how the building will be experienced. Even when building a physical or digital model, the three-dimensionality gives a false sense of experience. It is easy to forget that the building is meant for users, not just overall appearance, and the project can start to be designed from unlikely perspectives. For example, both digital and physical models are often made from a convenient point of view from above the building that looks down onto it, as if a camera were hanging in the sky. It is obviously easier to construct a model this way; it would be very complicated to build a model while constantly positioning one's view at the eye level of a scaled person. The problem lies in forgetting that the architecture will likely never be experienced from the lofty skyward vantage points. This traditional method of design results in a process that only incorporates the eye-level view as an afterthought while placing cameras. A

design solution must be found that acknowledges the way a person would actually experience a space.

For the most part, architectural photos of a finished project also commit to this error by focusing on the built architecture as the subject of the photo as opposed to the actual experience undergone by a person. The typical photo of a finished project might feature the most interesting view of a certain space, a close-up of a design detail, or a sexy angle of the building's exterior – all too often with the absence of people using the building. These types of photos give no suggestions to the actual experience that is undergone in these buildings since the viewer must project their own assumptions about the remaining context. The architecture is the subject of the photo instead of the human subject. More important than what the built project looks like, the experience lies in how people interact with it. How do people move through the entrance? Where do people sit when the seats are full? What can someone see when they look out the third story window? How does a crowd react when the silence of a room is interrupted? All of these questions remain unanswered in the photography despite that they would reflect on how the building is actually encountered on a daily basis.



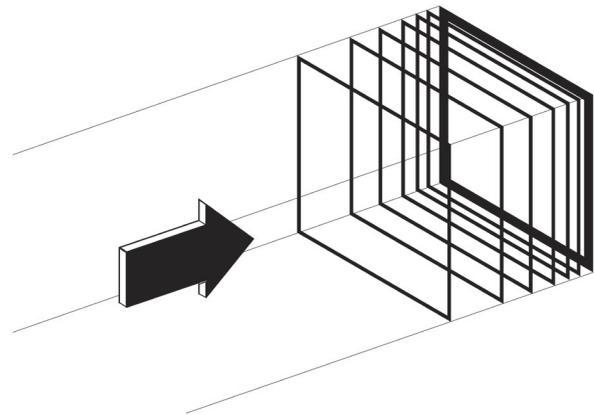
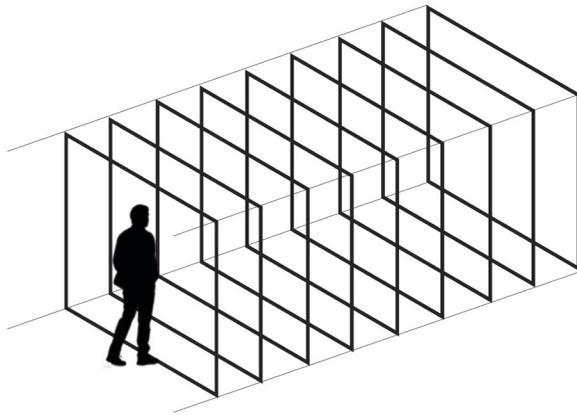
The plan of the Barcelona Pavilion and a photograph from inside the pavilion convey very different sets of information. When used together, the images can convey a greater degree of information but cannot substitute for the actual presence of the project.

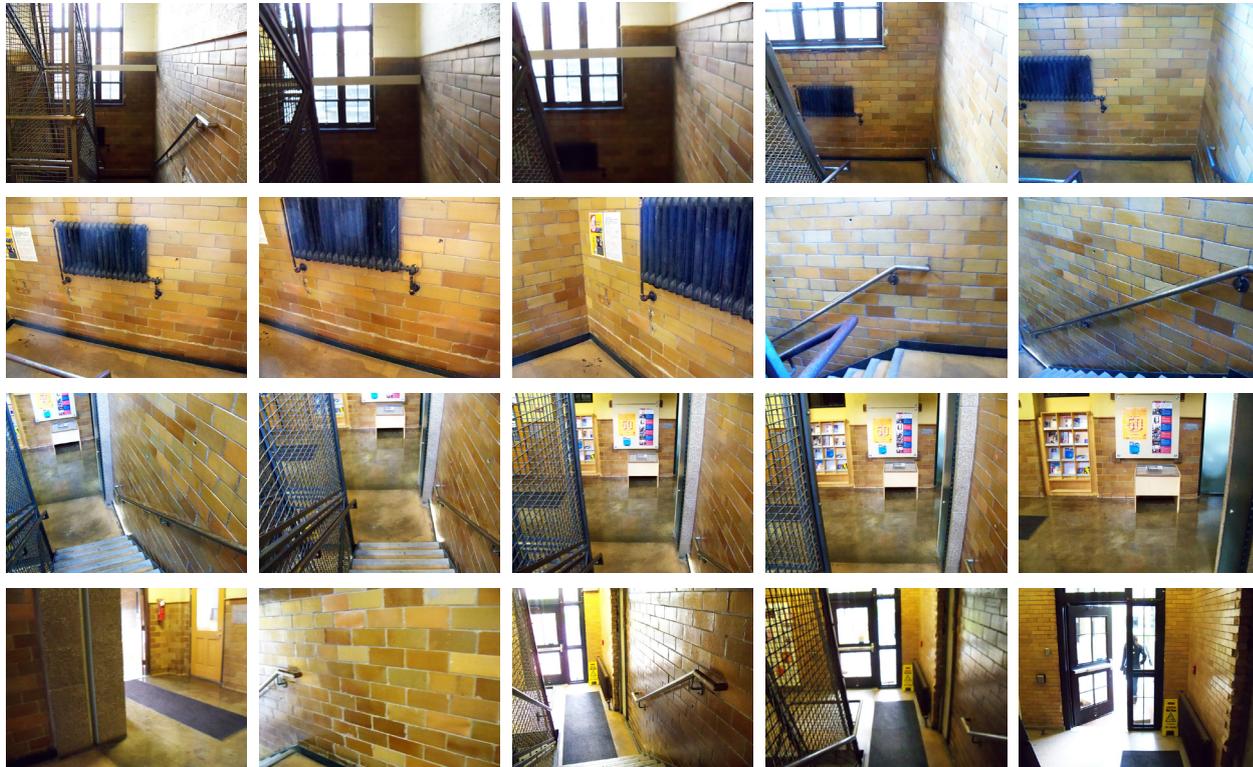
Left: Barcelona Pavilion Floor Plan. Fundacio Mies Van Der Rohe. 1986. Barcelona, Spain.
Right: Barcelona Pavilion. Photo by author

Action Collages

To reconcile this problem, the project begins with a sketch study focused on the representation of experience. Recognizing that a photograph can only exist as a depiction of a single moment in space, the author wanted to know what a photograph would look like if it were to frame the movement from an action. The first action chosen was walking since it is the most basic way in which a person engages with architecture. Each space studied was given a path of action that was followed for the study. A hallway utilizes a straight and direct path, the outdoor campus has a winding path that follows the pavement, and stairs have a path of ascension, etc. For

those paths, the author developed a process of walking while taking photos at regular intervals at eye-level in order to capture a montage of the spatial progression. Some progressions were simple, where each frame zoomed in to the end of a hallway but could become more complex when the paths twisted through the campus or spiraled up stairs. Each montage contains about thirty to fifty photos, depending on the length of the path. Digital editing allowed each image of the montage to be overlaid and gave equal opacity to each individual image so that the frame captures the sum of every image. The result is a single collage image that equally conveys every



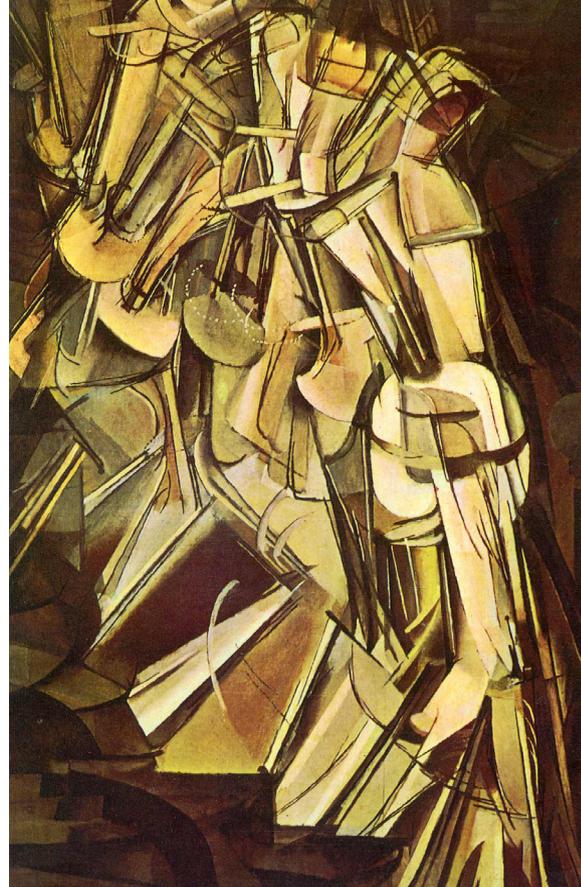


Selected montage photos from Descending a Stairway
Photos by author



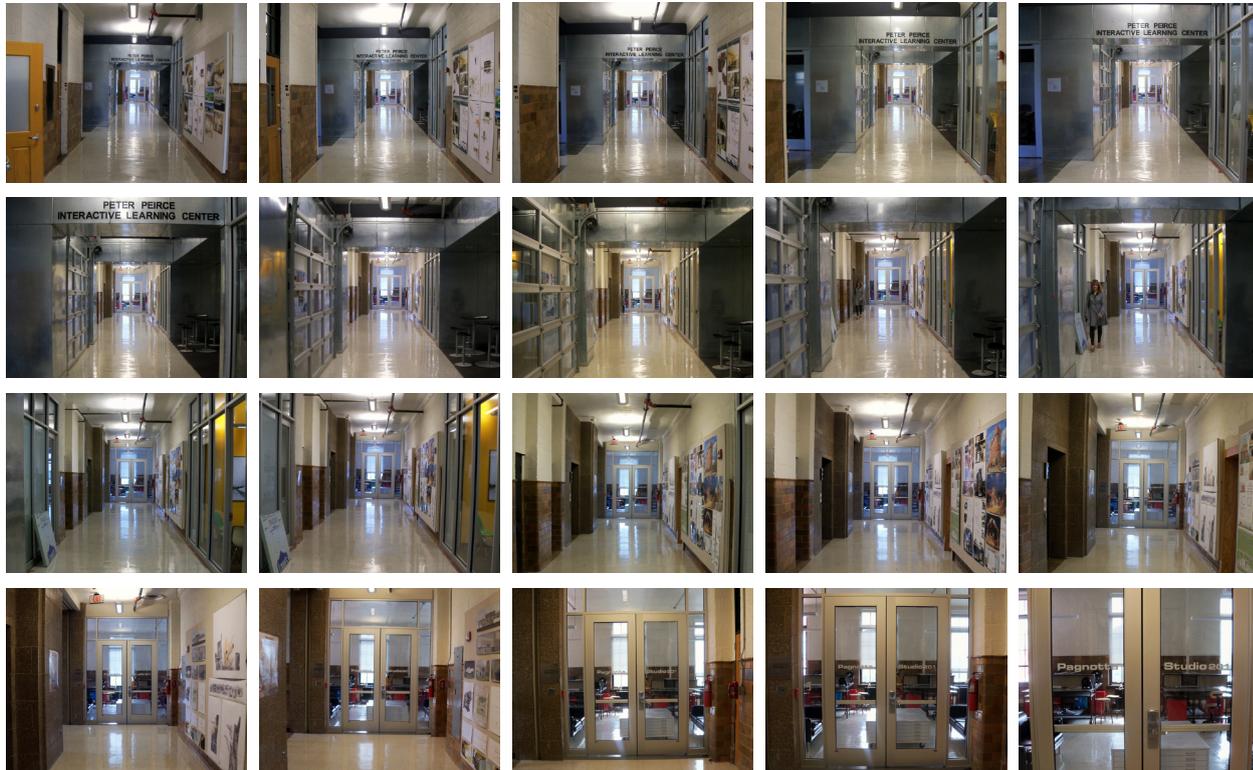
moment of the montage in an Impressionistic manner. The space and the action become interwoven into one representation. If someone were to walk through a different location or perform a different action (such as skipping or spinning in the same hallway), the result would be very different. Only one particular space with one particular action will yield the same results. Even repeating these conditions can have varied effects because the experience and perceptions will change at different times of day, different weather conditions, and due to ever-changing environments, such as crowds of people or impermanent objects. Each individual image acts as only a fragment of the unified collage as multiple perspectives and scales merge into one. The appearance of these images seem validated in their goal by their similarity to avant-garde Futurist and Dadaist paintings that experimented with time. The structure of the stair collage is not too dissimilar from that in Duchamp's *Nude Descending a Staircase*, which depicts the many frames of motion that a woman takes while descending stairs. The delightful twist is that the collage is perhaps instead an interpretation of what the *Nude* would be experiencing.

Left: Action Collage - Descending a Stairway



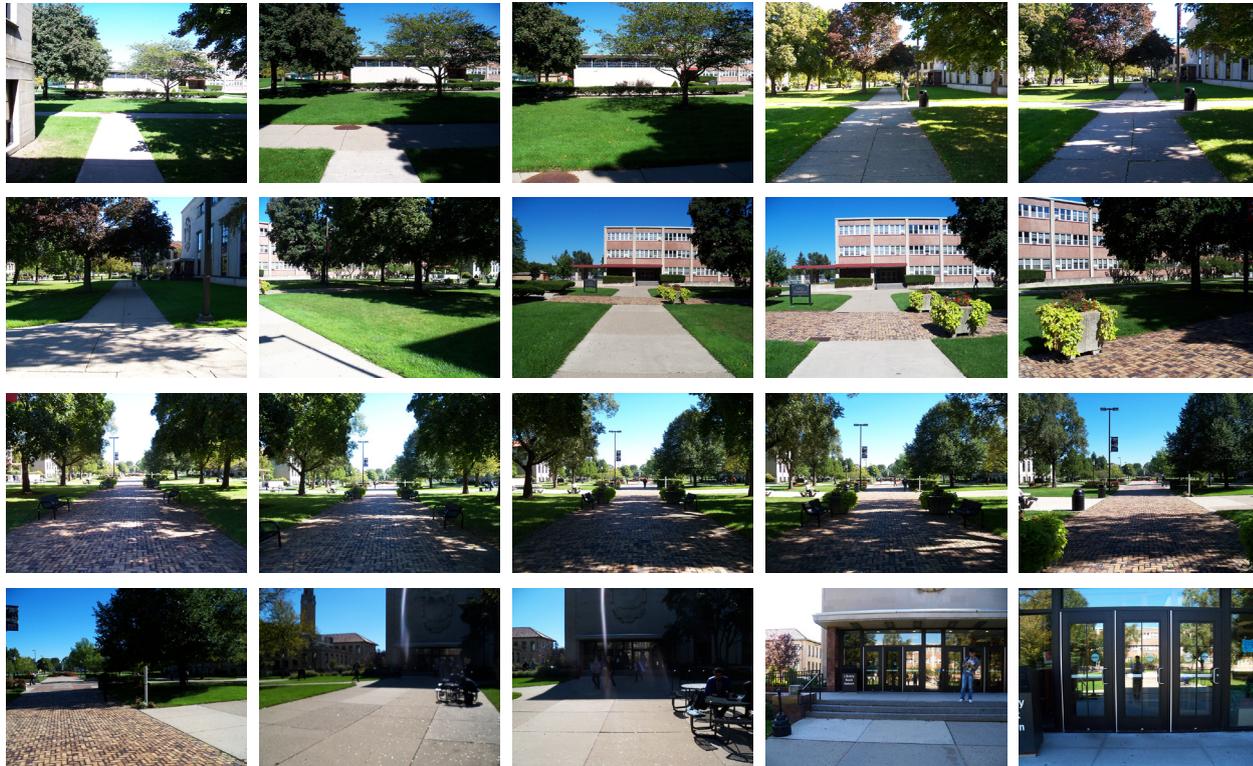
Duchamp, Marcel. *Nude Descending a Staircase No. 2*. 1912. Oil on canvas. Philadelphia Museum of Art, Philadelphia.





Left: Action Collage - Walking a Hallway
Above: Selected montage photos of Walking a Hallway
Photos by author





Left: Action Collage Walking the Campus
Above: Selected montage photos of Walking the Campus
Photos by author

Before beginning this investigation I realized that it would contain some limitations. The first is that this is still just a representation of space like any other photo. It falsifies the experience in different ways than a photo but conveys different information. Similarly, the collage presents a two dimensional image despite the action and time suggesting a three dimensional space, like a photograph does. The collages also only refer to perception, and only the author's vision at that. The other elements of experience: sound, touch, smell, etc. were not a focus of this study. The images are also captured in a different method from how the eye perceives since the montages are captured in a stop-motion style every few seconds while the eye perceives continuously. This previous limitation is not majorly significant since it has been noticed that above a certain quantity of photos, an increase in photo samples becomes unnoticeable and removes this problem. Keeping these limitations in mind, the investigation led to some valuable insights and striking imagery.

While these collages lack clarity, they provide the depth an action. The collages are more similar to how people actually perceive and remember experiences in that they do not allow any absolute clarity. When the human eye perceives, only one

point can ever be in focus at one time. The rest is filled in by the mind with a vague projection of what is actually present. It is not until the gaze is shifted that areas of this projection can come into focus. This is easily demonstrated by having an observer look at a desk for a few seconds and then having them try to remember what objects were on a desk without looking again; although they may recall the objects that they directly focused on, they will not be able to recall a completely clear image. The eye interprets the world in a moving bracket that focuses only on a small frame at a time and quickly scans to create a larger field of context². The collage mimics this trait for an entire frame, while only denying the single point of focus.

The other interesting quality to note from the collages is that not only do they join the element of time to the photo, but they are also representations of the space without time or progression. Having every image viewed at once creates a snapshot of a continuum, but captures the continuum in a single image. They show what it would look like if a person were to perform the action in the space in a single moment, allowing no time between motions. A precedent for this is the Light Tunnel at Detroit Metro Airport

2. This can be demonstrated by reading a paragraph of text because our eyes only ever perceive a couple of words at a time. The eye perceives a constantly shifting bracket that frames only a few words in the field of view.

where the tunnel connecting the concourses is wrapped in a musical LED light show that constantly changes and obscures the passage of time. Instead of guests looking to the end of the tunnel, the light show suggests that they look to the sides and ceiling. These areas would typically have been void of content but are now used as a distraction. In this instance, the removal of time progression is advantageous; if the travelers can be distracted to ignore the passage of time, then the tunnel journey does not seem so long and tedious.

In order to continue playing with how the collages could reinterpret the representation of event and action, variables were added to the process. Test studies manipulated the frame rate and number of images used for a collage. In both cases, the result was the same; images with a higher frame rate or more images reduced clarity in the collage while fewer frames made the individual images stand out more distinctly. The collages with fewer images appeared Cubist in nature since the individual elements of the images were more distinguishable and appeared fragmented instead of ambiguous.



Light Tunnel, Detroit Metro Airport
Photo by Steve Hopson Photography, March 2006.

The greatest variation came about by taking photos of these paths during different external settings. Photographing the hallway in the late evening on an overcast day led to a distinctly different quality than the same path on a sunny, high contrast day at noon. Since these paths were familiar to the author, it was easy to pick out the different moods that the spaces have in these differing settings. Despite the lack of clarity in the collages, it was easy for those familiar with the space to look at the collage of the hallway at evening and recognize the metallic blue hues while the sunny hallway reveals warm light cast over the glazed brown bricks and yellow walls. The simple character and relationship of colors was enough to suggest the space for those who had been there before.



Top: Collage of a House
Below: Collage of House (half frame rate)



Top: Hallway Collage on an overcast day
Bottom: Hallway Collage on a sunny day

Top: Campus Collage on an overcast day
Bottom: Campus Collage on a sunny day
Photos by author

Another test investigated the way that these paths were recorded. Until then, the collage recorded the path of an action but did not capture the actual perceptions from that path. This was an important aspect to investigate because it spoke back to the idea of architectural photos treating the building as the subject instead of the experiencing user being the subject. In this case, the difference was that the path of action became the subject instead of the author's own experience being the focus. With new locations, a test began by photographing the paths with the method from before at regular intervals and then a second time photographing whatever the author noticed himself looking at. Every time focus shifted, one or more photos were taken proportional to the attention given. Due to the plethora of different content photographed, the resulting perceptual collages are much less defined than the previous method. What is more interesting though is that despite the wide array of objects photographed, the organization stays nearly the same. In the riverfront collage, the horizontal organization of colors remains but the browns and oranges of the left side start to dominate the collage. This makes a lot of sense when looking at the individual images that made up the collage because the perceptions were mostly focused to that side of the path while looking at the dying leaves and blowing grasses.

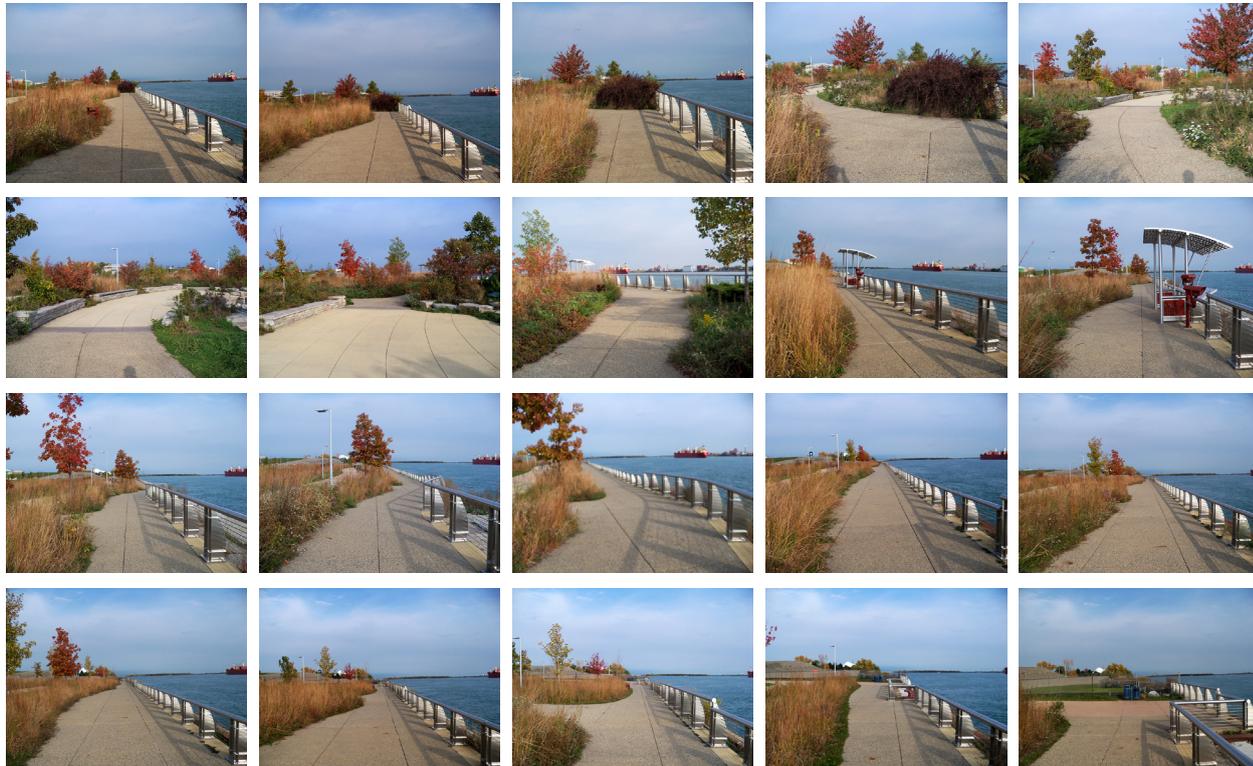


Top: Downtown Path Collage
Bottom: Downtown Perception Collage



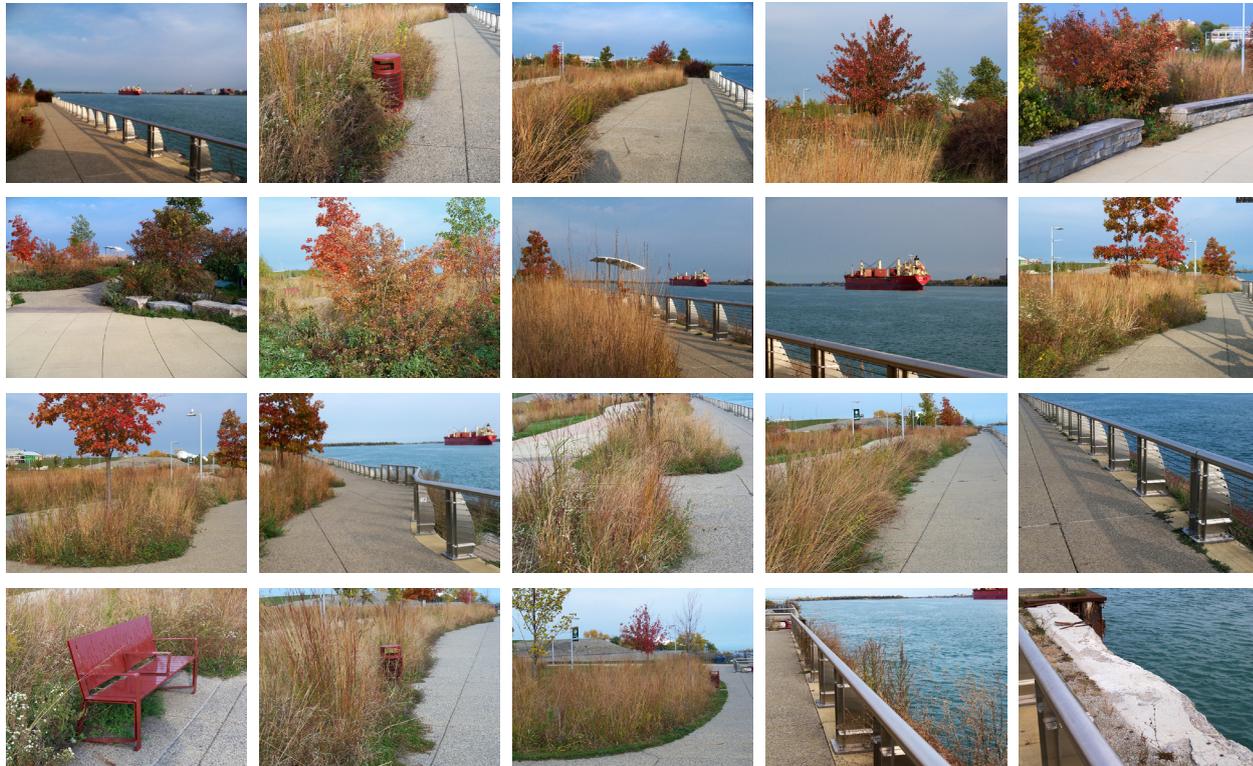
Top: Riverwalk Path Collage
Bottom: Riverwalk Perception Collage
Photos by author





Left: Riverwalk Path Collage Above: Selected montage photos of Riverwalk Path Collage
The photos simply follow the path of walking.
Photos by author





Left: Riverwalk Perception Collage Above: Selected montage photos of Riverwalk Perception Collage
The photos express a much wider range of perception which makes the similarity between the photos more noteworthy.
Photos by author

Disjunction

While making the collage studies, Bernard Tschumi's *Architecture and Disjunction* became a large influence on the project. The book influenced my thoughts heavily, ranging from the ideas of disjunction in architecture to the Post-Structuralist approach Tschumi suggests. What interested me most was Tschumi's repeated call for the combination of incompatible events and spaces. In his example, "if the Sistine Chapel were used for pole vaulting events, architecture would cease to yield to its customary good intentions and the transgression would be real and powerful. Yet the transgression of cultural expectations soon becomes accepted³⁷. Whether the disjunction comes from the combination of a bridge and trampoline, a museum with a rollercoaster or rappelling in an elevator shaft, the sum of the event and program breaks our preconceived acceptability of habit. When these habitual uses of a space or program are challenged, new meaning is given that can enhance not only the richness of space, but also the event and experience. There is no space that can be imbued with only one program; change is a permanent quality of the world and nearly any act can adapt to any space given some creative thought. Habitually, hallways are used for the action of walking but are not naturally imbued



Top: Atelier Zundel Cristea. Battersea Power Station. 2013. London, England. Image from zundelcristea.com

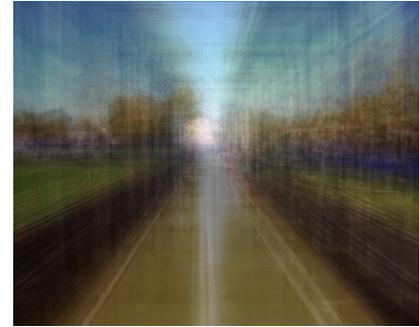
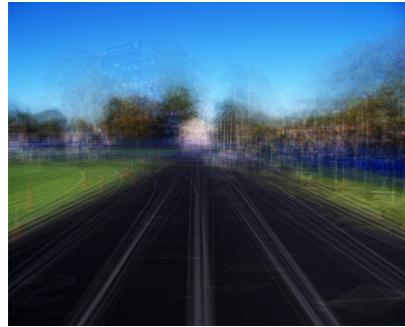
Bottom: Bernard Tschumi. *Parc de la Villette*. 1998. Paris. Image from Waymarking.com



The proposal acts as a folie, much like Tschumi's work in Parc de la Vilette, but also combines a bridge and trampoline in a contradictory way. Atelier Zundel Cristea. Bridge in Paris. 2012. Bridge. Paris, France. Image from zundelcristea.com

with this action. Consider the first time that most young children find themselves in a long hallway; the first instinct is to take off running. It is only after they are conditioned to know that walking is more appropriate that it is accepted and made a common habit. To play off this idea, I found spaces that held a similar line of action and collaged those two spaces together. The hallway and the track imbue the same action of running and so the collages were overlaid to see if the progression presented a similar representation. The same was done for the stair and slide since both contain spiraling vertical motion and for the campus and boardwalk since they both contain open space that restricts movement to a path. The results are just as ambiguous as the original collages, but show slight organizational relationship. The hall and track both have a zooming aspect while the stair and slide represent offset frames. However, these studies relate only to the path of action, and do not consider alternate interpretations of use for the spaces.

It can be argued that running and walking are still in the same family of actions – that of progression – but even in the particular hallway studied, the use has adapted to that of an exhibition space, an artists’ studio, a soccer field, and a racetrack in the author’s experience alone (although these last two were not condoned by the school of architecture). Following this reasoning, it may appear at first that the ultimate level of experience can arise from those spaces that provide the greatest range of use, such as the open plan. However, the problem with an open plan is that the program is not optimized for any one event. Instead of being the best space for some events and a secondary solution for others, the open plan represents “the set of all unsuitable solutions to any problem”⁴. Instead of radical and memorable change, the result is a bland solution that can never be the optimum choice and will not stand out as greatly experiential. Therefore, it is best to design for one or more specific uses when designing a space but allow for ambiguous reuse. The design of ambiguous space allows the user to interpret how it is to be used and presents an opportunity for the design to find new meanings that what were originally intended.



Although the spaces are programmed for different uses, they are imbued with similar actions. The hallway and stair are programmed for utility, but do not present actions very different from similar spaces programmed for recreation.

Top: Hallway and Track Juxtapositions Bottom: Stairway and Slide Juxtapositions
Images by author

Reinterpretation

The greatest moments of experience from disjunction are those that reinterpret a space or event to give it new meaning and with it, a new way to experience. The trampoline bridge reinterprets how we are meant to cross a river and suggests a new, unique way to do so. The experience of bouncing across the river would certainly bring new meaning to how the river is crossed, what bouncing is like, and the perceptions that occur from both together. While the trampoline may seem like it is not the optimal solution for the problem of crossing the river, it makes up for the lost practicalities in other ways. Instead of facilitating the function of speed and convenience, the bridge adds a heightened emphasis on the functions of fun and experience. Fun and play are just as important to a good life as efficiency and speed. Every other bridge in the city serves the function of efficiency, meaning that a bridge that offers the function of play is both under-utilized and overdue.

The best example of reinterpreting meaning of the built environment is skateboarding. Skateboarding arose when surfers wanted to continue their activities when the waves were low and they found a solution in the city. With the addition of wheels to a board, the surfers were

able to use the actions of surfing and find meaning in a most unanticipated way. Without realizing it, the skateboarders were applying new meaning to an urban environment; rails became a track to ride on, empty pools became half pipes, and ramps became jumps. Nothing had to be built or programmed specifically for the action to occur and the meaning had no way to be expected. Despite this, a seemingly impossible combination was able to bring a new interpretation to how the city is used and brought new process for experiencing place⁵.



In a similar vein to skateboarding, skiers found a way to utilize abandoned locations in Detroit for stunt skiing. Video still from Poor Boyz Productions.



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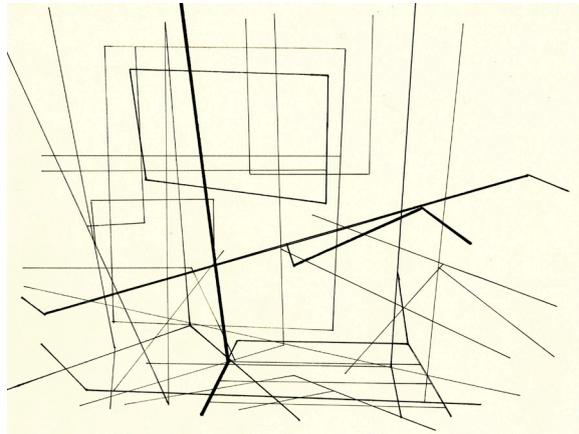
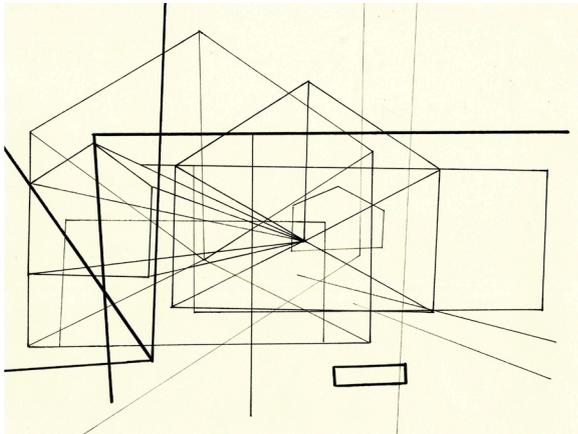
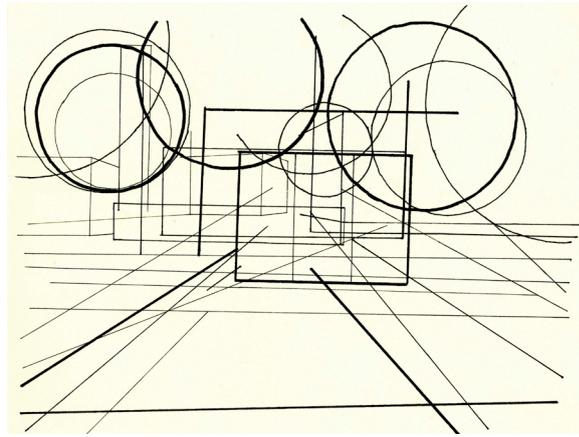
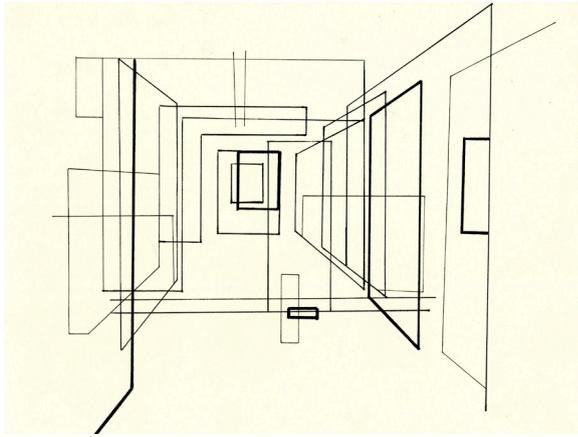
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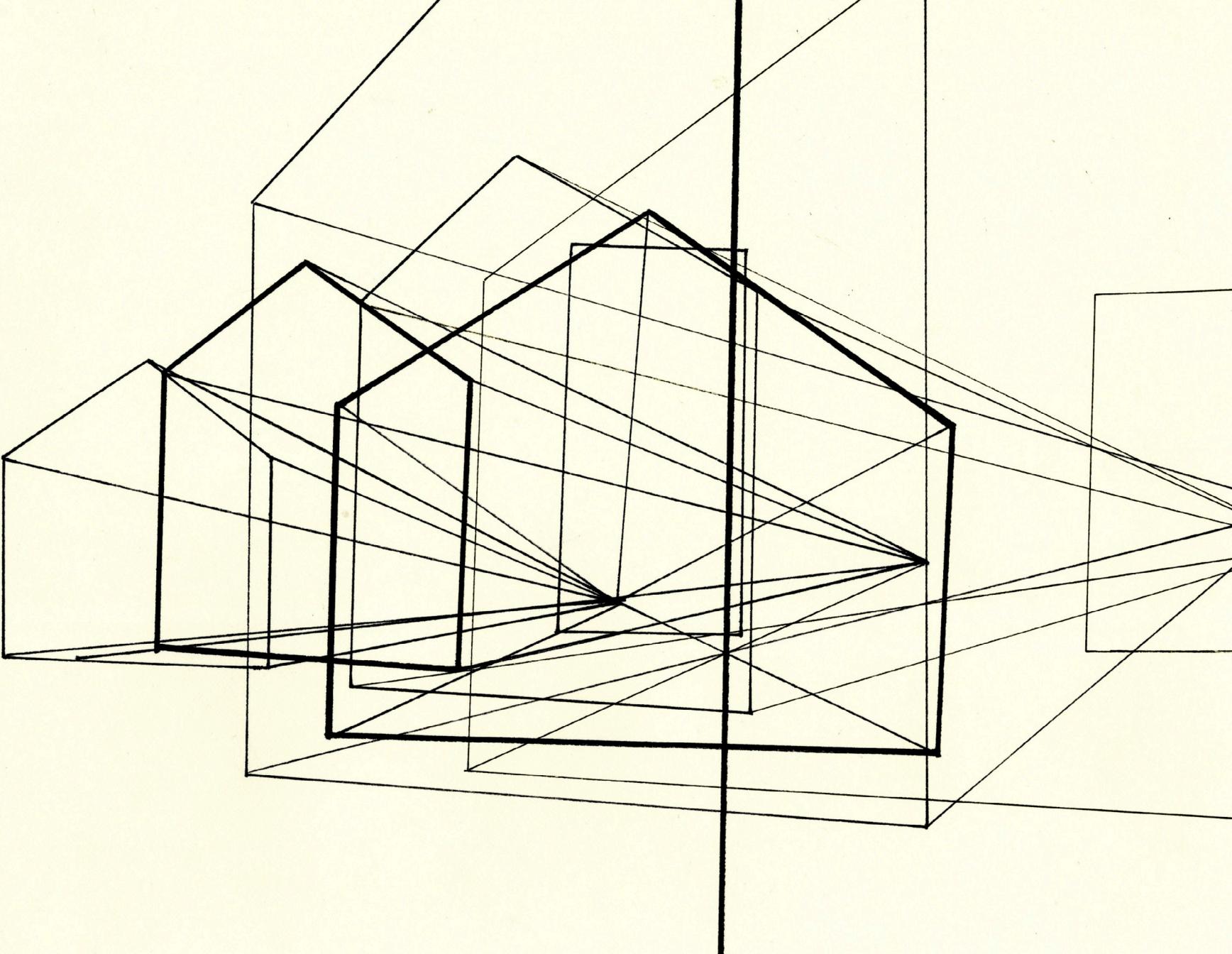


Imagining New Experience

The project continued to reinterpret the collage representations in a variety of different ways in order to explore experiential representation in a more thoughtful way. Looking to find a new use for the path montages, the individual frames that stood out the most were isolated and studied further. From these photos, the author traced out key elements that emerged through movement and the varying perspective points that motion implied. The line drawings helped to find a structure from the original collages, which would be useful going forward. The more interesting development came with certain linear weights being drawn in. Instead of finding meaning from the original photographs, line weights were increased based on what linear elements could be fictitiously imaged to be near or far from the viewer if the collage were imagined as a single static space. Instead of re-representing the collages, the line drawings could now take a step towards imaging a new represented experience.

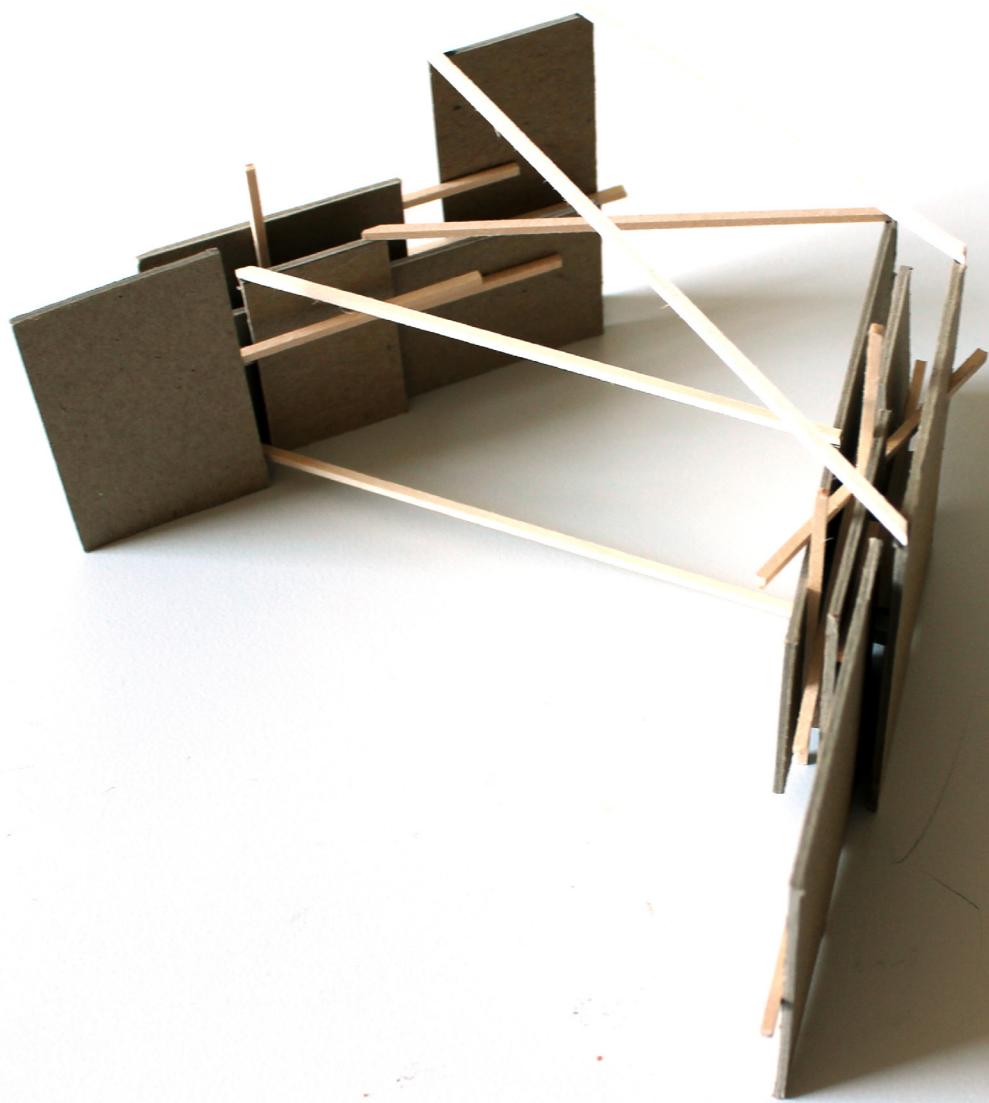
Line Drawings: Clockwise from Top Left:
Hallway Study, Campus Study, Stairway Study, House Study
Images by author





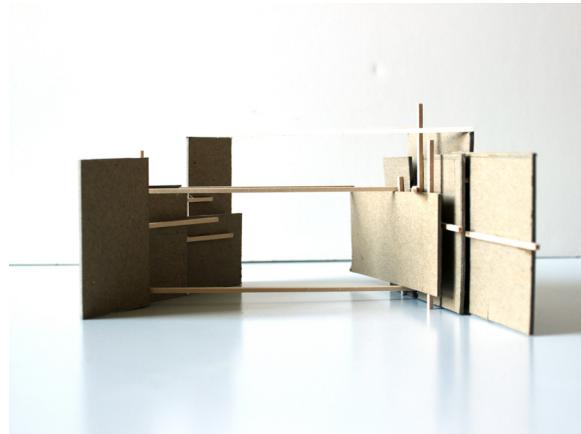
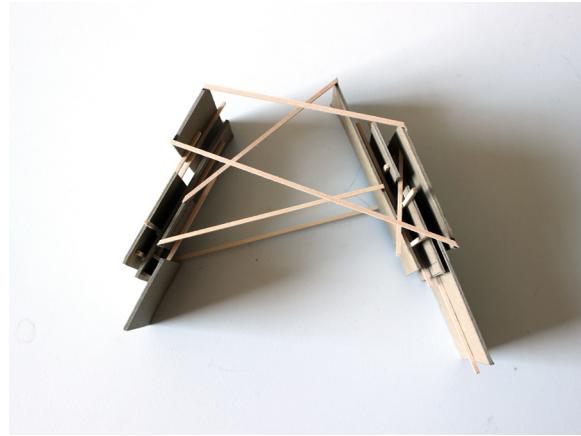
The weights no longer spoke to the original actions but represent a fictional action that may not be fully understood. In other words, the line drawings became elevated to a position where they no longer represented a real space or action, but rather, represent a potential for a something that has yet to be built or performed. The space and action together became a linear perspective of an imagined space without progression that has been extruded from the progression of a real space.

Opposite: Line Drawing of House Study 2
Image by author

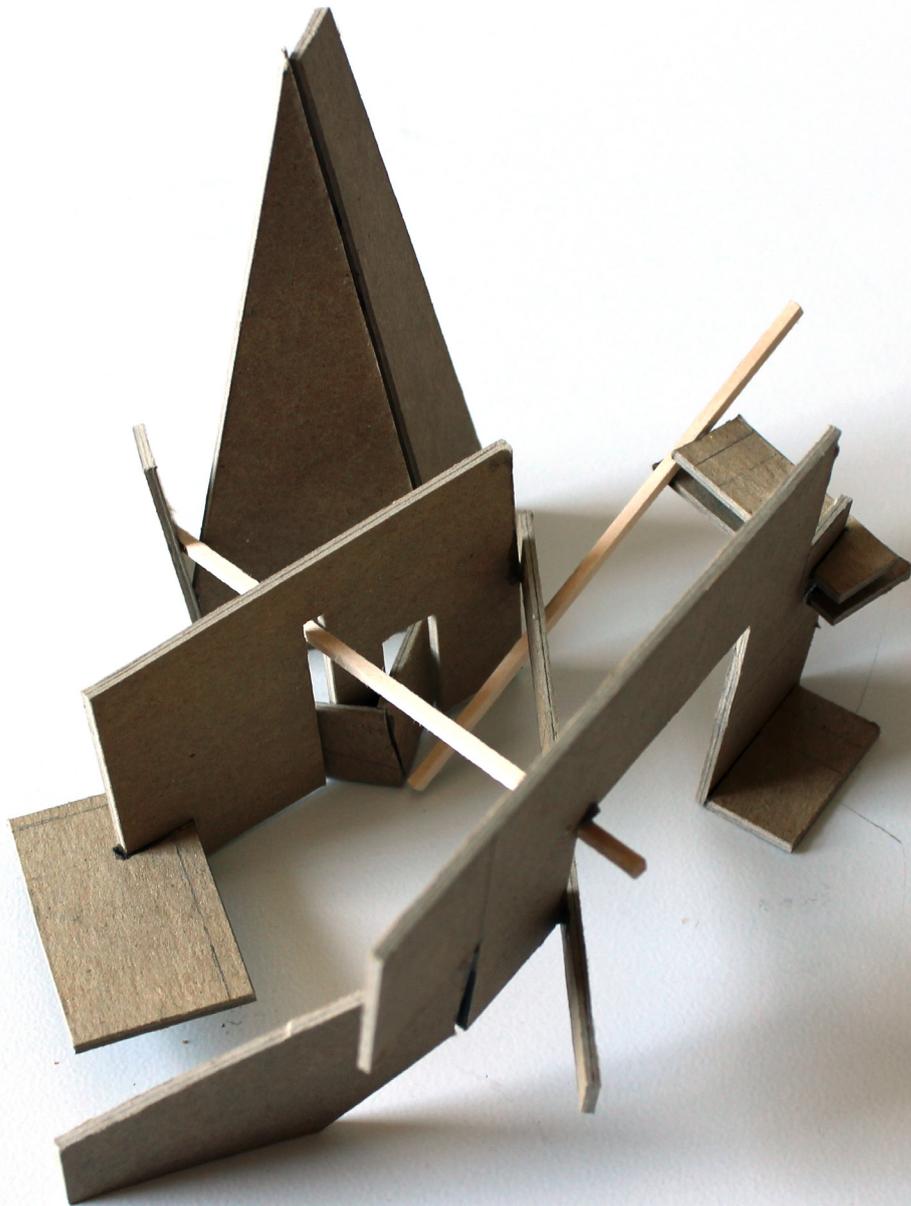


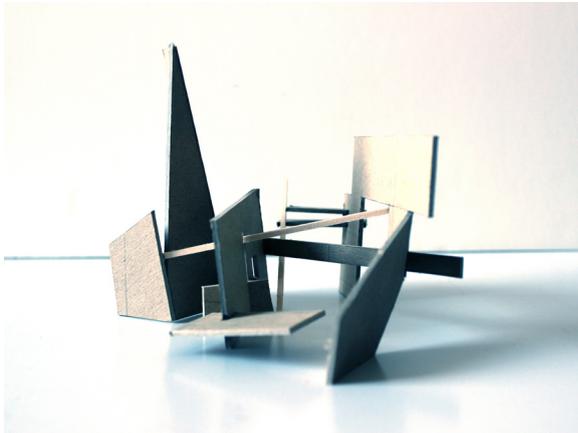
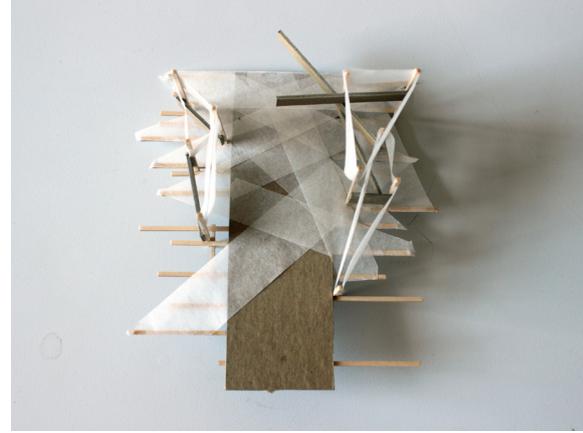
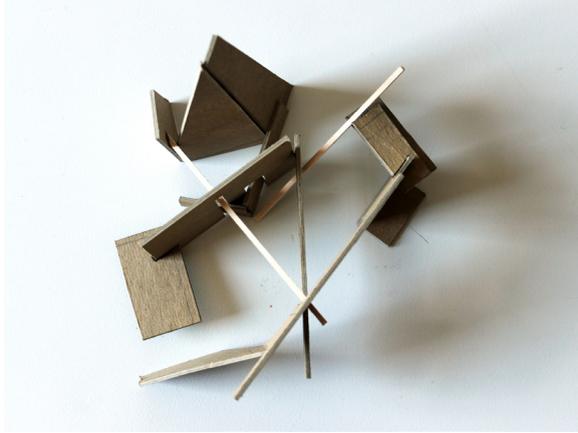
The next step was to extend the collages and line drawings into a three dimensional model that could capture the total essence of the experience. The models were meant to answer the question of what spatial progression would look like in a single model. Using the previous collages as inspiration, the author extrapolated meaning to try and interpret what an action without progression would look like in three dimensions. The results are interesting but have a few shortcomings, namely that they created the very process that had been hoped to avoid. The models were simply representations of representations since they were the next stage of interpreting the collages. While still a valid attempt at the exploration of abstract action-space, they ironically defeat their own purpose in terms of mapping an experience.

The result was not as successful as was hoped and the realization was that the author could never possibly hope to model what was visualized in his head if real materials and real physics were to be used.



Three Dimensional Interpretation of Hallway Study
Photos by author





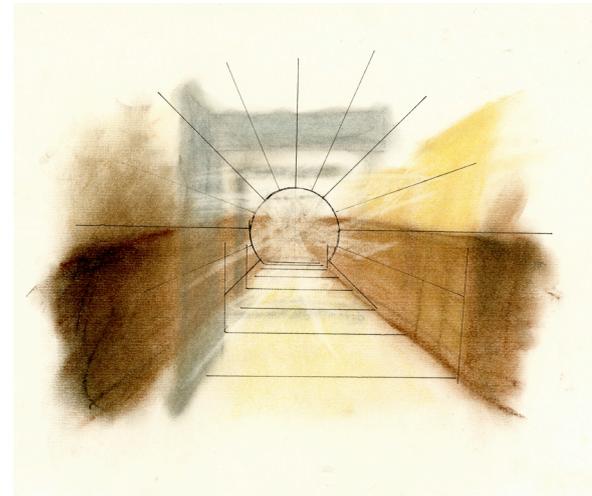
Above: Three Dimensional Stair Study
Opposite: Three Dimensional Stair Study

Above: Three Dimensional Campus Study
Photos by author

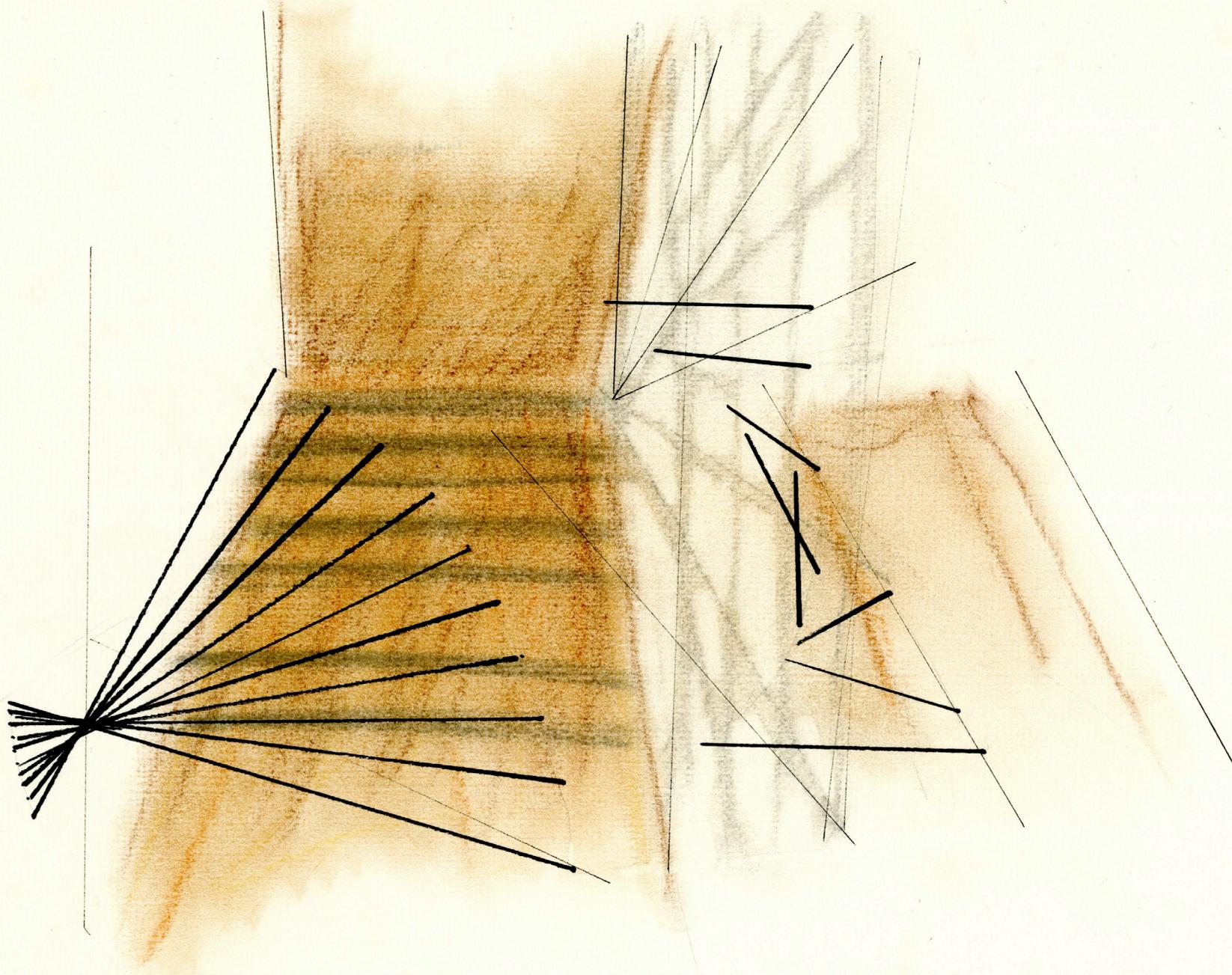
Recalling early concept drawings for the designs of Walt Disney World became an inspiration for one last study on event-space representation. The drawings convey an immense amount of character, emotion, and, most importantly, the intended experience that the models could never hope to convey. Two more hand drawings were produced in pastels that attempt a mapping of actions without an intermediary camera. The familiar paths from before were used so the outcome appears visually similar to the collages in some ways but adds new elements as well. They do not convey the information any better than the previous studies did, but I find that they act as a good summary of the previous processes combined into one.

Each of the processes used are equally valid methods of describing space and event together. Experience is too complex to ever be able to adequately describe in full, and each method still lacks information of the bigger picture by losing different information and abstracting experience in a different way. It is recognized that any attempt to explain an experience will never be complete and will always act only as a representation of that occurrence.

Of the studies, it is the author's opinion that the original action collages are the most successful. They simplify the expression of motion in direct relation to the space with a simple but striking manner. Learning from the studies done prior, the project moves forward to investigate the impact of activity and event on a real site and proposes a project that embraces activity first and foremost.



Above: Pastel Abstraction of Walking the Hallway
Opposite: Pastel Abstraction of Descending a Stairway
Images by author



A Brief History of the Detroit River

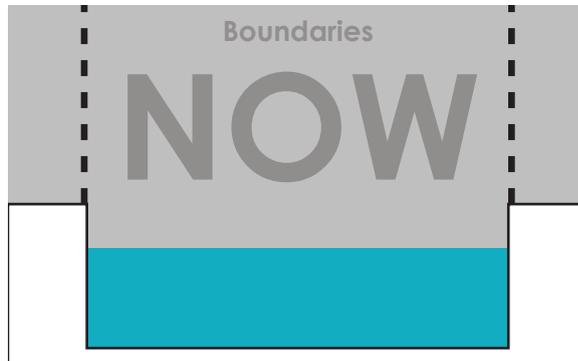
The ideal site for the project is a location that is experientially and actively underutilized. Since experience cannot be reproduced, the site must also be accessible for many visits so that the current condition can be well understood. Given the author's location, this limited the site to a location in the Metro-Detroit area. When thinking about an underutilized condition, the Detroit River comes to mind; the river is not integrated into the urban environment as well as it could be and presents many missed opportunities.

Originally the center of Detroit shipping and industry, and then the overlooked back door of downtown, the city and river are starting to become reintegrated once again. Following Detroit's decline, Belle Isle and Hart Plaza remained as two of the few city-maintained areas in the city where residents could even come into contact with the water. In recent years though, the riverfront has been showing new importance. In 2004, the Detroit Riverwalk opened up as a network of riverside parks that would hopefully someday accomplish the 1950's goal of spanning from bridge to bridge (Belle Isle Bridge to Ambassador Bridge). Since then, interest in the river has steadily grown along with new development. Between the new Renaissance

Center Wintergarden plaza that opens onto the river, the long stretches of paths that run alongside, and the new rivertown condos being constructed, the river is thriving more than it has in the last century.⁶

In terms of activity, the biggest problem facing the Detroit Riverfront is the treatment of the river's edge as a boundary. The river is a boundary in a geographical sense due to the international boundary with Canada, but does not have to be one experientially. The Urban Land Institute has given a set of guidelines for cities that are developing on a waterfront and one of those points reads, "Even though a waterfront serves

as a natural boundary between land and water, it must not be conceptualized or planned as a thin line."⁷ This means that the land and water cannot meet at an abrupt change, but should instead work in a transition zone. This way, the water can start to bleed into the landscape and the land can find interaction with the body of water. Detroit has not broken this principle as badly as other cities – Chicago has lined its waterfront with a massive road that obstructs access and other cities have battered the coast with private developments that leave no entry for the general public. Despite Detroit's foresight to locate Jefferson Road a few blocks north of the river, the river's edge is certainly designed as a thin line. The riverwalk



Detroit's "thin line" on the waterfront results in an abrupt change between land and river with minimal interaction.
Photo by author.

follows the character of the water, being that it is linear like the river, but is rapidly separated along that edge with a vertical drop of eight feet between the Riverwalk and the river. The river becomes nothing more than a visual amenity, limiting the activity to one axis of movement and allowing no true connection.

Another principle from the ULI is that a body of water should encompass two realms of space, not one. The Detroit Riverfront embraces the land realm most heavily, but neglects the realm of water. The experiences felt at the river's edge are entirely single purposed because the river is used only for its visual appeal. As the perfect example that the current riverfront only embraces the land realm, one can analyze the activities that take place there. On the riverwalk, most visitors can be seen walking, biking, rollerblading, and sitting at the water's edge. However, all of these actions except the last can be performed in equal measure anywhere else in the city, where the river condition is not present. The land realm has been well provided for so far but when looking towards the future, the water realm needs some attention.⁸

In order to alleviate these problems, there are a

few methods that should be utilized in the city's long term plans. The biggest idea for alleviating this problem comes from Detroit Future City, the city's long term planning organization. Although the river is hardly mentioned in the framework, the strategy does mention one major prospect for the river in the form of a sustainable city typology. The typology is a "River Marshland" that would perform similarly to the demonstration marsh at Milliken State Park, but at a full scale and real environment. The current marsh is confined to a small scale that cannot grow outwards and has no contact with the river. While it is certainly an important gesture, the marsh is explicitly manmade since it is located about eight feet above water level on top of the infill plane next to the river. The Future City framework suggests that parks and vacant lots along the Detroit River could be transformed at the water's edge to produce true, natural wetlands that can achieve a larger scale and be allowed to grow. These wetlands act as a buffer between the land and river during surges and also treat the storm water before it enters the river to create a healthier ecosystem. The marshlands also provide a habitat to native creatures while being pleasing to look at. If this one typology can start being implemented at vacant or open sites, the river can start to have

a softer edge and become less detached from the urban environment⁹. A buffer marshland could also help to widen the transition space between river and land since it is an environment that is simultaneously water and land. The current riverwalk is over-urbanized; the plants and trees seem more like an afterthought amongst the broad concrete pathways. The corrugated metal siding at the city's edge and metal railings lead to a more industrial feeling than an enjoyable riverfront experience. The Detroit River needs to give some true river access over to the public. The river is clean enough that it can be swum in once again and so Detroit should take advantage of this. Along with the possibility of swimming areas, the riverwalk should also host kayak launches, rowing towers, diving boards, and other resources that encourage water activity. With the water realm fully engaged, the land realm would also receive great advantage since there would be an increase in visual activity. Today the river has isolated events that attempt to do this such as the Red Bull Air Race that takes place over the river, but the riverwalk needs to plan for small events that happen more than once a year. This way, the river can be a major asset to the city rather than simply a picturesque landscape.



The demonstration marsh at Milliken State Park.
Photo by author.

This exploration necessitated the selection of a specific site and the West Riverfront development area seemed to be the best choice. The site was previously used for rail lines along the river before becoming the Detroit Free Press printing factory and then lying vacant for many years. It is now owned and being developed by the Detroit Riverfront Conservancy as an extension of the riverwalk. The site exists now as a blank slate in that it is simply a large empty field. Even after redevelopment, the park will continue to be an empty slate since the current work only proposes to widen the concrete path along the river and not much else.¹⁰

Image from Google Earth
Altered by author



Site Analysis



Top: The fortress-like Post Office building borders the site to the north upon a monolithic, four story plinth.

Bottom: Riverwalk detour looking east on Jefferson Ave

After analysis of the site, it shows great potential but also a few shortcomings. The largest obstacle in the area is the Riverfront Towers Apartments to the immediate east. These towers were built in the 70's during an attempt to develop the river by privatizing it and have since held on tightly to their claim of riverfront privatization. The ownership has refused to allow the Detroit Riverwalk access through its riverfront and as a result, the riverwalk must detour up to Jefferson Road and travel through a corridor that is unfriendly to pedestrians.¹⁰ The route is brief but travels under a concrete jungle of overpasses and goes alongside several gargantuan concrete buildings that are severely out of human scale. When traveling west, the route starts along the blank metal walls of Joe Louis Arena. At Jefferson, the route turns to go between the Joe Louis' and Riverfront Towers' parking structures. Even as the detour reaches the park, the site is walled in by the massive Post Office Building across the street and the large Salvation Army building next door.

Another downside is that Cobo Hall takes up several blocks of space that cannot be passed underneath at a pedestrian level. All pedestrian



The west view of the “Detroit Riverwalk” in its current state as it detours around the Riverfront Apartments. The route weaves underneath multiple overpasses and is dwarfed by the apartment parkign garage on the south side and the Joe Louis Arena garage to the north. Photos by author.



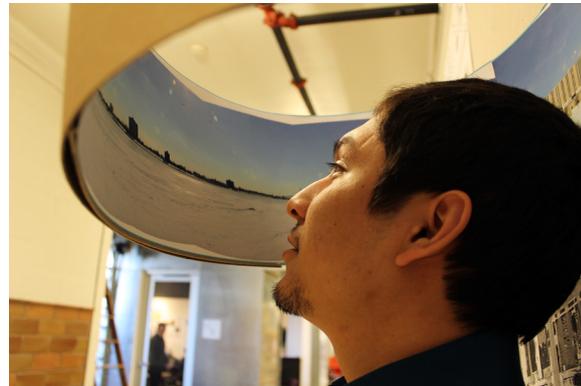
The site offers great views of downtown, but the connection is deceptive. Cobo Hall separates all street traffic between the site and downtown while the Riverfront Apartments hide it away.

traffic downtown essentially dead-ends at Cobo since there is no outlet or destination to keep moving through. On the riverwalk, activity decreases dramatically west of Hart Plaza because the views are blocked on the north side by Cobo Hall and Joe Louis Arena before coming to an abrupt end.

As for the assets of the site, there is a strong visual connection to downtown despite the lack of an active connection. On the eastern portion of the site, the Riverfront Apartments block views of downtown and obstruct views of the Renaissance Center on the site throughout. One the western portion of the site though, great views of the downtown skyscrapers can be seen, much like the views from the eastern portions of the riverwalk. The site presents fantastic views of the ambassador bridge since it is located nearby and panoramic views of the river. The river turns slightly at this site, giving it the widest panoramic views of the river of any point in the city. Due to this condition, the site also presents fantastic views of the city of Windsor across the river and has a great vantage point from which to view freighters passing.

The river is only a few short blocks from

Corktown and Michigan Central Railroad Station can be seen from the right angles. Near the dilapidated station, the tunnel begins for the Michigan Central Railroad Tunnel that carries freight under the river and under the site. This presents an opportunity to acknowledge what is happening underneath the ground, but also contains a difficult condition. The site contains an exhaust building for the tunnel that is surrounded in fences as a land easement. No activity can happen on this small plot as a safety measure and the building could be considered outdated stylistically.

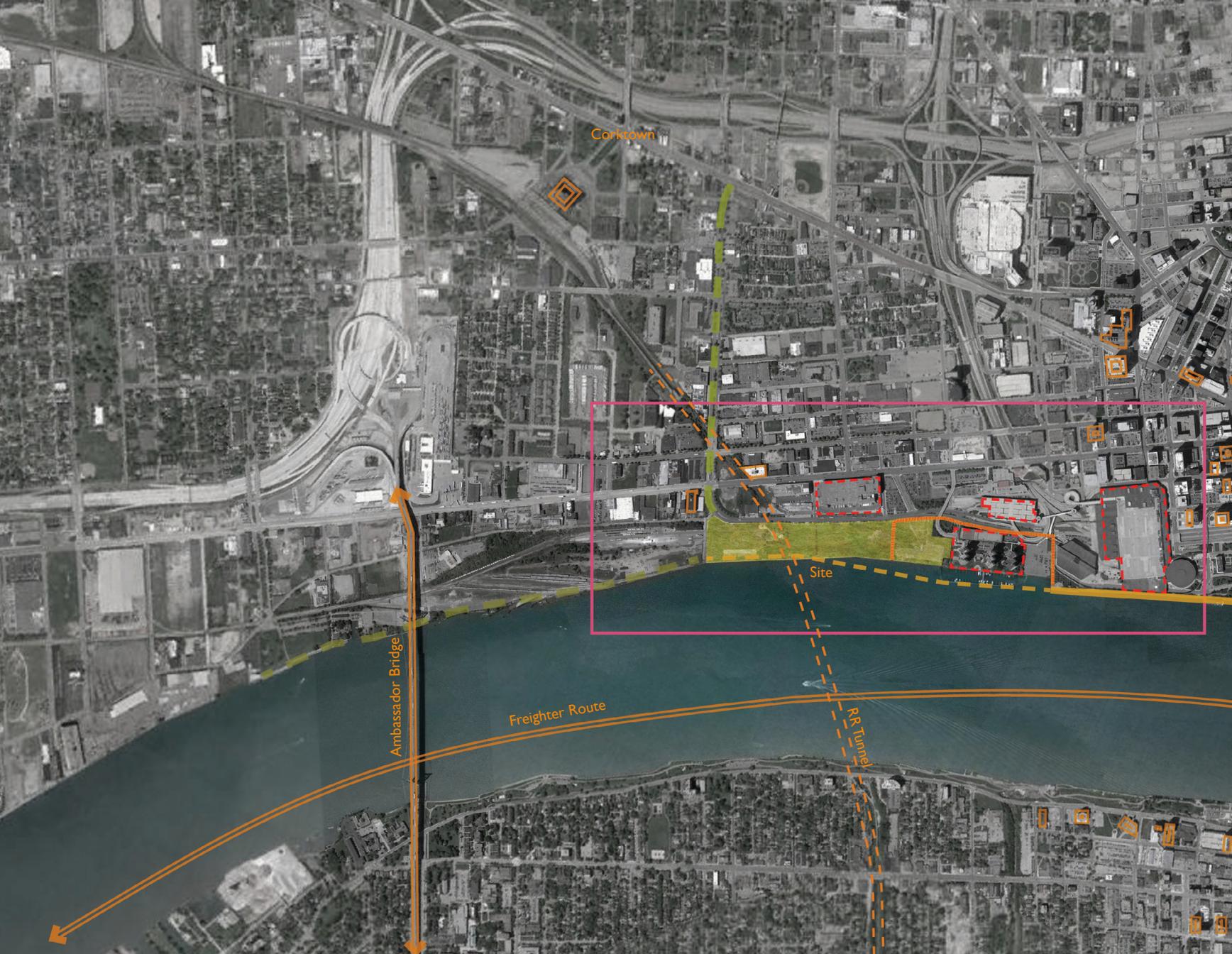


Presentation of panoramic views at Benchmark III
Photos by author.





Top: Winter Panorama
Bottom: Spring Panorama



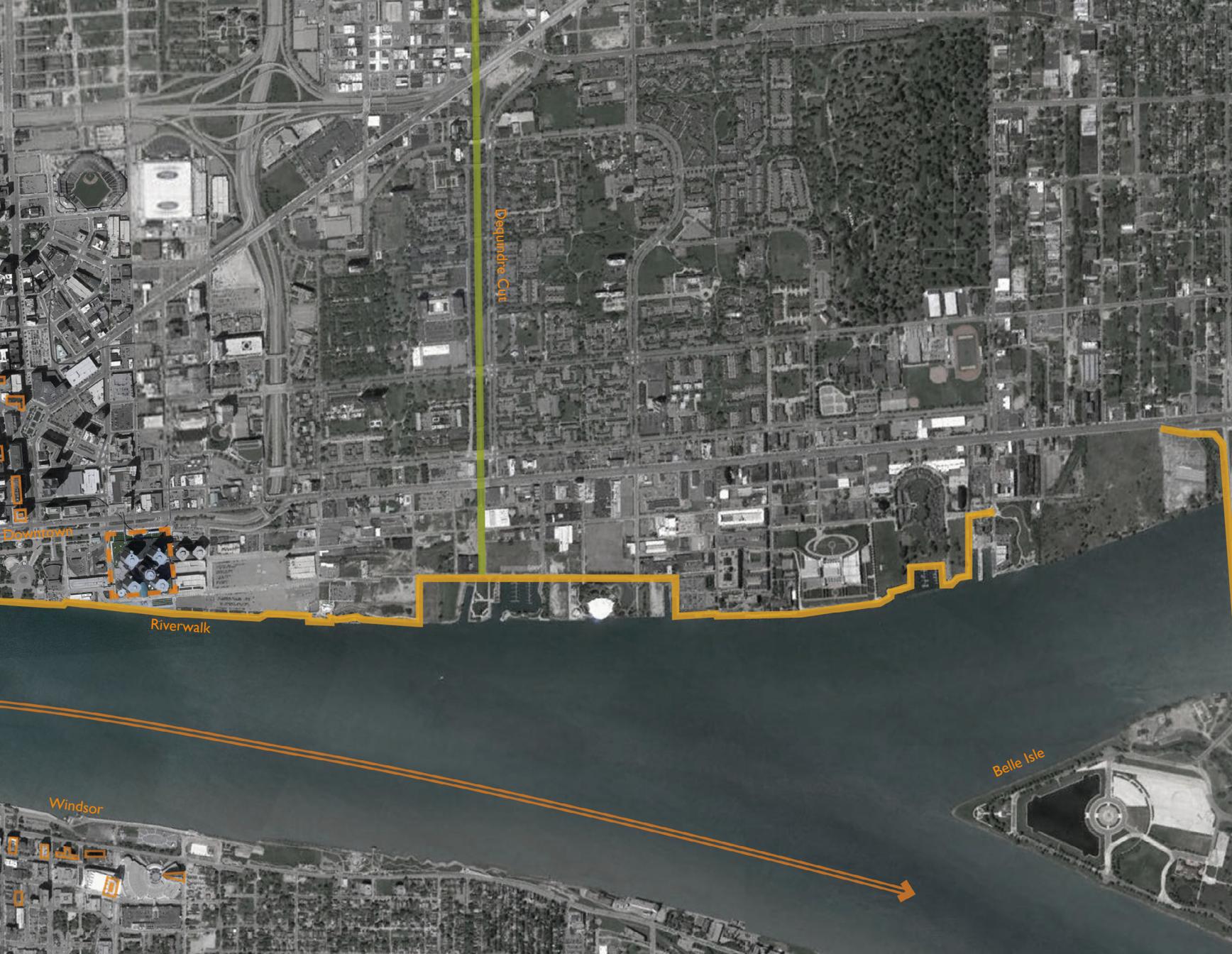
Corktown

Site

Ambassador Bridge

Freighter Route

R.R. Tunnel



Downtown City

Downtown

Riverwalk

Windsor

Belle Isle

Urban Framework for Action

The intentions for the project are to design a public space that encourages reinterpretation of actions and program. Since these contradictory events are often unpredictable, the challenge will lie in how to design a space so that it can be used in unimagined ways. Since designing for all possible programs is not an option due to the problem of the open plan, the best option is to design for a specific program while keeping in mind that the goal is for the conventions of the site to change. The most suitable design program for the project is for a park since the primary function is leisure and the architecture takes no qualms about operating in a more “useless” manner.¹¹

A component of the park will also consider the potential to be used by creative users as a means to demonstrate reinterpretation of space. These installations, artworks, structures, or landscapes will be meant to either reinterpret the relationship between activity/event and space or the relationship between Detroit and its River. The

primary form of encouraging transgression is for the transgression to already be present. Few people want to be the first to perform an act that defiles the norm, but once one person has done it, others will deem the activity acceptable and are more likely to follow. The installations on the site will be used to similarly encourage visitors to become more creative users of space rather than habitual or stagnant ones by leading actions and spurring further growth. By circulating installations and bringing in new artists, the experiences and transgressions can always be changing themselves in order to avoid becoming mundane.

Precedent: Wyly Theater

A precedent for this type of framework can be found in the Wyly Theater designed by OMA for the Dallas Theater Center. The DTC is an innovative group that previously worked in a large warehouse so that the theater could be rearranged to fit the group's needs for any particular show. With this new theater, OMA turned the typical theater organization around by ninety degrees so that a vertical organization was reached. By using a system where the exterior walls could be raised and the seats are able to be configured in any number of ways, the space is able to be transformed infinitely. This way, the theater group did not have to anticipate their future layout needs, but now know that the space can be adapted to fit almost any production.¹²



OMA. Wyly Theater. Dallas, TX. 2009.
Photos from OMA.eu

Precedent: Bordeaux Bridge

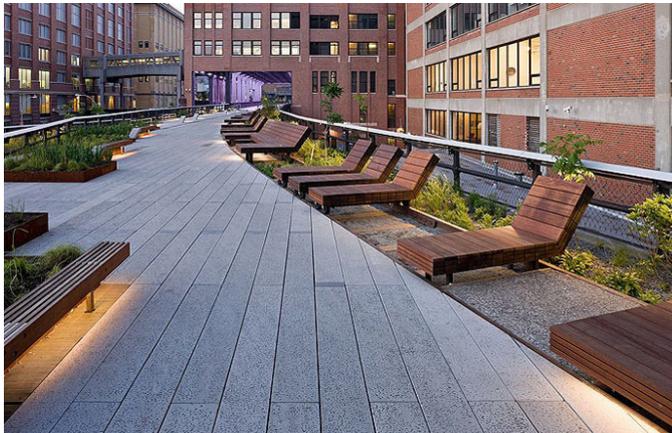
The Bordeaux Bridge proposal by OMA accomplishes a similar goal to the theater. The bridge takes on a simple form to fulfill functional needs, but is made to be extra wide so that the bridge can double as event space. Clément Blanchet states, “The bridge itself is not the ‘event’ in the city, but a platform that can accommodate events of the city.”¹³



OMA. Bordeaux Bridge. Unbuilt. Bordeaux, France. 2013.
Photos from Dezeen

Precedent: The High Line

Another good precedent for this framework is the High Line in New York. Although well known now, this project practically invented the elevated greenway and utilized an elevated railroad track in a way that nobody thought possible by turning it into a public park. The High Line succeeds in adapting to ongoing use of the site and reinterpreting the activities that happen there very well. As just one example, the High Line passes under the Standard Hotel where guests sometimes leave the windows open. This will occasionally give High Line visitors a view of illicit activities, but becomes entertainment none-the-less. In another location, an opera singer would step out to the balcony of her nearby apartment and sing free shows to anyone who cared to stop and listen. These events are both exceptional in their own right, but the combination of the two led to an idea for a walking opera. As one travels along the High Line, the different scenes are arranged along the path and the show can be viewed in its entirety only by walking from one end to the other.¹⁴ Event and architecture have been brought together as one in a truly unexpected way.



Top: Standard Hotel above the High Line. Photo from Wikipedia Commons
Bottom: Sliding chairs allow interchangeable layouts. Photo from Designrulz.com



Elizabeth Soychak sings a free show from the fourth floor fire escape near the high line.¹⁵
Photo by Jessica Dimmock for the New York Times

Site Proposal

Initial studies for the site involved barges that could be reconfigured throughout the year so that the site was constantly evolving and changing with each visit. The barges could be used as bridges, stages, event spaces, or any other function that could be imagined. Other site elements could have included bridges on rails that could be manipulated by guests to conform to whatever change they desired. Although these studies were interesting in terms of motion, the project required a site that utilized less structure. By imparting so much control in site development, the guests can already expect what they are meant to do. By seeing a bridge on rails that is expected to slide, the process of discovery is removed. Discovery of an experience is at the opposite end of the spectrum from mass awareness and presented a constant struggle to resolve both problems. In order to allow for moments of discovery for creative users or makers while still providing awareness to a mass audience, a loose framework into which new pieces can fit into place proved to be the ideal solution. This also supports the idea that the site should not be overdesigned by just one person. By having one person or firm design a master plan for a large site, only one interpretation is allowed instead of many possibilities. By designing a framework that other makers can fit

into or change, the site allows an opportunity to constantly evolve instead of remaining static.

The new site would start by linking activity from downtown to the site. The riverwalk would be extended into the river, in front of the Riverfront Apartments' harbor. Once past the apartments, the riverwalk would branch back to the site but also continue forward on its path through the water. Two "islands" in the river would stand as elevated plazas that would be linked to the continuous path by bridges. These island plazas create an event or gathering space that is a contradictory relationship of land and water. They would present views back to the land that could otherwise not be seen except by boat or from Canada while also allowing interactions with the water on a more intimate and adjacent level. One of the islands would also ramp down into the river so that when walking that path, the river could be felt rather than just seen.

To prevent another dead end of activity, the actions need to continue through the site and not just onto it. In this sense, even the word "site" is used loosely since experience is tied to all surrounding elements and does not end at an arbitrary site boundary. To continue activity, the

riverwalk would ideally continue through the end of the site and go on towards the bridge. This path could eventually link with Riverfront Park on the other side of the bridge and would help to fulfill the “bridge to bridge” goals for the riverfront. An alternative path could extend up Rosa Parks Boulevard and act as a greenway to Corktown. On the eastern riverwalk, the Dequindre Cut greenway acts as an aesthetic and safe pathway that links the Eastern Market to the riverfront. If Rosa Parks Blvd could have the number of car lanes reduced, then the extra space could support the planting of trees and pedestrian/biking paths. Corktown and the riverfront would both benefit from this connection and it would also present the first pedestrian friendly path from Corktown to downtown. This connection is strengthened by the people mover station at the current end of the riverwalk because it is a source for more people to enter or exit the site. This would become especially true if Joe Louis Arena is demolished after the new stadium is built, in which case the station could specifically service the riverfront.

The site is imagined to be left as a grassland or wetland along the river, as mentioned earlier, so that the large area can serve as an empty framework into which new interpretations can be built

or placed as time passes. The advantage of having a marshland on the site instead of the existing grass field is that the marshland is a positive resource for both the land and river. The marshland supports local wildlife, treats storm water, provides a buffer from the river, and does not have to be watered or mowed. It is also more scenic to look at and does not look empty like an empty grass field would. It could be arranged similar to the marsh at Milliken State Park, but at a larger scale that is allowed to actually interact with and grow in the water rather than serving as just a demonstration. Historically, the marshland is representative of the Detroit River’s natural state as well.¹⁶ As time goes on, makers and creative users would be encouraged to develop small projects within the site that could fit into the marshland system. Even if portions of marshland had to be removed for these interpretations, the wetlands serve only as a place holder until new interpretations can be made. Even as a placeholder environment, the marshland typology could display the benefits of green development in the urban setting and hopefully spur the greening of other nearby areas.

Next Page: Site Proposal



Rosa Parks Blvd

Observation Tower

Exhaust Building



Harbor

Harbor

Within this framework, several areas have been identified that would be ideal for re-interpretive opportunities. Reinterpretations are not exclusive to these locations, but have simply been identified as key assets for the site. The first area is the sheltered harbor at the eastern start of the proposed riverwalk extensions. This area is protected from the strong current of the river and from the flow of ice in the winter time. Since it has easy access to the riverwalk, this area could be used as an opportunity to give access to the river by acting as a swimming area in the summer or ice rink in the winter.



Harbor
Photo by author

Precedents



Top: Plus Pools Photo from Pluspool.org
Bottom: BIG, Big U Photo from Dezeen

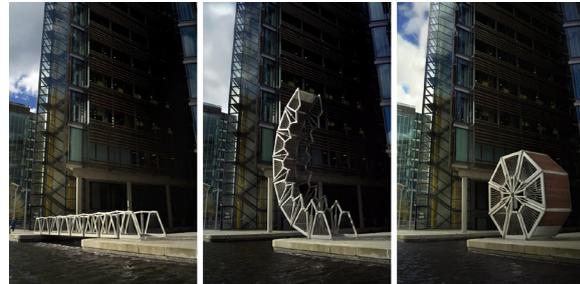
Bridges

The next opportunity lies in the multiple bridges that would be used on the site. In particular, the bridges in front of the apartment harbor would need to allow boats to pass through occasionally. There are a variety of ways to meet this condition and they could be re-evaluated every few years to provide creative solutions to the problem and encourage flows of movement.



Bridge location at dock entrance
Photo by author

Precedents



Top: AZC, Trampoline Bridge Photo from Zundeacristea.com
Bottom: Heatherwick Studios, Rolling Bridge Photo from Heatherwick.com

Exhaust Tower

The exhaust building easement cannot have activity on its property, but the flat, wide surfaces would be conducive as a projection screen. Sloped seating could be built along the path of the railroad tunnel as an indication of its presence that informs the visitors about the below-ground structure while also creating an outdoor theater.



Railroad tunnel exhaust easement
Photo by author

Observation Point

The final area of interpretation is the freighter viewing point. This point in the river gives the widest views of the river in Detroit and is one of the few areas where the passing freighters can be seen approaching directly at the viewer. This area holds great opportunity as an observation point for passing freighters, the Ambassador Bridge, and the river in general. As an example of projects that could fit into the larger framework, this area has been developed further in the project.



View of Ambassador Bridge
Photo by author

Precedents



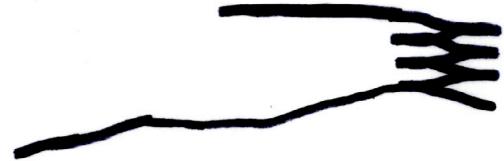
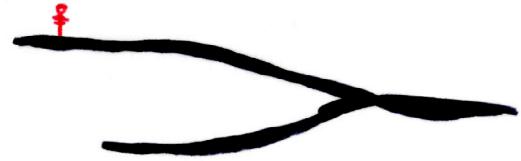
BIG, St. Petersburg Pier Concept Photo from big.dk



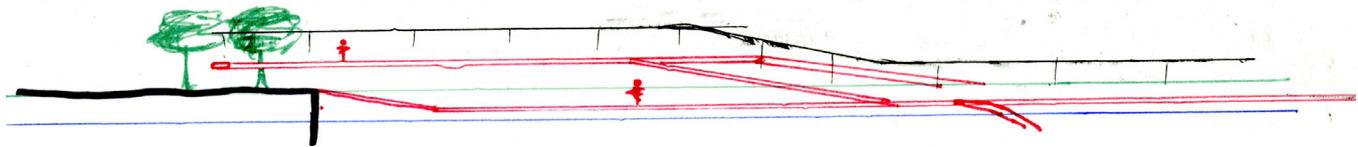
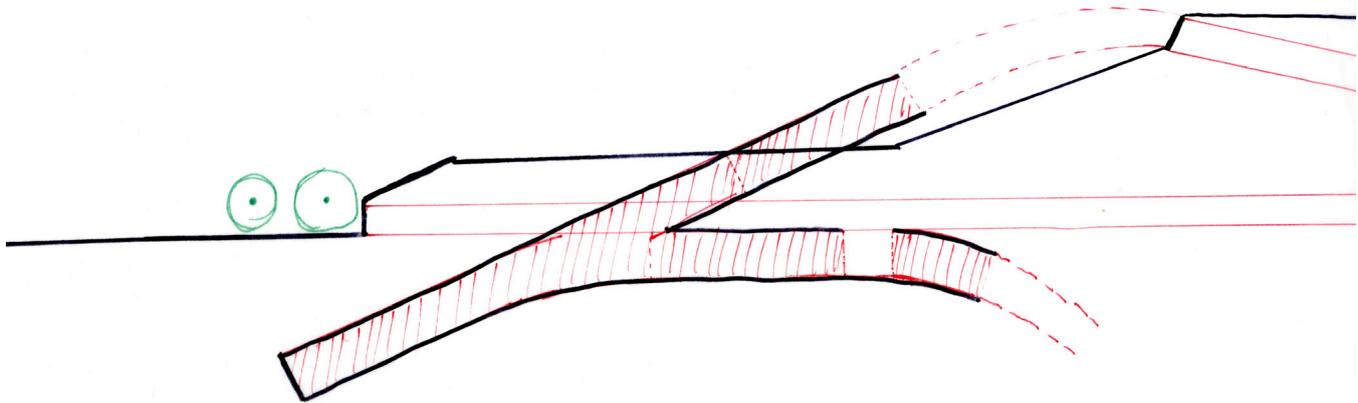
Reiulf Ramstad, National Tourist Route Photo from reiulframstadarkitekter.no

Observation Tower

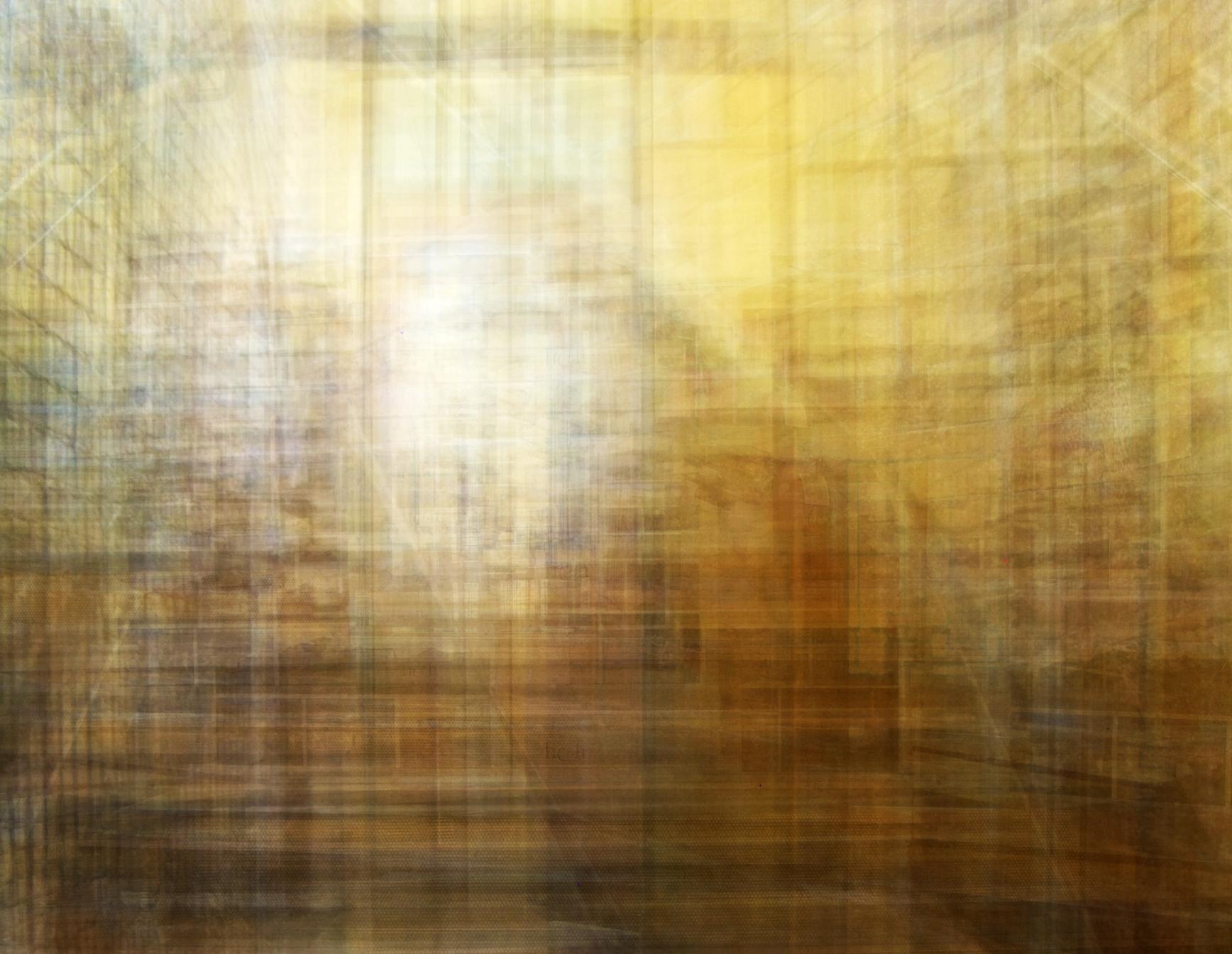
Early sketches of the pier for observation incorporate a gently sloping ramp from the mainland, which is eight feet above water level, and a lower path at water level that sweeps away from the riverwalk path to approach the tower. The riverwalk path also continues underneath the higher pier to rise back up at the end of the site and carry on towards the Ambassador Bridge. A tower was decided to be utilized at the conclusion of the pier because it would allow more interesting views and give special significance to that particular location. Externally, the tower will also act as an icon and way finding point on a site that is currently empty.



Early sketch studies of the observation point typology in section
Drawing by author.



Top: Sketch of plan layout
Bottom: Sketch of pier levels in section



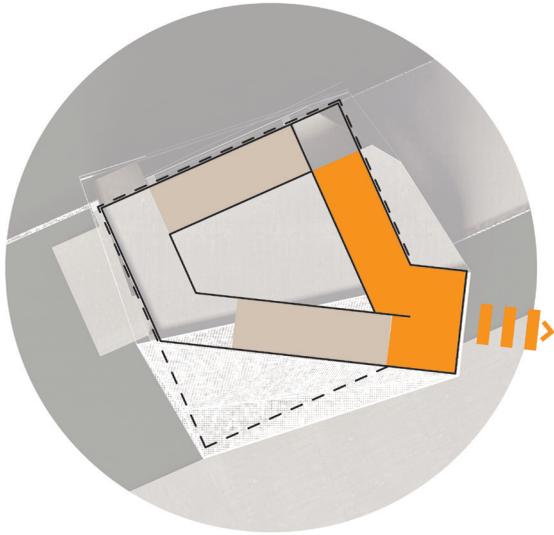
The stair collage served as an inspiration for the tower since it gave an idea of how the action could relate to the space. Despite the spiraling movement, the upward view was always framed but the constantly changing sides were masked. It was the author's hope that this relationship of ascending stairs with the stairway form could inform the new design.

Opposite: Action Collage Ascending a Stairway
Image by author.

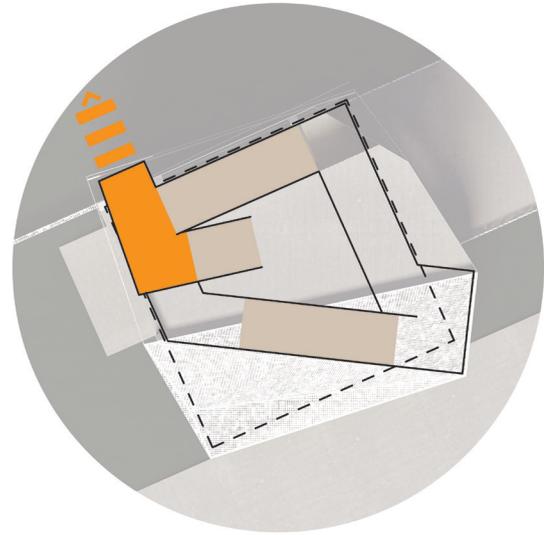


The massing study for the tower envisioned a winding staircase enclosed in a larger rectangular form that is only partially transparent. The skin of the structure's envelope was decided to be perforated metal panels so that the external views were always present when ascending the tower, but obscured in a way that makes the open areas more significant. When the stairs or paths open out from the envelope and the screens are not in the way, the result is a view that is made much more significant than if the approach had been open to the exterior completely. At these viewing platforms, the removal of the perforated screen frames views of the approaching new riverwalk extension, the Michigan Central Railroad Station in Corktown, and the downtown skyline before reaching the top and providing a panoramic view of the river and the city. The emphasis inward to the city while rising up the tower creates one of the few places where a Detroiter can rise above the buildings and see a view of the urban realm, especially on the west side of downtown. With multiple views framed before reaching the panorama above, the act of ascending the tower becomes just as important as the eventual climax.

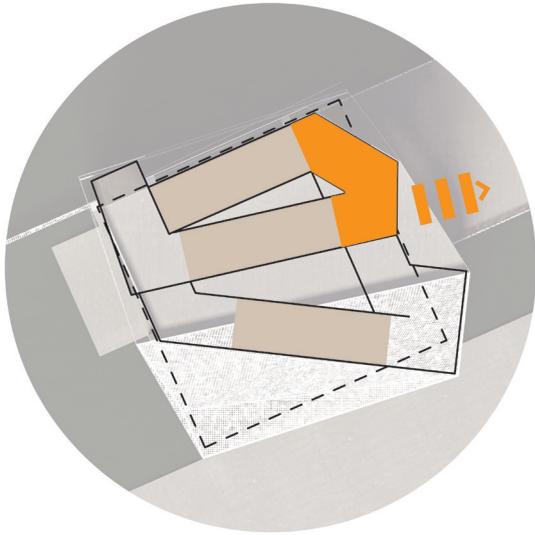
Opposite: Tower Perspective facing Windsor
All renderings by author.



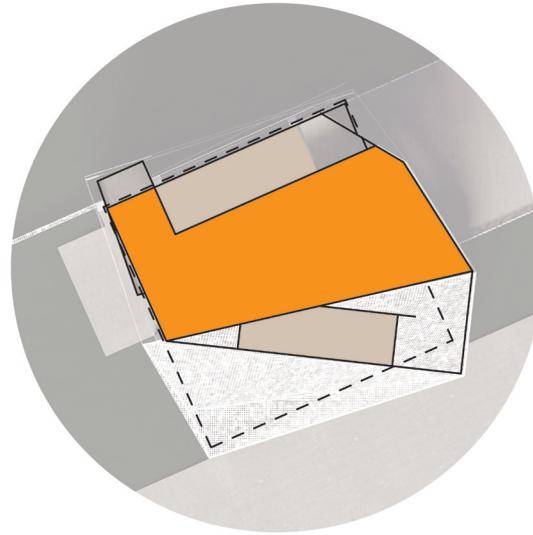
Riverwalk Viewing Platform : The first viewing area while ascending allows a view that aligns to the new riverwalk extension since the tower acts as a terminus to the path



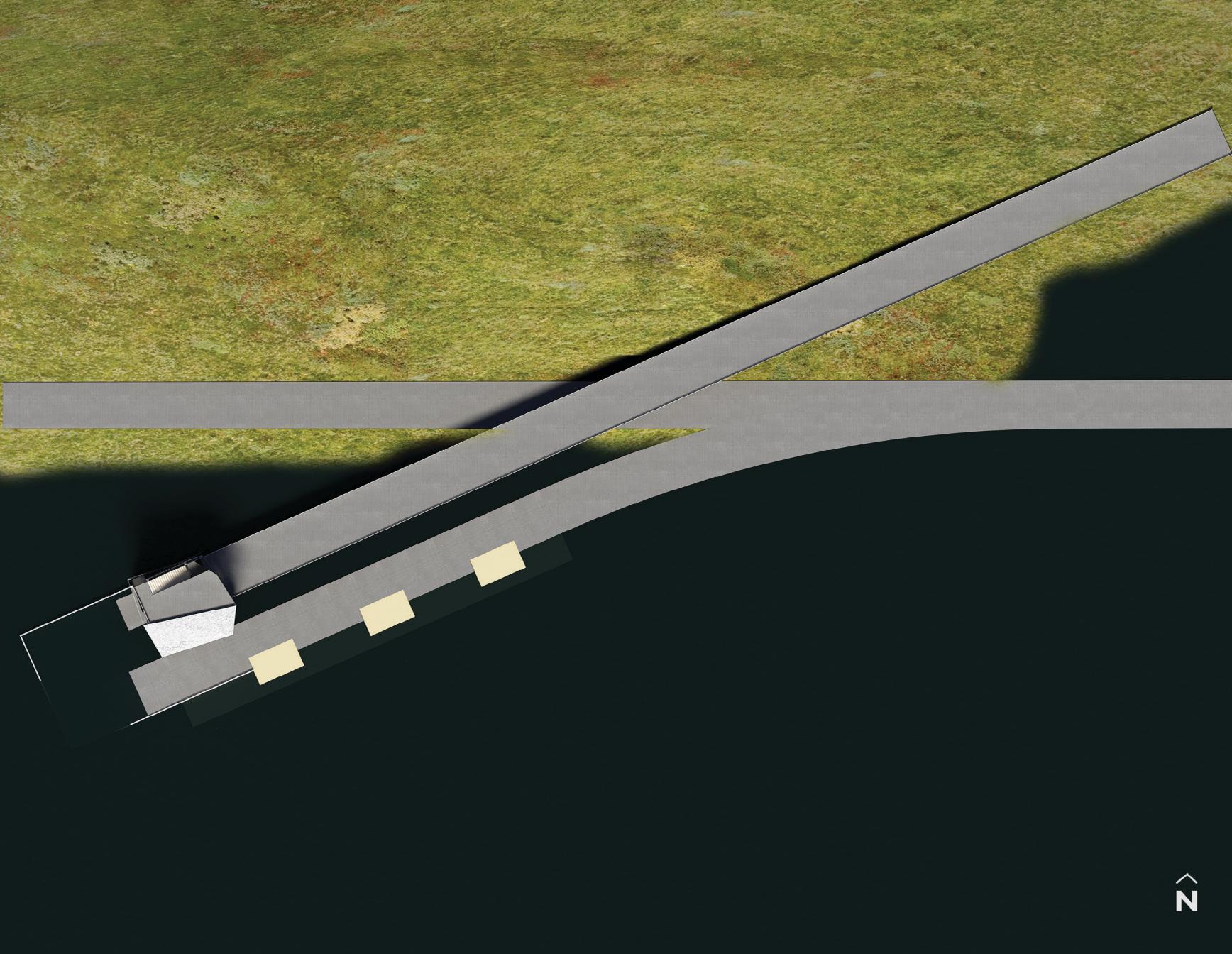
Corktown Viewing Platform : The second platform reaches a height where the Michigan Central Station landmark can be seen above the nearby buildings

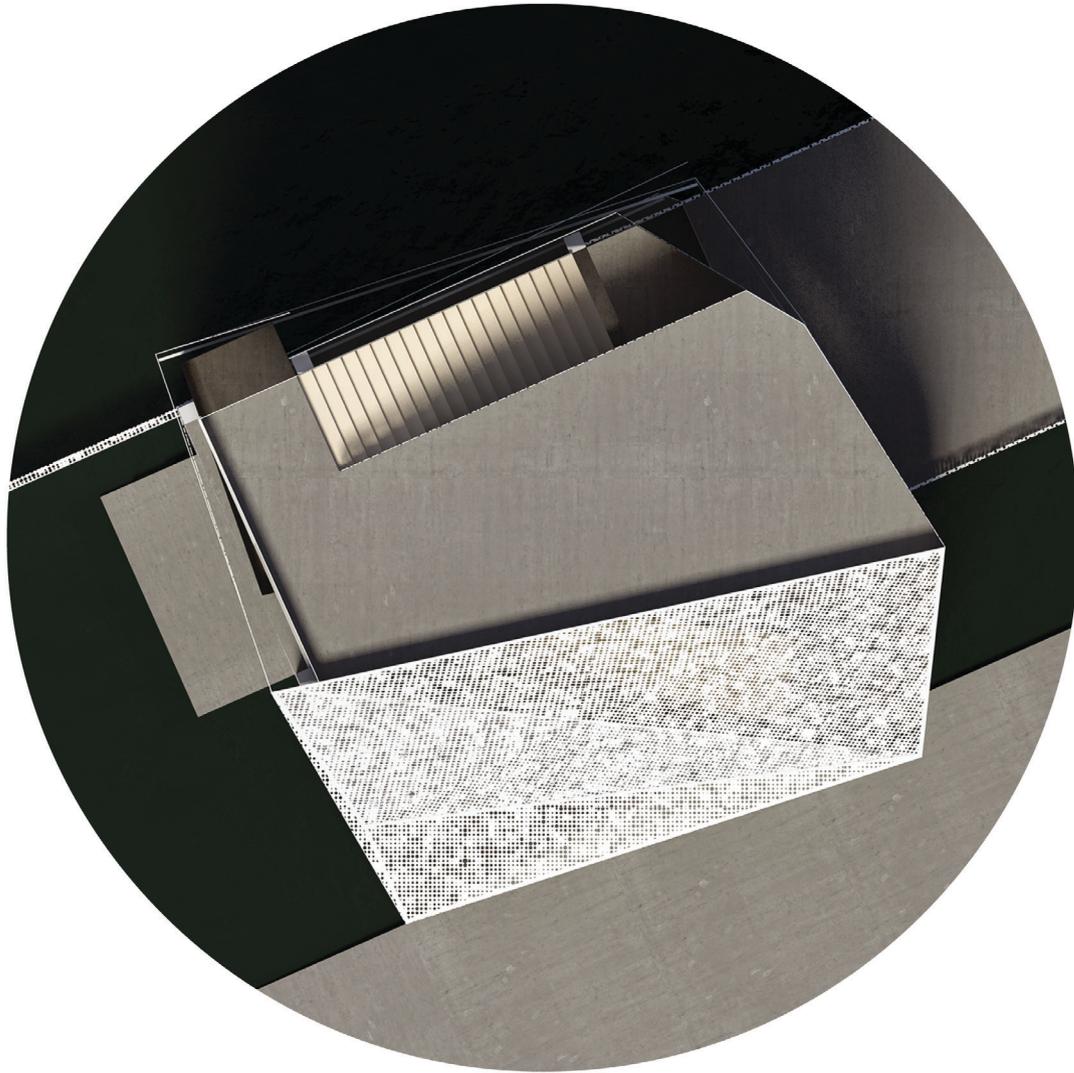


Downtown Viewing Platform : This platform offers a wide view of the downtown skyscrapers



Top Viewing Platform : Upon reaching the top of the tower, the visitor is granted a panoramic view of any passing freighters, the river, and the city.







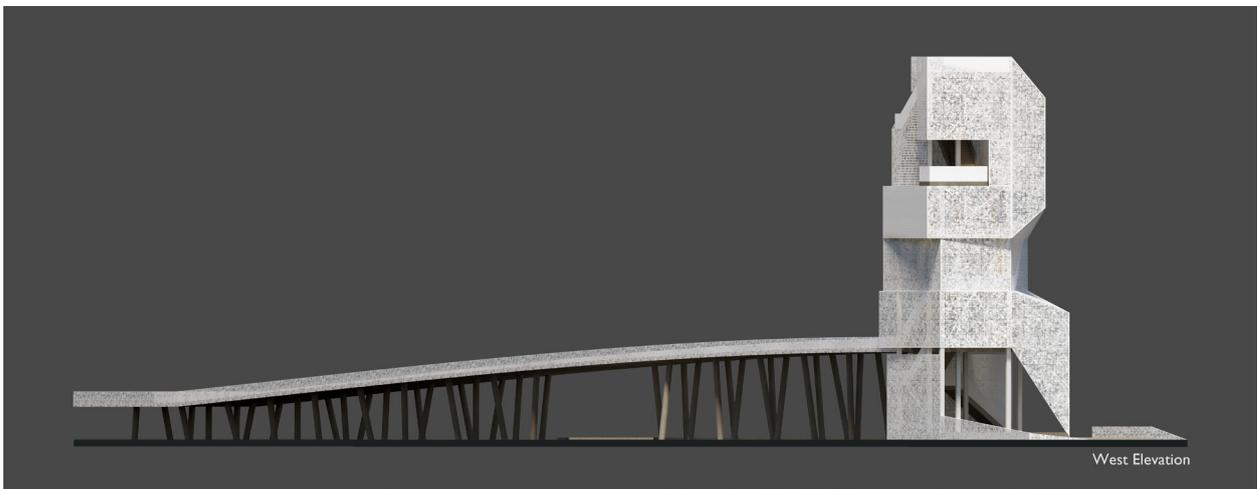
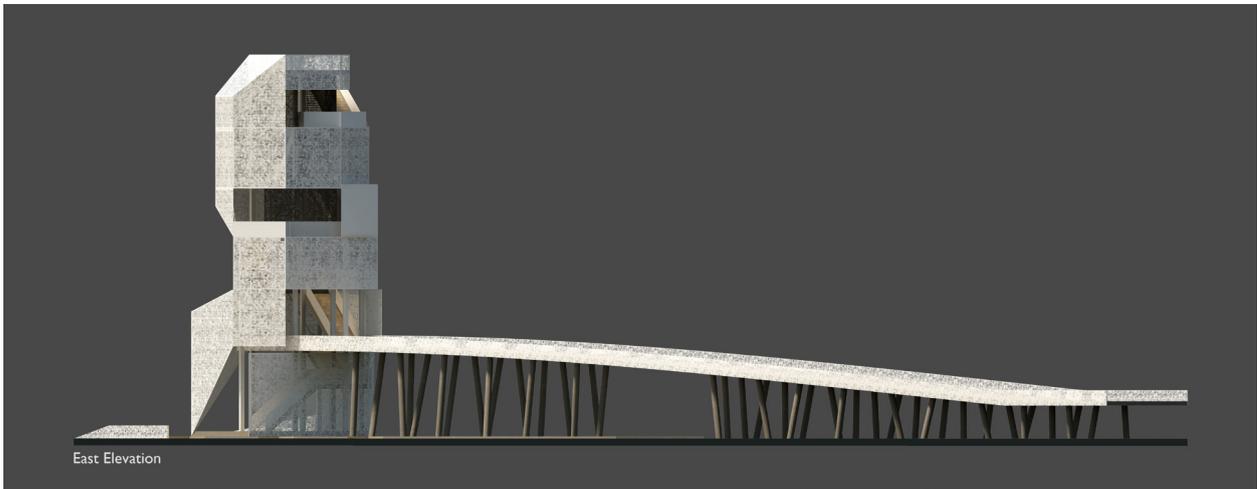
View from the top viewing platform, facing the Ambassador Bridge



View from the downtown viewing platform; the metal screens dissipate to set up a dramatic scene

The envelope of the structure also wraps and conforms to the interior paths to sculpt the path of ascension. The goal was to create an interior that both frames the stairs tightly so that visitors can get a glimpse of what is outside and to allow an airy interior that provides views down or up into the tower to see the other guests moving about. The exterior of the tower also had to be carefully considered since it would stand as an icon on the site. The tower, in a way, is a subtle nod to the fact that no major development ever made it to this site and marks a new point going forward. The forms of the tower are fractured and angular, suggesting the motion that happens inside. These forms also visually wrap around the building in order to provide a cohesive form. The five sides of the tower all feature a different form and different elevations so that to fully understand the tower, one must travel around it in various ways. The appearance of the tower from land will be a different facade than what someone would see from a boat on the river.

Previous Spread: Site Plan and aerial view of tower and piers



Top: East Elevation Bottom: West Elevation



Each elevation presents a different facade so that the iconic nature of the tower differs from various vantage points. This also encourages that visitors move around the tower to fully understand the form.
Top: North Elevation Bottom: South Elevation

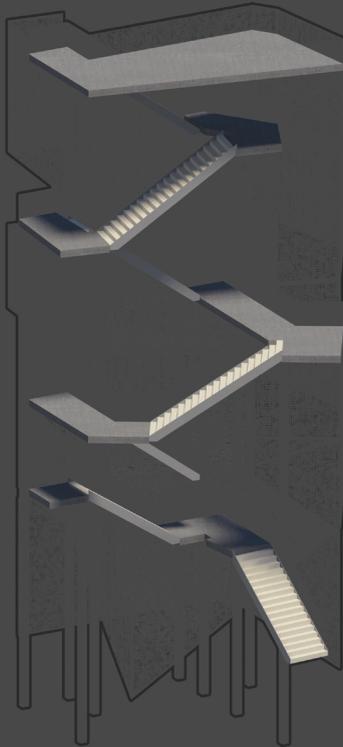


The upper and lower piers to the tower are both wide enough to accommodate the movement of crowds and be used as an impromptu gathering space if desired. The upper pier reaches the tower and allows access to above and below so that visitors can not only see the river, but get up close to it as well. At the base of the tower, the path gently slopes into the river and into an enclosed pool area so that the river can be experienced in a more tactile way. This area also presents the ability for the waves to wash up onto the path so that the sounds of the river can be heard. This experience can also link to the passing freighters by allowing guests to feel the wake left behind. The waves from the freighters passing will result in higher waves on the path and will generate a brief encounter that is similar to an “aqua alta” experience found in Venice.¹⁷ The approaching lower pier could even have removable wooden rafts that would gently float on top of the river’s surface so that the changing wave conditions could be felt without having to physically enter the water.

The Querini Stampalia by Carlo Scarpa utilizes the changing tides of Venice, “aqua alta” in a very experiential way. Photo by Archituck at Wordpress.com

Right: Perspective facing northeast

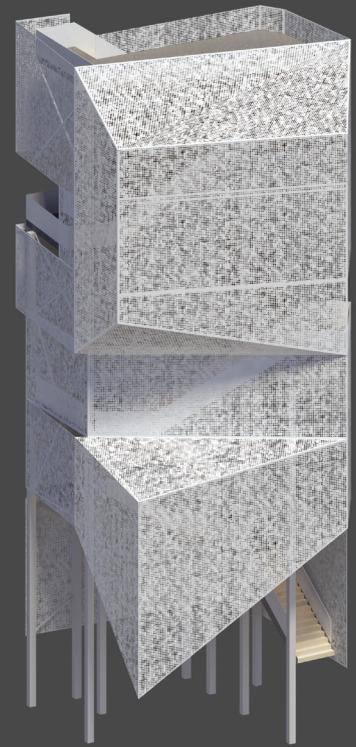




Path



Structure



Orthographic

The tower is currently only a concept since it does not yet provide handicap accessibility to the top of the tower. The structure is also incomplete, but has started to be suggested at this point. The lower pier is an important piece of the tower's existence because the concrete path would act as a break wall that extends to the bottom of the river. This foundation would deflect ice flows away from the tower to protect it from damage in the winter. As for the tower structure, the concrete stairs are supported by a partial grid of columns that extend to various heights in the tower. These columns are located on the outside of the stair structures and would also support the webbing for the perforated skin on the other side so that the paths and the skin are displaced by the columns' width.

Left: Stair arrangement, structure, and orthographic view



The tower is a terminus of action at the end of the riverwalk extension and stands to emphasize the experience of the river. It is meant to relate as just one possible interpretation for this site and give an example of the types of projects that could happen at the other areas that were pointed out. An important note of the tower is that even it should act as a framework, like the site. The architecture is not a sacred object and can be enhanced or modified in ways that help bring about a new understanding of interpretation. The tower has been depicted here with other possible reinterpretations as a structure to house a water slide or a rock climbing wall, but could become an artist's canvas for whatever new meaning it is given. The structure was designed to enhance the current actions but also allow new, unforeseen activities to occur. Whatever change is brought to the site, permanent or temporary, the action of change should be embraced.



Left: Perspective facing the tower from the upper pier

Top: Potential reinterpretation of the tower as a rock climbing wall
Bottom: Possible water slide attachment to the structure

Next Steps

The themes of these studies seem to suggest a body of work in the scale of spatial actions. If the project were to continue forward, it would follow this trend and move on to the next scale of action: the individual person. This scale was touched upon earlier in the site studies with the bridges on rail and moveable elements. If the scale of actions were to be studied at this level, it could fit within the framework of the site or the tower and start to explore ways that those spaces or objects could be manipulated not just by makers, but by anyone who visits the site.

Right: Perspective view upwards from the lower pier



Conclusion

The final conclusion from these studies did not provide a design solution, as originally thought. Rather, the method of allowing for actions and event in architecture is more of a philosophy to be integrated with design. No project should be held sacred and anything can be modified. By crying foul on acts of “art upon art,” dynamic creation is withheld. To design for actions that cannot be anticipated, a program must be developed with some aspect of ambiguity. It was mentioned before that open plans rarely provide any optimum use, so a project should still strive to meet a certain function. It is when this function becomes too strictly tied to a building that future activity is stifled; a building that is designed to perform only one function is more difficult to adapt to new actions. In a way, the work that the Detroit Collaborative Design Center approaches

this method by designing spaces in verbs rather than programs. The spaces or organized to accommodate sitting, eating, or walking, instead of offices, lunchrooms, and hallways. It is not a complete method, but starts to push in the right directions.¹⁸

These studies did not hold one consistent idea, but flowed in an evolutionary process. Many strands of related theories hold the studies together to form a deeper understanding of the relationship between action, experience, event, and space. From the representation of architectural actions and spatial time, to the proposition of action-based sites and structures, this project is the conclusion of one body of work that could easily be carried on into the future.

Right: Perspective view from the lower pier



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