AN EVERYDAY MONUMENT: ARCHITECTURE AS A FRAME TO REVEAL THE HISTORICAL AND LIMINAL SITE

by

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ABSTRACT

The city is a manifestation of culture, containing its history and informing its transformation. The preservation and erasure of the historical city through policy and regulation distances its artifacts and liminal spaces from the everyday lived experiences of its users. By creating a metaphorical barrier between user (observer) and historical artifact or space (that which is observed), the user is no longer involved in the transformation of the city. The architecture of the city ceases to serve as an archive for the history of its cultural evolution.

The historical and liminal zone along the former East-West Border in Berlin is one instance of this phenomenon. This thesis analyzes 'site,' highlighting aspects of its history and existing conditions through an architectural framing to enable its artifacts and spaces to become part of one's lived experience. It engages vision and movement in an experiential line of constructed perspective(s) that encourage interaction between user and context. Herein, the architecture of the city becomes again a resource for cultural and physical transformation.

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CHAPTER 1: INTRODUCTION

A building is not an end to itself; it frames, articulates, restructures, gives significance, relates, separates and unites, facilitates and prohibits. (Pallasmaa 1994, 35)

The Historical and Liminal City

Over the past century, the architecture of the city has been built, destroyed, divided, and then rebuilt, each time according to the dominant economic or political system. Since 1989, Berlin has been newly cast as a multicultural capital of tourism, arts and entertainment, innovation, and commerce, inviting yet another round of reevaluation of its architecture. Its informally inhabited relics—leftovers of its industrial age, its destruction during WWII, its division during the Cold War, and its reunification after the Fall of the Wall in 1989—are being bound by policies of zoning and redevelopment. The selective preservation of these historical artifacts, liminal spaces, and zones to commemorate situations passed is protecting them from the transformative effects of the evolving cultures of their would-be inhabitants.

Further developing this idea, Christine Boyer, in *The City of Collective Memory*, posits that the collective memory of public places is being undermined by 21st century practices of architecture and urban planning that resituate urban artifacts in a context of vastly changed circumstance and desires (Boyer 1994, 32). The creation of a series of rules or regulations to preserve the historical city and its form is limiting the engagement of its citizenry with the architecture of the city. As such, the lived experience of these artifacts and spaces is coming to a grinding halt and fracturing the form of the city into two cities, one that is preserved as a memorial to the past and another that is lived.

Lived Experience and Collective Memory

The notion of "lived experience" was developed by Merleau-Ponty in his *Phenomenology of Perception* to describe the unique relationship between the observer and that which is observed.

The world is not what I think, but what I live through. I am open to the world, I have no doubt that I am in communication with it, but I do not possess it; it is inexhaustible. (Merleau-Ponty 1945, 16-17)

When urban context is separated from the lived experience of its citizens, its artifacts

and liminal spaces alike cannot contribute to the growth and vitality of cultural life. As described by Also Rossi in *The Architecture of the City*, the city is

not only the place of the human condition, but itself a part of that condition and is represented in the city and its monuments, in districts, dwellings, and all urban artifacts that emerge from inhabited space. (Rossi 1982, 64)

Locked in place by institutional and economic forces that are driving the redevelopment and transformation of Berlin, such protected artifacts become unchanging signifiers of past notable times and spaces. As such, they no longer function as repositories of collective memory and their contribution in the continuing development of the city and the everyday lived experience of its citizens becomes questionable.

The Historical and Liminal Zone of the Berlin Wall

The Metropolis of Berlin is rezoning its liminal spaces to allow for their reappropriation and redevelopment. The former East-West border of Berlin stands as one of these liminal zones experiencing tensions between heritage and economic value. Along this former border, portions of the Berlin Wall and the liminal zone formerly known as "No-Man's Land" are being protected in various ways: preservation, reappropriation, and erasure. In site "B," in the residential district of Wedding, pieces of the wall are being reincorporated into new housing developments along the former "Death Strip."

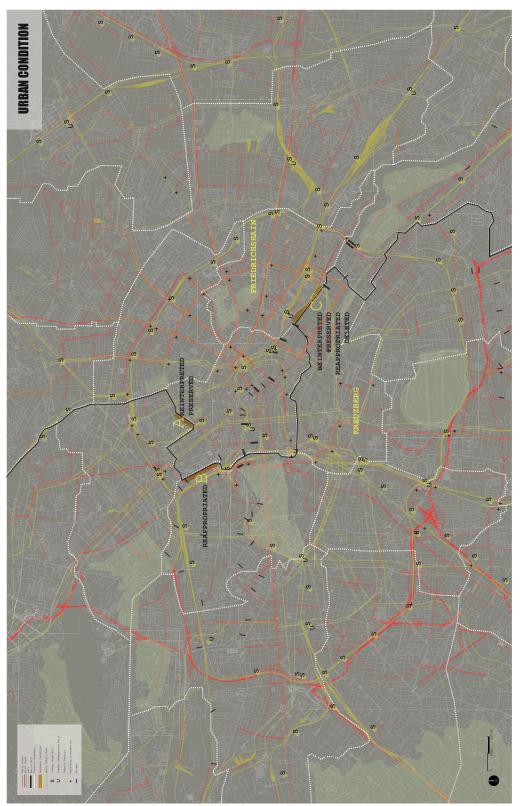


Site B, Preservation of artifact, New Housing Development in Wedding, Berlin, 2015

In site "A," in the commercial and touristic district of Mitte, a line of rebar and a memorial park mark the site of the Berlin Wall without preservation of the wall itself.



Site A, Preservation of zone, Bernauer Strasse Memorial in Mitte, Berlin, 2015





In site "C," in the Friedrichshain-Kreuzberg district, both the wall and the zone of "No-Man's Land" have been preserved as a memorial commonly known as East Side Gallery and serve as the site of exploration for this thesis.



Site C, Preservation of artifact and zone, East Side Gallery in Friedrichshain-Kreuzberg, 2015

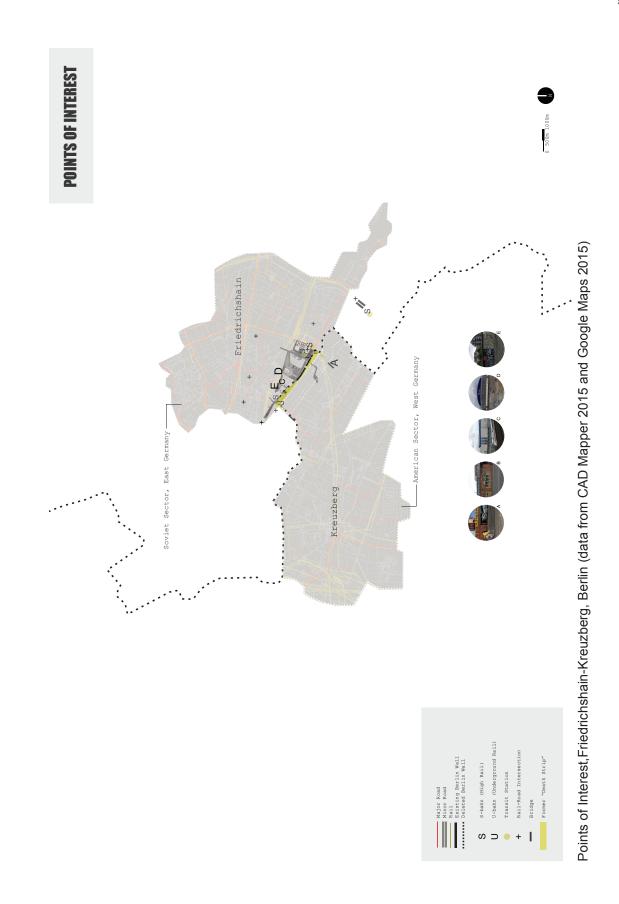
The Liminal Site

The current form of this liminal zone is a repository of its historical identities; as a port of exchange; a border between East and West Berlin; and a social hub of informal artistic and entrepreneurship activities. The North and South banks of the River Spree in the Friedrichshain-Kreuzberg District are replete with abandoned warehouses, 19th and 20th century heritage buildings, and historical war remnants as well as a dense network of transportation infrastructure and new commercial and residential developments ("Points of Interest"). Its built form is currently home to start-ups, bars, nightclubs, restaurants, hostels, and informal public spaces.

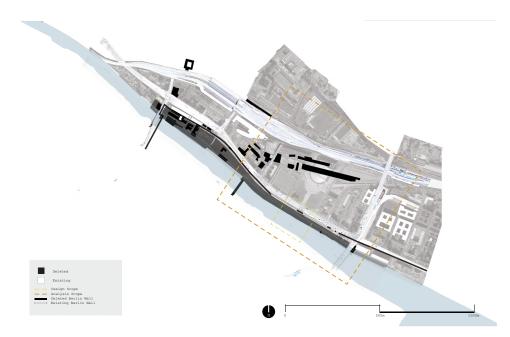
Mapping History

The history of the liminal site can be found in both its form and its formation. Though defining characteristics may shift and evolve as its architecture passes through historical epochs or as it is replaced by new programs or built forms, the site itself stands in a process of continual transformation. A mapping of a site over time allows for an understanding of this layered and varied identities with both the significant and nonsignificant aspects of its history. From such an understanding a formation of site can emerge that resonates with its temporal qualities.

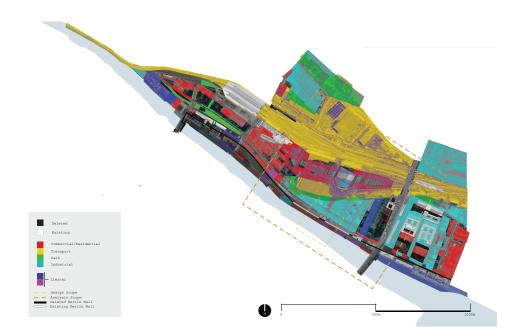
The following series of drawings map the transformation of the built form and use of the site over time to deliver a sense of its history. Traces of this history can be found in the entirety of its formation, both in what has been preserved and in what has remained ("Erasure and Permanence"). A layering of drawings of the architecture of the site at specific



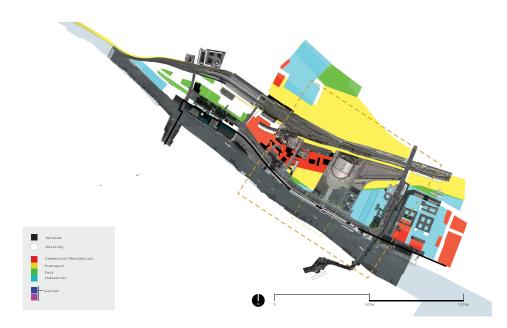
points in time enables visualisation of the transformation of site over time ("Transformation over Time"). Reading its existing condition alongside its historical condition reveals the current tensions and negotiations in and of its architecture ("Existing Condition").



Erasure and Permanence, Friedrichshain-Kreuzberg, Berlin (data from City of Berlin 2015)



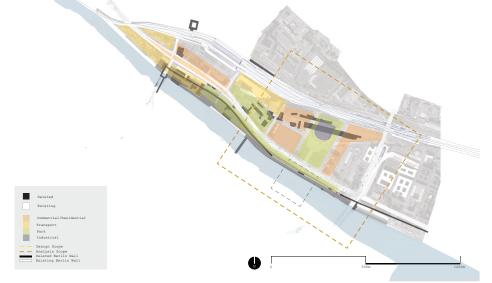
Transformation over Time, Friedrichshain-Kreuzberg (data from City of Berlin 2015)



Existing Condition, Friedrichshain-Kreuzberg (data from City of Berlin 2015)

Redeveloping the Liminal Zone

The location of this liminal site on the banks of the River Spree and peripheral to Berlin's City Centre has this area earmarked as prime real estate scheduled for intensive redevelopment over the next 15-20 years (City of Berlin 2015). To accommodate new commercial and residential developments without entirely writing over the zone's history, its historical relics—portions of the Berlin Wall, sections of the former "No-Man's Land," and the remaining buttresses of the war-destroyed Brommybrucke Bridge—have been designated as preservation areas ("Zoning").



Zoning, Friedrichshain-Kreuzberg, (data from City of Berlin 2015)

The city's recent proposal to redevelop this underused riverfront, home to informal clubs, bars, small-scale entrepreneurs, and artists, has sparked heated dialogue on the effectiveness of preservation policies and regulations and the gradual deconstruction of its cultural and historical identities. Existing tensions are demonstrated in the debate around the construction of Living Levels, a 63 m luxury condominium nicknamed the "Death Strip Condo" which has resulted in both the visual and physical deletion of preserved moments of the Berlin Wall. Sections of the East Side Gallery were removed to make way for its construction.



Protests to Living Levels, 2012 (image from CityLab 2012)



Protests to Living Levels, 2012 (image from CBS News 2012)

Its situation directly across from the Brommybrucke Memorial, a viewing platform that marks the former location of the war-destroyed Brommybrucke Bridge, blocks pre-existing views of its historical context.



Brommybrucke Bridge, 1909 (image from gettyimages 2015)



Brommybrucke Monument, 2015



View from Brommybrucke Monument, 2015

Therefore, to prevent future instances of high-rise developments along the North and South Banks of the River Spree, Berliners are in negotiation with the municipality to establish a 50 m setback between the edge of the river, its retaining wall, and all new developments. These attempts to negotiate and to zone for preservation indicate the importance heritage value to both citizens and the municipality alike and is commendable. The larger question is whether zoning and preservation policies are sufficient to encourage continuity in the collective memory of a historical and liminal site.

This thesis posits that the designation of a historical site through preservation designation or physical demarcation alone does not encourage the participation of these artifacts and spaces in the articulation and evolution of the culture city. It only symbolizes what is historically significant. This thesis seeks architectural techniques that engage user with context to augment preservation attempts through lived experience. It aspires to understand the possible ways in which the architecture of the city might engage its users with its historical and future formations.

Thesis Question

How can an architectural framing of a site construct the perspective of the pedestrian and presence its historical underpinnings and current debates through a lived experience of its context?

CHAPTER 2: VISION AND MOVEMENT AS METHOD

My movement is not a decision made by my mind ... It is the natural sequel to, and maturation of, vision. I say of a thing that it is moved; but my body moves itself; my movement is self-moved. (Merleau-Ponty 2012, 123)

Vision and movement are the core of the spatial experience of architecture (Holl 2000, 26). Our world moves in relation to us. Our perspective depends on how we are situated relative to what we are observing. It represents one moment in time, from one fixed position or point-of-view. And as we shift our gaze or our bodies, we create movement in ourselves and in our world. It is through this shift of point-of-view that we construct our understanding of space and also realize our situation in it (Holl 1994, 40).

Stephen Holl further describes the relationship between vision and movement in *Parallax*: "The movement of the body as it crosses through overlapping perspectives formed within space is the elemental connection between ourselves and architecture" (Holl 2000, 26). How we move, whether walking, driving, or biking influences our understanding of where we are and our situation in time and space. As we move through space, we actively compile a series of fragments, partial perspectives or details, that are brought together in our consciousness to create an understanding of our surroundings. When movement is stabilized, our cone of vision and point-of-view stabilize and result in a fixed perspective of ourselves relative to our situation. We sense change when movement destabilizes the fixed perspective. Therefore, the overlaying of multiple perspectives through destablization and restabilization results in a deepening of the spatial experience of context.

The depth of our spatial experience is influenced by our directionality, mode, and speed of movement. Another condition that affects our perception is when the axes of movement leaves the horizontal dimension, which destabilizes our sense of balance and heightens our awareness of our situation. Our balance is managed by our Vestibular system which helps to reorient us in space. During this reorientation, our spatial experience is multiplied towards a total immersion in context. This phenomenon is introduced in relation to architecture by Stephen Holl in *Parallax*:

Parallax—the change in the arrangement of surfaces that define space as a result of the change in the position of a viewer—is transformed when movement axes leave the horizontal dimension. (Holl 2000, 26)

It is in these moments of reestablishing our situation that new information can be incorporated into our perspective-in-construction to deepen our experience even further. The insertion of a historical image, video, or artifact in the immersive moment pulls the past into present and towards a lived experience of the historical site in its existing conditions. This thesis project explores architectural strategies that manipulate vision and movement to enhance the perspective of the observer and allow a lived experience of the liminal site.

Case Studies

The following section analyses four architectural case studies which demonstrate four unique crossings of vision and movement that connect user to context. These studies were used to help the development of design strategies for the thesis project.

1. Maya Lin Vietnam Memorial

The process of resurrecting memory can be experienced in Maya Lin's Vietnam Memorial. Its architecture positions the viewer on a path of gradual descent along a reflective wall. It establishes the ground as a datum line and moves the viewer vertically relative to this line through which the viewer can situate him-/herself in space. The vertical scale of the wall grows in relation to the height of the viewer to deliver a sense of growing gravity. The horizontal scale of the wall establishes a sense of path or journey and guides the viewer towards an end. Inscriptions in the shiny stone appear before the reflected image of the observer and breaks separations between the observer and that which is observed and presencing history in his or her current context.

Design Principles: Directionality, access, framing of view and blocking of context, materiality, scale, and relationship between body and artifact through a datum line



Maya Lin, Vietnam Memorial (image from Arts Everyday Living 2015)

2. Mies van der Rohe Barcelona Pavilion

The experience of unfolding space in time is manifest in Mies van der Rohe's Barcelona Pavilion through an intersection of movement, object, and perception. A series of framed and blocked views guides the user across a procession of experiences that frame the same context from multiple vantage points. The movement of the observer towards that which is observed plays with his or her experience of distance and engagement between him-/herself and the subject-in-view.

The Barcelona Pavilion is a labyrinth, a montage of contradictory, perceptual facts. Its meaning is generated through the experience of a circuit that suggests parallels with those of the English landscape garden ... [Its] meaning is ... given to sensual and temporal experience. While immersed in the experience of Mies' pavilion, the spectator is simultaneously distanced from it. (Constant 2000, 17)

Design Principles: Using relationship between user and context, blocked and framed views, and materiality to create an experience of distancing and engagement and to present context from different perspectives.

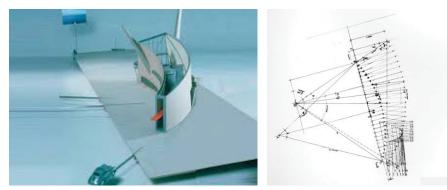


Mies van der Rohe, Barcelona Pavilion (images from Jason M. Kelly 2013)

3. DSNR Slow House

A site can be experienced directly and also indirectly through documentation. The architecture of DSNR's Slow House is a dialogue on the differences in experiencing the "authentic" and the "mediated." The weekend house is designed as a passage from physical entry to optical departure or, simply, a door to a window. The viewer is lead down a 100 ft long passage towards a large picture window with an ocean view. A video apparatus on the left of the window captures a view of the water and feeds a monitor in front of the picture window for the observation of the viewer. The juxtapositioning of the screen and picture window encourages a simultaneous experience of both the authenticated and the mediated view and an understanding of how the two might differ and relate.

Design Principles: Juxtapositioning projection and authentic views along a path.



DSNR, Slow House (images from DSRNY 2015)

4. Lois Weinthall

Lois Weinthall's work, "Berlin: A Renovation of Postcards," considers the memories associated with public spaces in the former East Berlin. This temporary installation invited the viewer to consider ways in which memory is a critical component in experiencing the built environment and to understand change.

The photomontages were installed as advertising billboards on the passenger station of the Friedrichstrasse underground station. Images of the historical site were embedded in images of its existing condition and challenge the viewer to confront the transformations of the physical landscape and their memory of these transformations. The positioning of these images in fixed perspective maintained a distinction between the observer and that which is observed. As such, the observer could reflect and compare his or her memory of the instance to what is being presented in attempt to reconcile or understand differences between the two images.

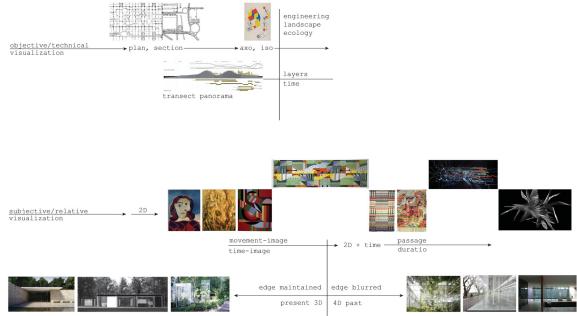
Design Principles: Juxtapositioning historical and existing artifacts for the user from a fixed point



Berlin: A Renovation of Postcards (image from Yu, szuan 2015)

CHAPTER 3: SITE ANALYSIS

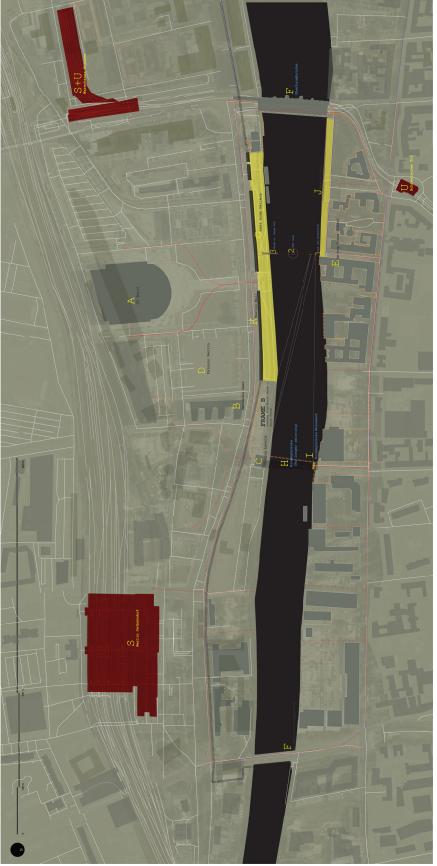
This thesis explores ways that the lived experience of a historically rich, layered, and contradictory site can be understood through various modes of analysis that replace canonical tools of urban planning such as the map (Pousin 2012, 102). A wide range of documentation tools—photography, video, aerial photographs, transects, plans, sections, narratives, and models—are used to deconstruct and re-present the site to uncover its underlying structures. The translation between modes of documentation such as photograph, model, and drawing enable varying depths of perception of site similar to those of the vision (Foxley 2012, 297).



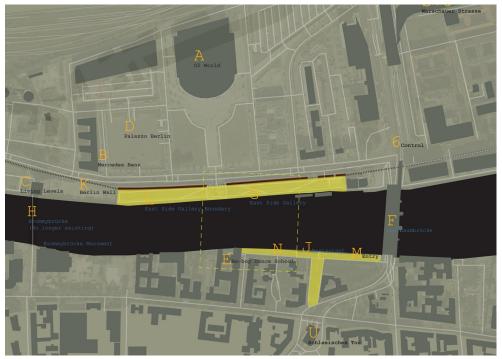
Dimensions of Representation

Structure of Built Form

The various maps, from Aerial view, municipal and historical maps, and Google Maps were compiled to form a plan of the liminal site through time. This plan was layered with 3-D information from Google Street-view, video, and first hand photographic information to understand relationships between points-of-view, flows, and the structure of the urban form. A layering of site enabled the development of a model and the situation specific sites or points-of-view for further development in plan and section.



2-D Plan, Overall Structure, Friedrichshain-Kreuzberg, Berlin (data from CAD Mapper 2015 and Google Maps 2015)

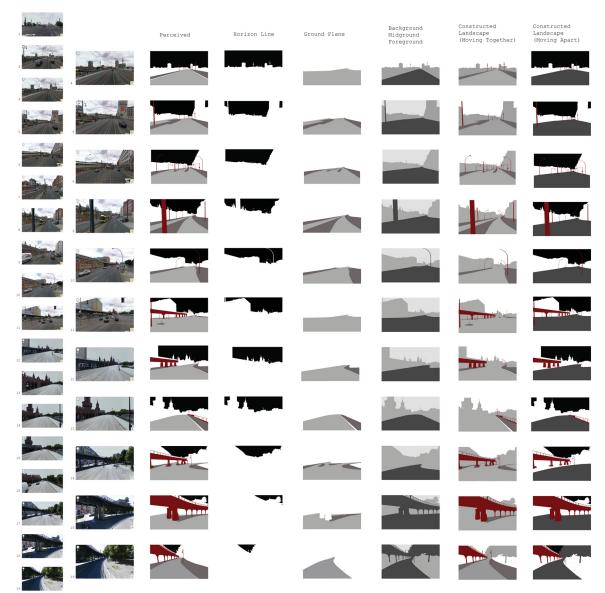


Artifacts and Liminal Spaces Friedrichshain-Kreuzberg, Berlin (data from CAD Mapper 2015 and Google Maps 2015)



Sectional Site model, Artifacts and Liminal Space in 3-D + Points of Interest

Video and Google street view wer used to document the perspective of the user along the East edge of the liminal site. The photographic image was deconstructed into foreground, midground, and background and reconstructed in various combinations to analyse how elements of the built form are framing vision and movement.



Foreground, Midground, Background Friedrichshain-Kreuzberg District (base images from Google Street View 2012)

The reconstructed images were then assembled into GIFs to understand what aspects of the architectural frame were continuous and where the architectural frame broke, and to simulate the effect of the changing frame on the perspective of the moving viewer.



Foreground, Midground, Background GIF series



Detail GIF series



Horizon Line GIF series

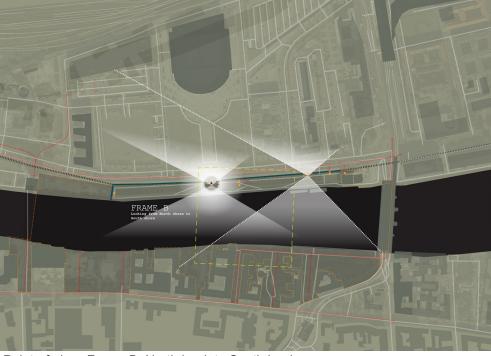
Directionality and access were mapped against built form to understand how existing architecture was influecing flows across site ("Flows"). Point-of-view was mapped to the historical and existing context of site to understand the appearance of site along these flows ("Point-of-view, Frame A" and "Point-of-view, Frame B").



Flows, Movement of people into and out of the historical and liminal site Friedrichshain-Kreuzberg, Berlin (data from CAD Mapper 2015 and Google Maps 2015)



Point-of-view, Frame A: South bank to North bank Friedrichshain-Kreuzberg, Berlin (data from CAD Mapper 2015 and Google Maps 2015)



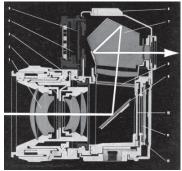
Point-of-view, Frame B: North bank to South bank Friedrichshain-Kreuzberg, Berlin (data from CAD Mapper 2015 and Google Maps 2015)

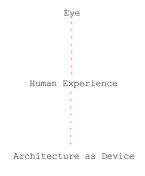
Each representation of produced in this analysis of site is a unique reading of site. In isolation, each representation of site conveys one depth or fragment of our understanding and experience of our surroundings. As a collection, or palimpsest, the readings build our overall understanding of the complex site. Both a technical and experiential understanding of site is useful in analyzing and diagramming the principles that are being designed for, in this case, flow, point-of-view, and historical and existing context. A cycling between dimensions and scales is beneficial to simulating how space is experienced from the perspective of the pedestrian. As we form our representations of site, our mediums of analysis eventually become our mediums of design in which we start to imagine how we want to form our surroundings.

CHAPTER 4: DESIGN

Design Proposal

This thesis project proposal developed three didactic architectural viewing devices in which the passerby (resident, tourist, commuter) can experience the liminal zone of the Wall, the River Spree and its South and North banks and moments of its historical significance. The three devices hold and activate the site in a metaphorical bridge that presence its hisorical and existing forms from various vantage points. They construct an architectural frame that link user with context through vision, point-of-view, access, and directionality. Together, they work to create a visual and physical circuit that connects varied and layered histories of the liminal site and influences its formation in the minds of the viewer.

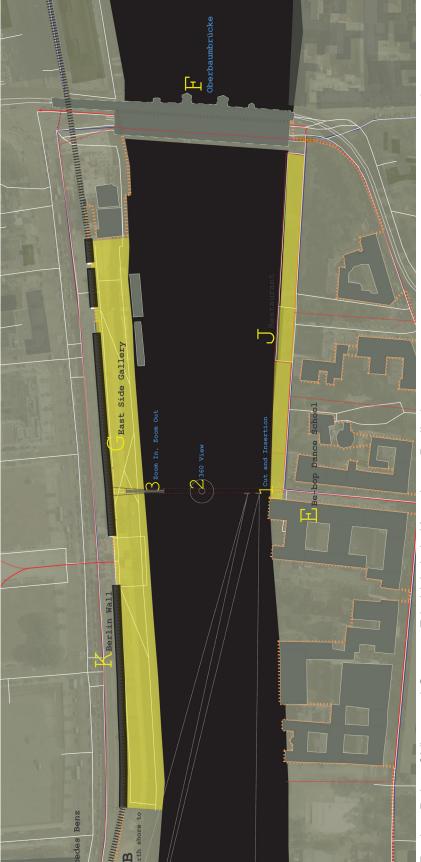




Design Concept, Viewing Device

The three devices create a metaphorical bridge across the North and South banks of the River Spree joining hte edges or breadth of the site ("Device, Point-of-View, and Context"). The first device, "Cut and Insertion," directs the attention of the viewer beyond their immediate surroundings to the site of the former Brommybrucke bridge and the recently constructed 63 m condominium, "Living Levels." The second device presents the existing boundaries of the zone of the former "Death Strip" in two constructed 360 views, one that is "mediated" and another that is "authentic." The third device directs the experience of the pedestrian to the Berlin Wall on the North bank and to the distant South bank.

In the process of designing these devices, Photographic Images, Videos, Collages and Spatial Mock-ups are used to develop and project user-context relationships and understand how the architectural techniques are creating a lived experience.





Device 1: Cut and Insertion

Cut and Insertion is a viewing device that activates discourse around the transformation of the site of the former Brommybrucke Bridge. This pedestrian bridge was destroyed during World War II to prevent the Red Army from crossing over the River Spree. Whereas other war-destroyed bridges were eventually reconstructed, this one was not.

The device is positioned at the end of the current pedestrian boardwalk along the South Bank. A 22 m heritage building currently blocks pedestrian views of the Brommybrucke Memorial and the non-existing bridge. The device is cantilevered out over the South bank and connects user with the non-visible historical and social context of the former bridge through two viewing frames: "Cut" and "Insertion."



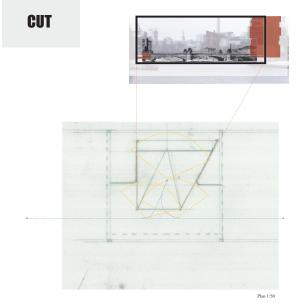
"Cut" Study Model



"Insertion" Study Model

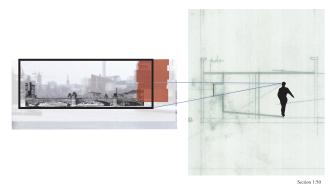
The framing of the condominium in isolation of context encourages users to observe their reaction to its scale and reflect on how it is reforming the site. The juxtapositioning of the two frames, the historical condition and the new construction, encourage a reflection on the tensions between the underlying history of the site and its current transformation. With this awareness, the viewer can critically engage in ongoing debates over the siting and scale of new buildings in this charged zone.

The viewing frame—"cut"—reinserts an image of the absent Brommybrucke Bridge back into place. This insertion montages the old bridge into the existing context and encourages the public (tourist, resident and commuters) to engage with their memory and increase their knowledge of the site.

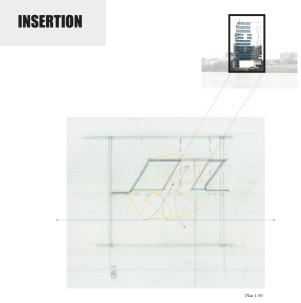


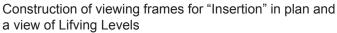
Construction of viewing frames for "Cut" in plan and a view of the old bridge over the existing condition

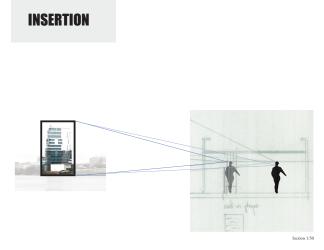
CUT



Construction of viewing frames for "Cut" in section and a view of the old bridge over the existing condition The viewing frame—"insertion"—draws attention to Living Levels, the 63 m condominium that sits directly across from the Brommybrucke Memorial. The memorial reappropriated the buttresses of the former bridge into a viewing platform that directed the view of the observer across the line of the bridge towards the Berlin Wall. The construction of Living Levels breaks this line of sight and challenges the original preservation intentions of artifact and the metaphorical space that it would have occupied.

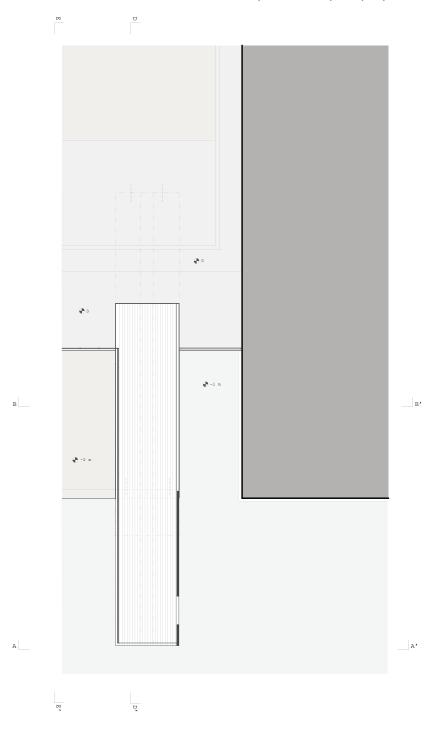




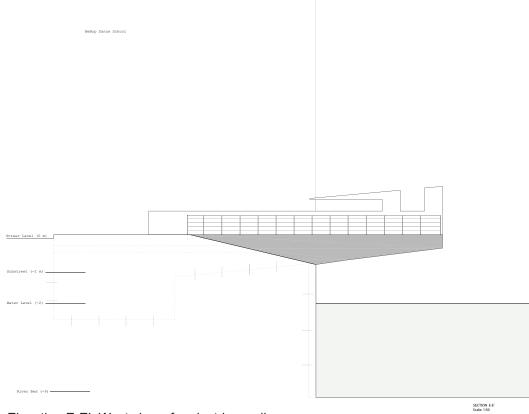


Construction of viewing frames for "Insertion" in section and a view of Living Levels

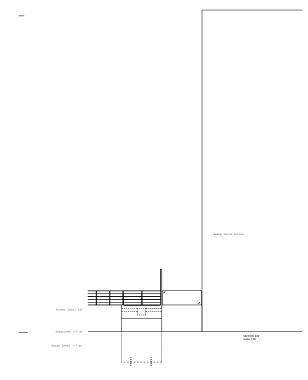
These two frames - "cut" and "insertion" - are positioned within a wall of Cortan Steel that is held in place to a pedestrian walkway that is cantilevering over the South bank of the River Spree. It can be accessed either through a pedestrian board walk that runs parallel to the river bank or as an extension of street and pedestrian path perpendicular to the river.



Plan, Insertion of walkway into existing site condition

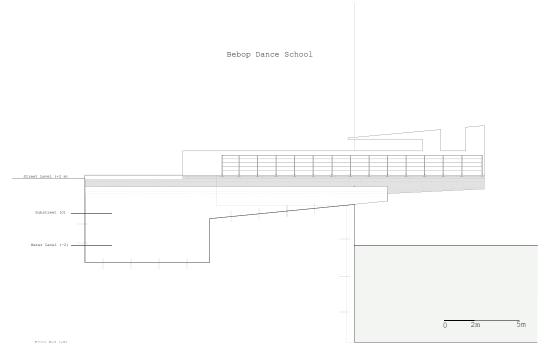




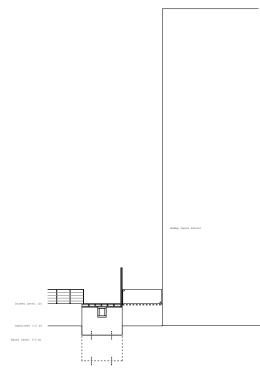


Elevation A-A', South view of pedestrian walkway

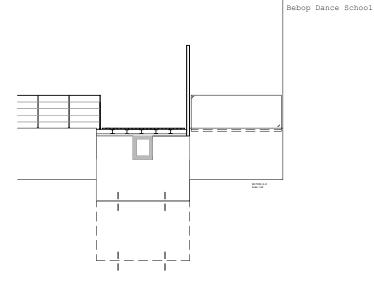
The pedestrian walkway is decked with 0.1 x 2 m concrete slabs and supported by a steel and concrete structure. A steel guardrail visually connects the east edge of the walkway with the North edge of the boardwalk.



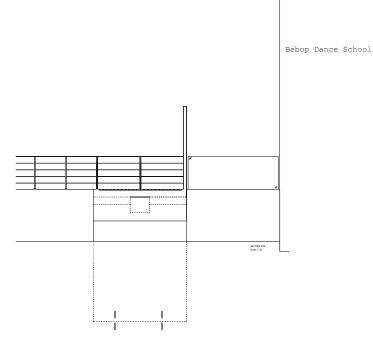
Section D-D', Structure of pedestrian walkway



Section B-B', Structure of pedestrian walkway



Section B-B', Critical Threshold: Ground-to-Walkway



Elevation A-A', Critical Threshold: Water-to-Walkway

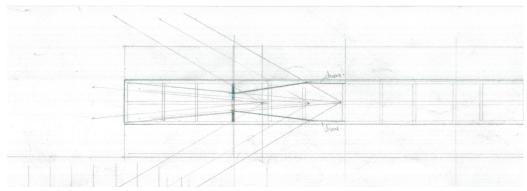
Device 2: The Ramp

The ramp is a viewing device that immerses the spectator in an experience of the scale Berlin Wall which stands at 4 m. It is composed of a ramped pedestrian walkway that is cantilevered over the North bank of the River Spree. It is positioned on the North-South axis between Pfuelstrasse, a boulevard that runs perpendicular to the South Bank of the River Spree, and the Berlin Wall on the North Bank. The device is visible from both the viewing platform of the first device, "cut and Insertion," as well as Pfuelstrasse, connecting the memorial site with vantage points on the South bank. Its placement directly across the Berlin Wall plays with the perceived relationship of the scale of the wall.

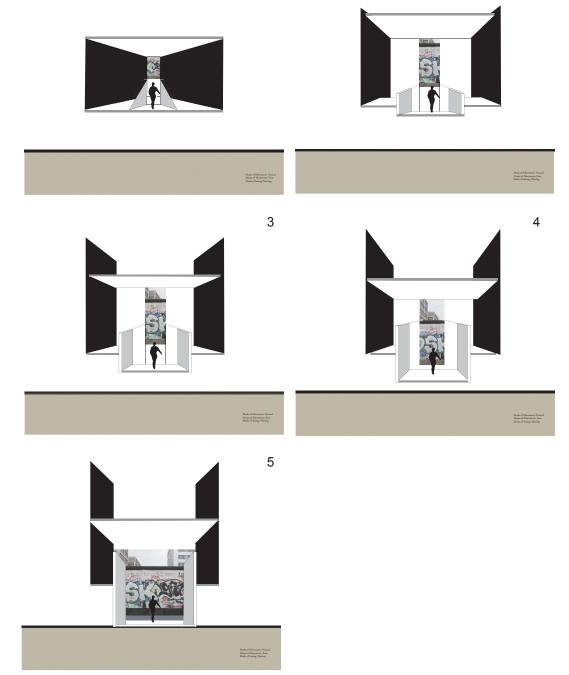
Two Cortan steel walls flank either side of the ramp and work with the Berlin Wall to establish a datum line that helps the viewer understand his or her position in space relative to the Wall. As the viewer makes his or her 4 m descent towards the Berlin Wall, the Cortan walls grow from 0 to 4 m to frame the artifact. As the Cortan walls move from the viewer's peripheral vision onto the edges of his or her binocular field-of-view, the gaze of the viewer is focused onto the Berlin Wall. The vertical movement of the observer induces parallax, defined by Stephen Holl, in *Parallax* as:

the change in the arrangement of surfaces that define space as a result of the change in the position of a viewer—is transformed when movement axes leave the horizontal dimension. (Holl 2000, 26)

The south end of the ramp evolves into a viewing platform that rests 4 m above average water level and looks out upon the South Bank of the River Spree. The view is left unmediated by the architecture of the ramp, save for its steel guard rail.

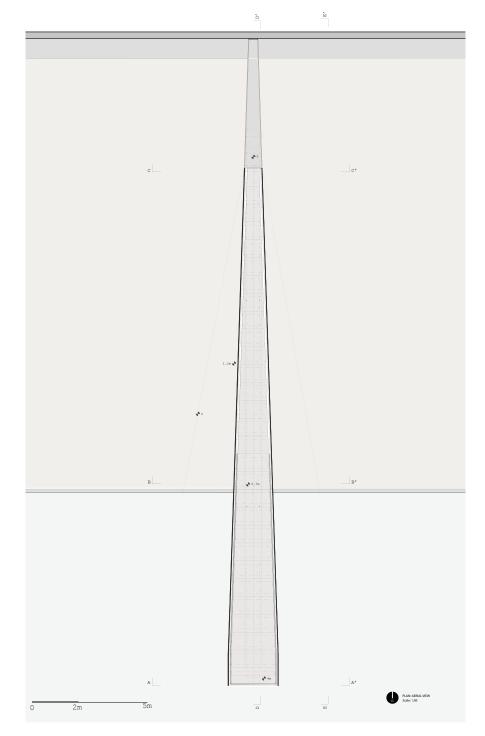


Ramp Concept Drawing, View Construction

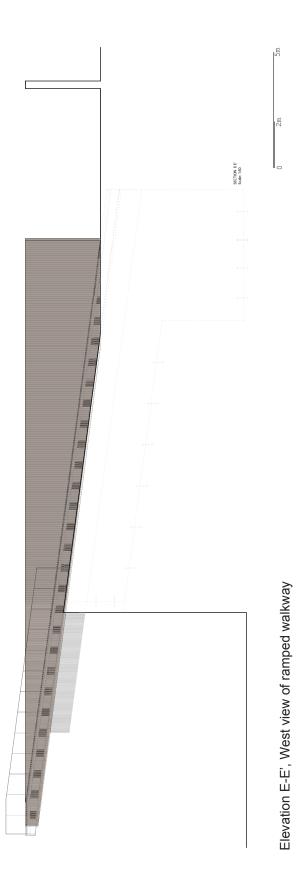


Time lapse/procession experiential diagrams

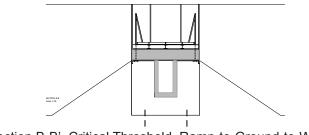
The ramp is inserted into the existing memorial park of the East Side Gallery on the North Bank of the River Spree. The walkway intersects existing pedestrian paths and is marked by two strips of Cortan steel on either side that run between the ramp and the Berlin Wall. Two grassy berms run alongside the West and East edges of the ramp.



Plan, West view of ramped walkway

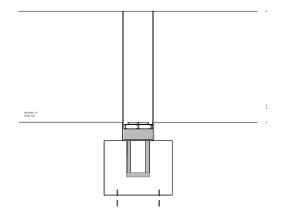


The pedestrian walkway is decked with $1 \ge 0.5$ m slabs of concrete and supported by a steel and concrete structure. A steel guardrail wraps around the cantilevered portion of the ramp.



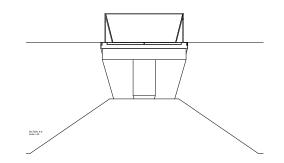
Section B-B', Critical Threshold, Ramp-to-Ground-to-Wall

Towards the Berlin Wall, the ramp becomes narrow and is angled downward. From the viewing platform on its South edge, it creates a telescopic effect that emphasizes the distance between user and the Wall. As the pedestrian descends the ramp towards the Wall, the framed Wall occupies an increasing amount of the viewer's central field-of-view and conveys the sensation of growing over the pedestrian until it is all that he or she can see.

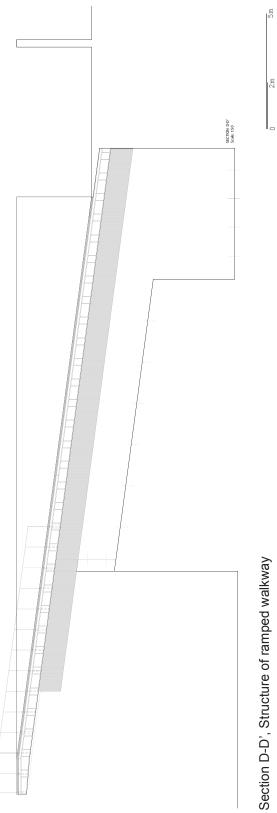


Section C-C', Critical Threshold, Ramp-to-Ground-to-Wall

Towards the South Bank, the ramp becomes wider and is angled upward. From ground level, near the Wall, the South Bank remains out of sight. As the pedestrian walks up the ramp, the South Bank vertically rises into his or her field-of-view. The pedestrian experiences the sensation of entering the formally blocked site, though the site remains physically inaccessible.

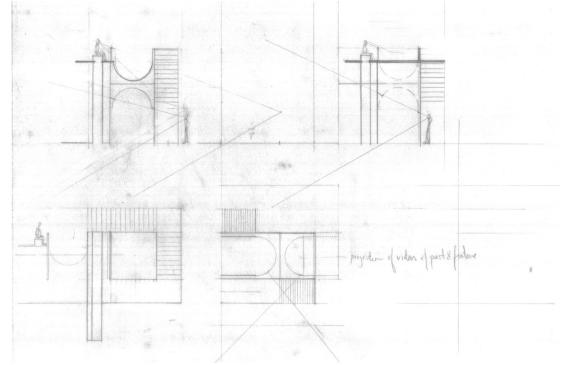


Elevation A-A', Critical Threshold, Ramp-to-Water-to-Wall



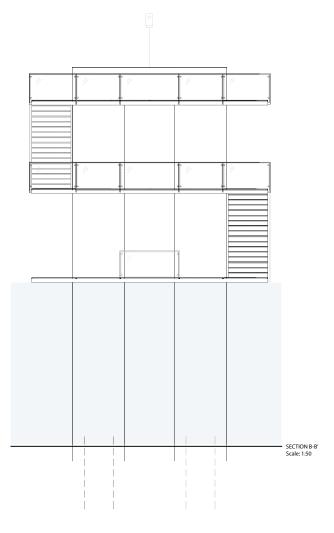
Device 3: The Tower

The tower is a viewing device that constructs 360 views of the existing conditions of the former East-West border in the viewer's mind through a series of fragmented and unobstructed views. It directs views to the remaining East-West boundaries that exist in the artifacts and spaces of the liminal zone and in the memories of the viewer. It is situated in the centre of the River Spree with the pedestrian vehicular boulevard, Pfuelstrasse, to its South, the Oberbaumbrucke bridge to its East, the Berlin Wall to its North, and the former Brommybrucke Bridge to its West. It is accessed by boat and presents its projected and framed views of context along a circuit towards, up, through, and around the tower.

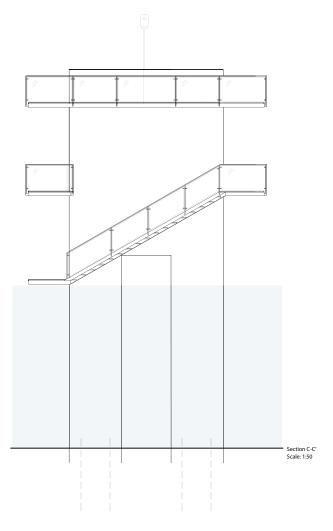


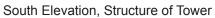
Tower Concept Drawings, View Construction

The tower is comprised of four concrete piles which are tied into the river bed and support a steel staircase with grated platforms. A steel and glass guardrail mark accessible areas of the circuit and moments of pause and observation.

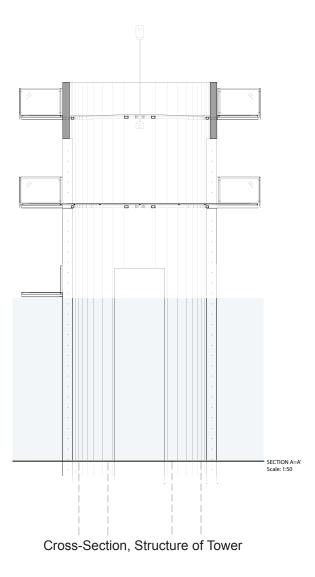


West Elevation, Structure of Tower

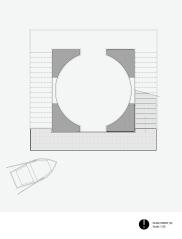




A steel ceiling structure can support the future installation of a transluscent roof cladding to adjust luminosity and improve viewing of the 360 projection. During precipitation, rainwater is guided along the the interior concrete walls and through the steel grating into the river below.

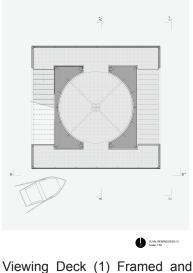


On the first floor, the level of the water, an entry deck invites boaters into the circuit.



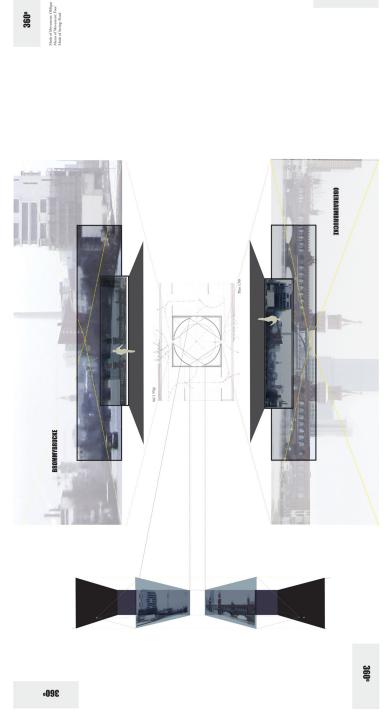
Entry: blocked views of periphery

A set of steel stairs that tour the outside of the tower guide the observer to its second level and into a viewing chamber.



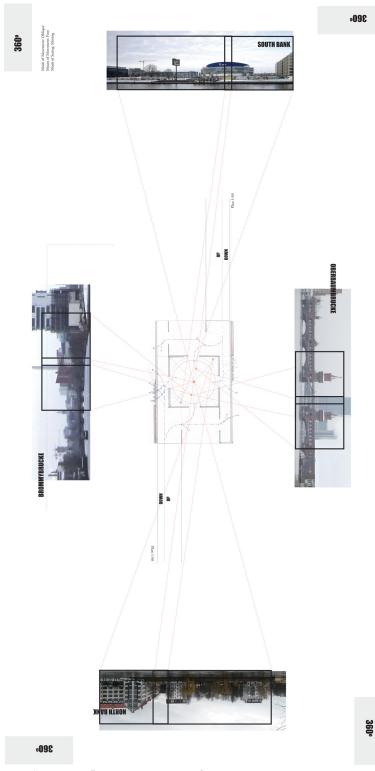
projected views of periphery

From the inside of the chamber, the user can experience a mediated observation of the 360 site, documented by a camera apparatus vertically tied to the ceiling structure. The visual data is projected onto the polished concrete walls of the viewing chamber. (Diagram: Bringing the outside in through projection)



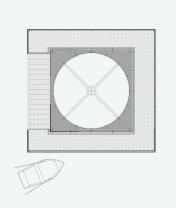
The "mediated": Bringing the outside in through projection

Views out of the viewing chamber towards the surrounding context of the tower are partially blocked by its polished concrete walls. The blocking of view presents the context in pieces. At this point in the circuit, the whole is only visible through projection.



The "authentic": Framing views of periphery

Outside of the viewing chamber there are two landings that direct a viewing to the North and South environs of the tower. The user can access the second viewing deck from the South landing. An unobstructed 360 view of the liminal site is available from the second viewing deck.



Viewing Deck (2) 360 view of periphery

The sequential blocking and framing of view creates a procession of images that the user can piece together in his or her mind to construct a visualization of site as a whole. This mental construction can then be compared with the mediated image of the 360 projection. Through this comparison the user can confront discrepancies between his or her constructed image and the "mediated" image and develop of his or her knowledge of how site is formed in the mind.

CHAPTER 5: CONCLUSION

[Architecture] has all-encompassing qualities. From the optic-haptic realm of material and detail to the connections of space developed in the light of foreground, middle ground, and distant view, architecture is manifest in perception. Enmeshed experience, or the merging of object and field, is an elemental force of architecture. (Holl 2000, 56)

The City of Berlin is seeking to preserve its history through policy and regulation. The designation of built form as artifacts and spaces is creating a metaphorical barrier between the public and the structure of the city. Such designation limits the engagement between user and context and dislocates that context from current circumstances and potential futures. In doing so, these preserved artifacts and spaces are no longer incorporated into the practices of the current era. They no longer serve as repositories of collective memory, but instead as markers of moments passed. As such, their role in the continuing development of the city and the everyday lived experience of its users becomes mute. This thesis explored the ways in which built form can encourage varying degrees of interaction between user and the surrounding and how space can be transformed to encourage the lived experience of its history.

To develop an architecture that incorporates history into the lived experience of its residents, commuters, and tourists, a multirepresentational analysis that layered perspectives of site over time was necessary. This thesis used a variety of documentation techniques that analyzed the relationship between users and the surrounding, excavating the layered histories of the site. To simulate the effect of the built form on the users's vision and movement, the site was also analysed from the perspective of the pedestrian.

The act of walking the site was allowed for a comparison between one's experience and the representations that simulate visualization or experience of site. In the walking of site, traces of information that were not documented or perspectives which were not apparent were revealed and contributed to the development of the new palimpsest of site. Photography and video were used as a means to approximate the lived and walked experiences of site. Photography simulated the perspectival image, enabling the visualization of various depths-of-field and demonstrating how these depths can be manipulated to focus the gaze of the viewer on specific contextual elements. It also revealed which elements in the built form were framing space and guiding or blocking flows through this space. Video conveyed the experience of how perspective changes during movement. It facilitated an understanding of how distant elements can begin to feel close as they move from the peripheral field-of-view to the central field-of-view. It demonstrated how experience of space is influenced by the type of motion and how linear or horizontal motion feels more consistent than vertical or oblique motion which conveys a sense of change.

Plan and section were tools that allowed abstraction of both specific site information (historic and contextual) as well as photographic and video information. The simplification of the layered qualities of site in plan and section provided a framework that enabled a construction of point-of-view and a placement in horizontal or vertical planes relative to specifics of site, such as flows, blocks and openings, and points-of-view. Drawing out design interventions relative to existing conditions indicated how they might transform the existing site and clarified how the architectural techniques could be applied relative to existing conditions. A cycling between mediums, scales, and points-of-view developed from optical and phenomenological studies produced an iterative process that filtered and refined concepts and strategies until they could respond to multiple depths of experience. This multirepresentational and iterative process resulted in an understanding of how the liminal site influences user-context relationships and enabled the strategic positioning of specific architectural principles to develop three viewing devices that frame, juxtapose, and emphasize elements of site.

The architectural principles for this thesis were identified through a series of case studies that developed architecture as a frame that sets up the relationship between the user and his or her surroundings. In each case, the connection between path or circulation and spatial geometry influenced the spatial positioning of the viewer. The blocking or framing of view influenced the perspective of the viewer and his or her interaction with elements of the site. The materiality of the structure and the juxtaposition of views influenced the relative appearance of elements of the surroundings. The exploration of these principles through design informed the relationship between vision and movement and an understanding of how this relationship could be applied as method to encourage interaction between user and his or her surroundings.

The case study principles were applied in the design of three viewing devices that pres-

ence the liminal site in the mind of the observer. The device "Cut and Insertion" stabilized the position of the observer relative to the former site of the non-existing Brommybrucke bridge. It applied principles of directionality and geometry to direct and focus the attention of the viewer towards the remnants of the Brommybrucke bridge and the 63 m tower, "Living Levels." It pulled the history of the artifact and space into his or her current image of site by inserting a historical image of site in the viewer's field-of-view. From this fixed perspective, the viewer could reflect on his or her memory of zone and participate in the ongoing discourse on the transformation of its history.

The device "the Ramp" studied how a change in the position of the observer relative to built form could alter the way the viewer interacts with his or her surroundings. Techniques of spatial positioning and scale change dispelled the boundary between observer and the Wall and created an immersive experience of its scale and materiality as he or she grad-ually walked towards it. Principles of materiality, blocking, and framing pulled the distance artifact into the viewer's central field-of-view to convey a sense of "entering" its space.

The device "the Tower" explored how the organization of form could create a circuit that guided the movement of the viewer towards an experience of context from various vantage points. It used blocking and framing of view and augmented projection to create multiple perspectives of the zone of the former East-West border. It organized these fragmented and full views along the user's path, an architectural circuit with moments of pause, to slowly build an image of the complex site in the mind of the observer. A projected recording of the 360 liminal zone was juxtaposed to the viewing circuit to encourage comparison between the "mediated" and the "authentic" image, —images that are given to us and images that we construct.

The viewing devices pay tribute to the existing character of the site while introducing new forms of inhabitation. As such, the viewing devices serve a dual role as both inhabitable structures and also as documentational tools that focus the layered qualities of site: its built form, its social and political context, and its previous and current uses.

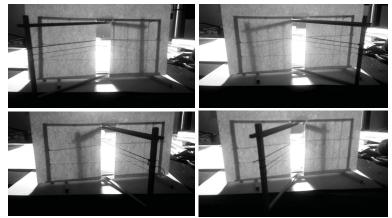
This thesis contributed to an understanding of the architectural frame as another dimension of representation that focuses the lived experience of site. Architecture can function as a frame for fixed observation, or as an opening that creates a specific point-of-view relative to the fixed position of the observer. It can also function as a frame for moving observation, positioning the viewer on his or her path relative to his or her context. When architecture structures both types of observation through vision and movement, it becomes an architectural device that enables an experience of site from a variety of perspectives.

This thesis also contributed to the larger dialogue on the possible roles of architecture in the formation of the historical contemporary city. It demonstrated the potential of architecture as both inhabitable structure and representational device that engages its users in an observation, experience, and formation of context. With this in mind, moving forward, architecture can be designed as an inhabitable framing device that can reveal the historical underpinnings and current debates of the city in transformation and engage users in this process.

APPENDIX A: VISION STUDIES



Fixed Perspective Study



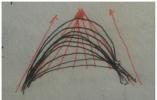
Moving Perspective Study



Study Model Parallel Overlay



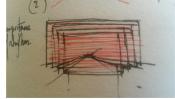
Study Model Perpendicular Overlay



Straight Movement



Meandering Movement



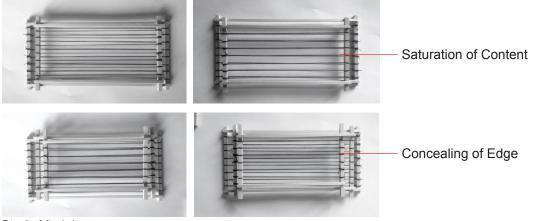
object.

Object in focus moves across field-of-view as user passes

Field-of-view is stable and increases depth of field-of-view



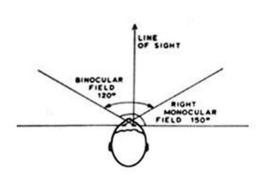
Field-of-view is shifting and results in enlarged, composite image

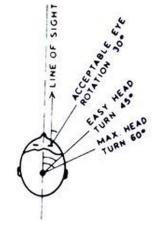


Study Model Density and Alignment

APPENDIX B: MECHANICS OF OPTICS

Diagrams of Field-of-View

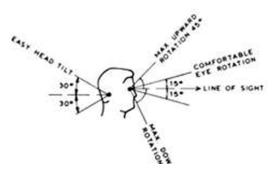




Horizontal views of human eye (Adopted from Peacock and Karwowski, 1993).

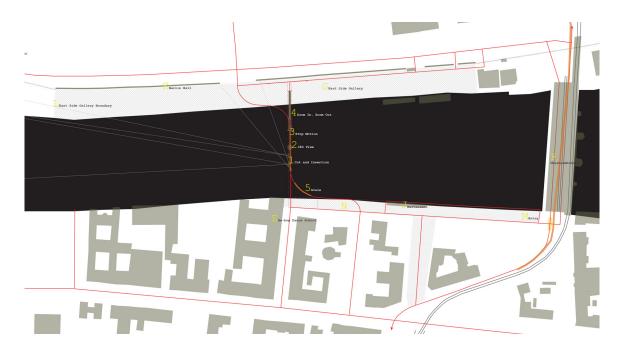
Limits of Visual Field

In the horizontal plane, the binocular field of view extends some 120 degrees, as indicated in the drawing above. Vision is sharp only over a fairly small area directly ahead. So, eyes need to turn to focus on objects outside the foveal area. Accroding to SAE J985 eyes generally only turn by about 30 degrees before the head is turned, which can comfortably give a further 45 degree view to either side.



Vertical views of human eye (Adopted from Peacock and Karwowski, 1993).

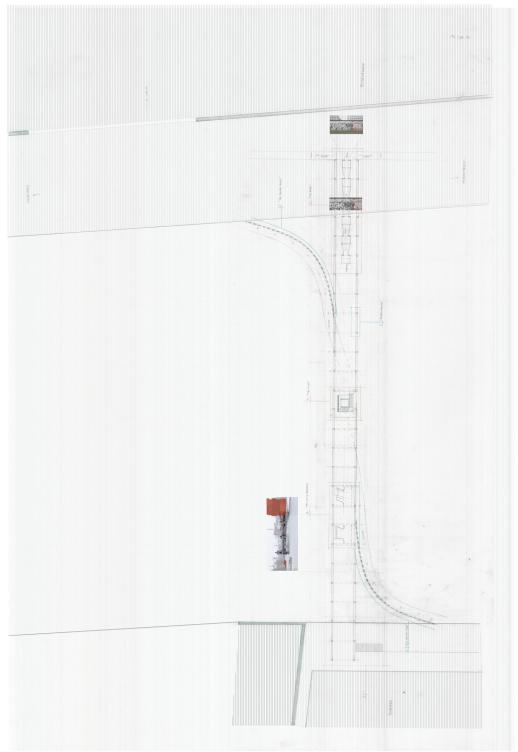
APPENDIX C: COUNTERPOSITION - THE BRIDGE



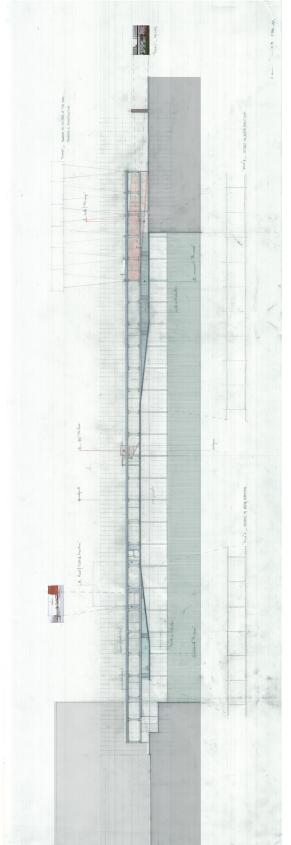
Viewing Moments on Bridge Friedrichshain-Kreuzberg District



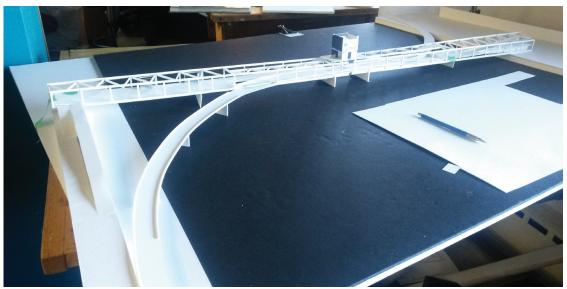
Bridge Model: 1:500 Friedrichshain-Kreuzberg District



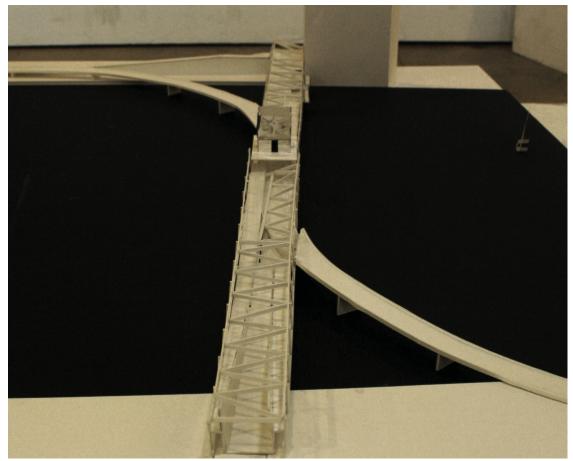
Plan 1:200



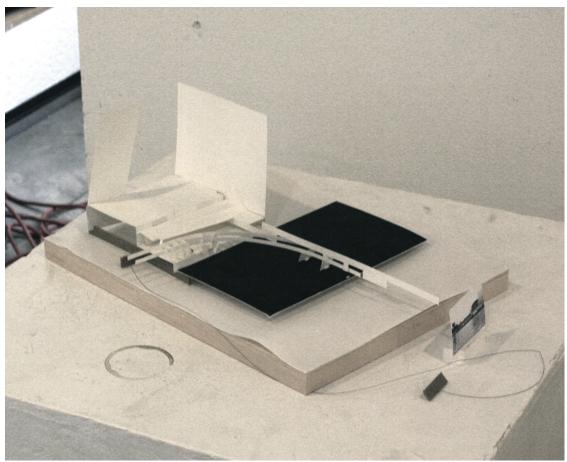




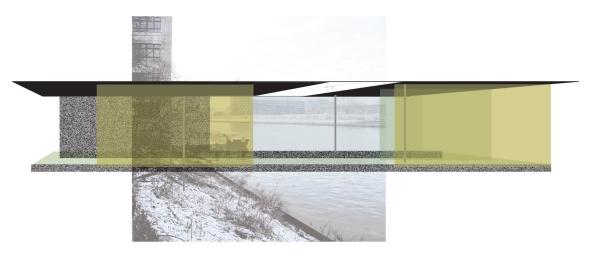
Bridge-Device Model, View from South Bank, 1:100



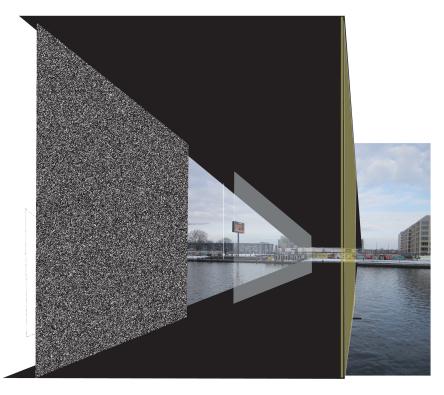
Bridge-Device Model, View from North Bank, 1:100



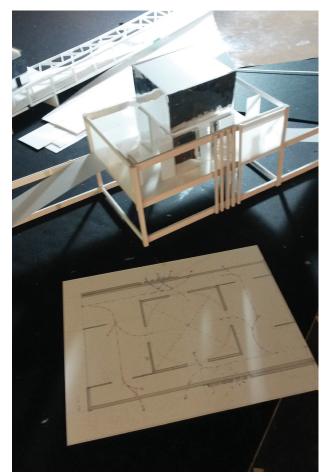
Bridge-Device Concept Model



Bridge Visualization A South Bank, Friedrichshain-Kreuzberg



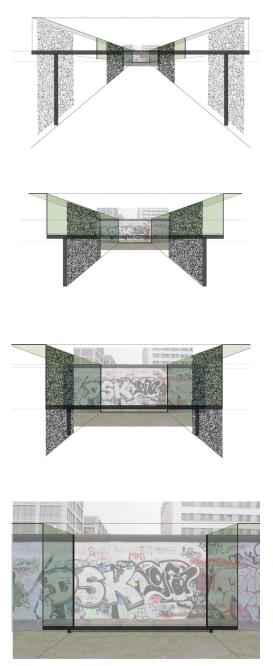
Bridge Visualization B South Bank, Friedrichshain-Kreuzberg



Tower Visualization, Circuit



Tower Visualization, Blocking and Framing of View



Ramp Visualization, Experience over time

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