

ARCHIVES

NATO: Network Architecture Tensile Organization
Mending Berlin Through Public Interface

by

Vasilena Vassilev
B.A. Art: Architecture and Urbanism, Smith College, 2002

SUBMITTED TO THE DEPARTMENT OF ARCHITECTURE IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARCHITECTURE AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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February, 2009

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NATO: Network Architecture; Tensile Organization
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Submitted to the Department of Architecture on 15 January, 2009
In Partial Fulfillment of the Requirements for the Degree of Master of Architecture

ABSTRACT

NATO: Network Architecture; Tensile Organization is a project that seeks to create a lighter public forum where architecture mediates a space of metaphor, yet looks towards a hopeful future, in a place laden with the immensity of a dark past. This project exploits the emblematic condition of connectivity within various paradigms. These states range from international and diplomatic initiatives to the structural integrity of a piece of architecture to infrastructural connectivity and finally to the simple experience of traversing a site.

The program and concept are based on an interdependent network where all architectural, programmatic and urban scale constituents are connected in order to foster urban renewal at the site of Mauerpark in Berlin, a place that from 1961 until 1989 was fundamentally divided and incapable of being traversed. The project seeks to define and give meaning to ways to mend a political, infrastructural and architectural scar that has been left on a city while depicting the very real and very palpable condition of the systemic political organization of the North Atlantic Treaty Organization (NATO) Public Diplomacy Division.

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NATO: Network Architecture; Tensile Organization
Mending Berlin Through Public Interface



Thank you.

To my thesis committee for their intensity and criticism.

To my family for their love and sacrifice.

My friends for their sensitivity and understanding.

Michael for his support and belief in my ideas and work.

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\\ REFLECTIONS

Contemporary Politics and the Need for Disclosure

The change in current political systems has grown with the boundless need for information disclosure and public awareness. Likewise is the nature of contemporary news. As Western influence grows politically and economically, the Eastern assimilation is not only inevitable but also warranted.

A government organization exemplary of this phenomenon is NATO, the North Atlantic Treaty Organization, a league of countries bound together by the need to maintain peace in the post-war era. Recent NATO political endeavors include the unification of former Eastern Block nations with the Western world superpower of the US and major global players such as France, UK, Spain, and Germany.

Notwithstanding such endeavors, since the 1990's first military campaign in Bosnia Serbia-Herzegovina, NATO has continued to spread its influence further east in various relief and military efforts including involvement in Afghanistan and Pakistan. As a political measure of

these efforts, NATO has since formed the Public Diplomacy Division, aimed at informing the public of their military and humanitarian relief efforts.

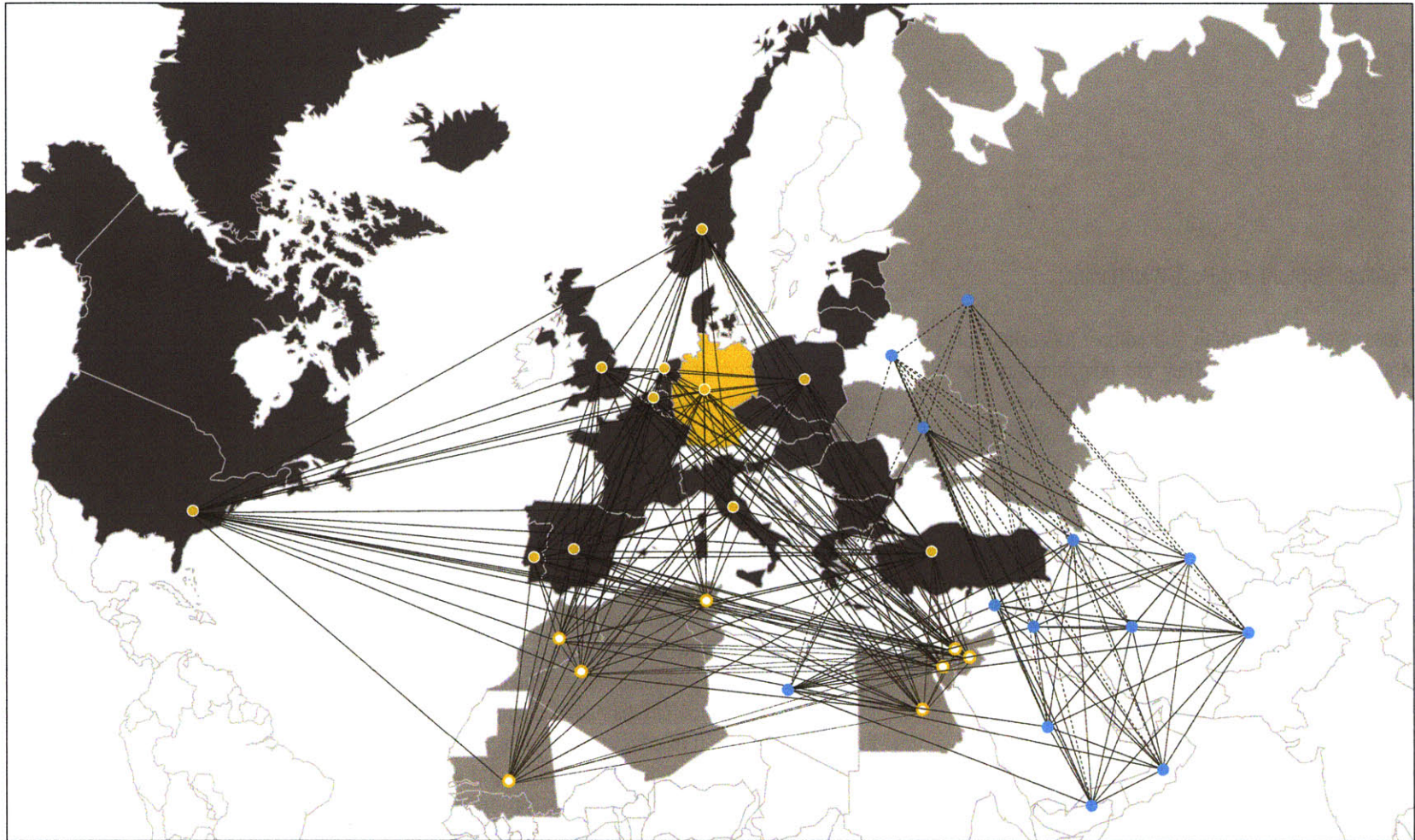
Currently, the Public Diplomacy Division is a relatively scattered group of offices and archives that are mainly endorsed and publicized online, with difficult civilian access due to the fact that they remain in the main NATO headquarters in Brussels.

My thesis contends that in order to bridge connections between major public organizations such as NATO and foster civilian discourse of current political trends and initiatives, accessibility and transparency is vital, as long as the main governmental structure and secrecy is exposed, visible, and understood. In this regard, my thesis is about a neutral form of disclosure, where the architecture speaks to the public in two ways: it exhibits NATO activities and it depicts an authentic account of its political systemic organization.



Former World Context

- East West Berlin
- Soviet Affiliation
- Allied Affiliation
- Cold War Front



Present World Context

- | | |
|--|---|
|  NATO Member |  Allied Command Operations |
|  Mediterranean Dialogue |  Communication Operations |
|  Non Member |  NATO Watch Countries
Communication |

Political Rupture and Post-Wall Berlin

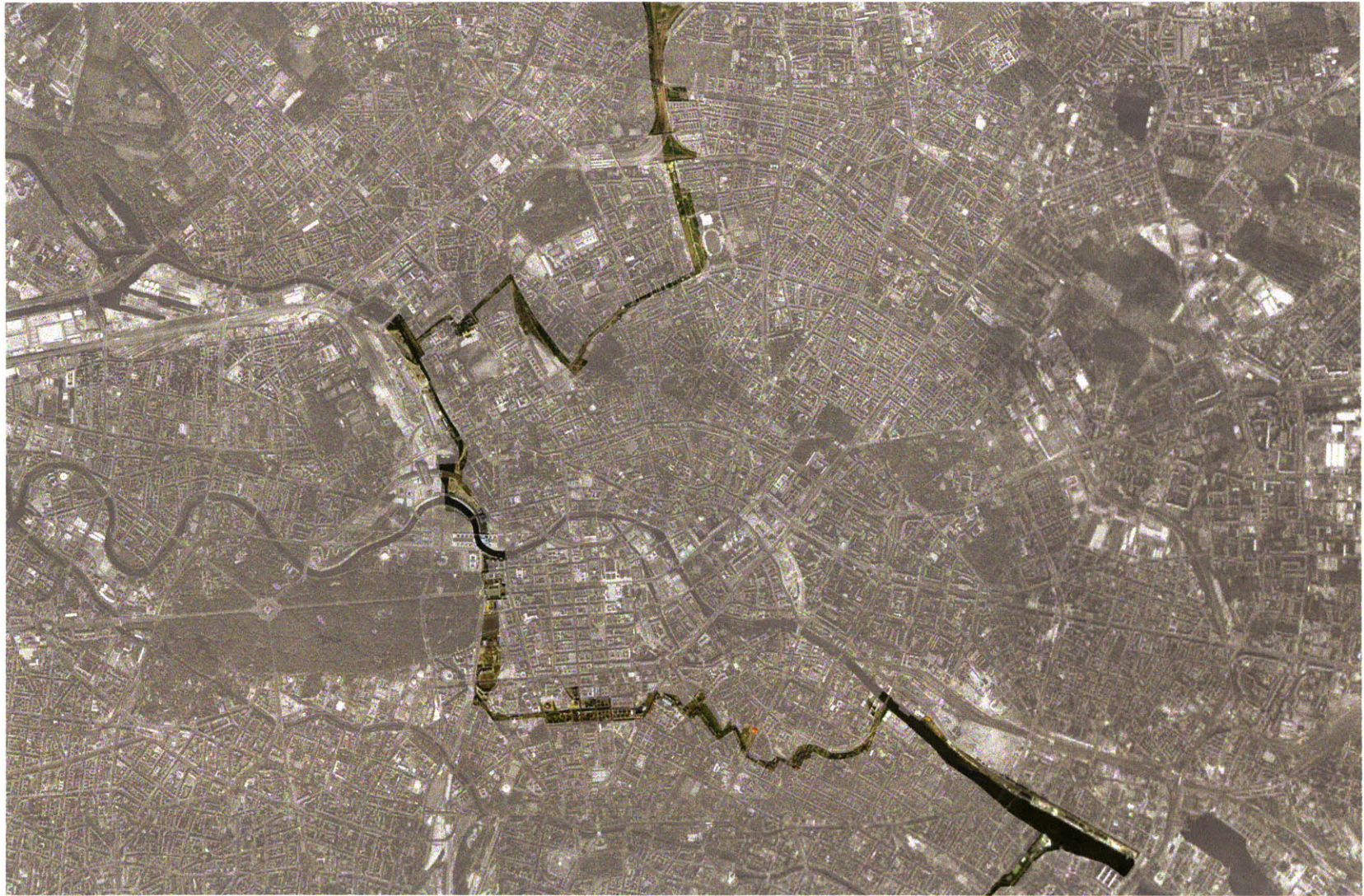
Places are never merely backdrops for action or containers of the past. They are fluid mosaics and moments of memory, matter, metaphor, scene, and experience that create and mediate social spaces and temporalities.ⁱ

As part of its ever fluctuating landscape, Berlin is a city that functions on various intellectual, experiential, and pragmatic levels, and is in a sense, a living memorial of 20th century paradigm shifts. While the historic landmarks of Berlin are experientially connected through the city, their precise architecture renders invisible. It is comprised of pure experiential paradigms, without a clear boundary between lived and living, a sort of political theater formed by past relics. Yet despite the form of the urban artifact, one true qualitative notion remains the same, its current form and image can be attributed to political censure, either by the general public or the reigning authorities.

Despite the obvious physical ramifications of these

ideals, Berlin is not staged nor does it feign spaces of extreme public interface. Its diluted political realm exists within the physical indicators of its monuments. However, instead of acting as autonomous political undertakings by merely marking history, they create the latitude for expression and discussion, a boundless urban landscape of future possibility.

Unlike other memorials dedicated to remembrance and scrutiny, the case of The Berlin Wall deals with a very palpable scar upon the landscape of the city. Berlin is therefore forced not only to deal with the social and mental division between East and West, but also its resulting physical ramifications. Likewise, the urban fabric of the city has been disrupted due to the overzealous need to constantly redefine the city as a global player. Berlin today embodies "a grid of self-enclosed places in which the interstitial spaces are abandoned or neglected."ⁱⁱ To walk through this city means to assume the role of a moving channel flipper, to traverse disconnected segments that position the individual in different imaginary pasts, presents, and futures.ⁱⁱⁱ There is clearly a lack of connectivity within the



Present-day traces of the wall and surveillance areas at the threshold of the former East and West Berlin

post-wall urban paradigm. The new connective tissues of Berlin have reduced themselves to a tourist attraction and not a local commodity. The city therefore is in need of an international and local connection, which can only be achieved visa-vie direct programmatic interventions with the capacity to stimulate urban and cultural growth and renewal.

My argument contends that within a city in which world powers and political trends have manifested themselves in urban form, a deliberate upsurge of architectural blending leads to an unviable collective urban space. As stated earlier, Berlin is a city of memorial landscapes suspended between landmarks, a strong connection to this network must therefore be established in order to fully assimilate to the true Berlin condition. A viable network of communication between relics and current trends capable of facilitating discourse between present day Berliners, comprised of internationally diverse individuals, must be present in order to fully mend the scar of The Wall.

_Unification through Architecture and Program

In order for an urban condition based on the process and effort of re-unification to exist, a sense of place must therefore be addressed and supported in order to ensure the resilience of any future city planning.

If the quality of a place is reliant to the “joint effect of the place and the society which occupies it,”^v then this relationship must be a reflection of the urban ecosystem and the cultural rhetoric of its time. Due to the fact that the identity of Berlin can be associated with the nature of political paradigm shifts and their influence on the cultural and urban environment, the notion of memory preservation is vital when assessing the success of various planning and architectural initiatives.

If a city were to be judged through the use of system dynamics, Kevin Lynch points out there must exist a “circularity between continuity and development – between the stabilities and connections needed for coherence and the ability to change and grow.”^{vi} This alludes to an open, decentralized system of fluidity and

flexibility, connected through urban interventions of various scales.

The Wall undoubtedly took these qualities away both urbanistically and culturally. The mending or suturing of its scar therefore has to be able to provide Berlin with the flexibility to naturally evolve in a functioning metropolis. The dilemma therein dramatizes a unique link between place and identity. It is caught in a struggle between destruction, or forgetting, on one hand, and preservation, or the establishment of intentional monument while resolving urban problems of unification, on the other.^{vi}

Based on Lynch's assessment of the importance of image to the vitality of a city, evolution of form must coincide with an evolution of history. This space encourages self healing between the East and West condition rather than inviting developers to spoon-feed the public tolerance and economic growth.

It can therefore be concluded that forced assimilation through the invocation of foreign bodies in the

architectural and cultural scales of Berlin, but more importantly at the site of The Wall's rupture, are futile ways of creating a thriving urban condition. Inauthentic gestures of memorial and forced global assimilation simply address the need for rebuilding without addressing the historical, cultural, and economic gaps that The Wall left behind.

If true flexibility is warranted, in an effort to retain plasticity and resilience, the fractured manifestation of The Wall can be mended best when it adequately reflects the city image generated by the complexity between various physical and social perspectives. If a site is culturally un-engaging, despite its architectural physicality or its attempt of memorializing relics, it therefore fails as a method of reuniting a city. It can be argued that structures or planning attempts bordering on an isolated urban condition on the global scale are not a productive way of addressing the threshold condition.

Karl Scheffler ascertained in 1910 that Berlin is a city destined "immerfort zu warden and niemals zu sein (forever to become and never to be)." If cultural plasticity

is therefore a requisite for this urban condition, then the stoicism of The Wall clearly negated this concept.

My thesis contends that architecture should carefully tread on mending this historical failure, yet proclaiming that unification of Berlin can only be attained once its cultural and social pulse is re-awakened. Berlin should therefore focus on the reconstitution of public space and its inherent complexities. Meaning, memory, image, and their traces on the urban landscape need to be reconnected along with the built environment in order to address the future needs and changes of an ever-evolving and growing Berlin.

Notes

i. Till, Karen E. *The New Berlin: Memory, Politics, Place* (Minneapolis: University of Minnesota Press, 2005) 8

ii. Boyer, Catherine, "The Great Frame-Up: Fantastic Appearances in Contemporary Spatial Politics." *Spatial Practices: Critical Explorations in Social/ spatial Theory*. Eds. Liggett, H. and Perry, D (Thousand Oaks: Sage. 1995) 81

iii. Koepnick, Lutz. "Forget Berlin." (*The German Quarterly*, 74-4, 2001) 347

iv. Lynch, Kevin "Dimensions of Performance" *Imaging the City: Continuing Struggles and New Directions*. Eds. Vale, Lawrence J. and Sam Bass Warner Jr. (New Brunswick, NJ: Center for Urban Policy Research, 2001) 112

v. IBID, 113

vi. Ladd, Brian. *The Ghosts of Berlin: Confronting German History in the Urban Landscape*. (Chicago: University of Chicago Press, 1997) 37

\\ SITE RESPONSE

_Berlin

The urban site of Berlin can be best described as a green urban archipelago, according to Oswald Mathias Ungers.

Berlin's urban form is a testament to the large-scale urban desecration during WWII followed by the fall of the Wall. Ungers remarked, "When I first came to Berlin for the first time, I saw in Friedrichstadt a huge landscape in which stood individual monumental object. Like a landscape with missing teeth."¹

These missing teeth are formed by the empty green lots, where buildings once stood, and plazas as often demarcated by government buildings. The park and plaza are therefore emblematic models of the typical Berlin condition. While often isolated from one another, they constitute an urban identity and have become a defining factor for a positive city experience for Berliners and visitors alike.

In a successful city plan and emergent architecture, a

maintenance of this allegory must be present in order to create a viable urban condition. The urban archipelago of independent programmatic islands surrounded by green space is therefore a condition which I emulated in my design strategy.

_Mauerpark

The site of Mauerpark lies in the Pankow region of Berlin with the Wall and Deathstrip formerly separating the East and West. It is flanked by the S-Bahn and Train Station to the South, a Sporthalle and Stadium to the East and mainly residential areas to the West and South. Presently and historically, it has consistently served as a back-end area to the community, having housed a train station stop prior to the separation of Germany, acting as a dead-zone during the days of the GDR, and currently serving as an open and relatively unused park.

Starting in 1820, it had been a military parade ground called "The Lone Poplar," and in 1848 it was the scene of pivotal events in the March Revolution. The track system



Berlin Built Areas 



 Berlin Unbuilt Plots and Parks with Highlighted Site

of the Stettiner freight depot was built on the property to the west in 1872, and after 1914 allotment gardens, makeshift housing, and sports facilities occupied the former parade ground. In GDR times it was home to the soccer team Dynamo Berlin, which drew regular crowds to this sports venue near the border. As a result, the Hinterland wall (inner wall) here was especially high, with an unusually smooth surface, and stood further away than usual from the “death strip.” For decades the Wall’s existence prevented any development of this fallow land, thus making it possible to build a “green bridge” from east to west once it fell.ⁱⁱ

The site remains as a testament to the post-wall Berlin condition, as illustrated by the sheer difference of the housing types which surround it. It is characterized by rehabilitated courtyard housing on the West and dense urban developments on the East. Formerly being separated by the presence of the wall, these residential areas still remain disconnected through poor direct pedestrian streets and environmental queues.

Perhaps the main instances of a lively communal envi-

ronment remain with the sporthalle when laden with the usual spectator crowds, the weekend open-air flohmarkt (flea market), and occasional concerts and happenings throughout the year. Programmatically, however, due to the existence of the sports fields and stadium on the SouthEast, there is a clear lack of connection between local communal life and space and the more public nature of the Sporthalle areas and Market.

In terms of infrastructure, the site is incredibly disengaged from the urban fabric of Berlin, due to the fact that it remains completely bypassed by major transportation hubs and roads. The main railway station while being in relatively close proximity to the site, does not invite or promote reasonable public access to the park. In addition, the main traversal between East and West happens in the surrounding park areas, with only a minor connection occurring between the residential areas of the West and the Sporthalle to the East.

The train station, mainly serving S-Bahn commuters and residents, allows for poor direct access to the public and visitors. The only major public transport node is a tram

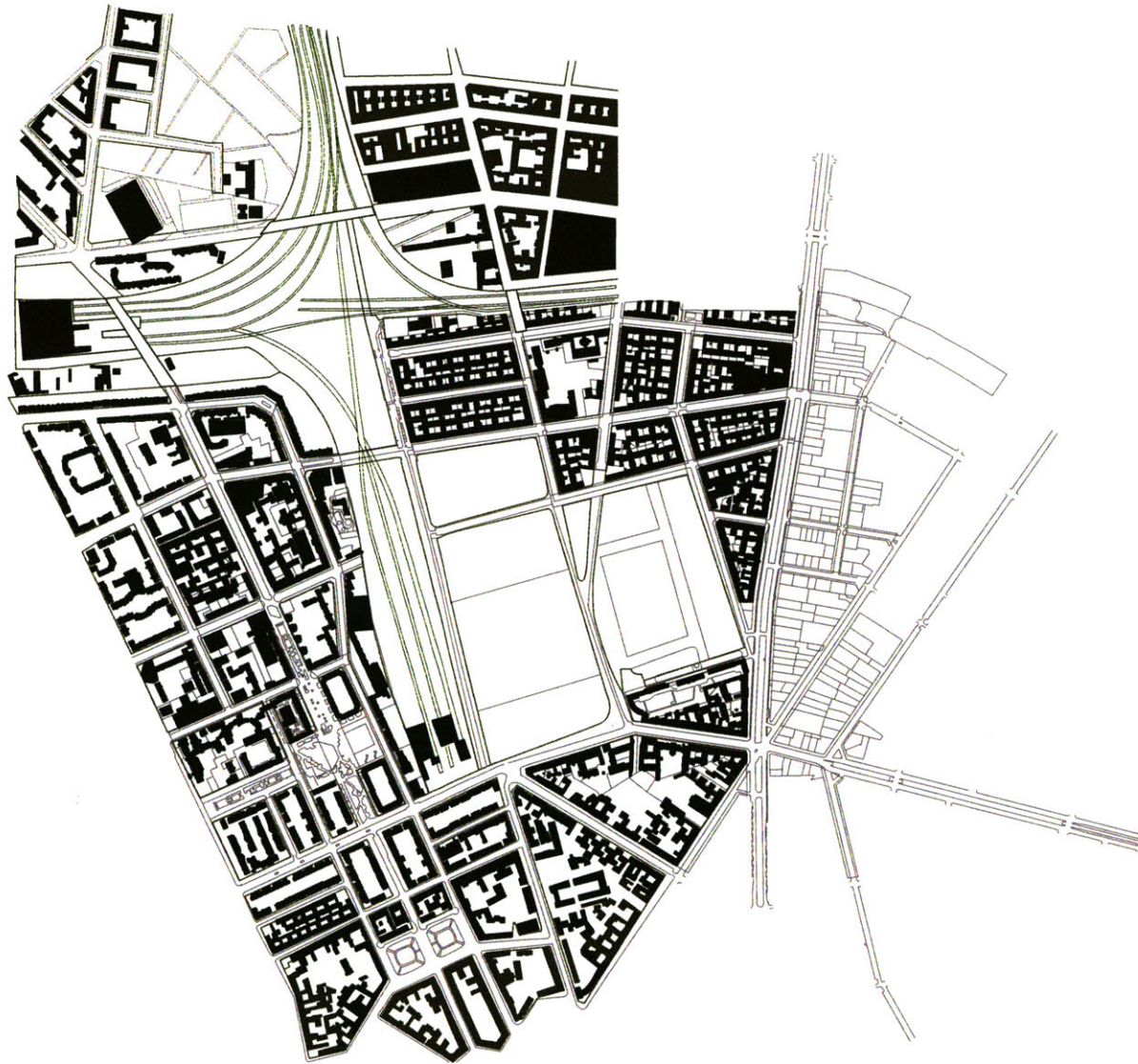
stop about a half-km east of the stadium. As a result of these circumventions, the site essentially becomes an isolated island.


Designed by Gustav Lange and completed in 1994, the direct site of Mauerpark itself seeks to transform “border space into free space” through transforming the previous death strip condition into a green park, where the physical presence of the wall renders itself manifest in paving which allows for N-S Pedestrian access. While successfully alluding to the mast memory of the juncture, Lang does not create deliberate moments of connection, and makes sure that upon arrival, visitors are allowed to wander without any clear sense of direction. This solution, however is merely conventional in nature, as it does not address the social implications of the wall, nor does it directly speak to the need for unification.

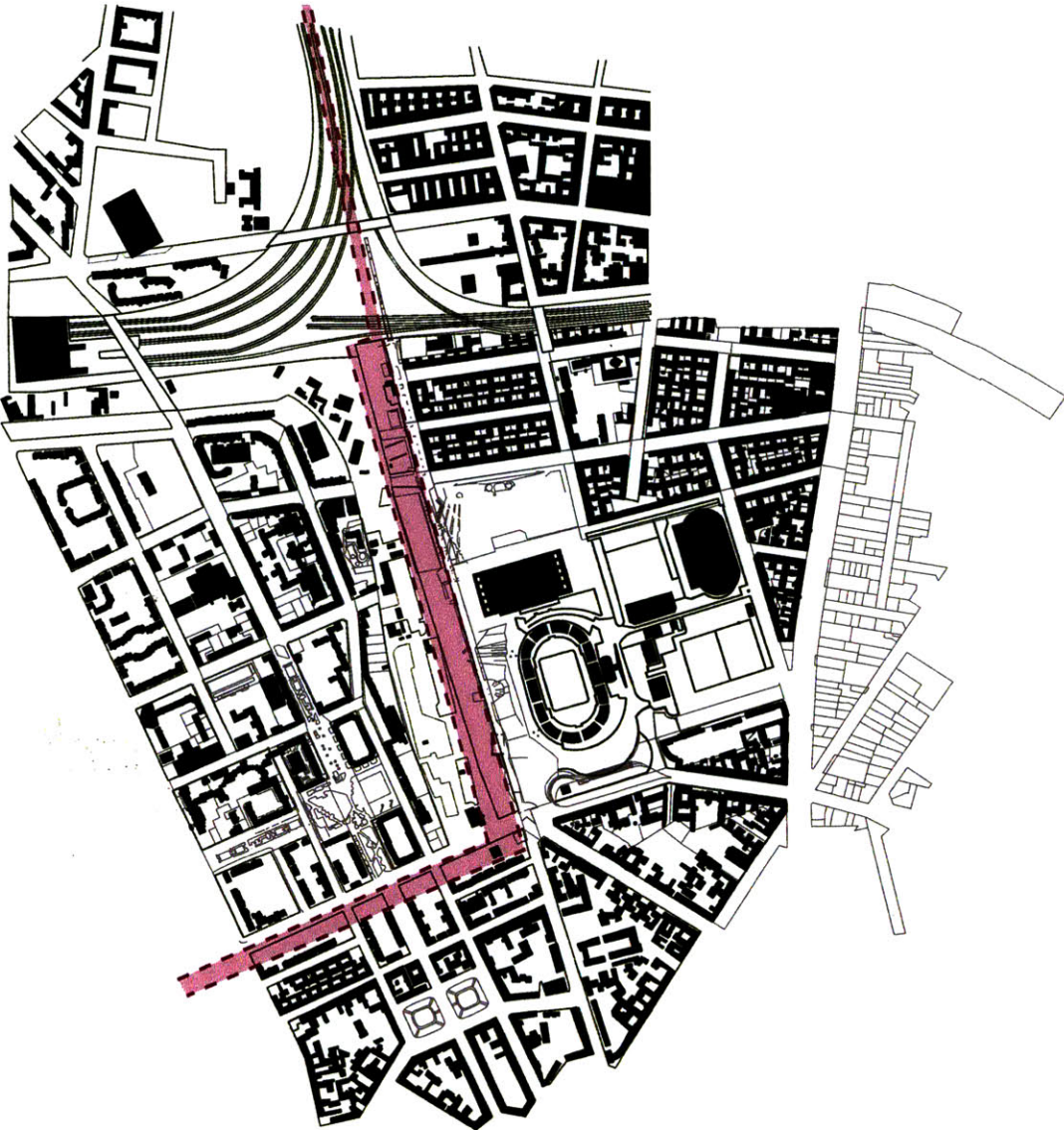
Notes

i. Ungers, Oswald Mathias, as quoted by Cepl, Jasper in *Shrinking Cities, Vol. 2 Interventions*. Ed. Philip Oswald. Berlin, Germany: Hatje Catz Verlag, 2006. 167

ii. <http://www.stadtentwicklung.berlin.de>



Site Plan c. 1932 



Death Strip and Wall Location

 Death Strip

 Wall

 Site Plan c. 1980



image source: <http://www.googleearth.com>
Mauerpark Aerial Site Montage - Existing Conditions









1



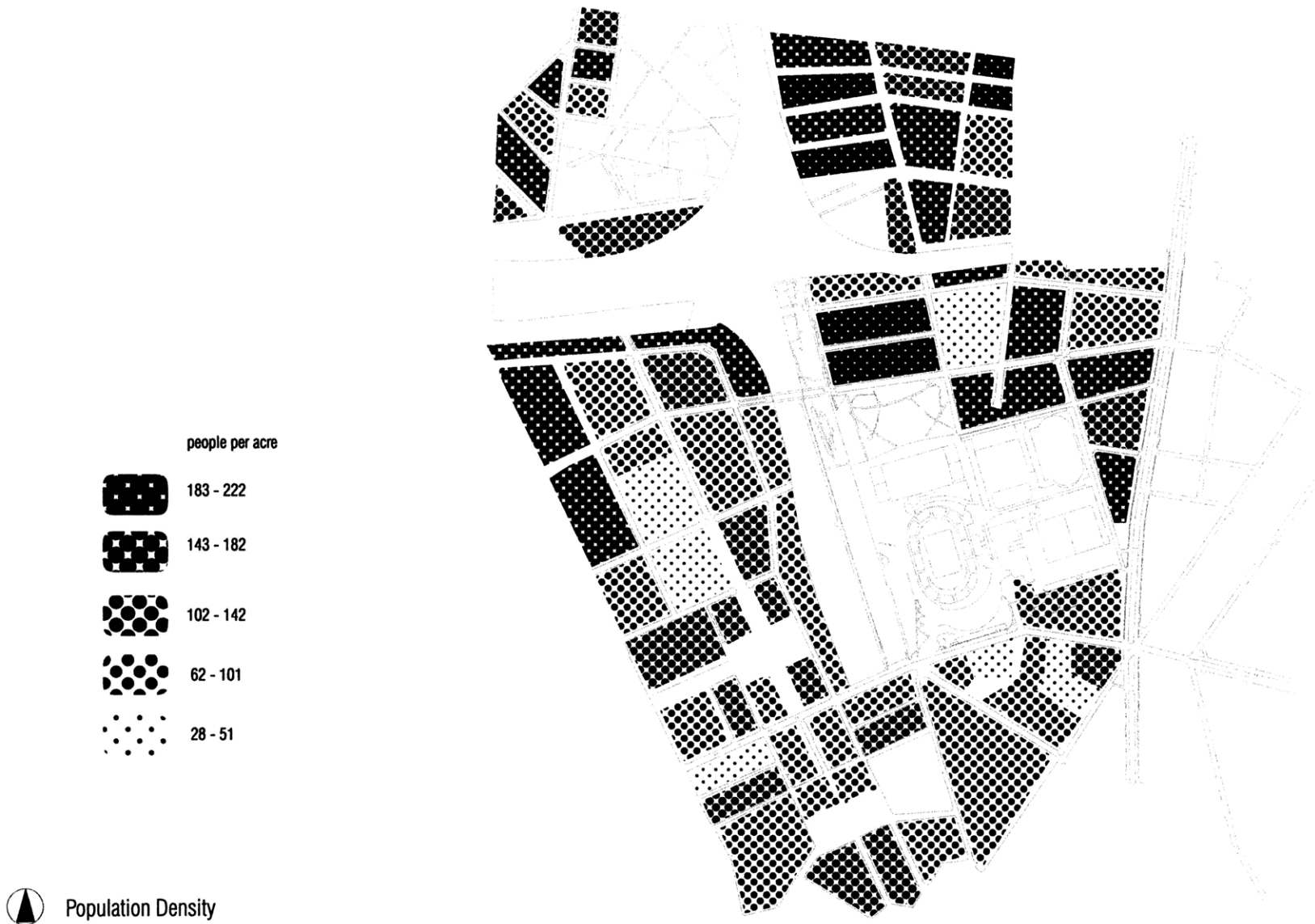
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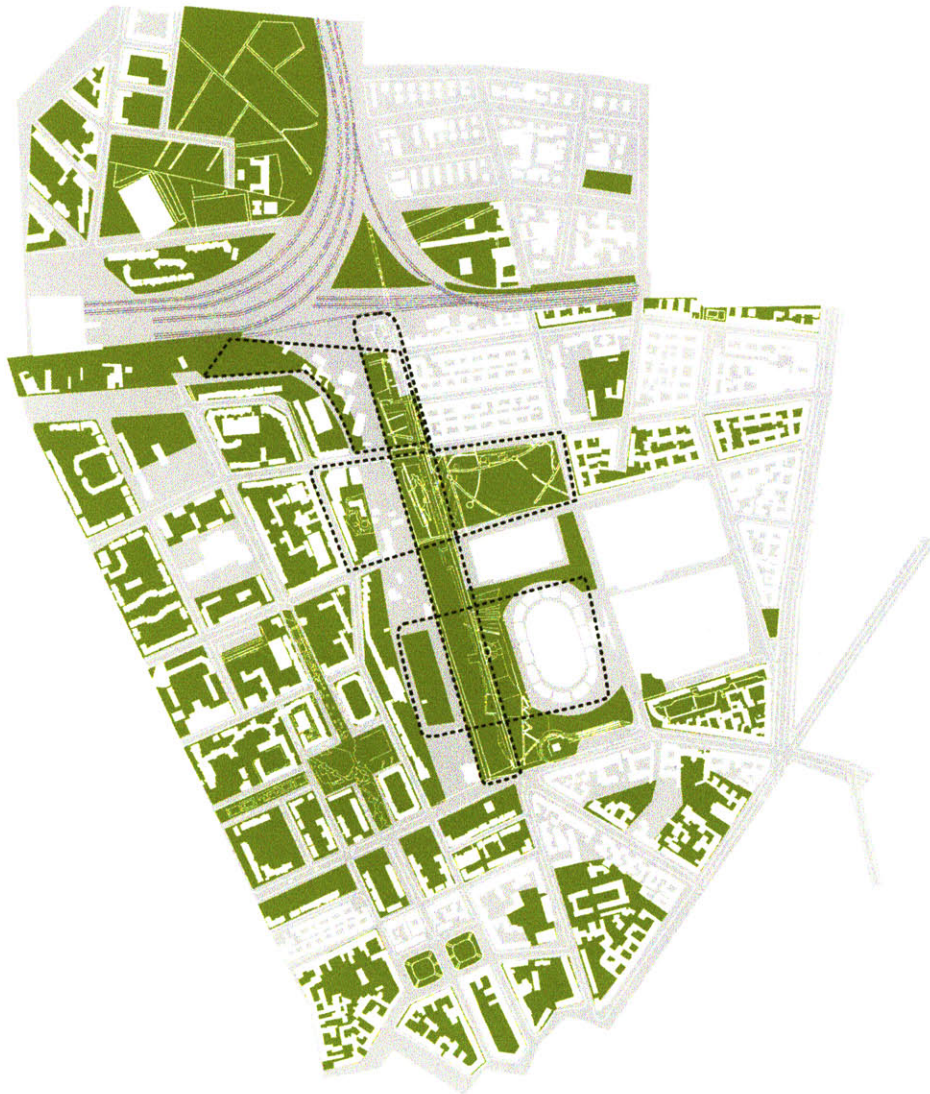
Mauerpark Panoramic Site Photographs - Existing Conditions



-  Post-war mid rise development
-  Late 19th century block development with little or not changes
-  Late 19th century block development with major changes
-  Development with predominantly commercial and service use
-  Low development with predominantly small buisness and industrial use
-  Development with predominantly public facilities and special use

Building Types 

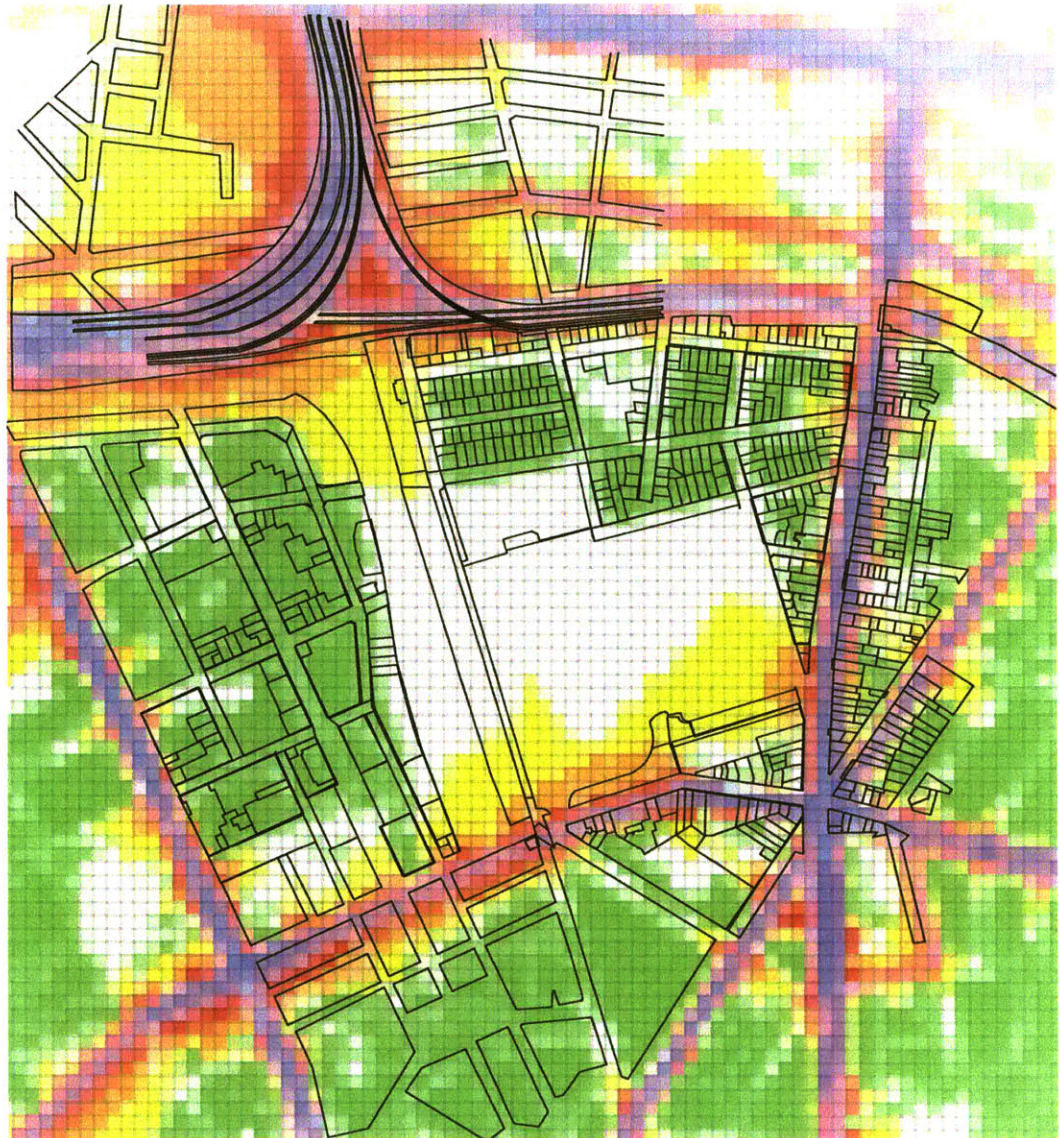
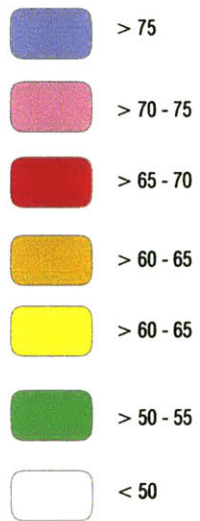




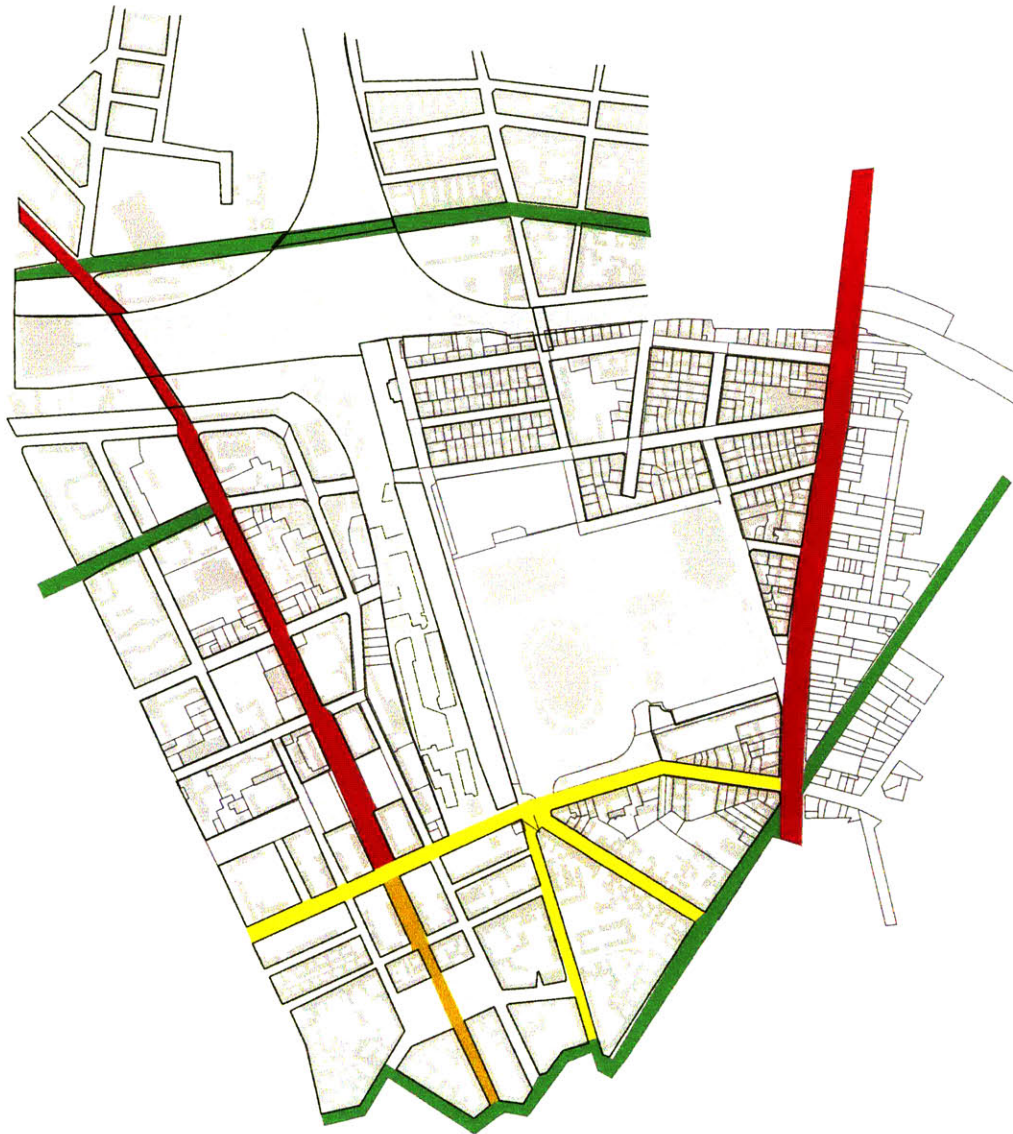
Open Green Space

Green Spaces 

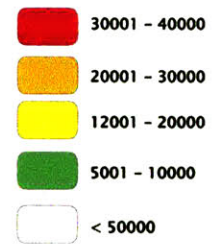
Strategic Noise Map Index in Decibals



 Strategic Noise Map

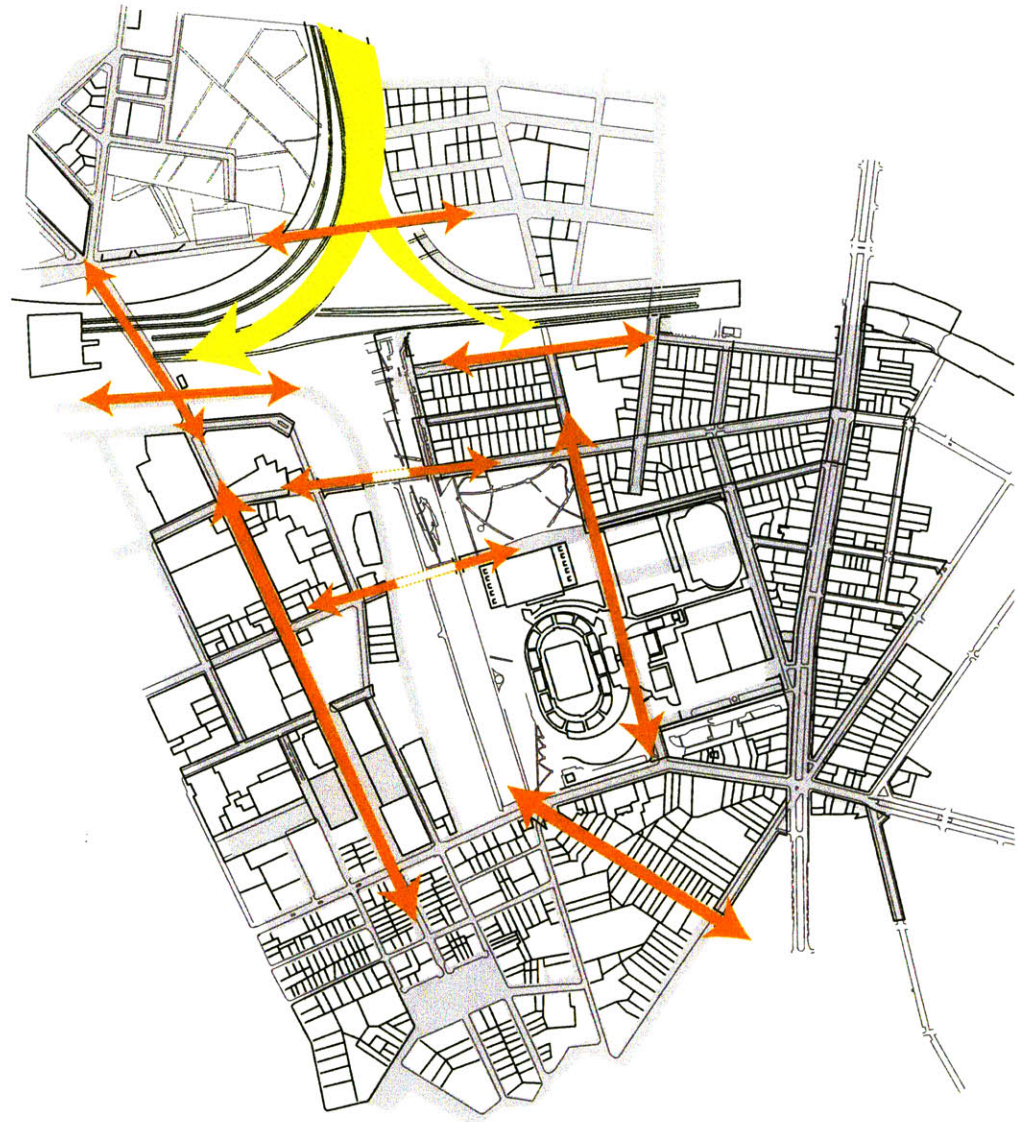


Number of Daily Passing Vehicles

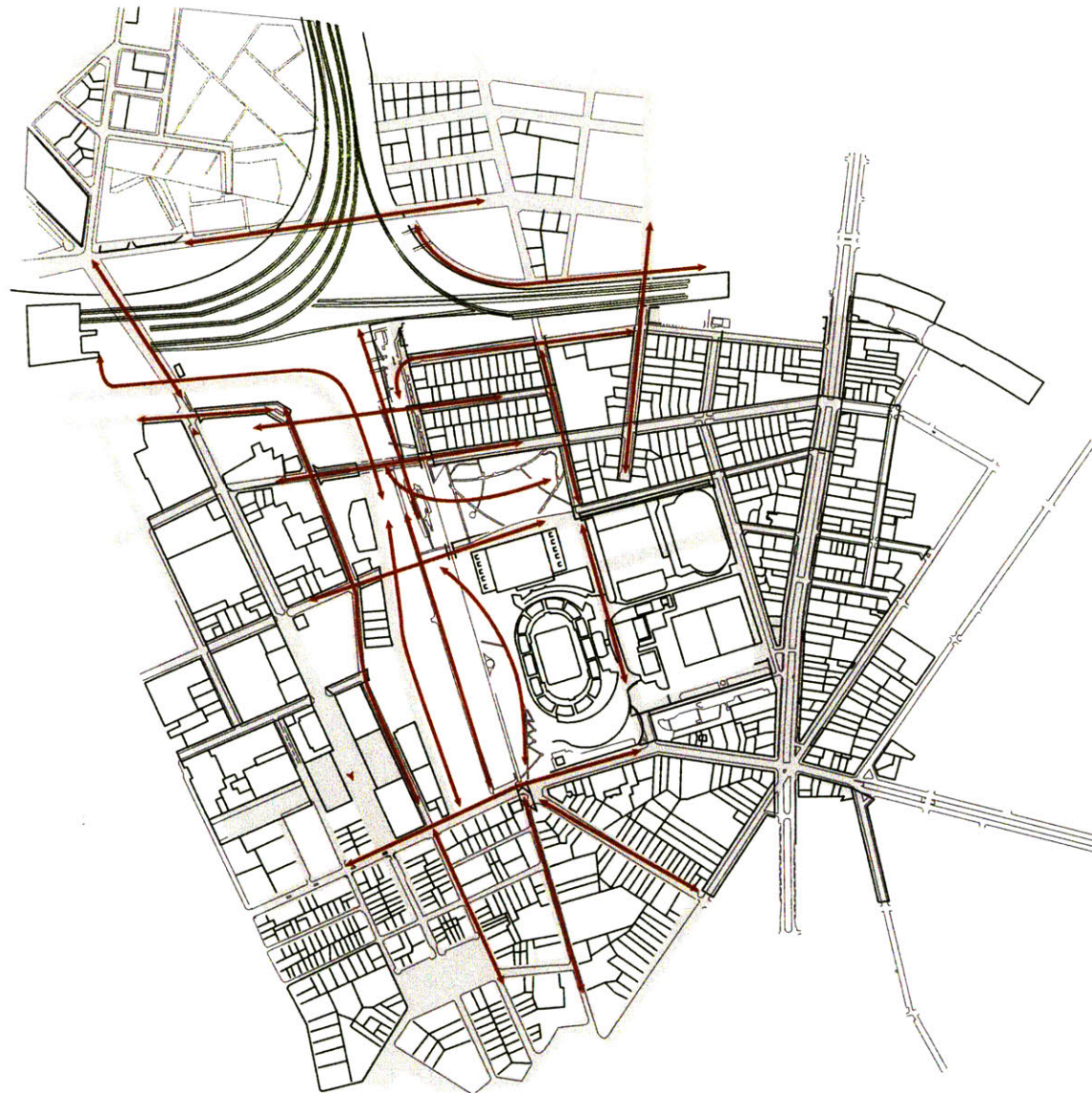


Vehicular Traffic Volumes





 Vehicular Traffic Flows



Pedestrian Traffic Flows 

\\ DESIGN STRATEGY

_Developing a Holistic Strategic Model

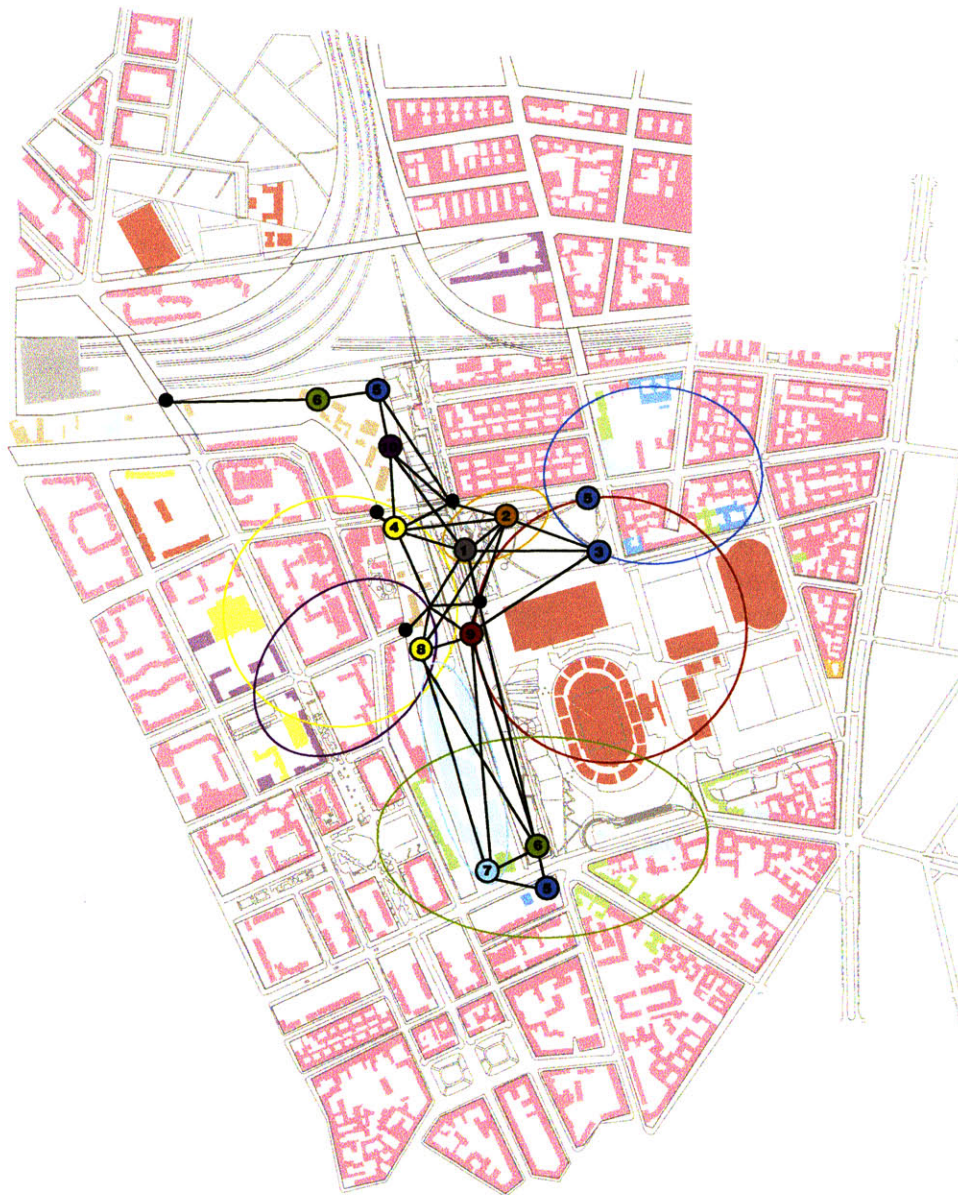
I have been exploring how architectural connectivity can find meaning in a site and depict historic conditions, while creating a viable urban public space. This approach does not seek to be another war or political memorial. I did not want to create a heavy architecture that buries itself in the ground, despite the fact that intuitively in a big open space one would want to explore the landscape condition. I was interested in creating a gesture that admits to our current political and social system but accepts it for what it is. I therefore chose to use the notion of this tension to begin to create a system where the complexity of a network is simplified down to its very essence, the complimentary entities that support it.

Based on my assertions, I felt that Mauerpark, located on the site previously known as the death strip, would serve as a site laudable of such a gesture. Already laden with meaning in its entirety and emptiness, yet seeking urban linkage to move past its austere urban framework, Mauerpark addresses the need to create a viable urban

public space to stimulate growth and unification between East and West.

In an effort to simultaneously address the upsurge of political networking among countries and the ever-evolving need for the West to involve itself with Eastern politics, I chose to use the program of the NATO public diplomacy division to address this global political exchange. The architecture, program and urban plan for the 1km long site are therefore the resultant of using the notion of a network as the conceptual framework behind their proposed organization.

While formally, I wanted to develop architecture foreign to its cultural and local surroundings, I wanted to create a lighthearted approach to our current system of living while acting as a catalyst to stimulate the urban environment. By acting as an organizational node, it therefore stimulates the previously empty site through various urban linkages. This conceptual framework seeks to connect between different experiential, political, infrastructural and local systems while structurally depicting their very essence of connection and the tension that binds them all.

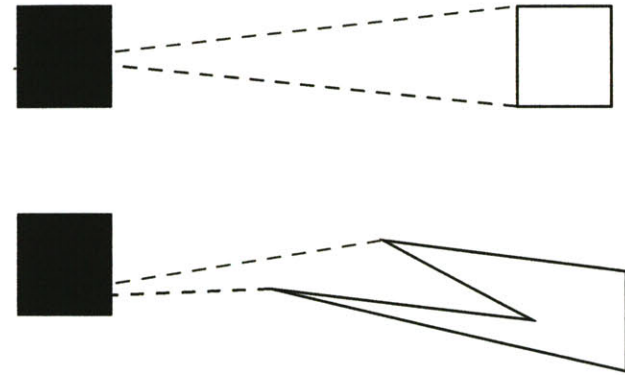
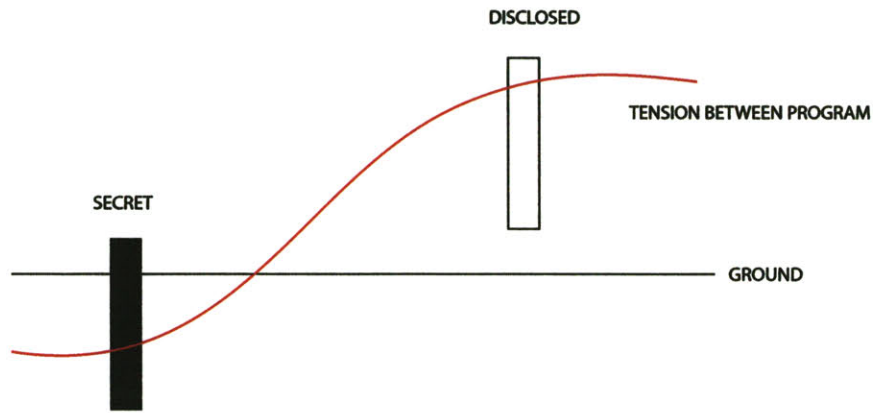


Investigative Program

- 1 Crossing Node for Main Bicycle Path
- 2 Outdoor Information Booth
- 3 Outdoor Performance Space under Canopy
- 4 Outdoor Information Booth
- 5:6 New Site Entry Point Information Booth
- 7 New Market Canopy
- 8:9 Main NATO Buildings and Gallery
- 10 New Train Stop

 Residential	 Community Center / School / Learnii
 Hotel	 Semi-permanent Industrial
 Restaurant	 Transportation Hubs
 Shopping	 Sports Facilities
 Culture, Entertainment	 Office

Concept Diagrams Illustrating Program Strategy



SECRET = HEAVY + STRONG, ANCHOR

DISCLOSED = VERY RESPONSIVE TO OTHER PROGRAMS, EPHEMERAL + OBLIQUE

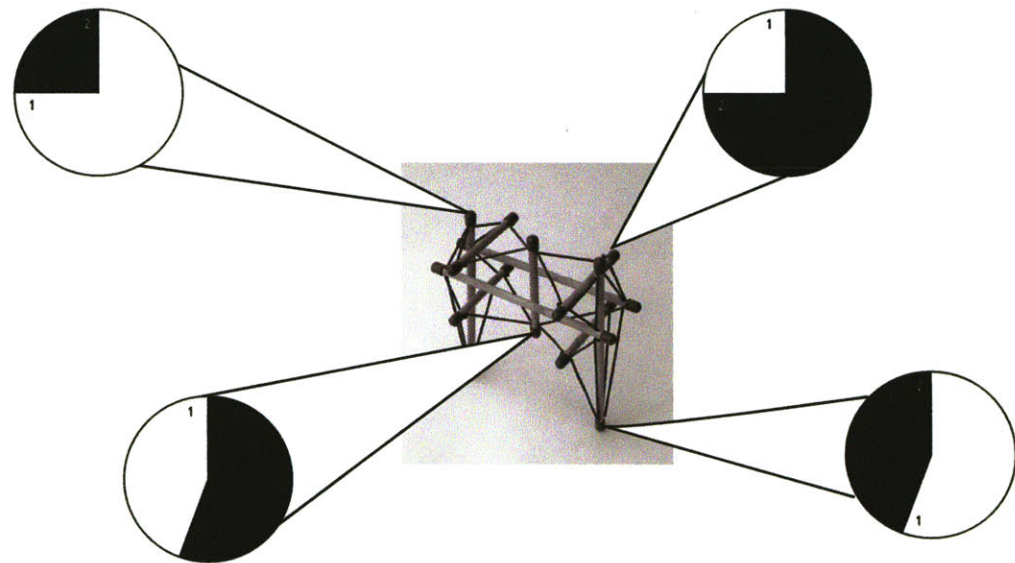
Final Program

Disclosed:

NATO Public Library
 NATO Public Gallery
 NATO Auditorium
 Observatory/Bar
 NATO Offices

Secret:

NATO Meeting Space
 Bunker
 NATO Secret Archives



Concept Diagrams Illustrating Political Tension vs Architectural Language

\\ DESIGN PROPOSAL

_Urban Organization

My proposal for the design of NATO park aims to establish a much needed link between Mauerpark, the surrounding community and ultimately, the city of Berlin. Based on my analysis, the key to this undertaking is to create a series of programmatic "nodes" characterized by a density of cultural activity, which are infrastructurally connected.

Due to the fact that the site remains relatively isolated from major transportation routes, my proposal first reclaims the entirety of the site as a node and connects it to the city visa-vie a new local S-Bahn stop, through an extension of the rail tracks on the North of the site, while connecting it to major transportation routes along major Berlin cultural and historic sites.

The site plan for mauerpark employs the nature of connectivity by extending existing street and traffic movement lines to establish links that enable a natural flow of movement. This results in a strong interweaving form which I used throughout the plan to establish an archi-

tectural and landscape language. Additionally, it provides a new method of traversal in a formerly impervious area.

Based on a programmatic study, at the crisscross of these newly established streets, I have allocated for discrete programmatic activities which support and stimulate the local urban dynamic. In particular, a picnic/outdoor gathering space to the North-East and a rehabilitated outdoor market area to the South-West. In the middle of these two nodes lies the main NATO facility, whose main axes lies N-S, to symbolically create an East-West circulation. These areas of programmatic density create an urban microcosm of the urban archipelago system, symbolic of the nature of Berlin.

_Architecture

The architecture of the cultural NATO facility emulates the need for connection through the application of a non-redundant system, where all structural elements are dependent on an equilibrium among constituents in order for each building to function. Programmatically,

each architectural constituent relates to the duality of a government organization, where the public realm and the secret realm function interdependently, yet support each other's existence.

These ideas are communicated in the architecture through having the NATO offices and NATO gallery space, where NATO initiatives are displayed for complete public viewing, structurally dependent on the NATO bunkers, which act as structural and programmatic anchors. The program is therefore categorized within two realms; the realm of the disclosed (public) and the realm of the secret (private).

In this respect, the NATO Public Diplomacy Division Headquarters are equal in program and square footage, emulating the need for a public and secret sphere within a government organization. Each component is structurally and programmatically linked to the other.

Rowe and Slutzky argue that through Gyorgy Kepes' definition of phenomenal transparency, "the transparent ceases to be that which is perfectly clear and becomes

that which is clearly ambiguous.¹ This ambiguity not only destroys the separation between public and private, but effectively puts them on the same perceptual plane, while deepening viewing accessibility and pushing the architecture from the exterior to the design of interior."

A truly transparent glass system would therefore place an equal amount of importance to the meaning of structure along with the daily activities of its occupants. I therefore wanted to steer away from this notion and create a building whose power would render itself in overall structural form and its implied meaning.

In addressing transparency, I opt for the notion of structural understanding to be a direct influence of and a direct reinterpretation of a complex political system. Following this interpretation, I have designed the façade as a dynamic system which clearly depicts the need for secrecy within the public realm.

According to Deborah Ascher Barnstone "the linkage between transparency and democracy [in the German perspective] does not address the false analogy for both the state and state architecture, since neither is truly

transparent.”ⁱⁱⁱ If defined by physical accessibility, the same nature applies. To use the abstraction of glass alone does not allow for the true questioning of current political wind.

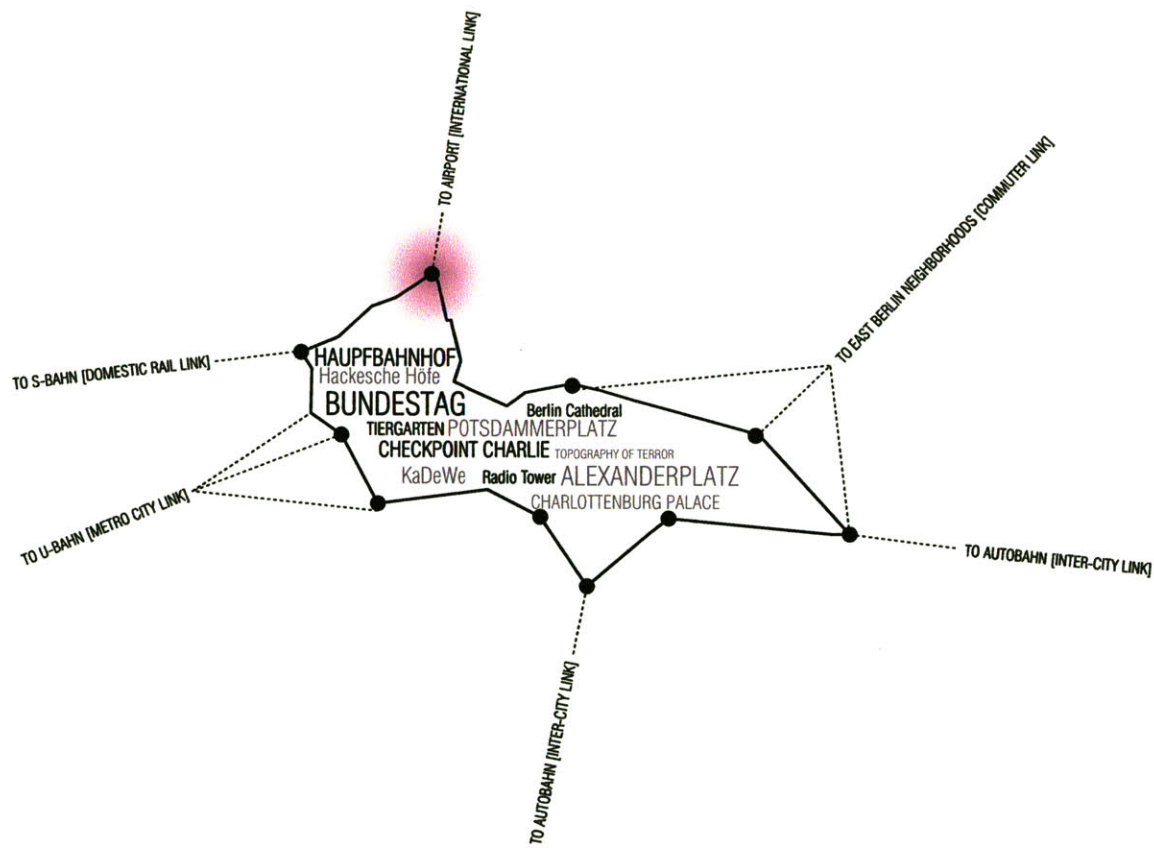
Similar to the structure, the facade also tells a story. Using electrochromic glass, the glazing changes opacity with the application of an electrical current: it changes between a neutrally colored, translucent state and a transparent state.

Using electroluminescent tubes embedded within the framing of the glass, once opaque, the surface has the capacity to display images. This allows for NATO to display their public initiatives, while providing privacy for delegates and employees when the need for secrecy arises. The facade therefore becomes a communication device between the government and the people. The meaning of democratic transparency within the public realm is therefore interpreted as one constantly in flux and dependent on the presence or absence of political turmoil, closely mirroring the nature of world politics in the present day ruling governments.

The components of my architectural and infrastructural proposition therefore constitute a new urban condition. The condition of the Wall and Death Strip is therefore transformed into a series of public promenade and exhibition spaces. The scattering of the system mirrors the scattering of government, and the loss of a centralized control state. Each node is therefore reliant on the other for survival and proliferation. Likewise, the architecture, being initially born from the armature of various urban and social connections, comes in the form of a tension-dependent structure nested within urban infrastructure.

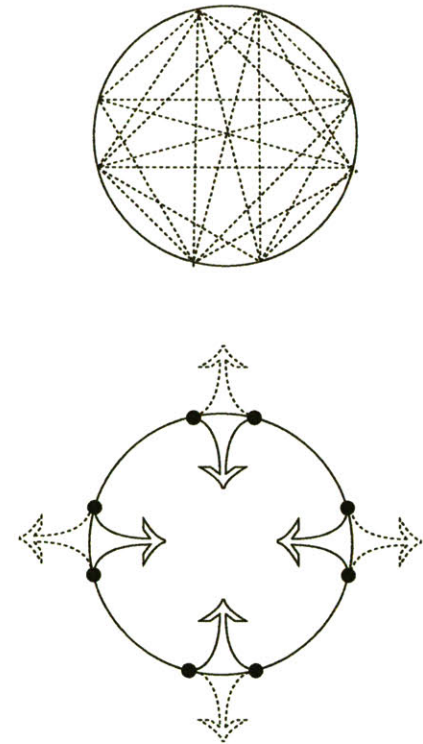
Notes

- i. Rowe, C, Slutzky, R “Transparency: Literal and Phenomenal Indigenous Architecture.” *Vol. 8 Perspecta*. New Haven: Yale, 1968. 45
- ii. D’Hooghe, Alexander. “The Terrifying Beauty of Absence: Transparency in Modern Architecture.” <http://www.thiscenturyreview.com/>
- iii. Barnstone, Deborah Ascher, *The Transparent State: Architecture and Politics in Postwar Germany*, New York: Routledge, 2005. 4

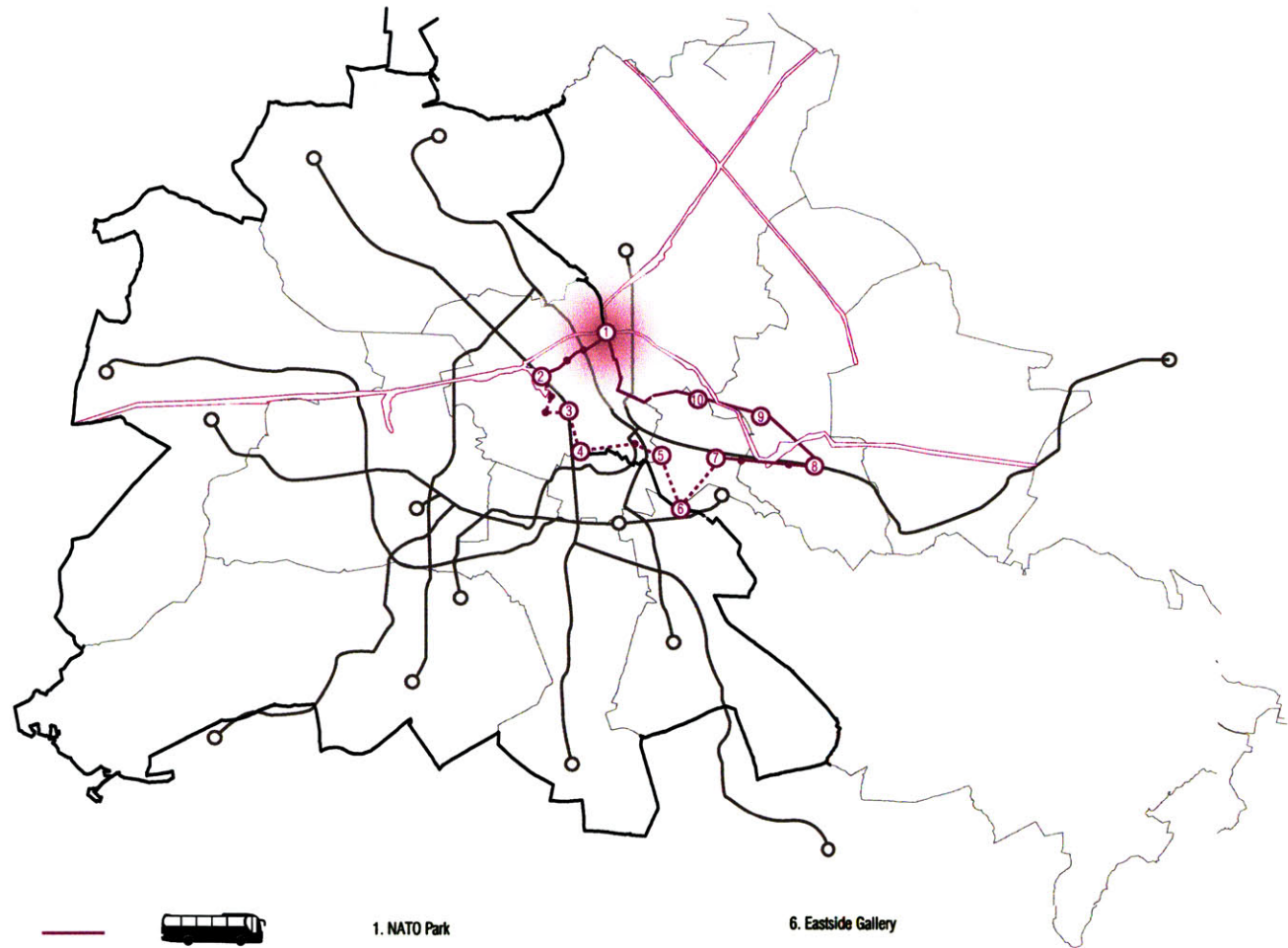


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b

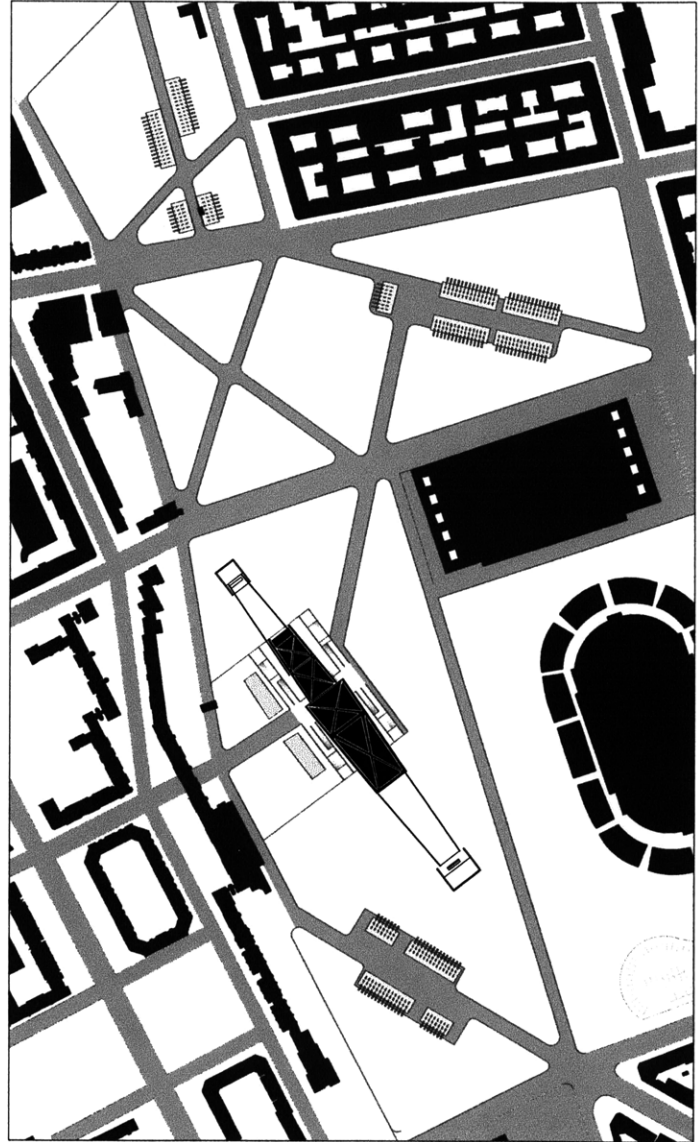
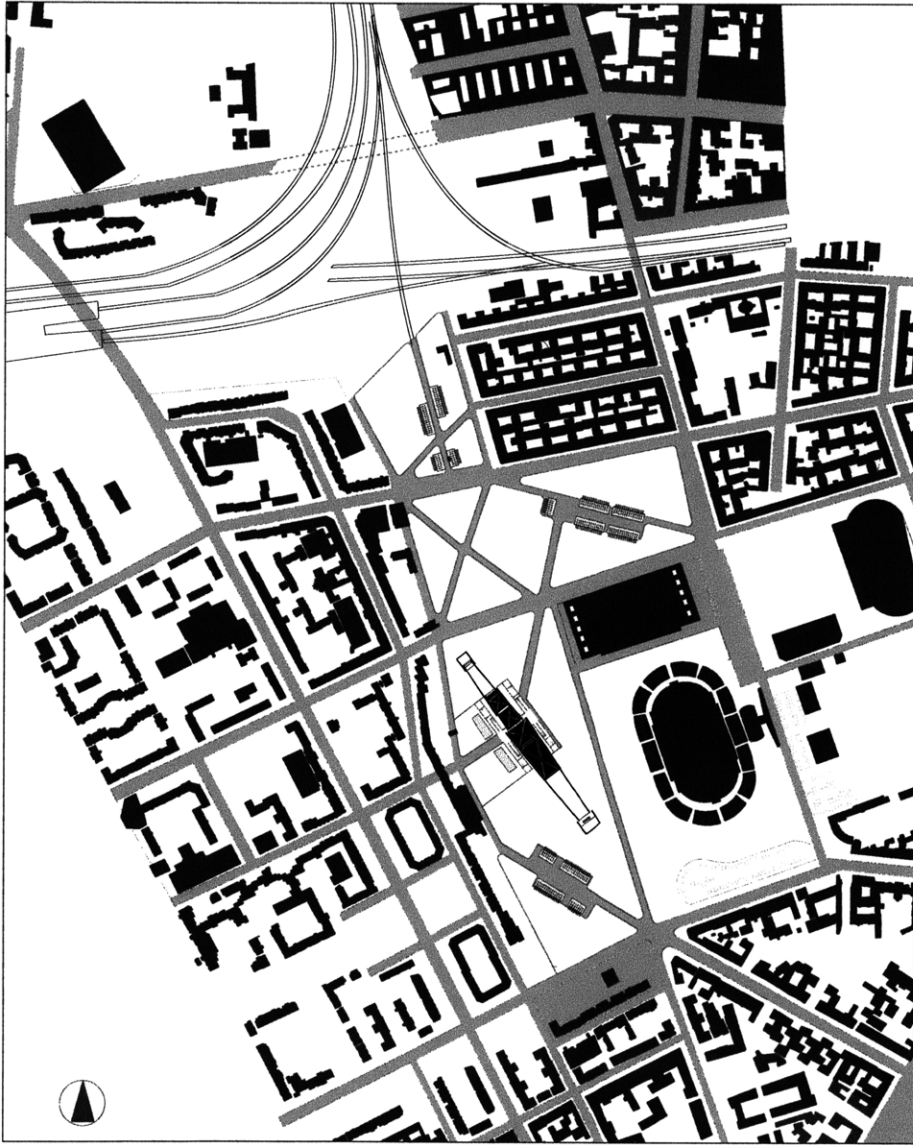


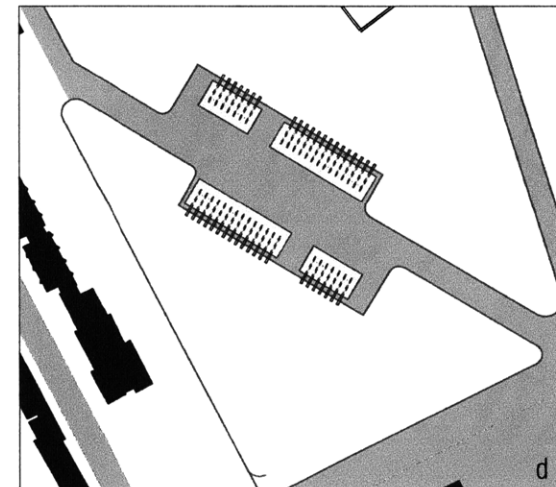
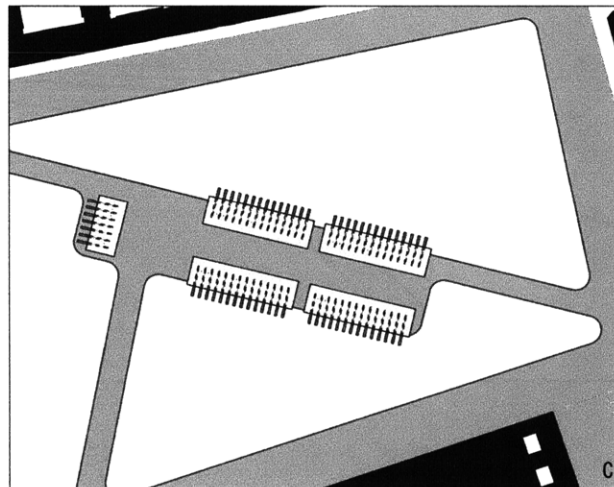
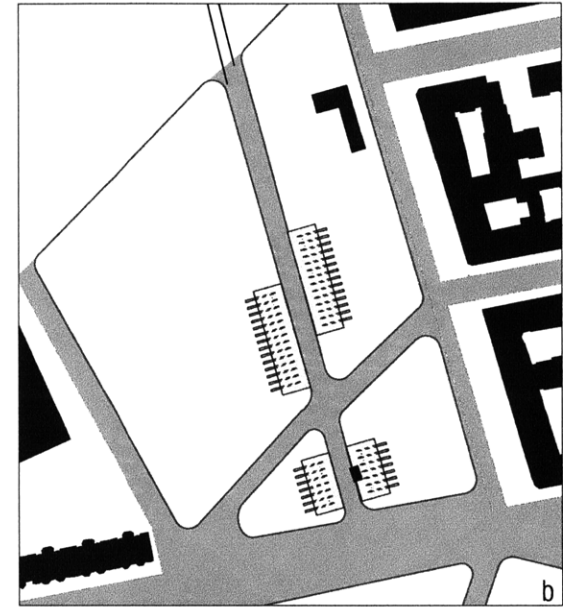
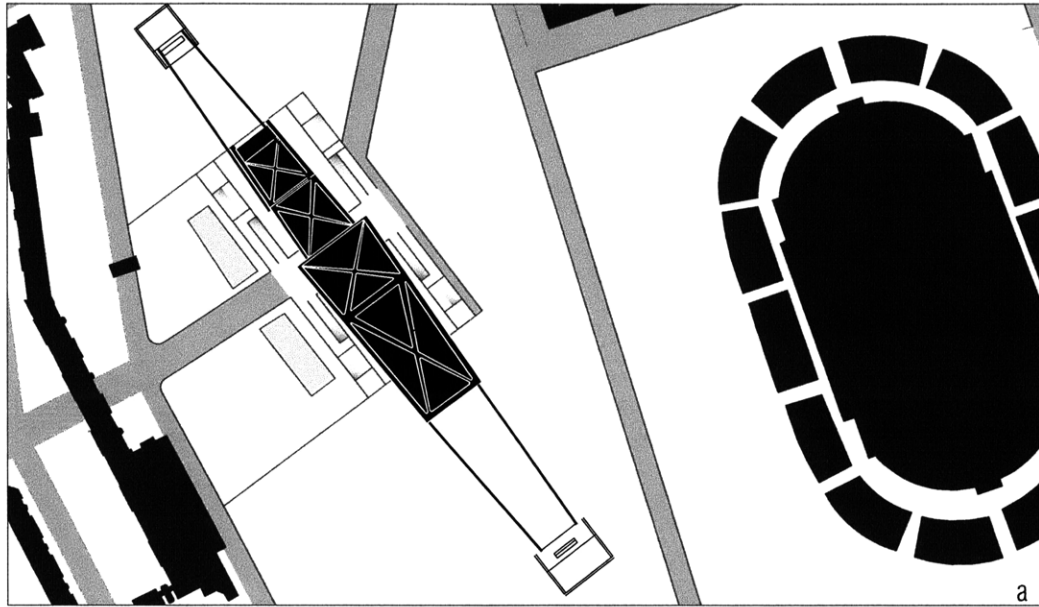
a. Transportation Proposal Diagram
 b. Node and Network Conceptual Diagrams



- | | |
|---|--|
| 1. NATO Park | 6. Eastside Gallery |
| 2. Berlin Wall Memorial | 7. DDR Museum |
| 3. White Crosses Memorial / Bundestag, Holocaust Memorial | 8. Normannenstrasse Research and Memorial Center |
| 4. German Historical Museum, Jewish Museum | 9. Karl Marx Allee |
| 5. Stasi Museum Berlin | 10. Volkspark Friedrichshain |

 Proposed Urban Connection



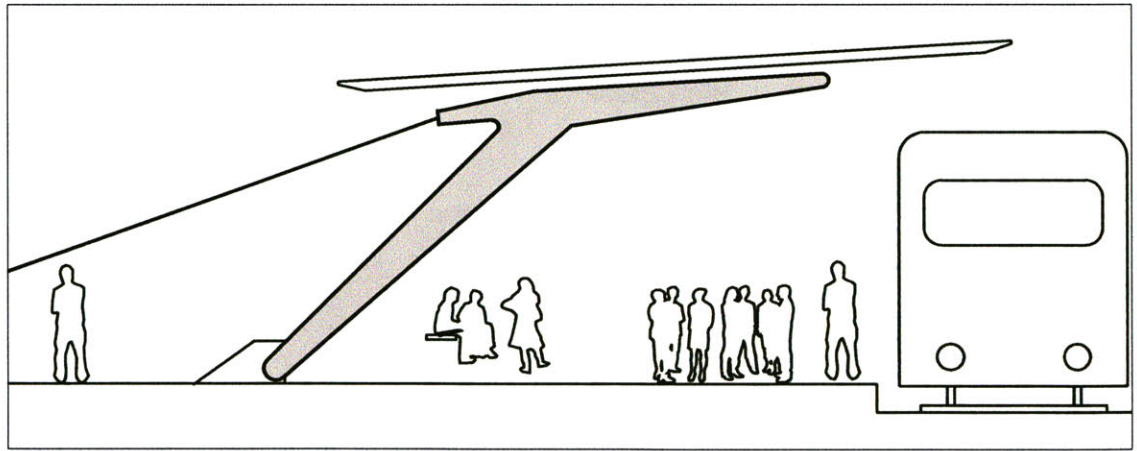
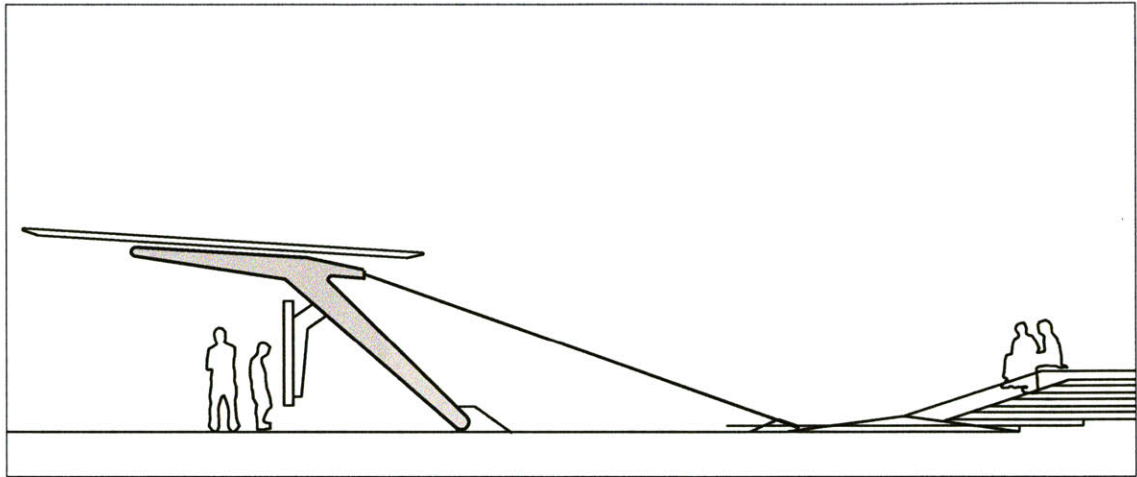
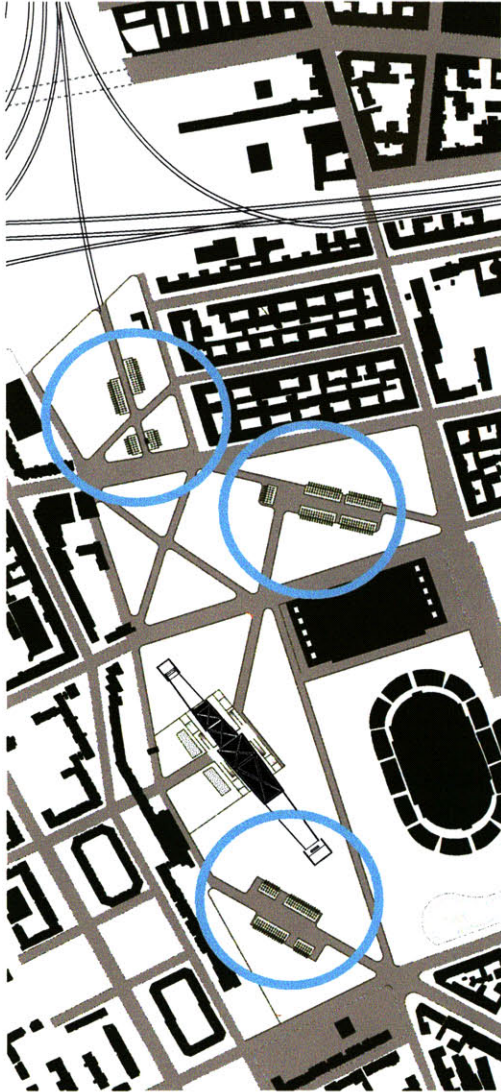


Siteplan

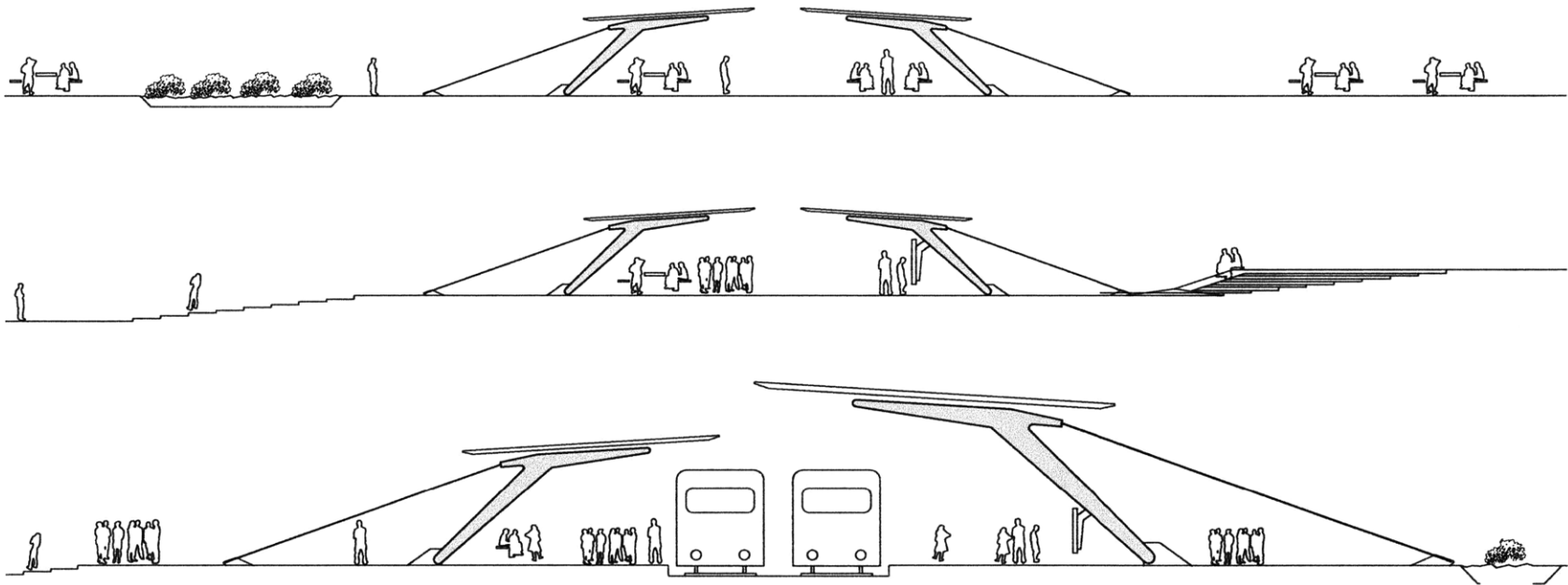
Details of Urban Programmatic Nodes

- a. NATO Buildings and Gallery
- b. Train Stop and Canopy
- c. Outdoor Recreation Canopy
- d. Market Facilities and Canopy

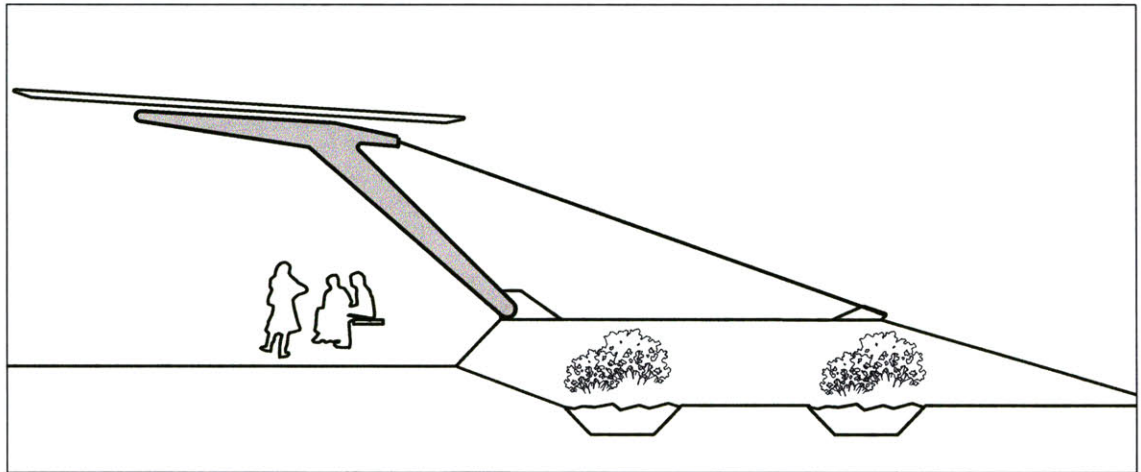
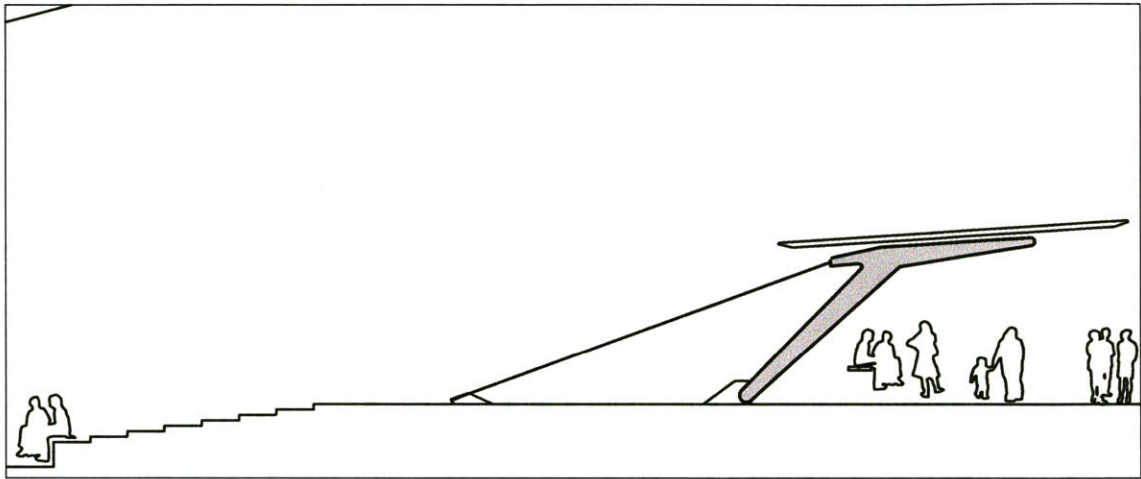
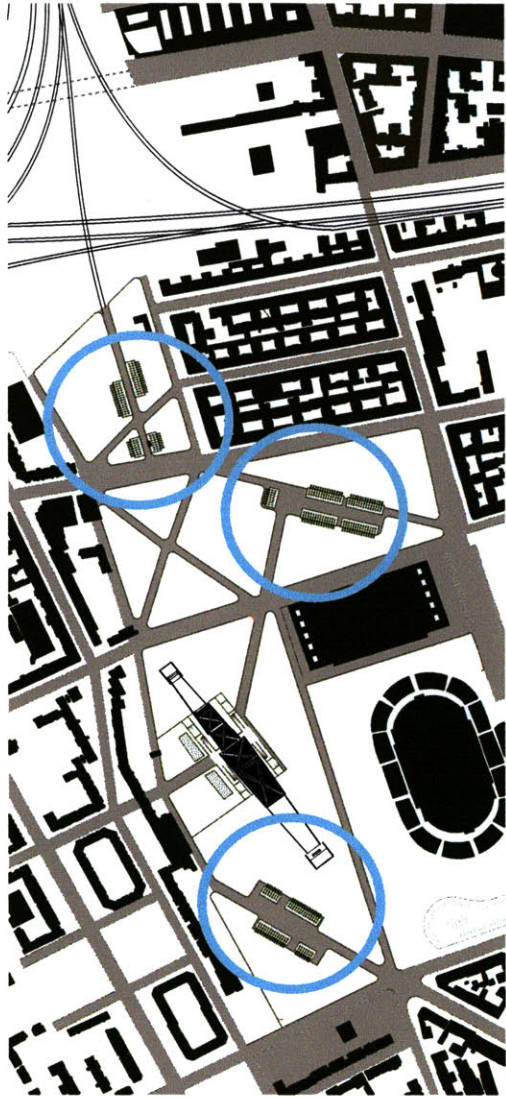




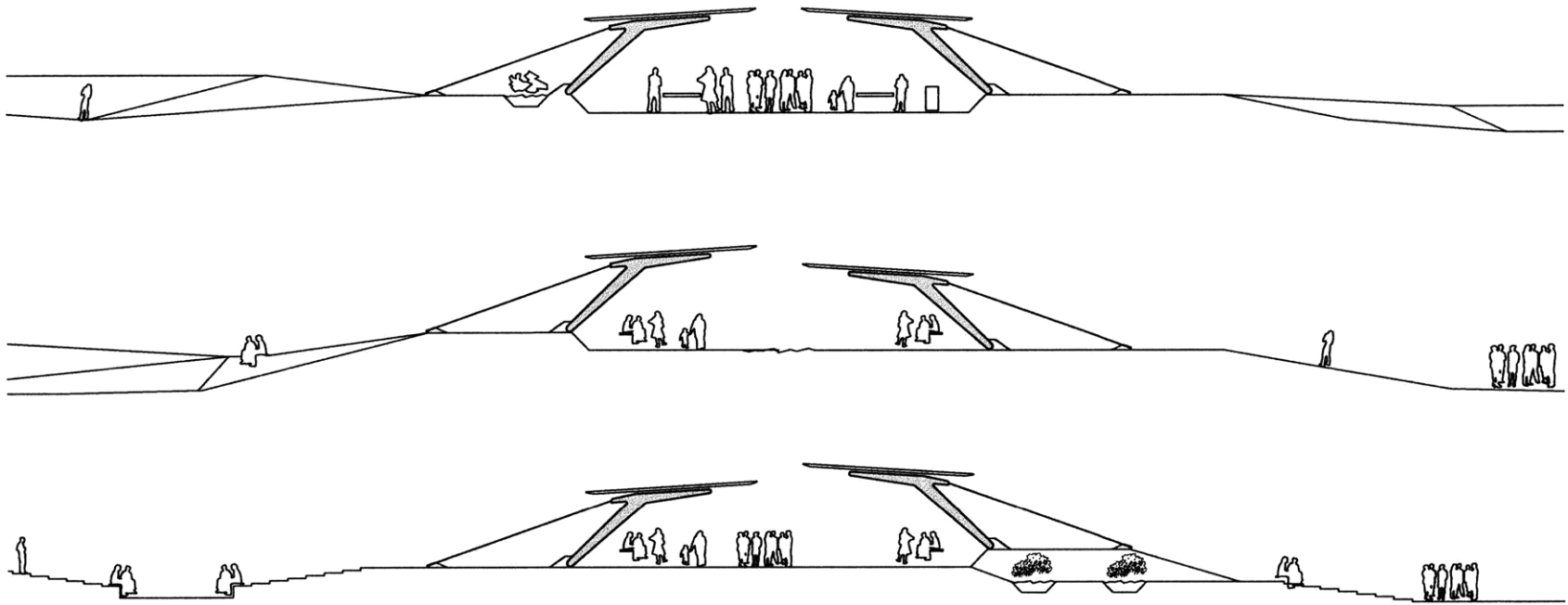
Canopy Detail at Programmatic Park Nodes



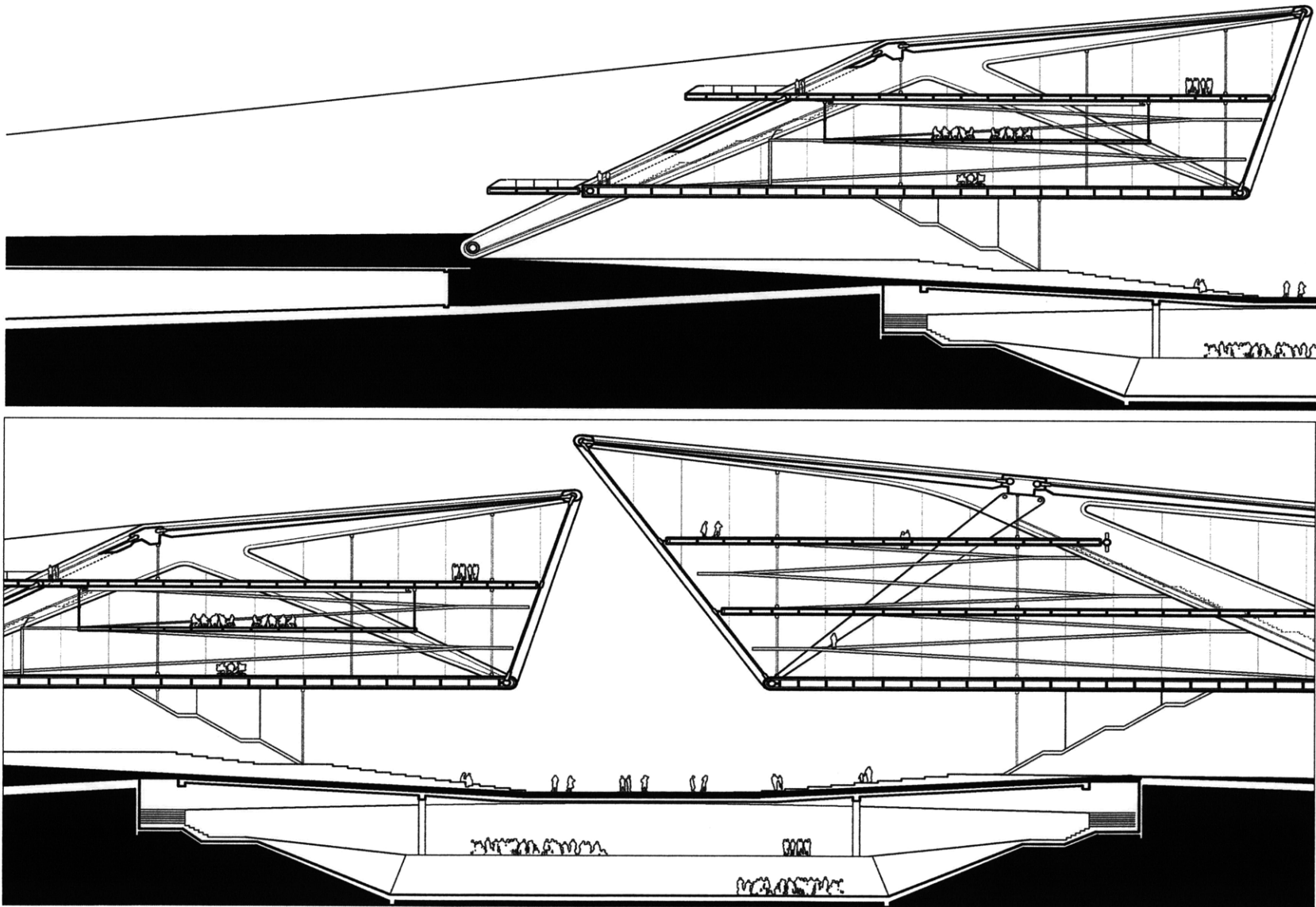
Canopy Section

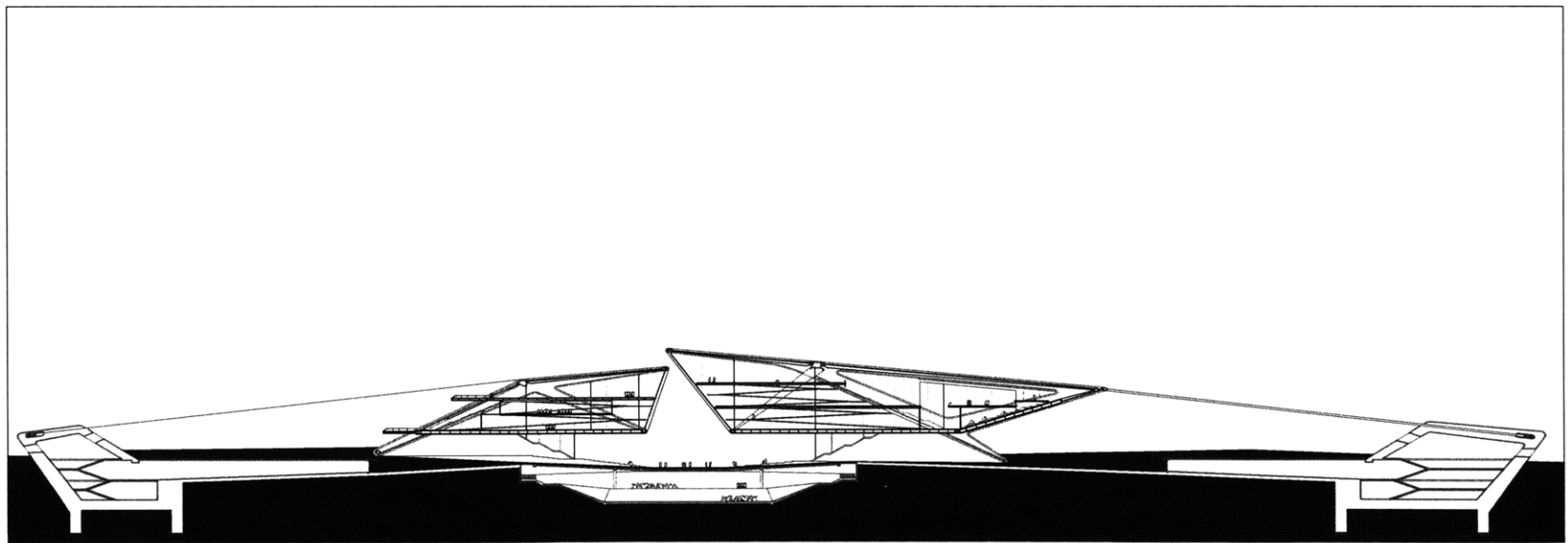
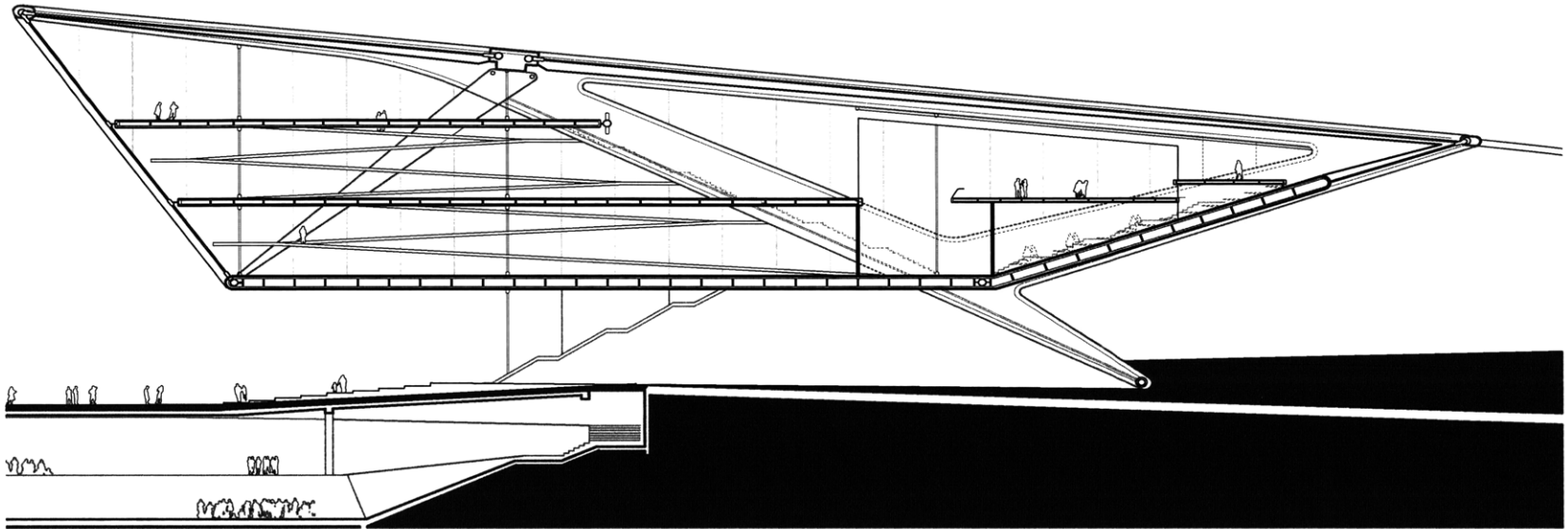


Canopy Detail at Programmatic Park Nodes

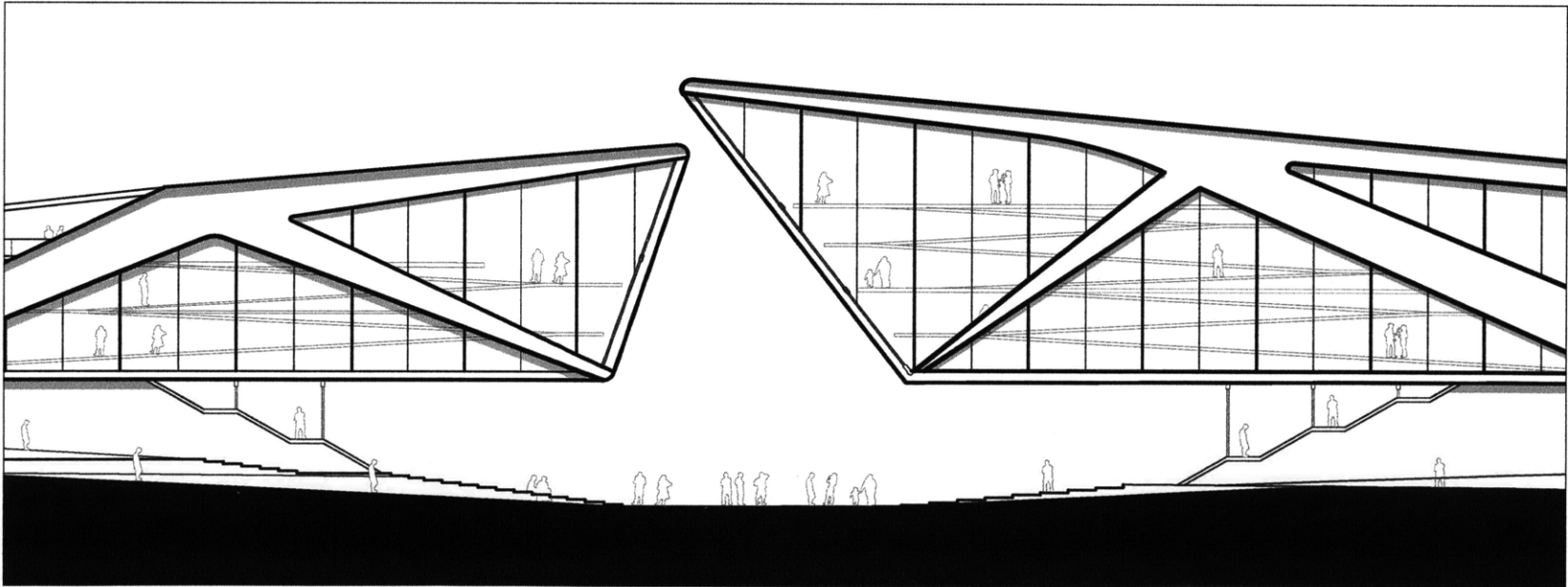
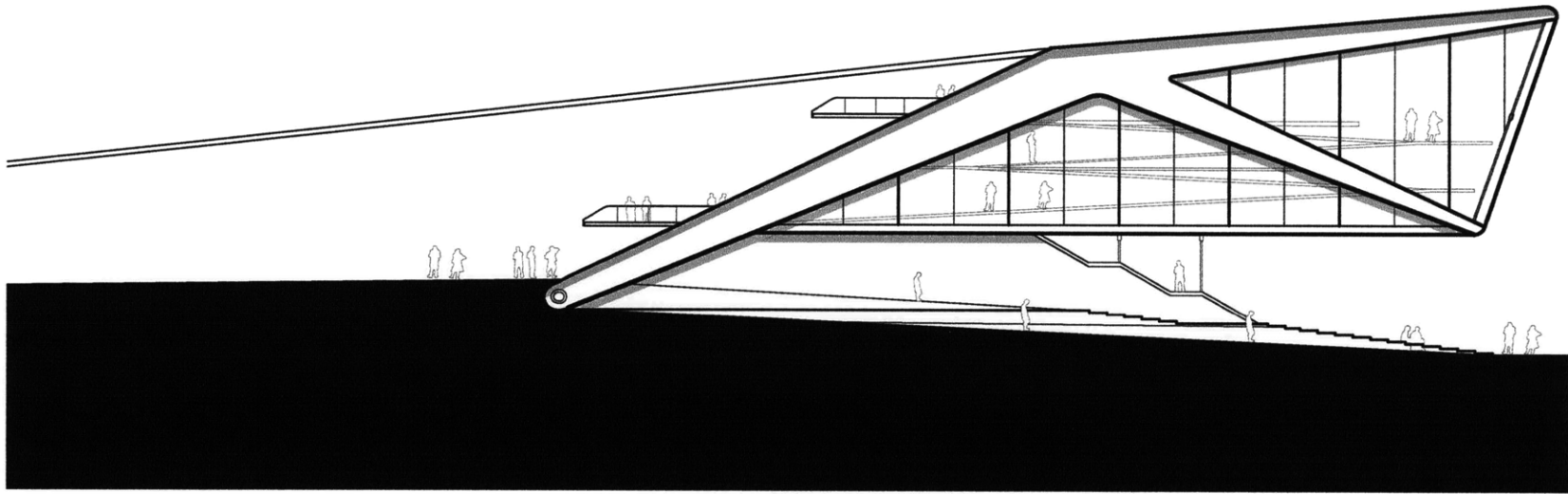


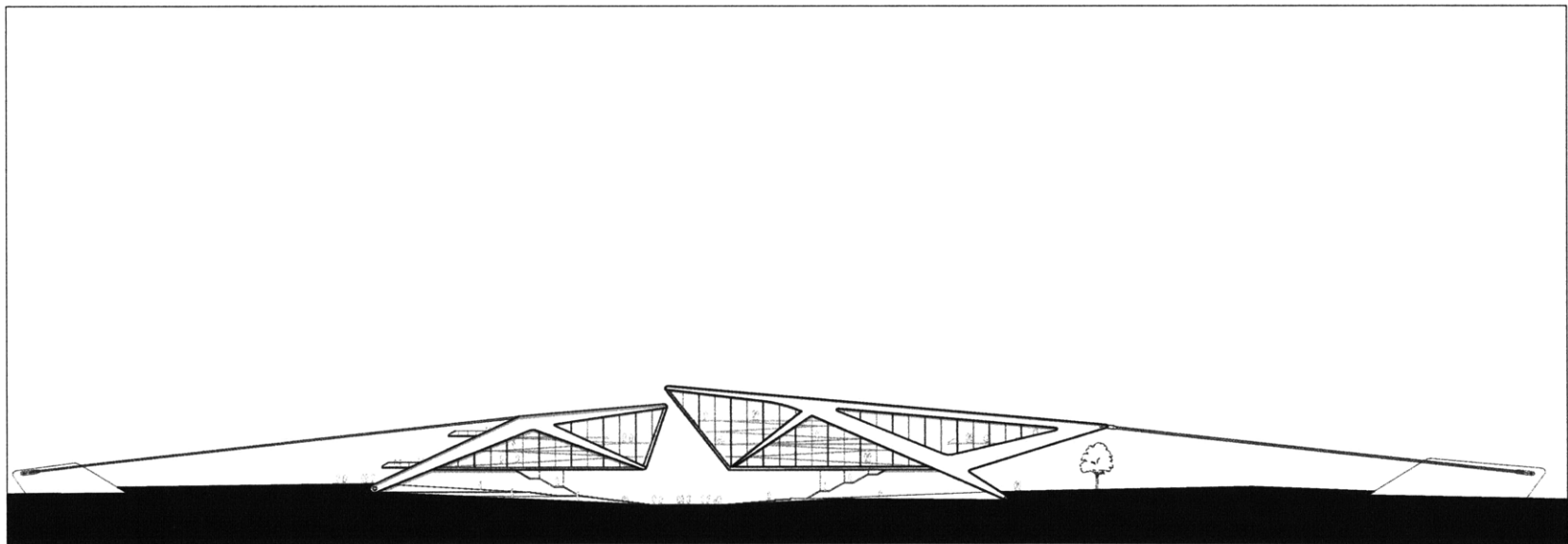
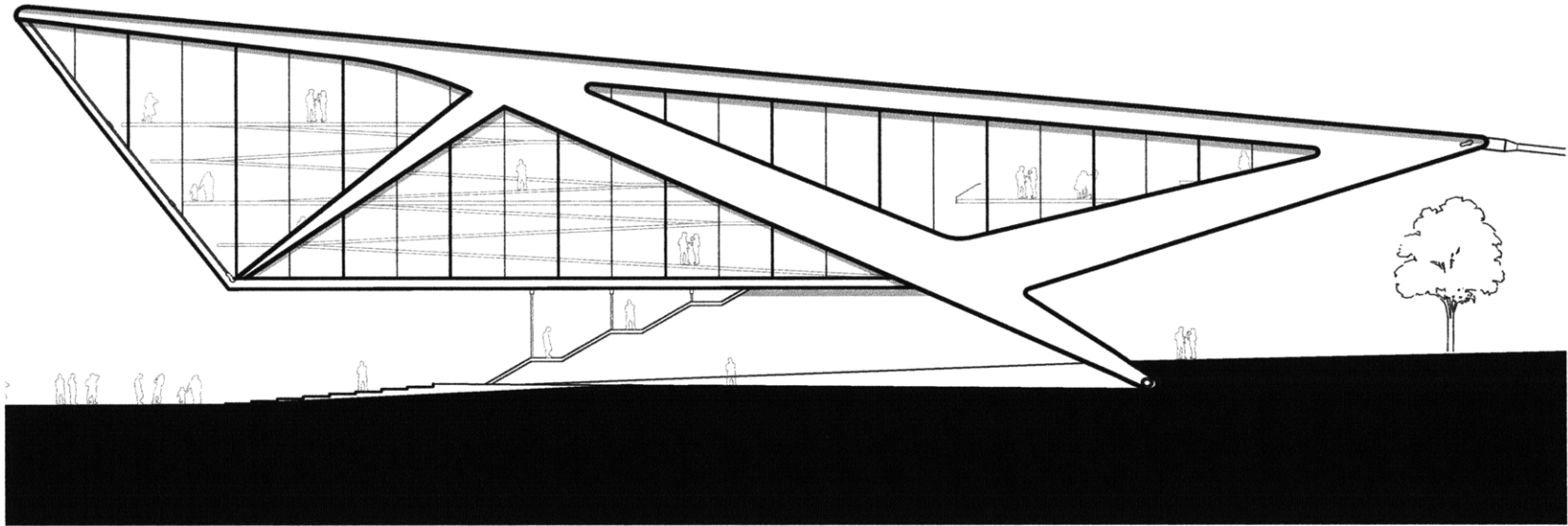
Canopy Section



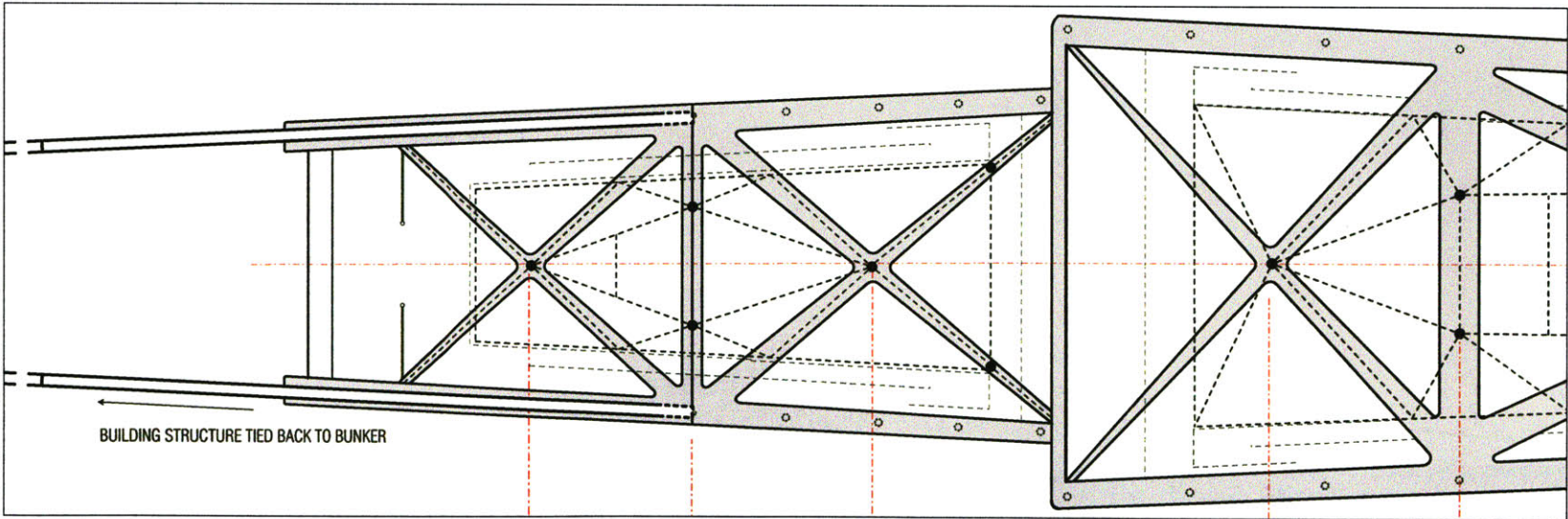
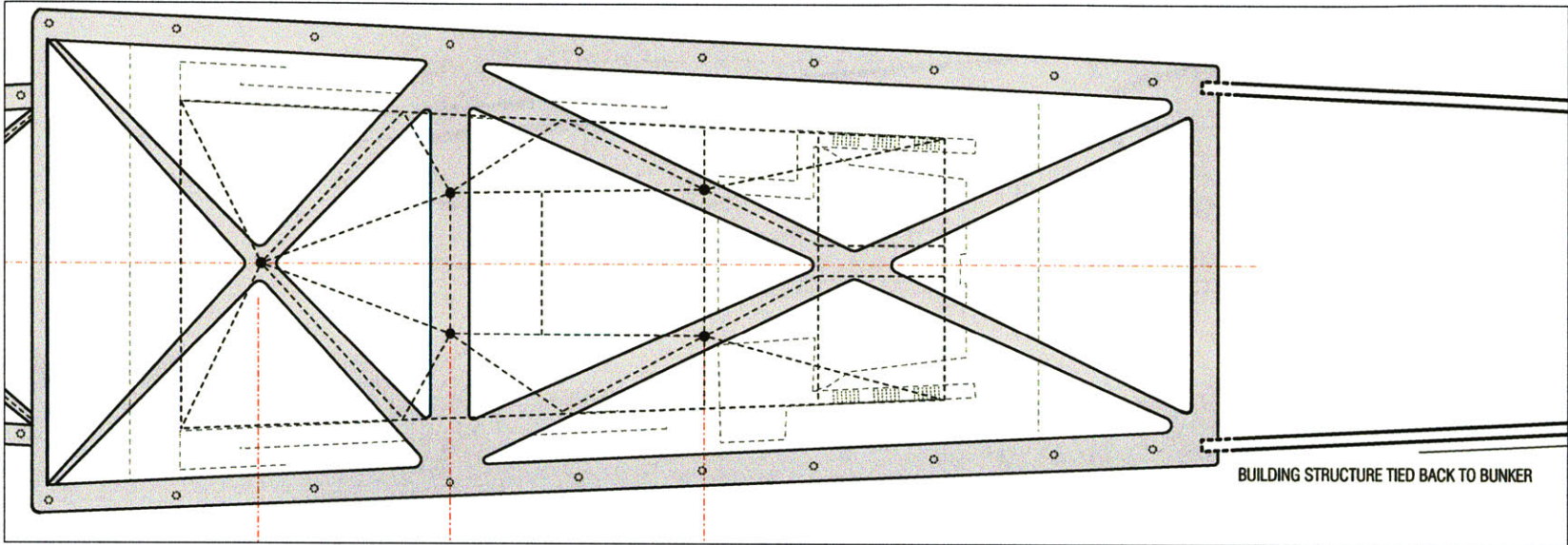


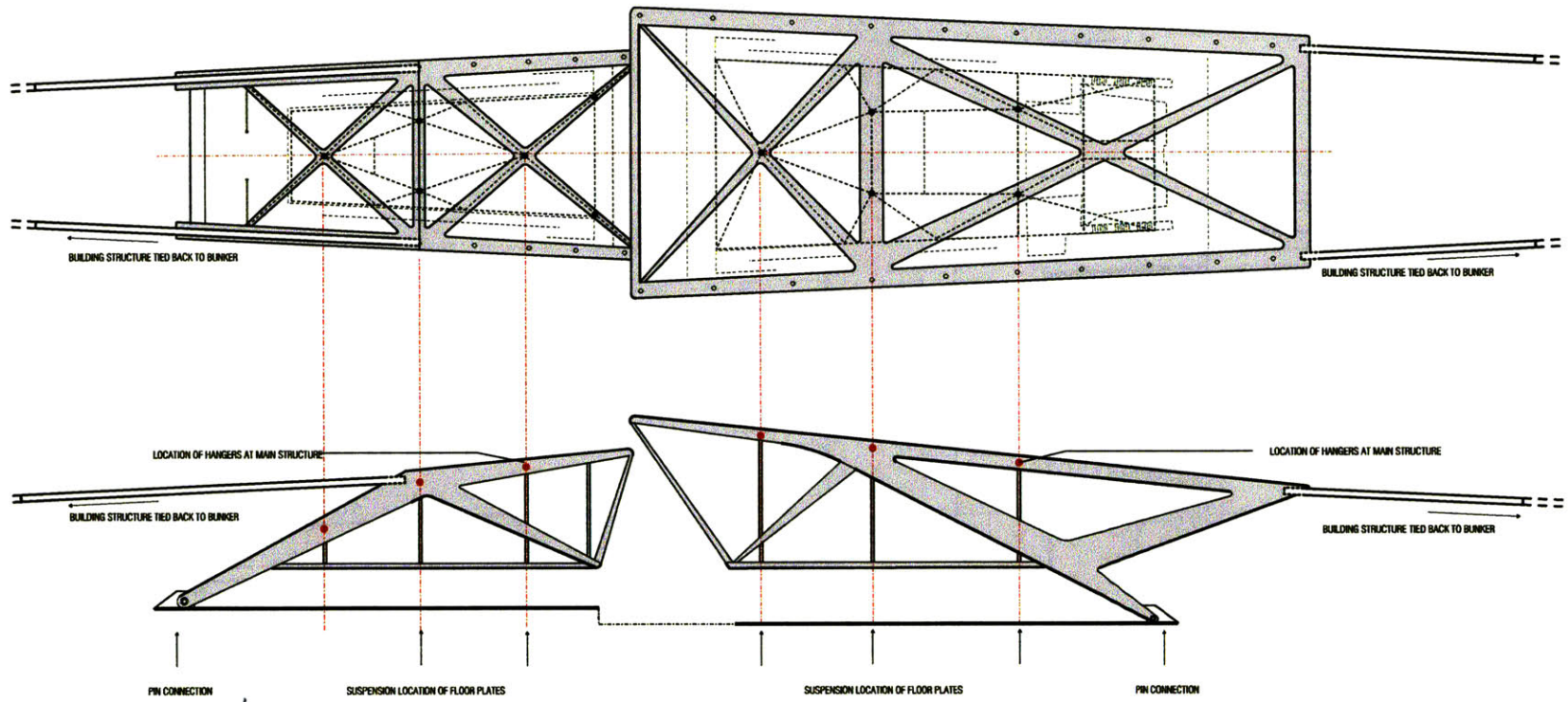
Longitudinal Section



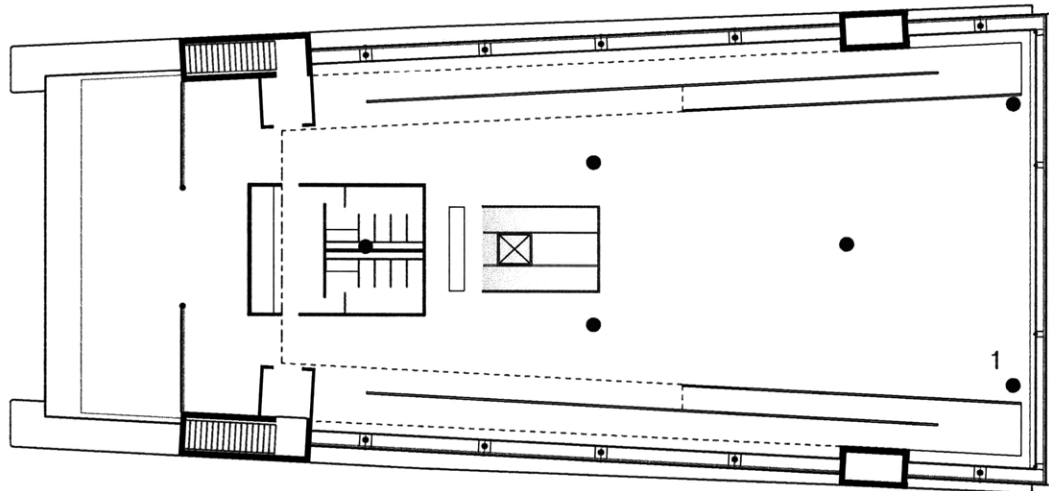
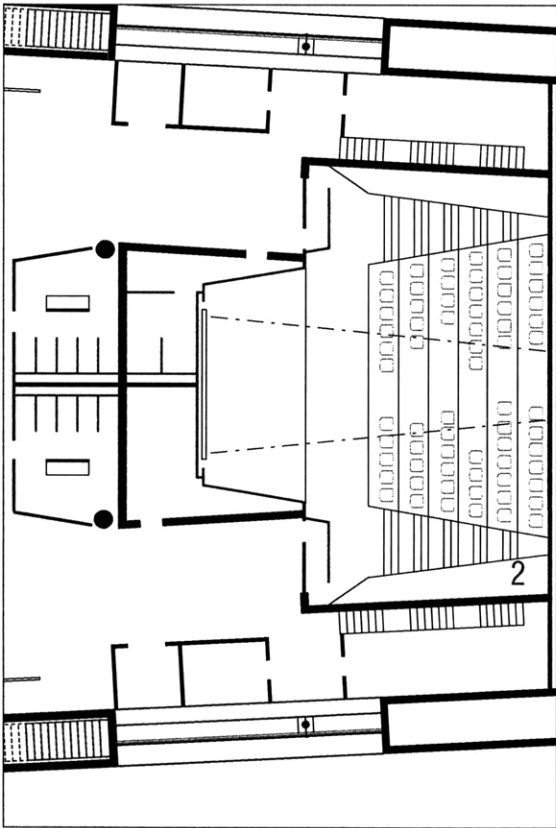
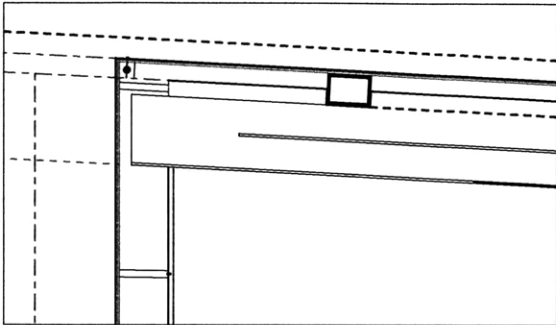


Longitudinal Elevation





Structural System and Component Relationships

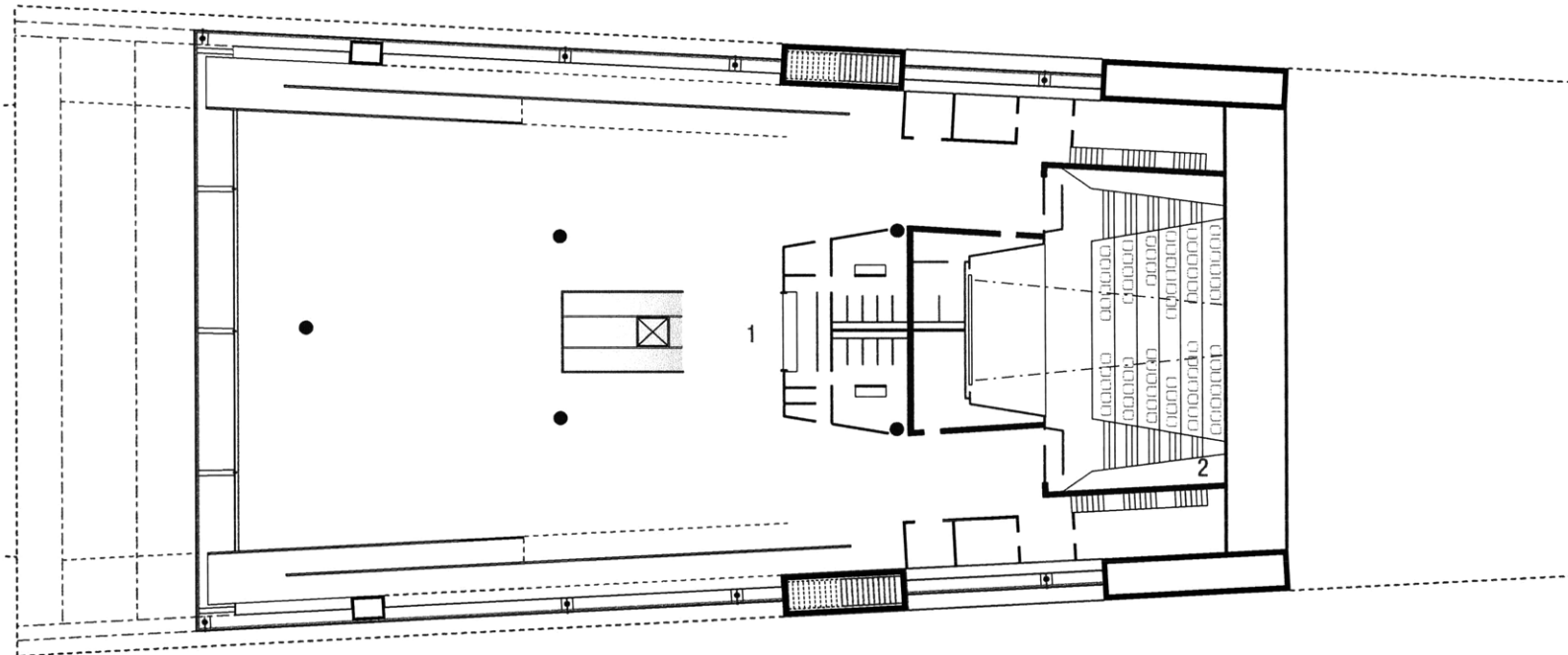


NATO OFFICES

- 1 : NATO Open Office
- 2 : NATO Meeting Space



First Level Plan



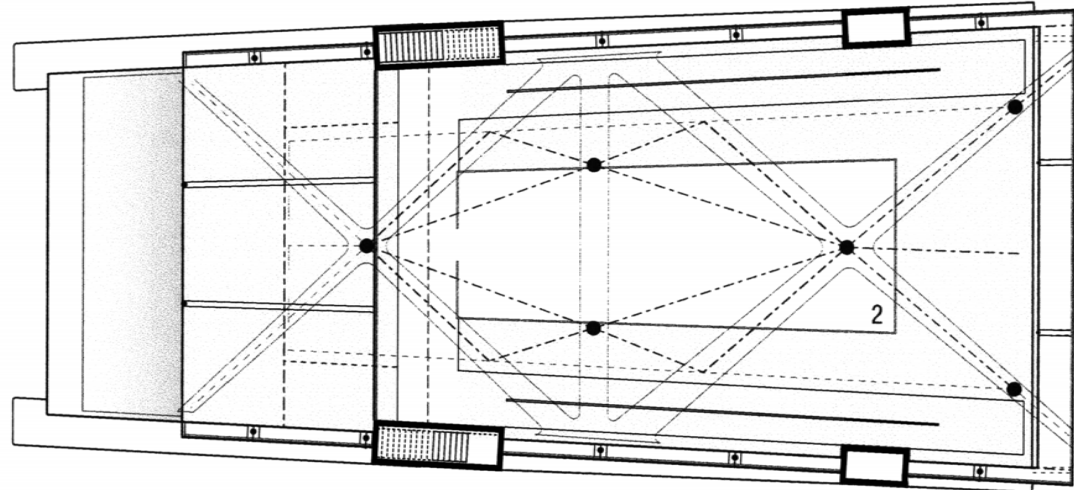
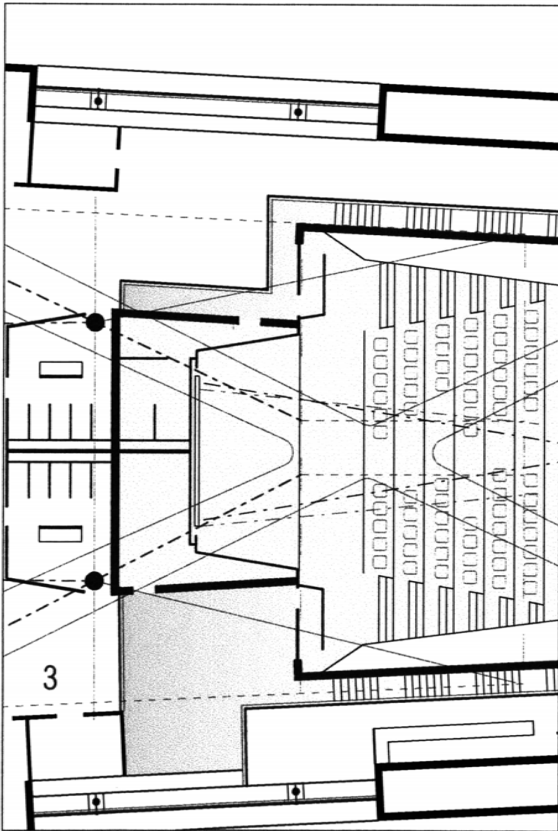
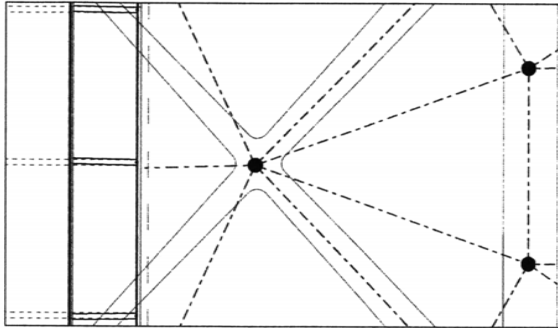
First Level Plan



PUBLIC INTERFACE

3 : NATO Gallery Space

2 : Public Auditorium

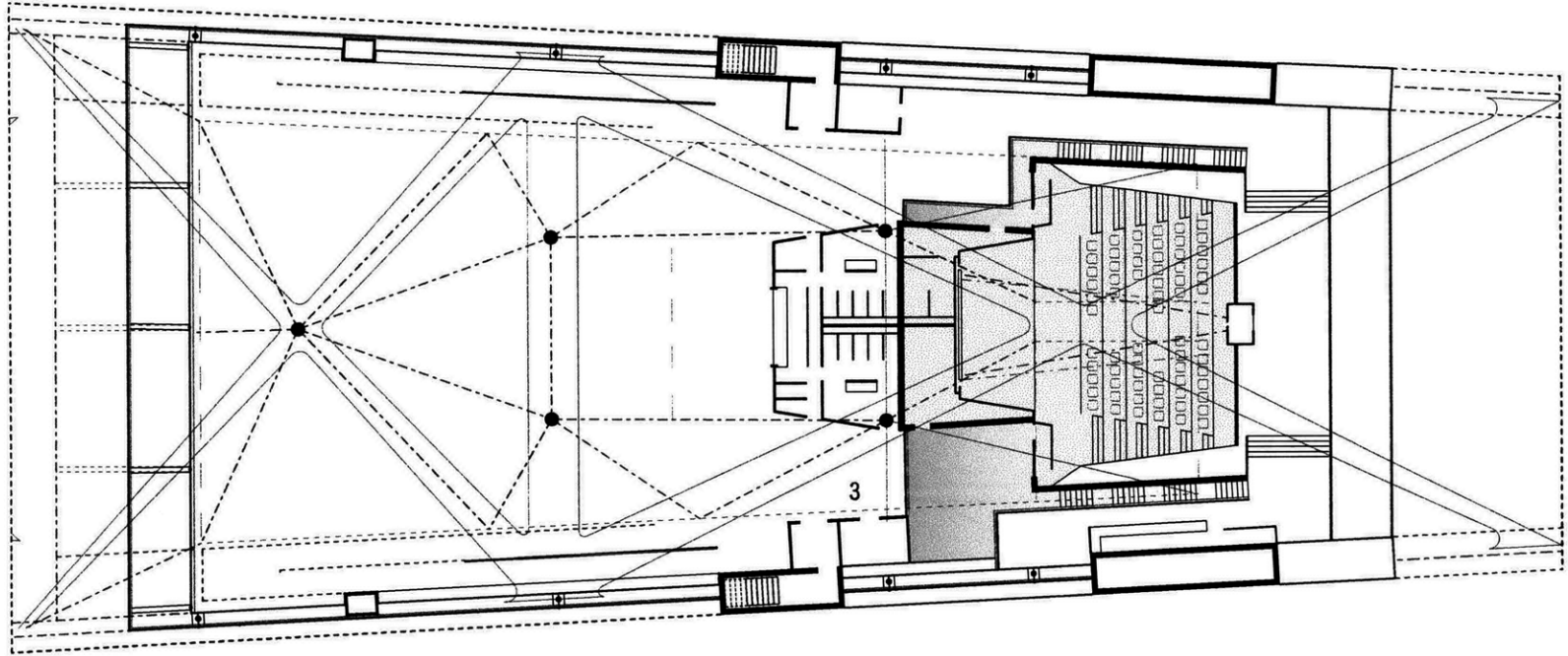


NATO OFFICES

- 1 : NATO Open Office
- 2 : NATO Meeting Space

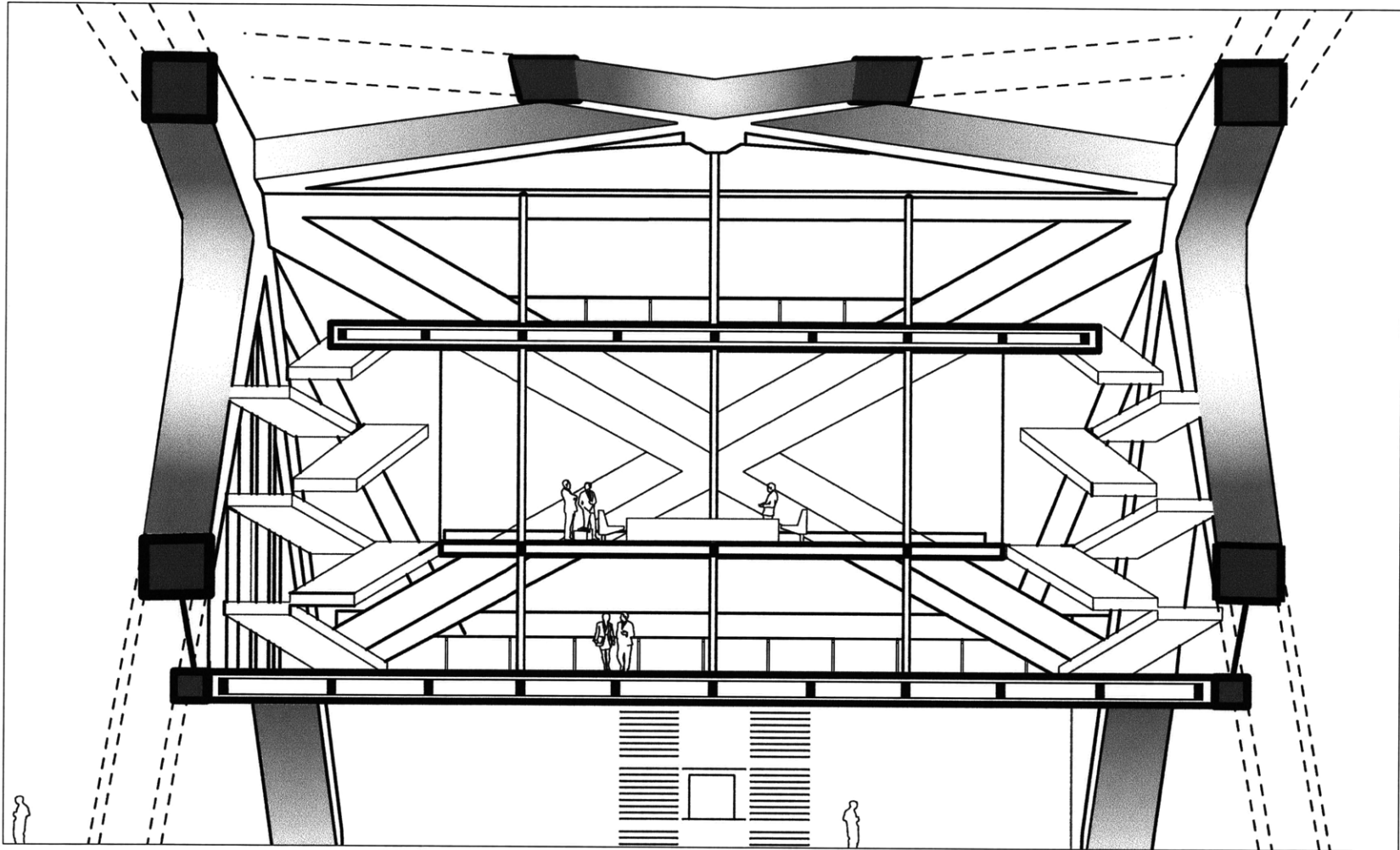


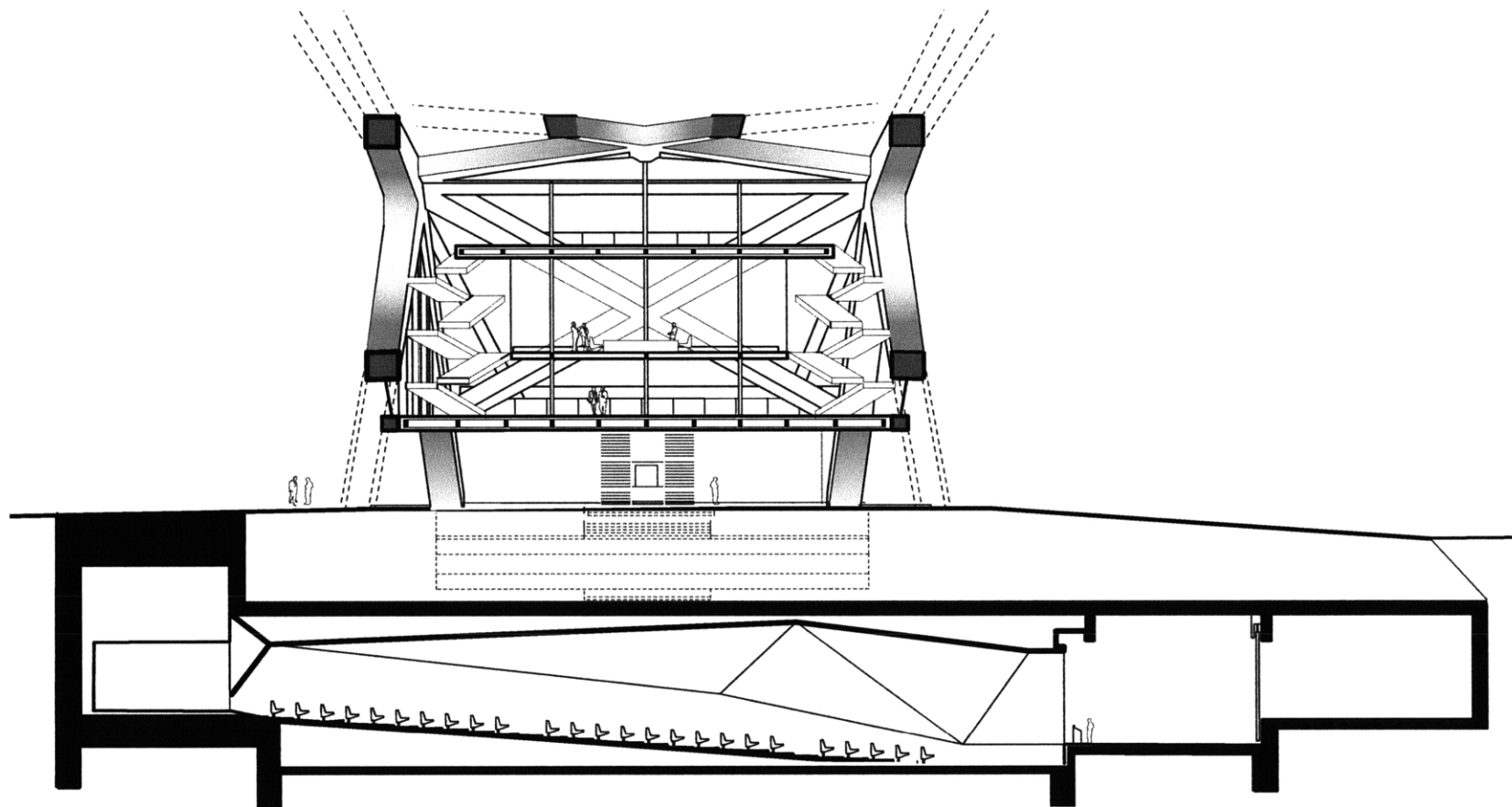
Second Level Plan



Second Level Plan

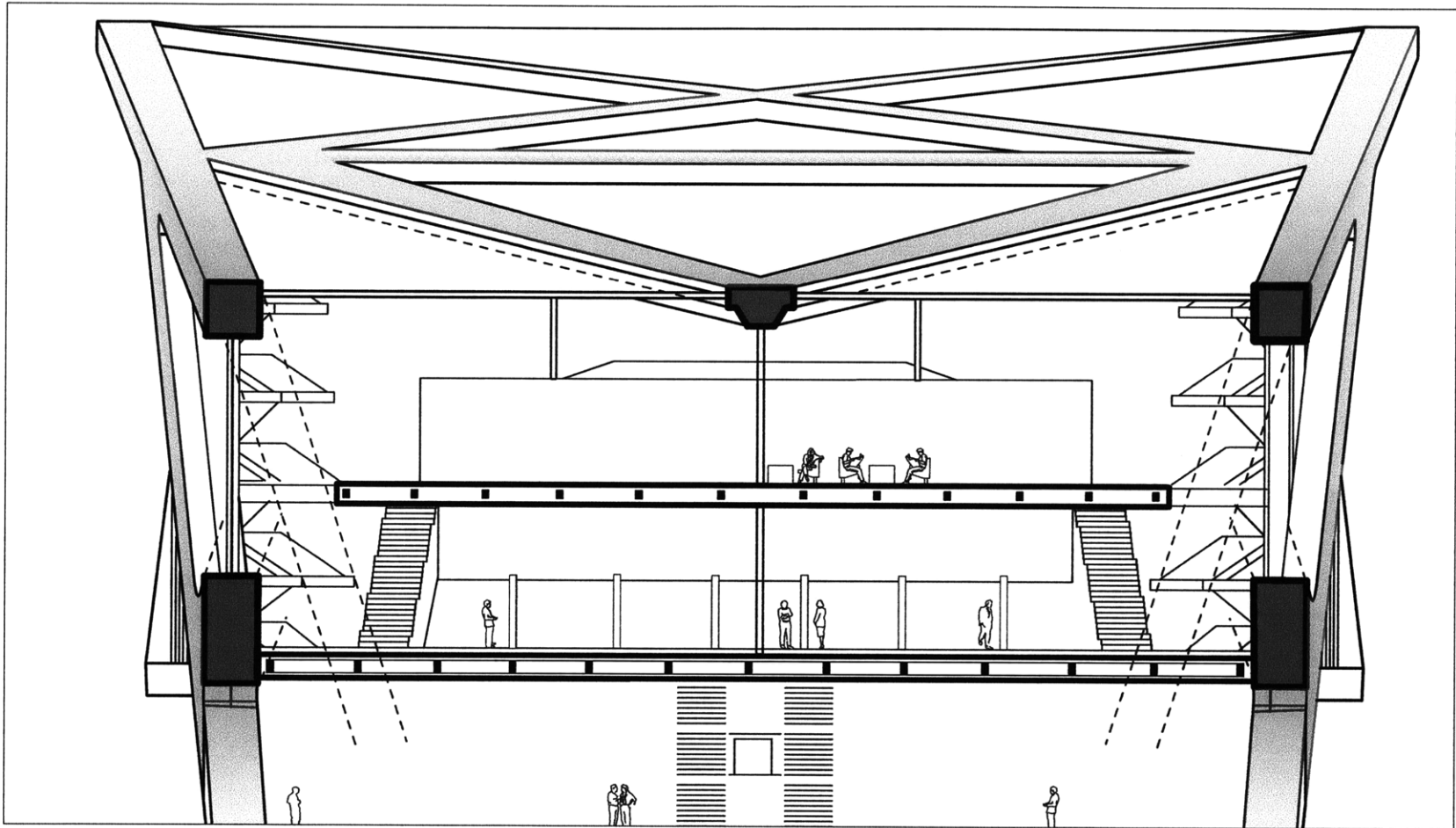
- PUBLIC INTERFACE
- 3 : NATO Library (Cafe Above)
- 4 : Bar / Observatory

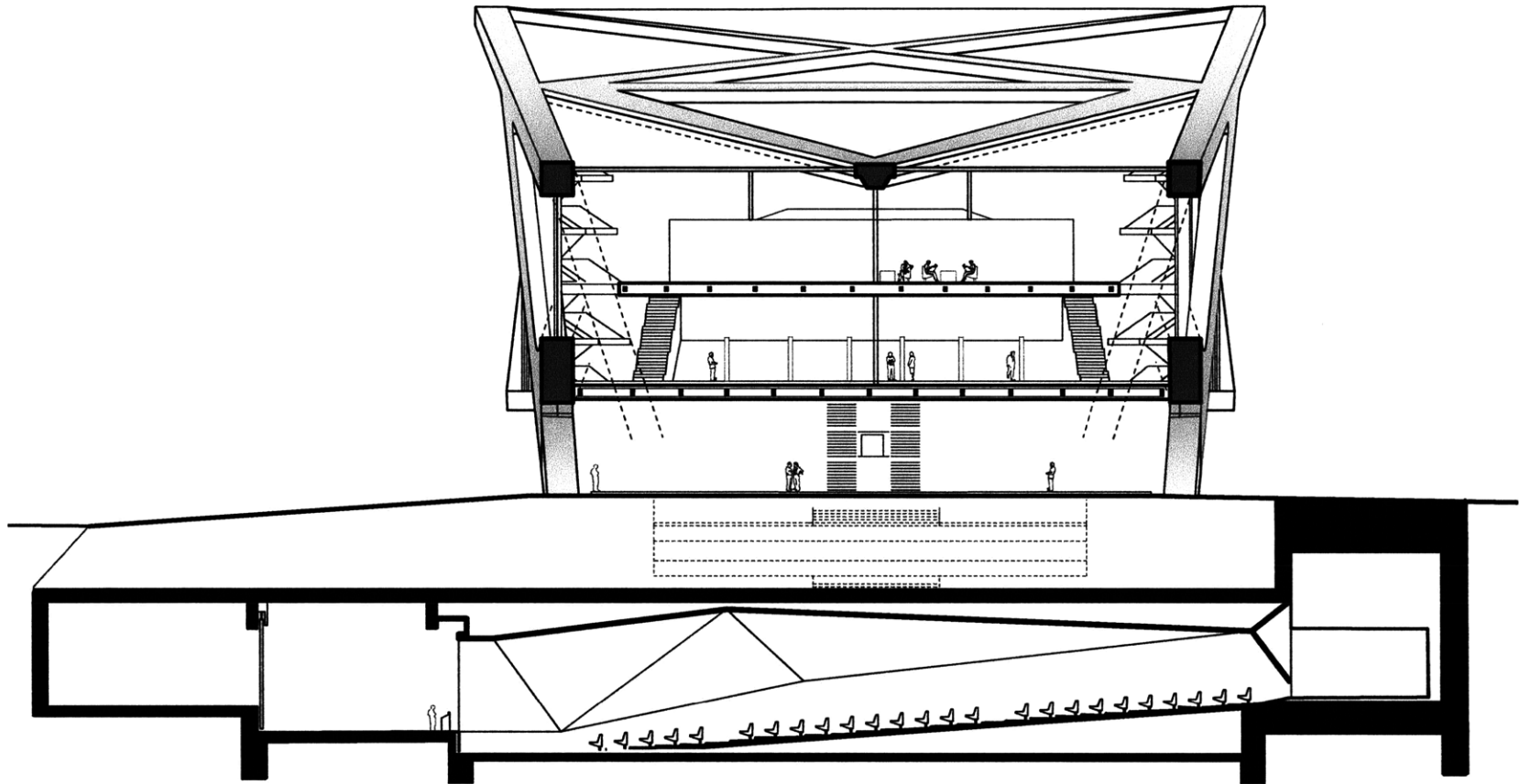




Underground Level: Secret Auditorium
Ground Level: Public Plaza
Level I: NATO Open Offices
Mezzanine: NATO Conference Area
Level II: NATO Secret Data Services Office

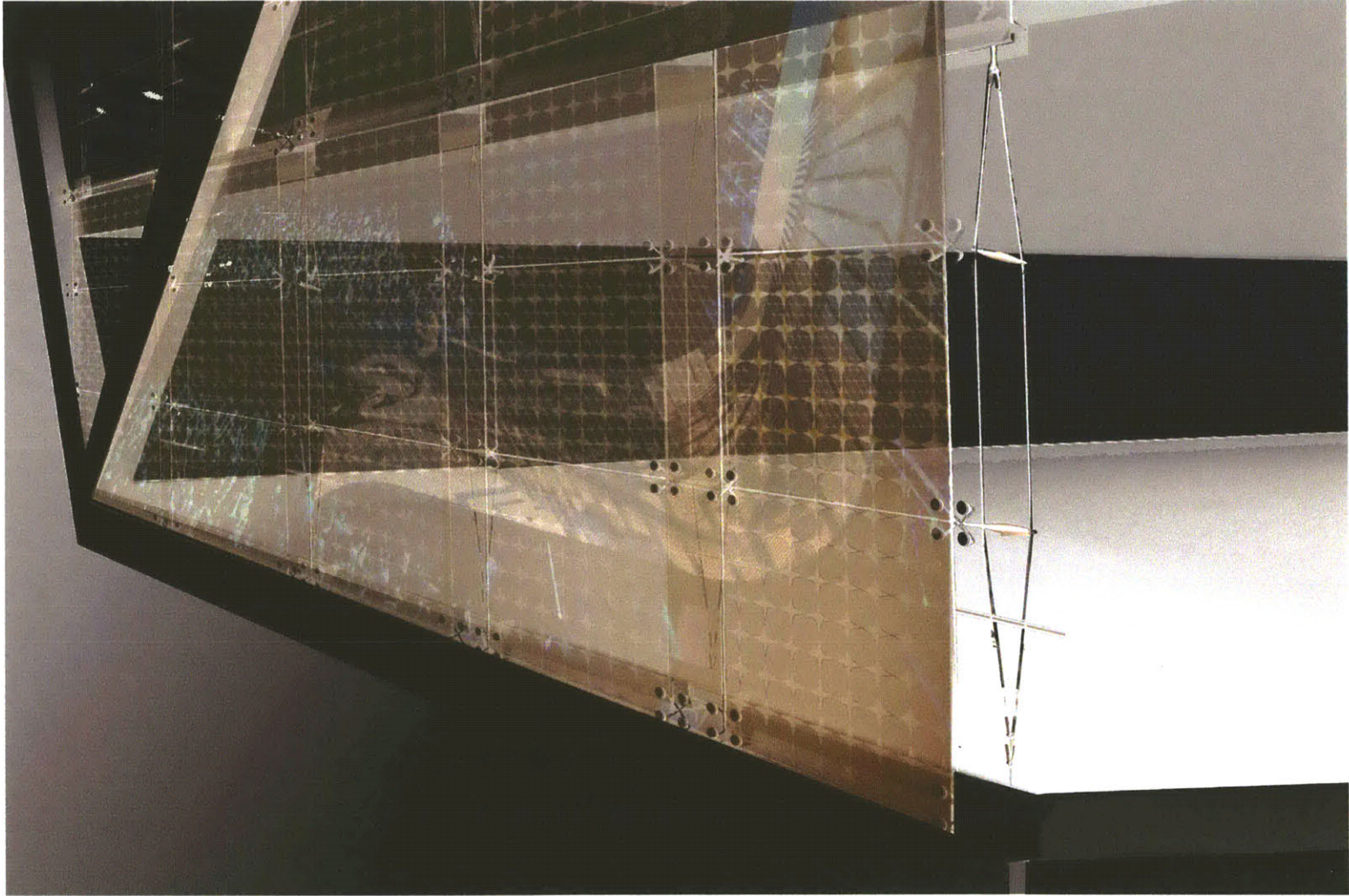
NATO Offices Transverse Section



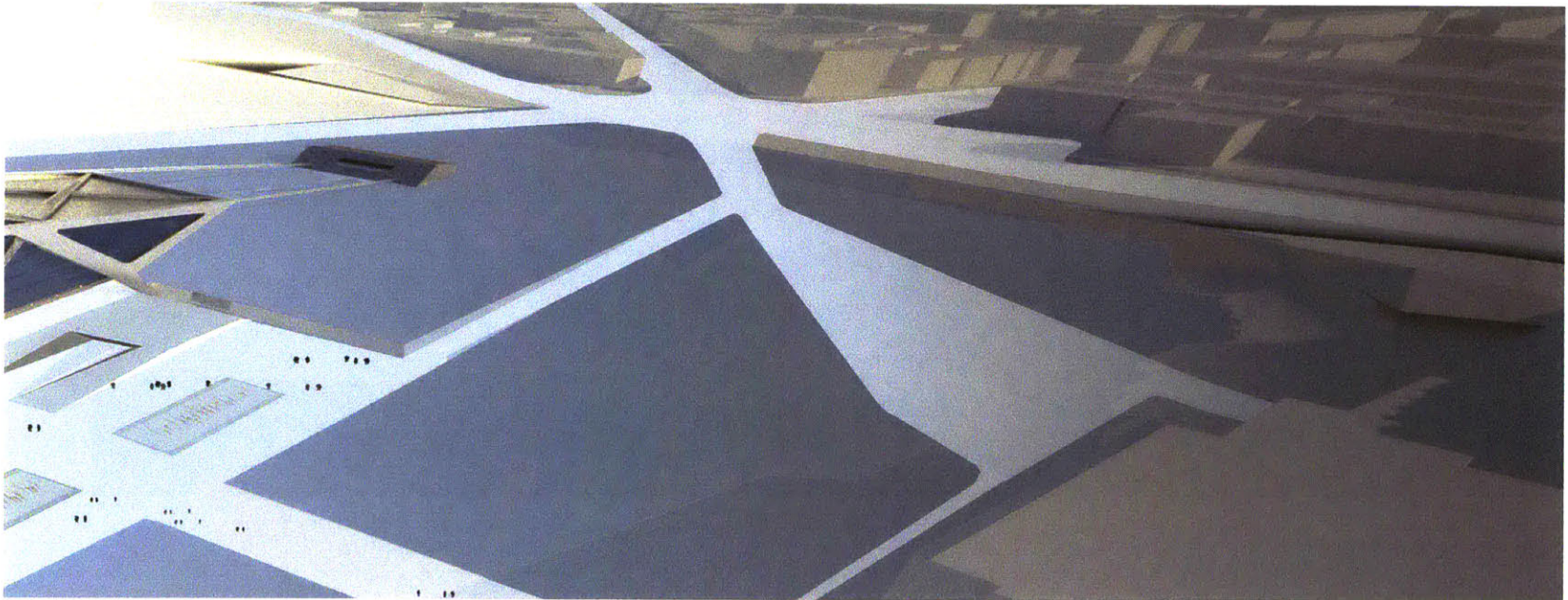
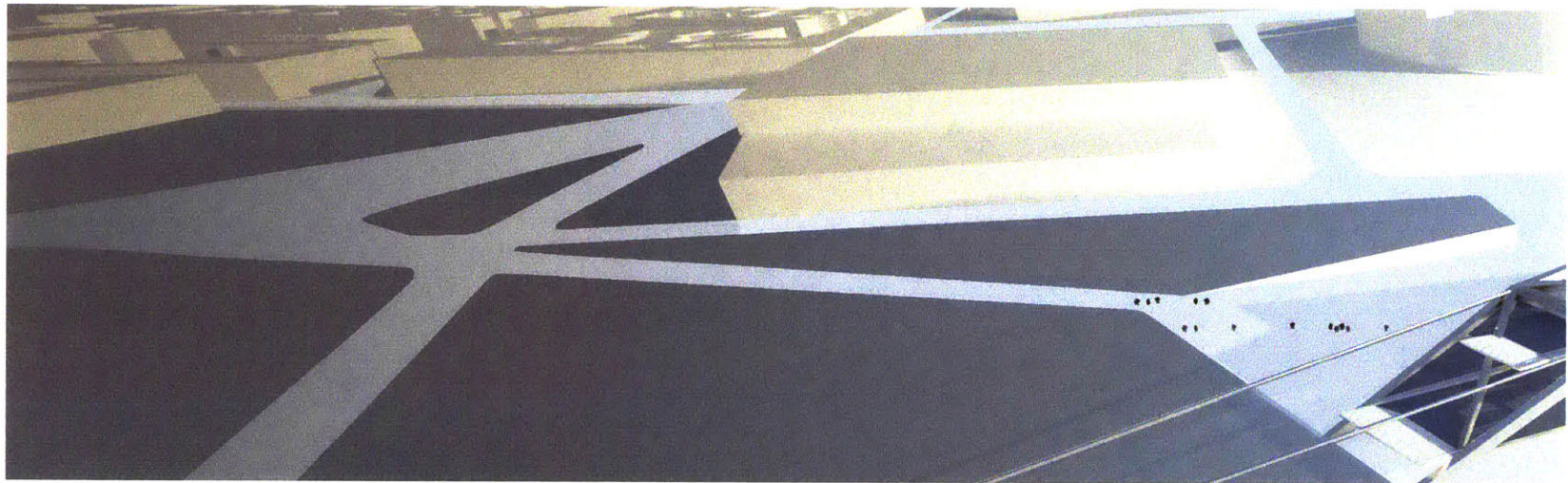


Underground Level: Secret Auditorium
Ground Level: Public Plaza
Level I: NATO Exhibition Space
Level II: Public Cafe Area / Media Library

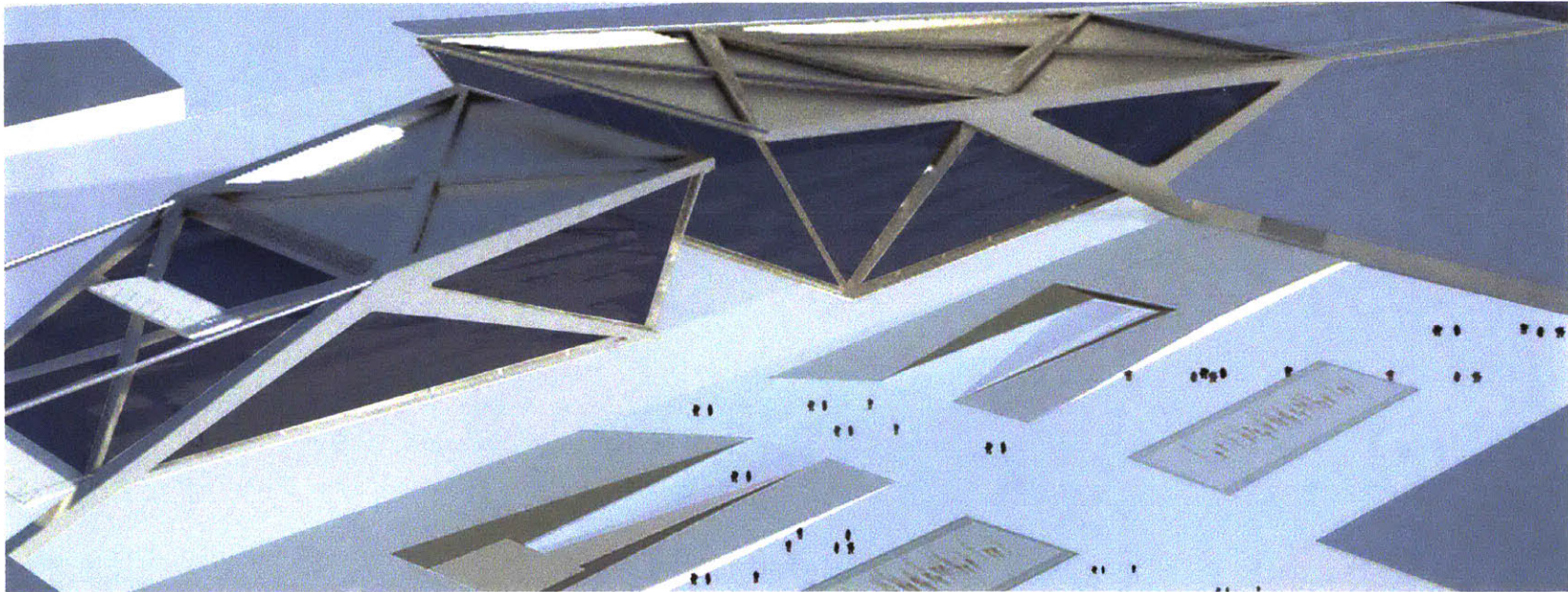
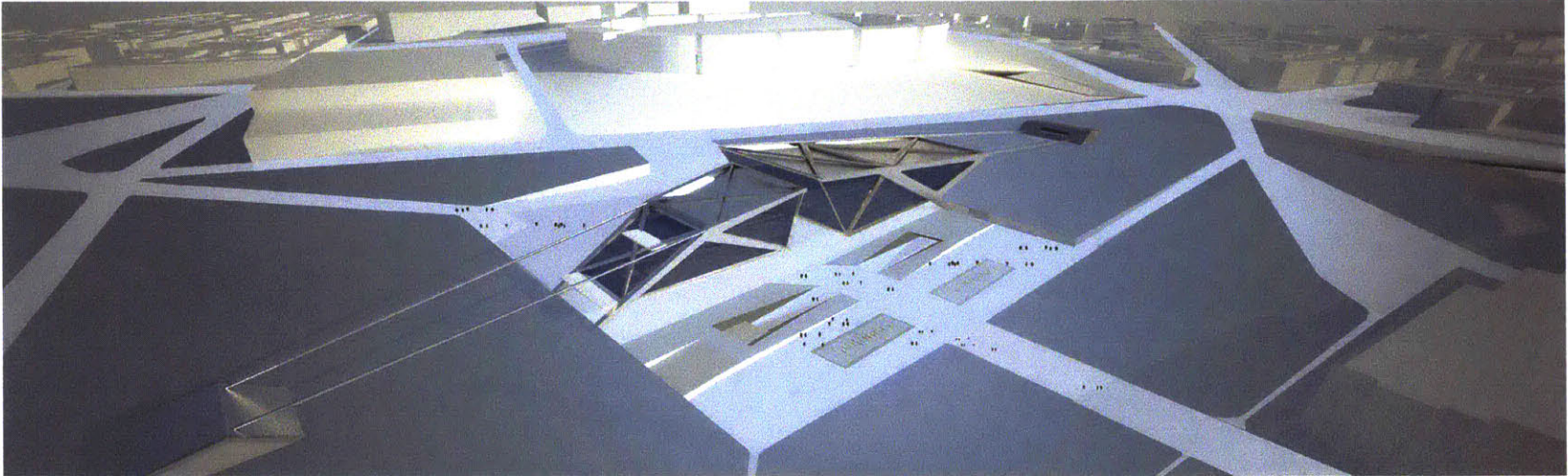
NATO Public Interface Transverse Section



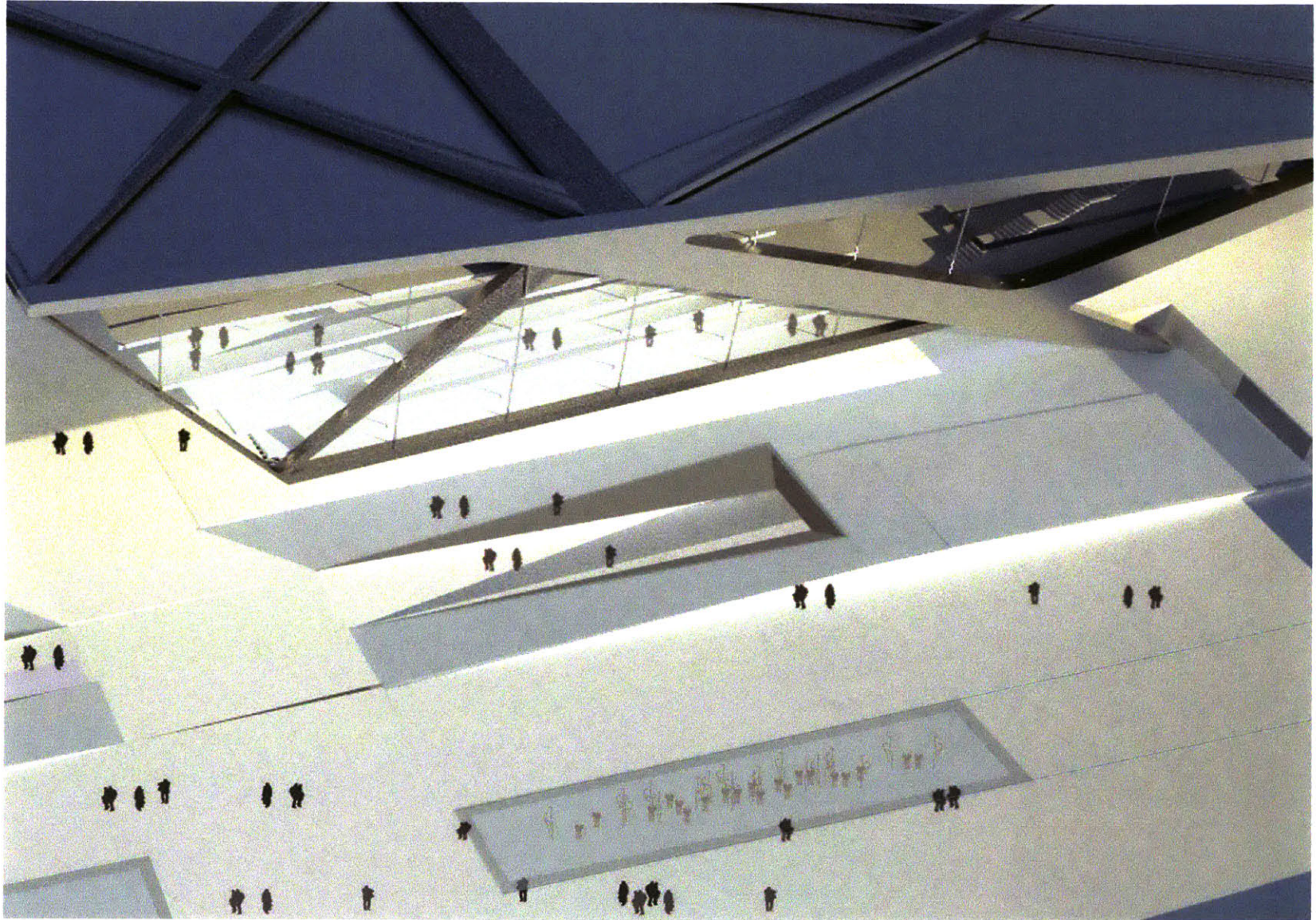
Building Facade Detail Depicting Electrochromic Glass and Display System - Night



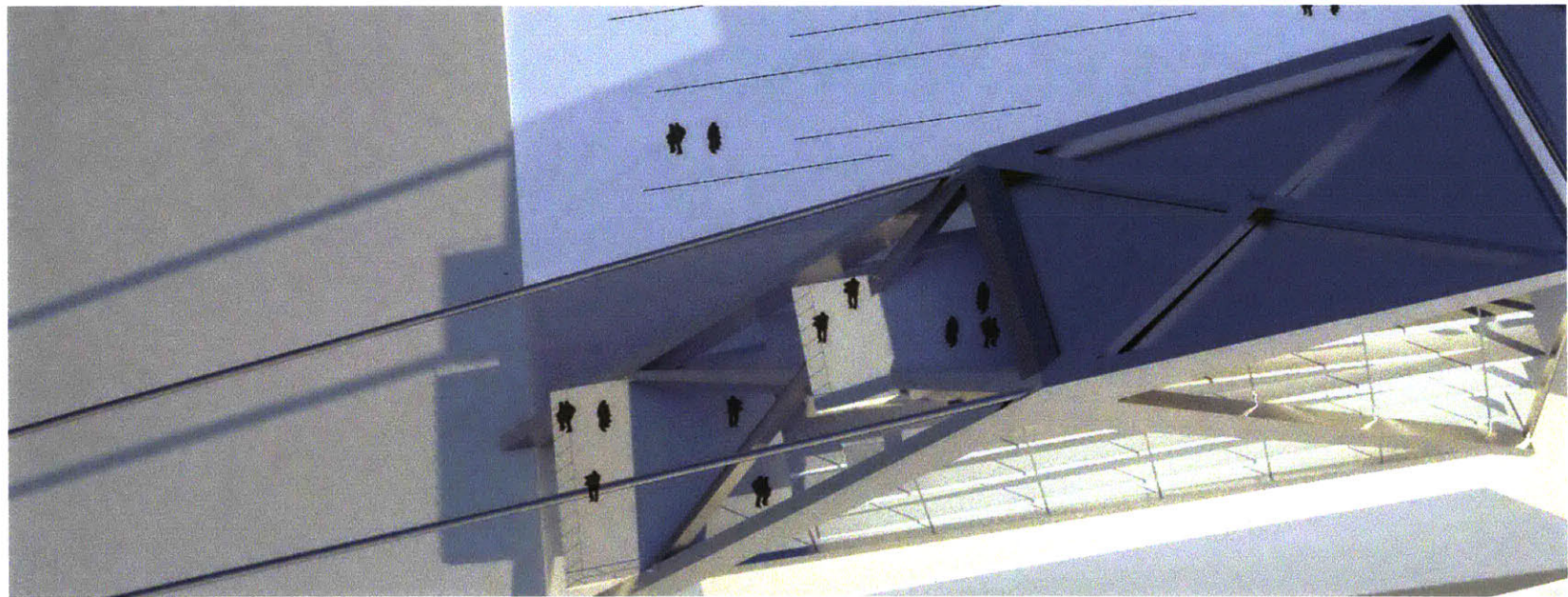
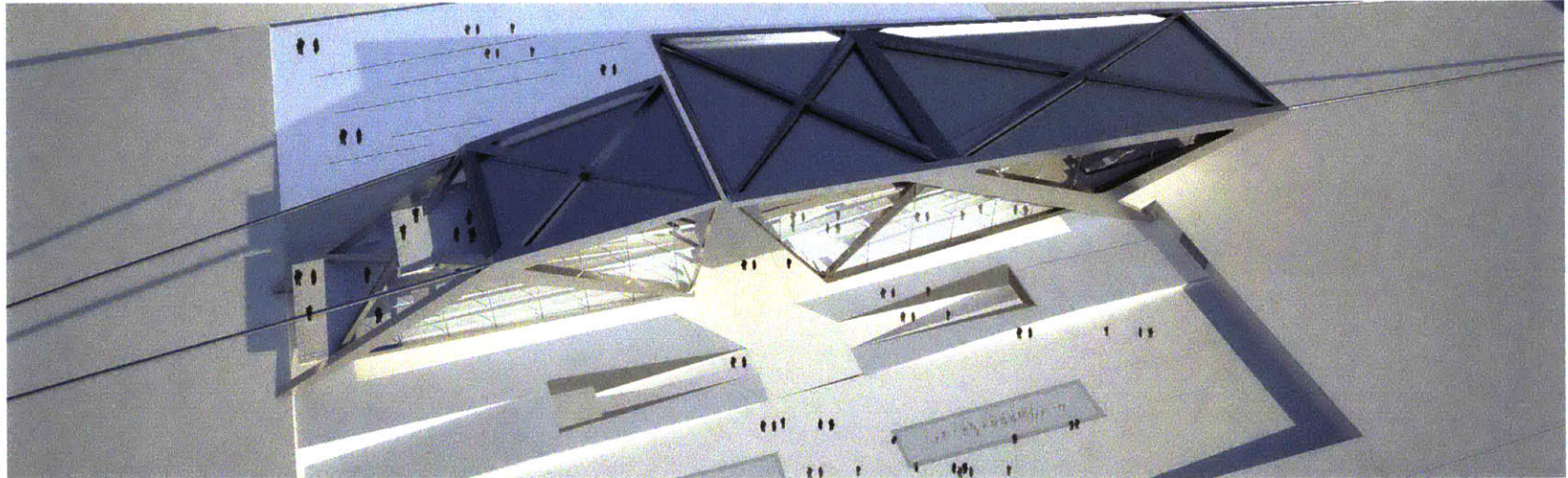
Site Connection



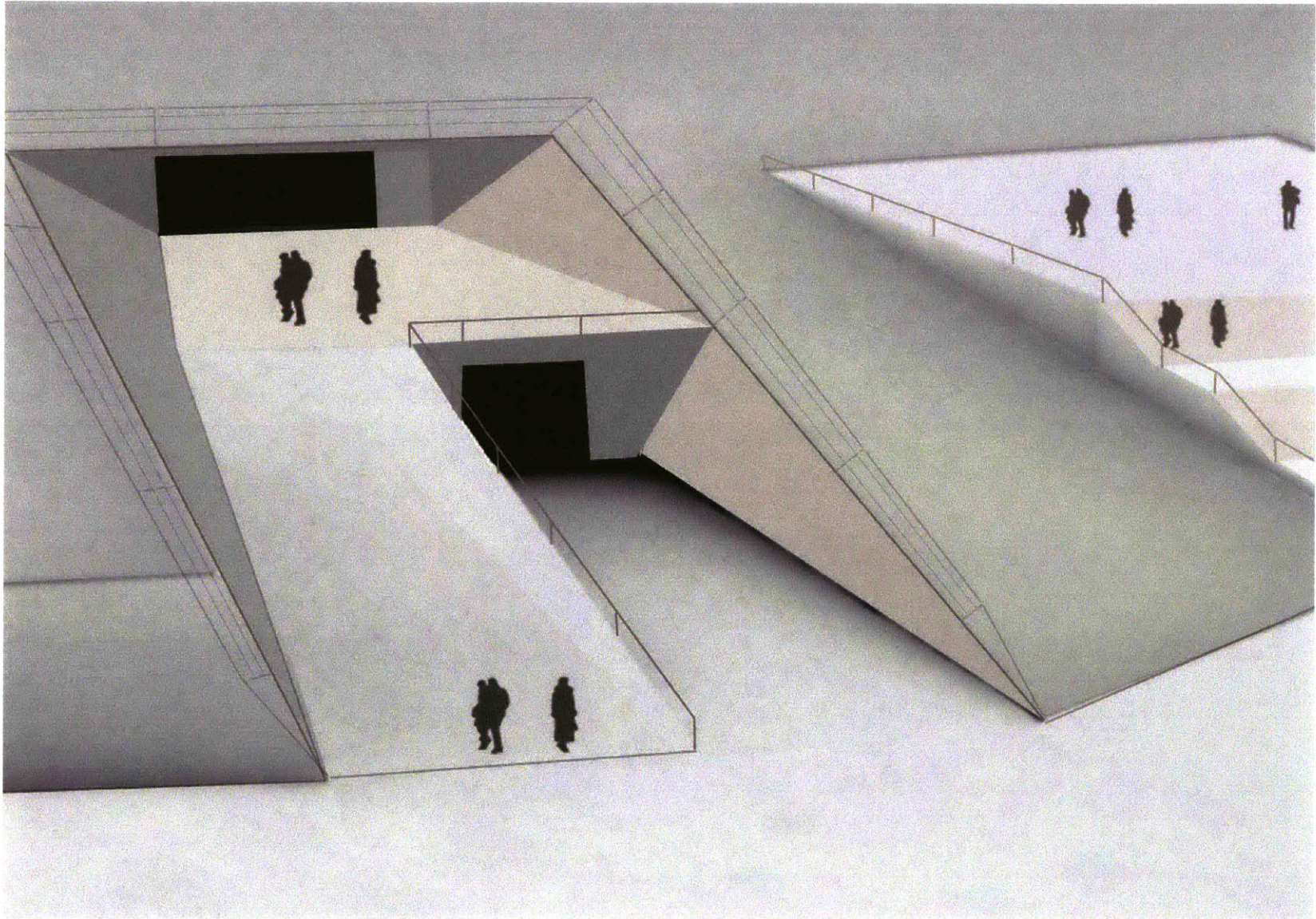
Site Organization



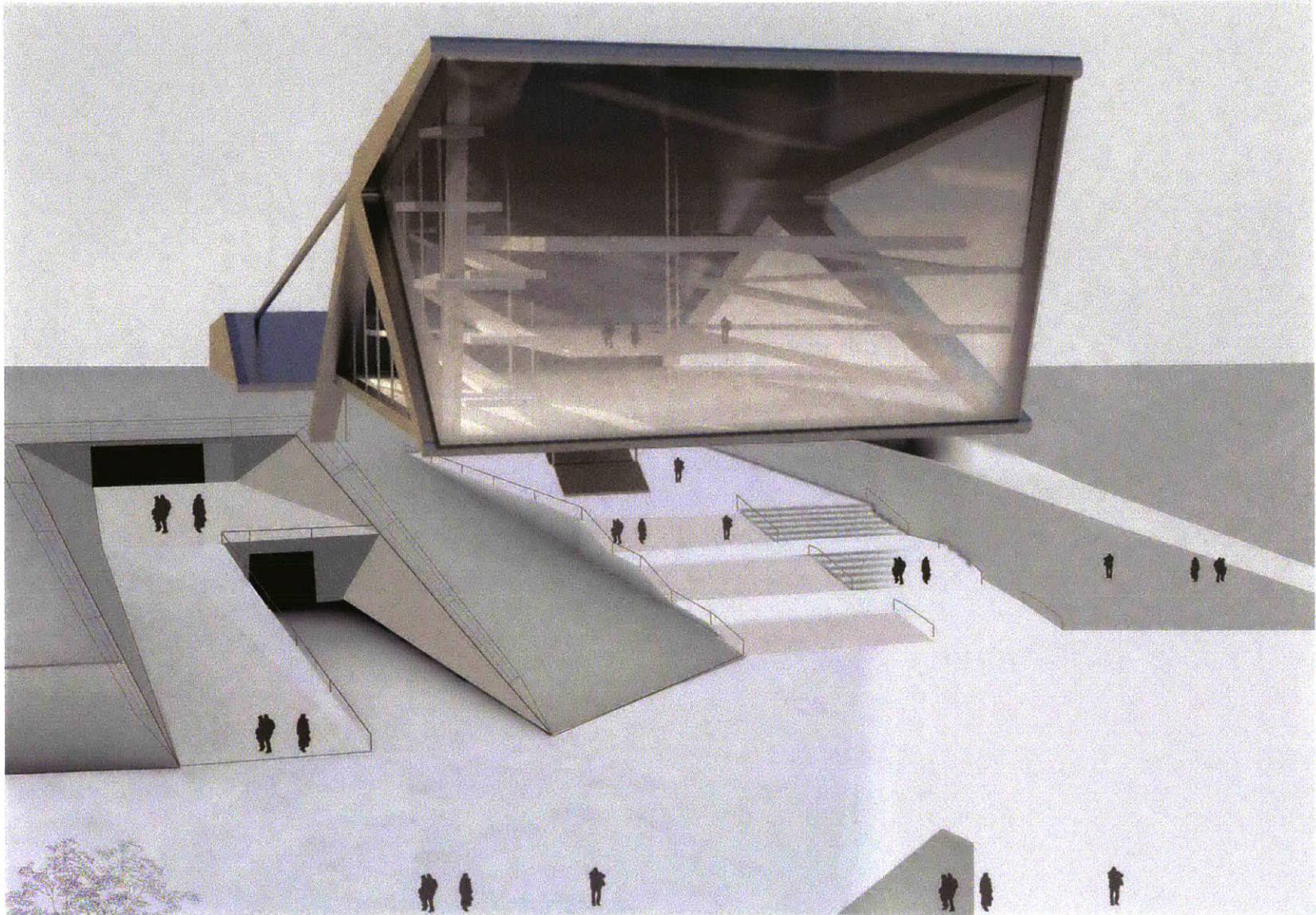
Public Plaza and Entrance



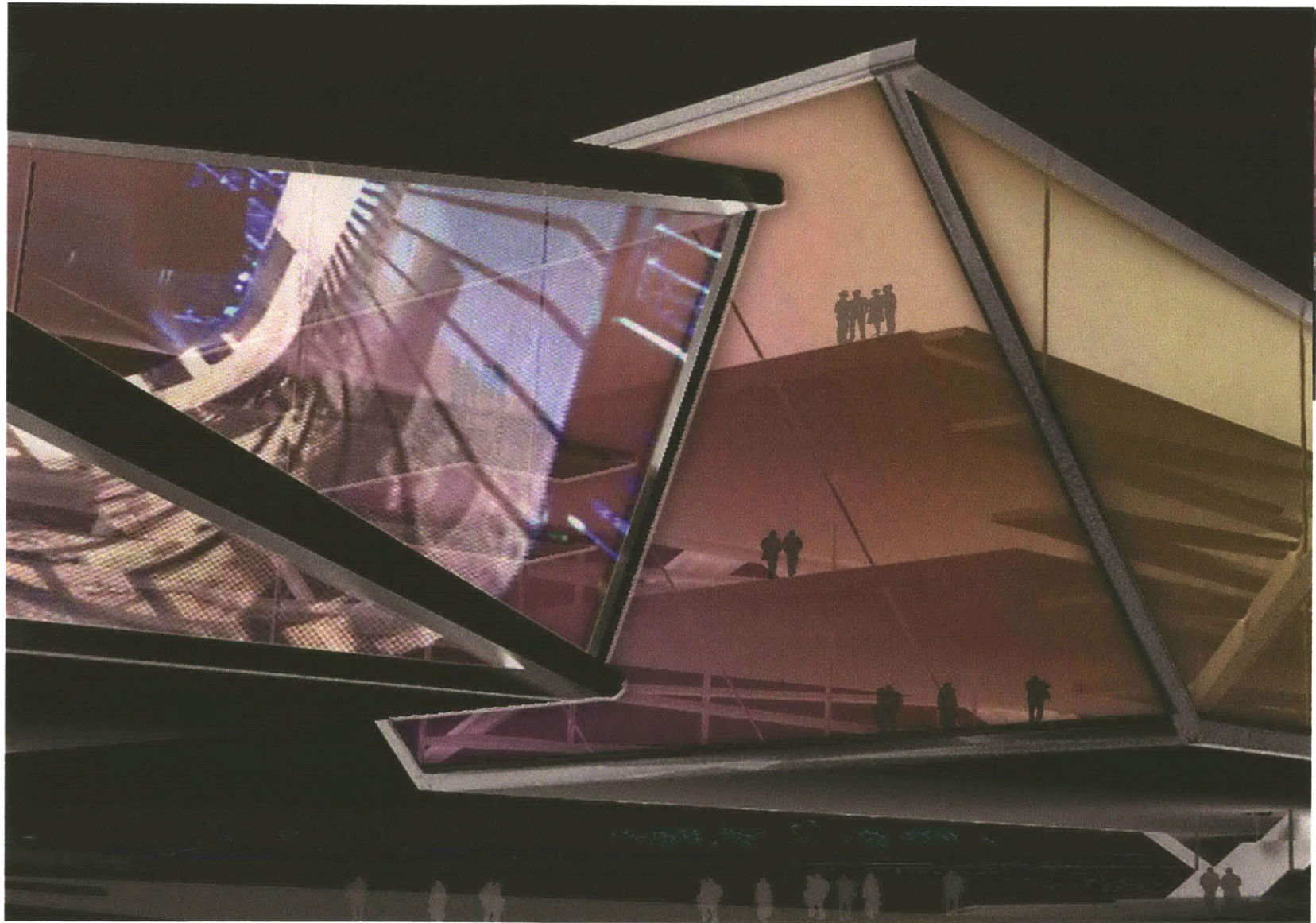
NATO Office Observation Deck



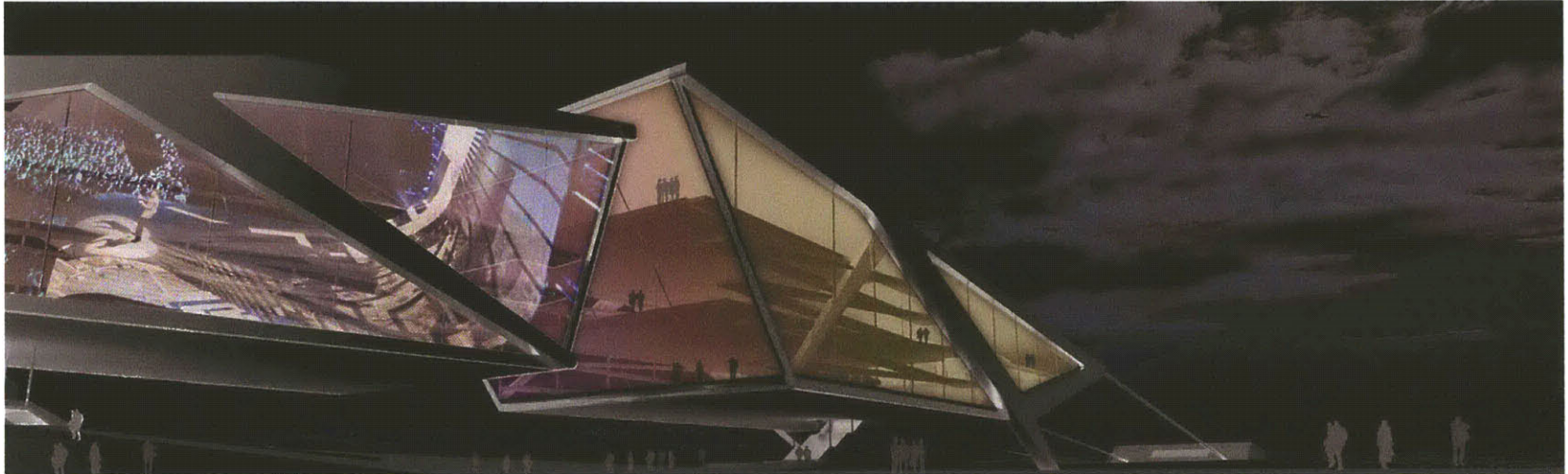
Public Plaza and Entrance



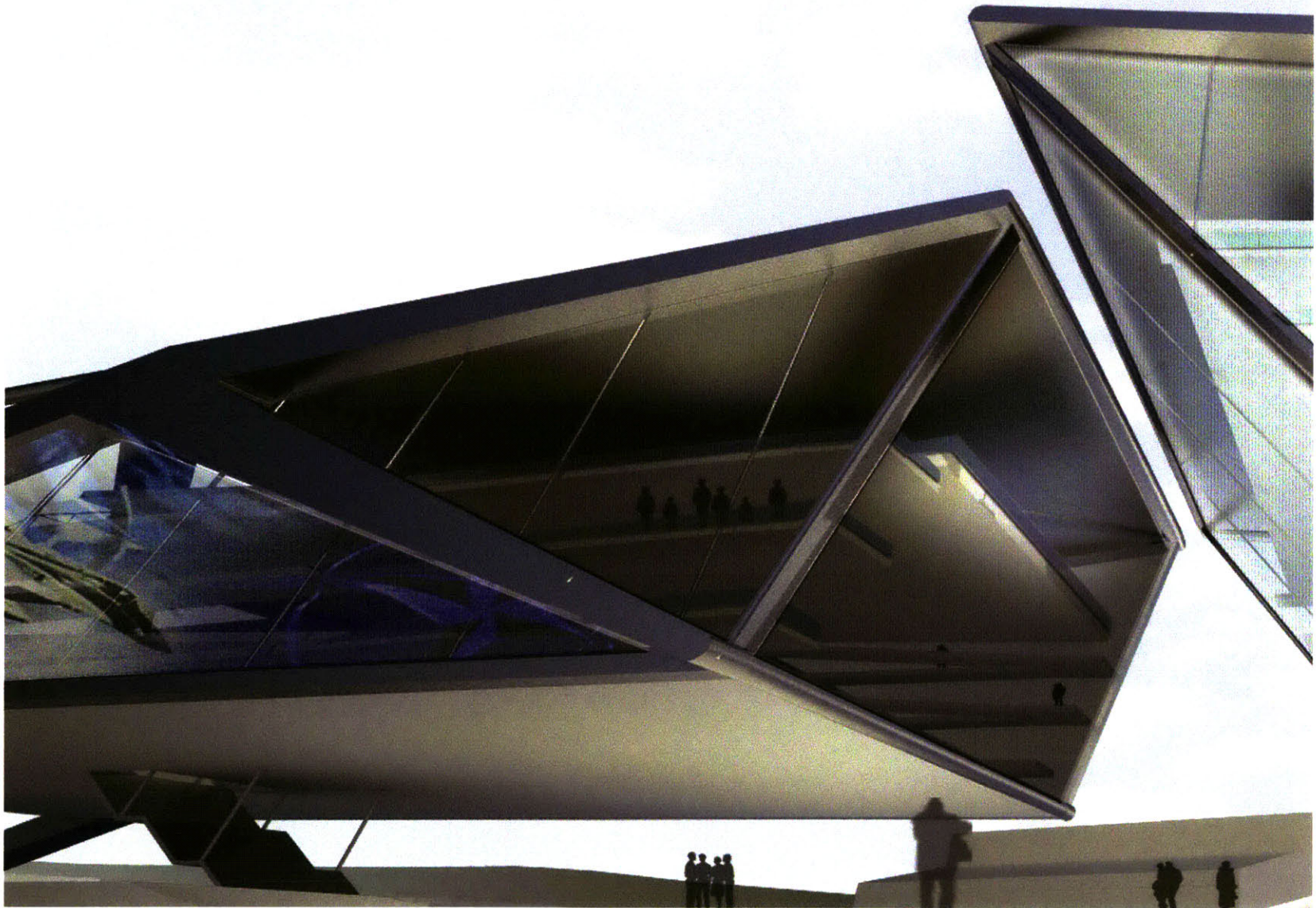
NATO Office Plaza and Entrance



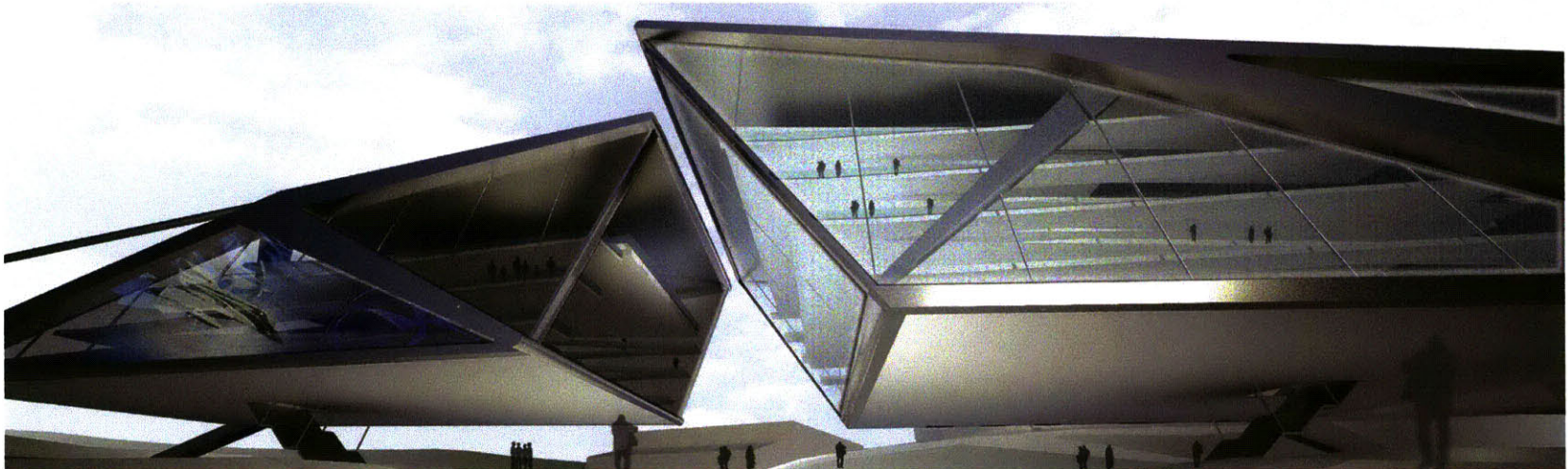
Night View of Buildings



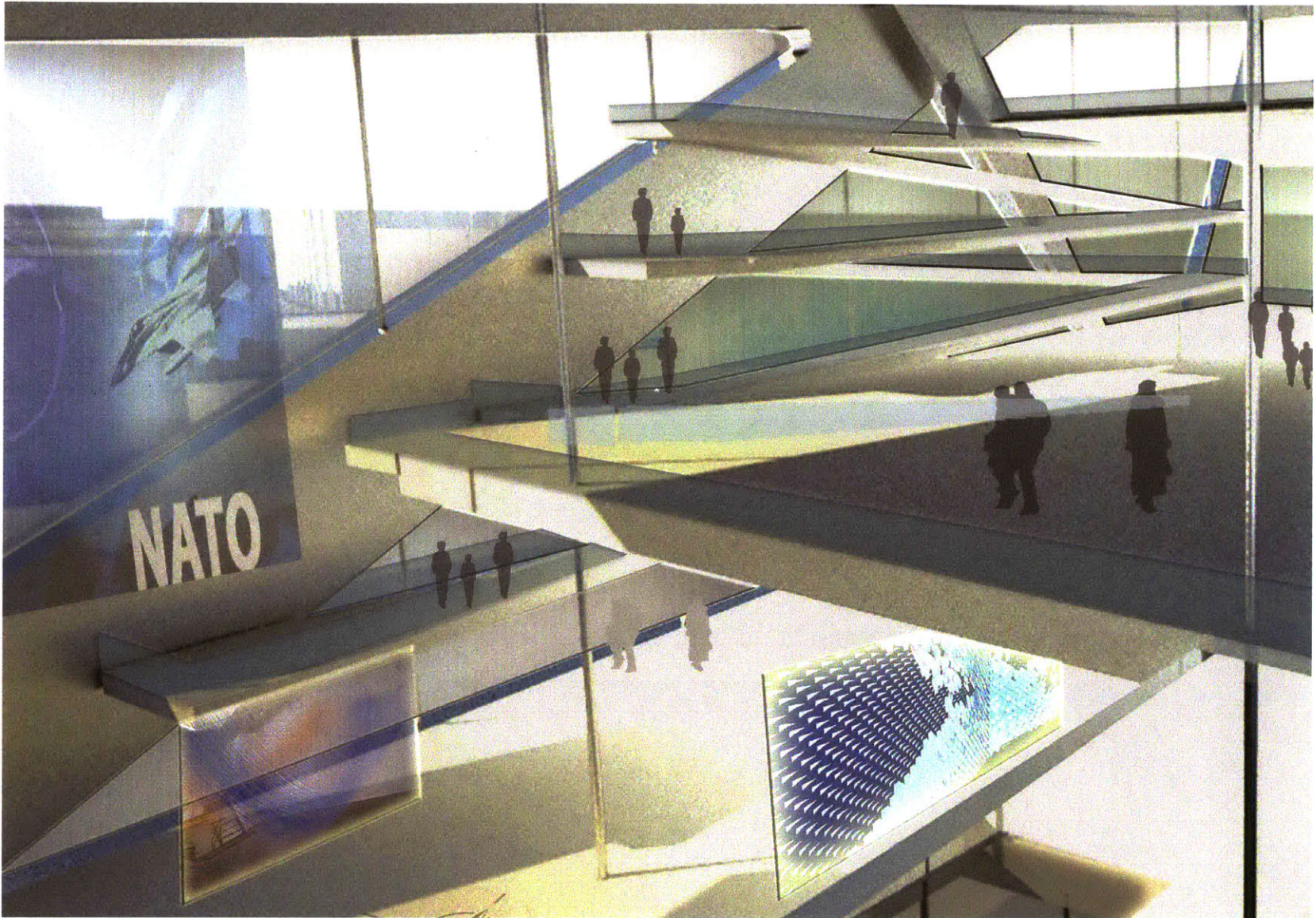
Night View of Anchor Bunker and Connective Plaza at Gallery Space



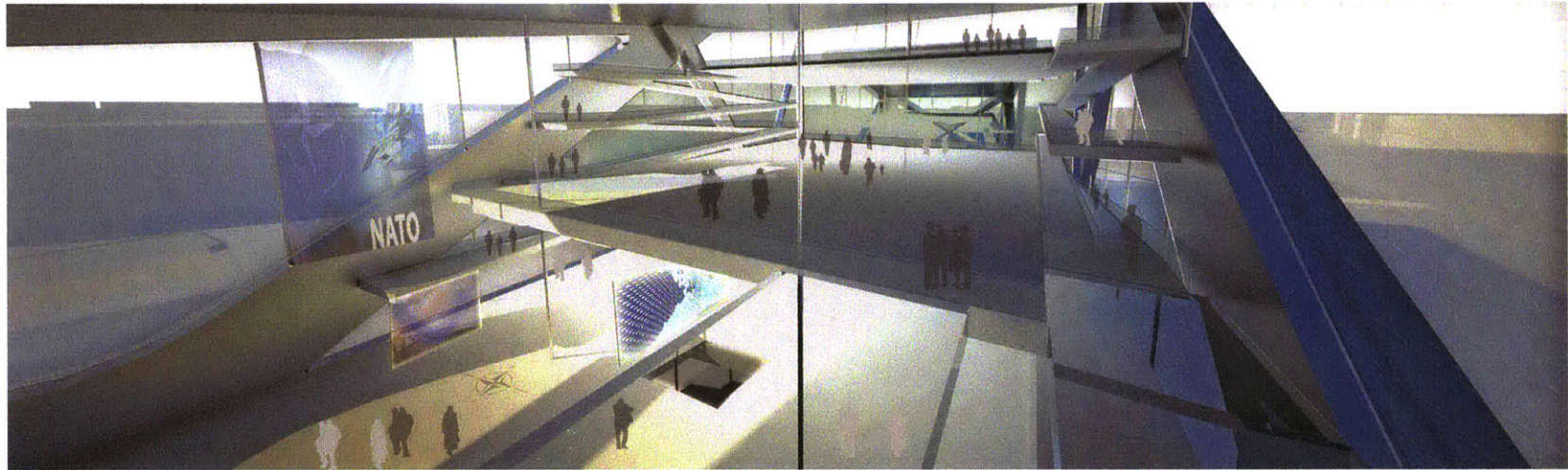
View to NATO Offices from Plaza



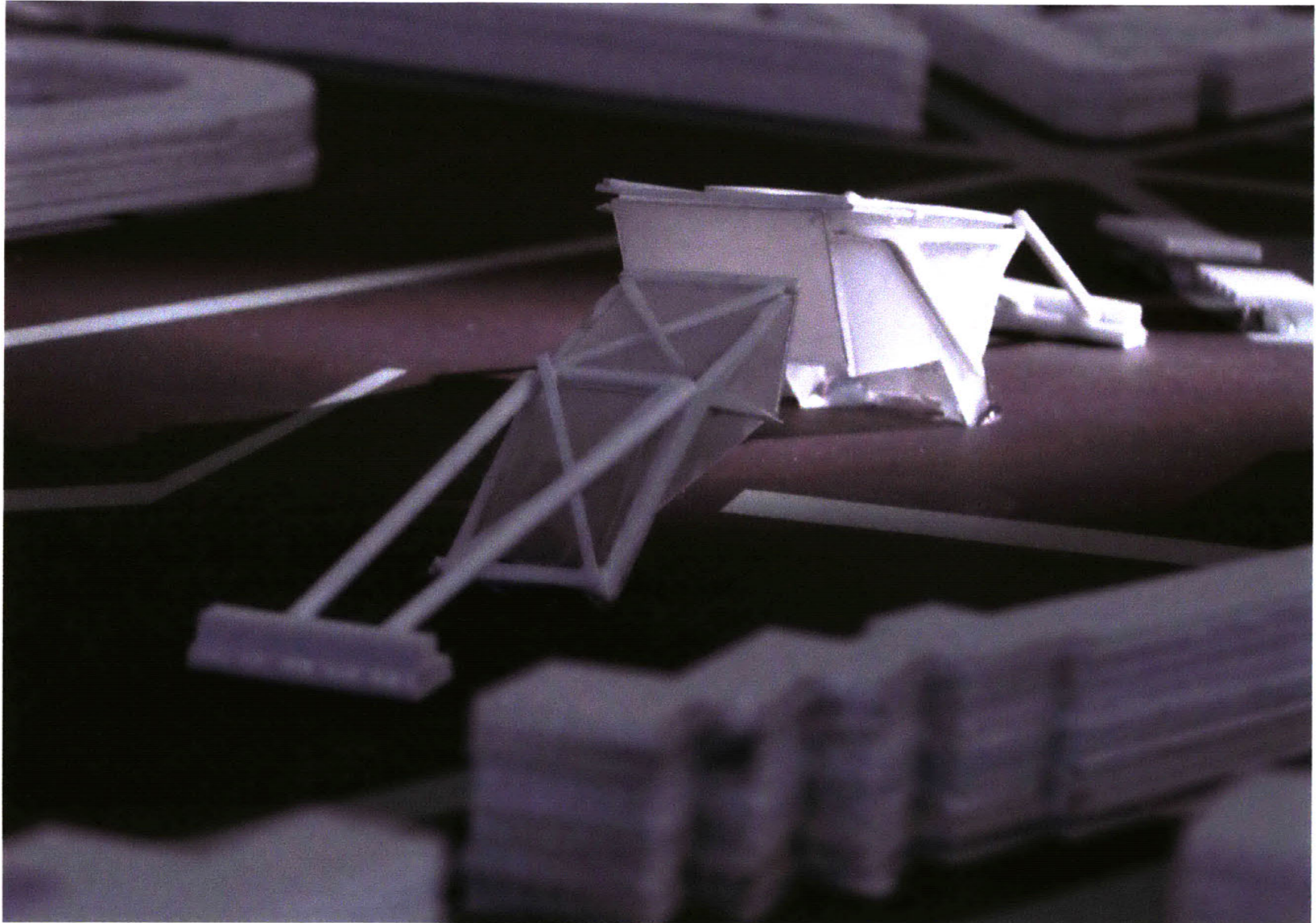
View of Gallery Space from Plaza



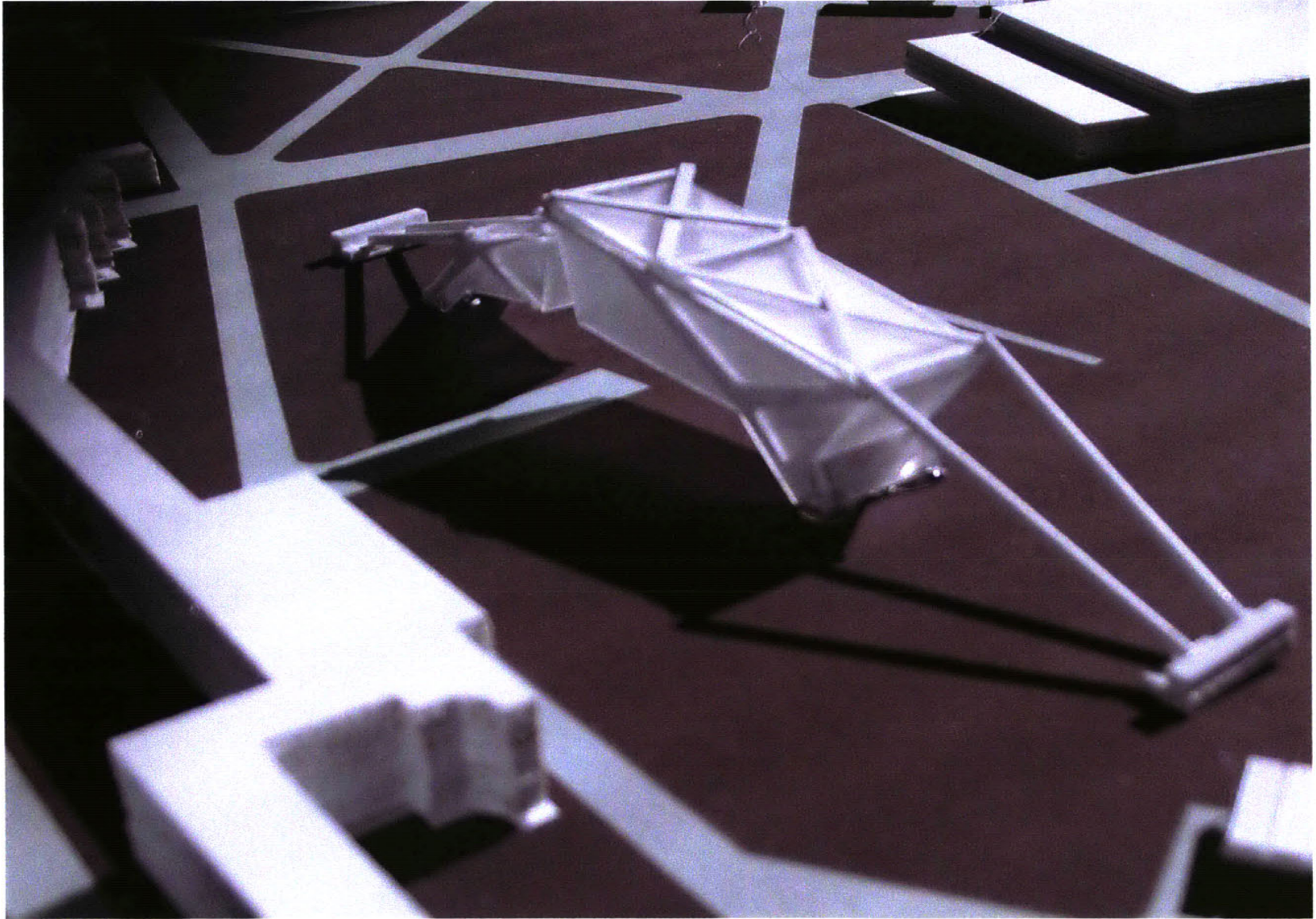
Gallery Interior View to Below From Second Level



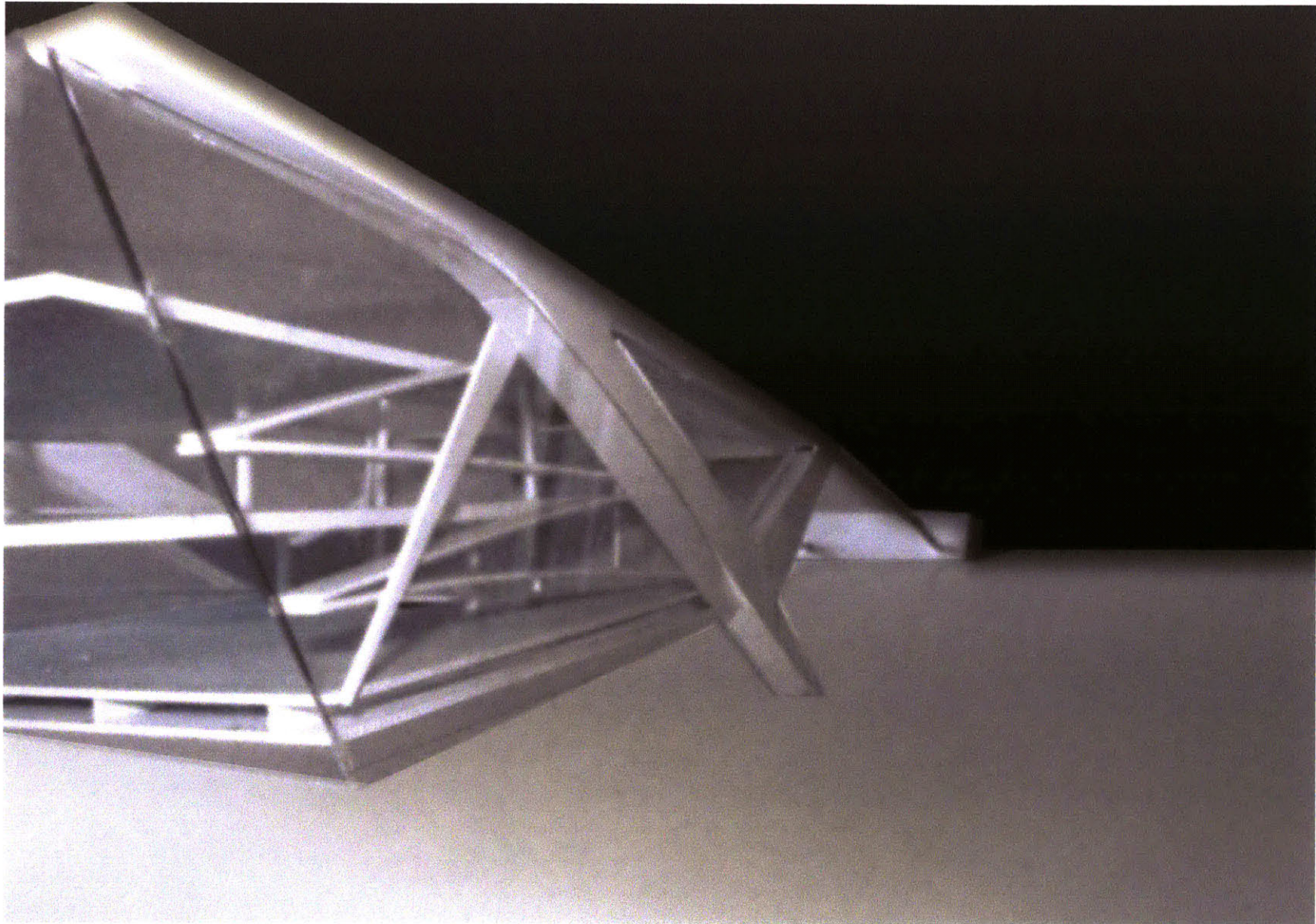
Gallery Interior View from Second Level



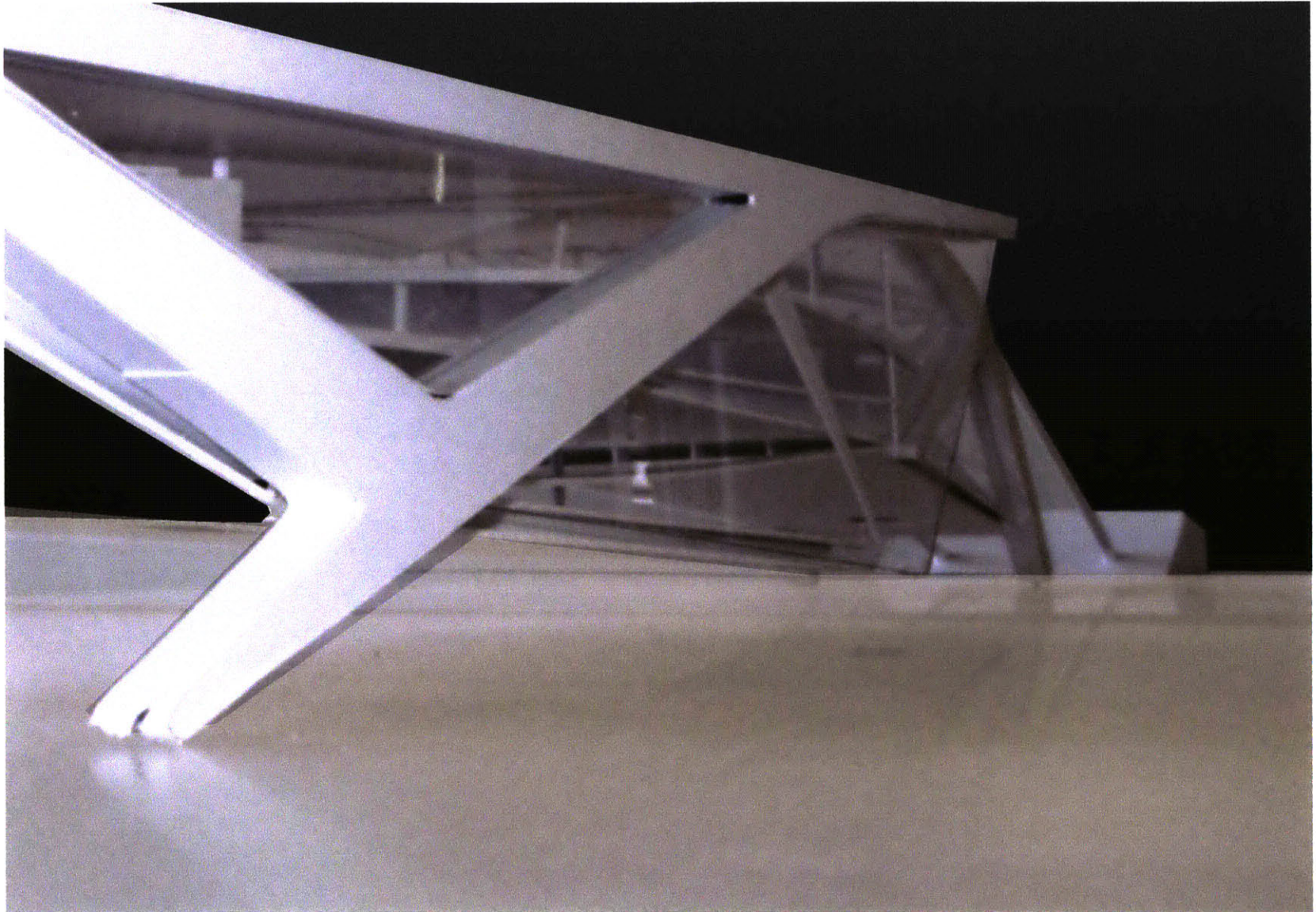
Site Model



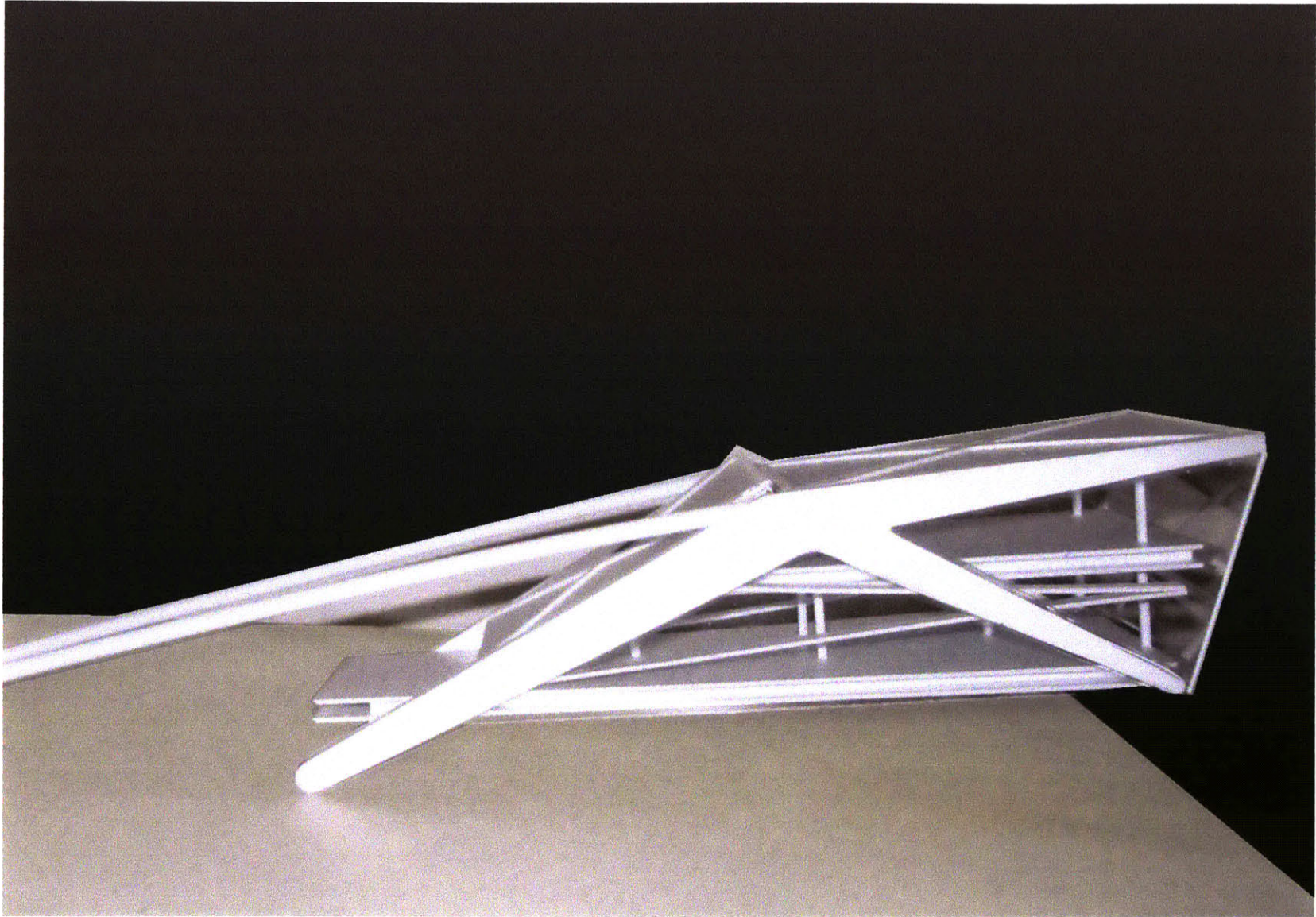
Site Model



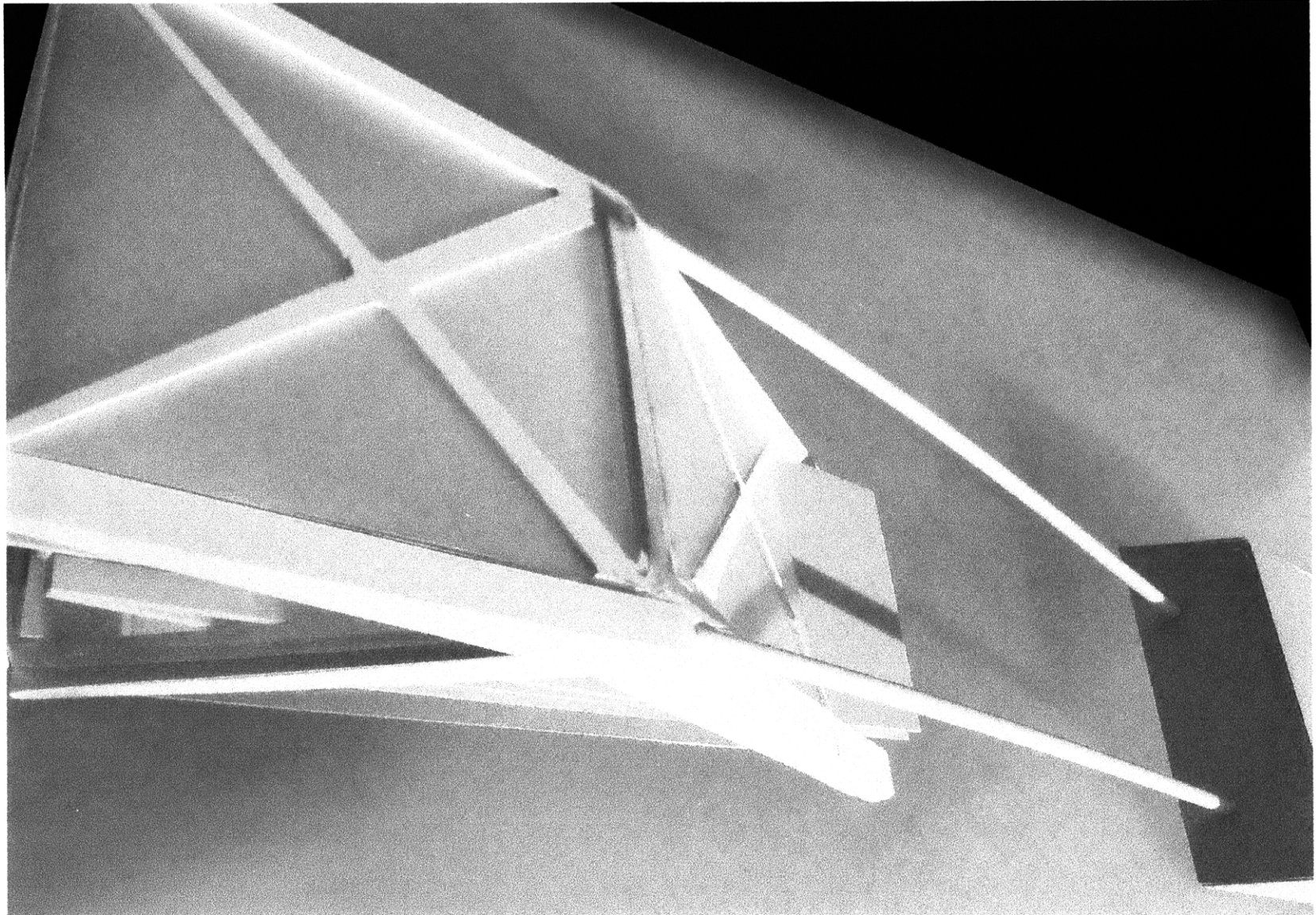
Architectural Model



Architectural Model



Architectural Model



Architectural Model

\\ INVESTIGATIONS

_From Landscape to Architecture

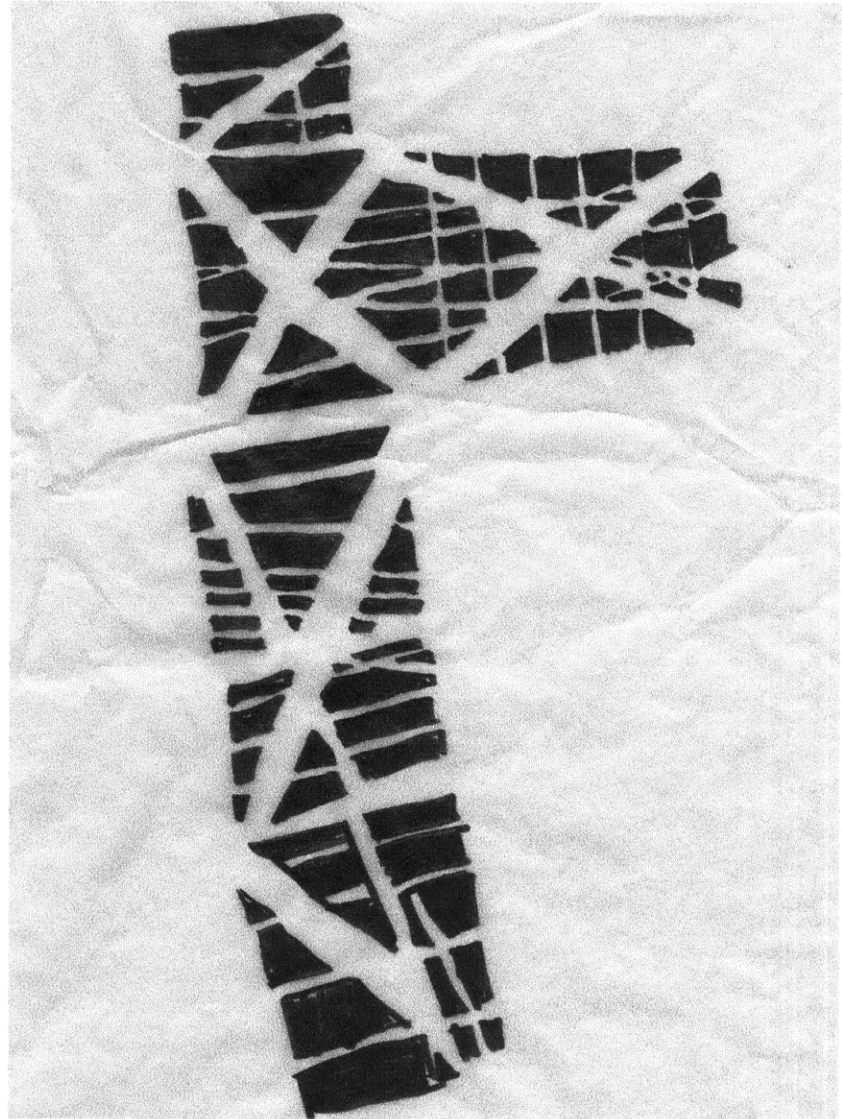
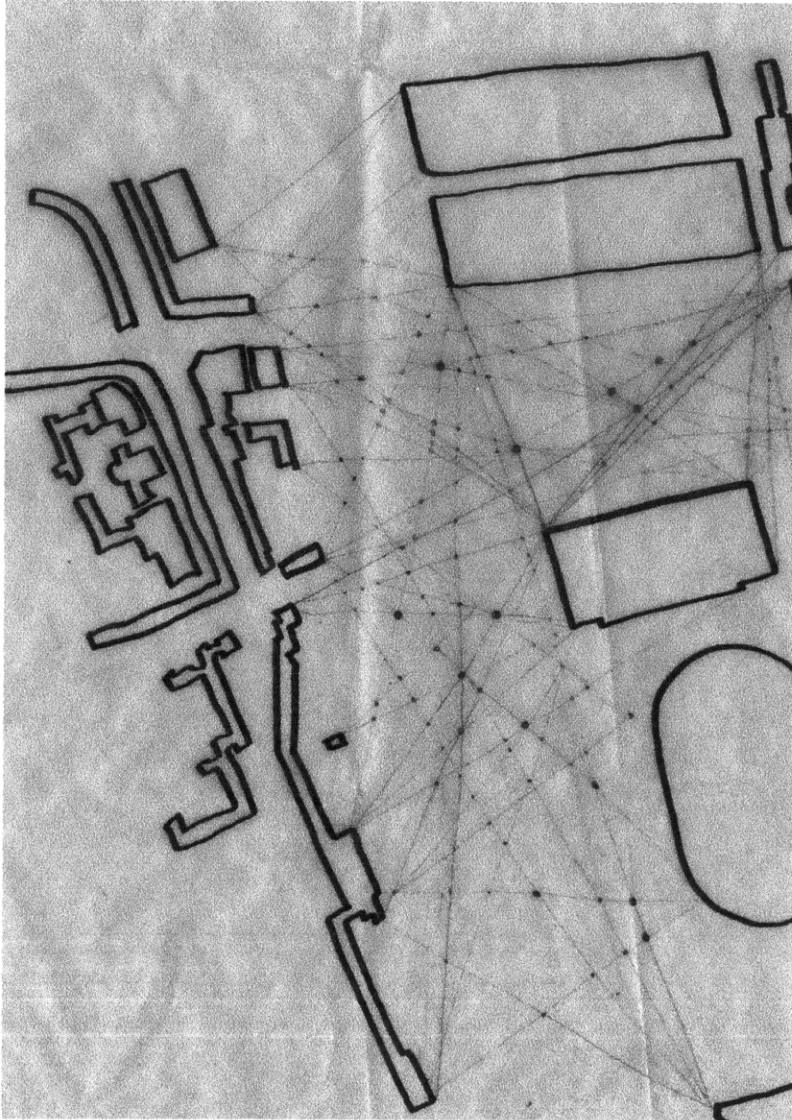
My process for this thesis began with the dissemination of a consistent design methodology that could dictate and encompass the design of both landscape and architecture. Initially, focusing on a comprehensive solution, my design addressed the need for mending the site through the interweaving of habitable space into an engineered site topography, while using a tensile network of supports to link all programmatic spaces.

Through these gestures, the process lead me to push the architecture below ground, while having the connections span above. This methodology, resulted in the formation of highly solemn spaces, that did not adequately address the positive nature of my initial ideas.

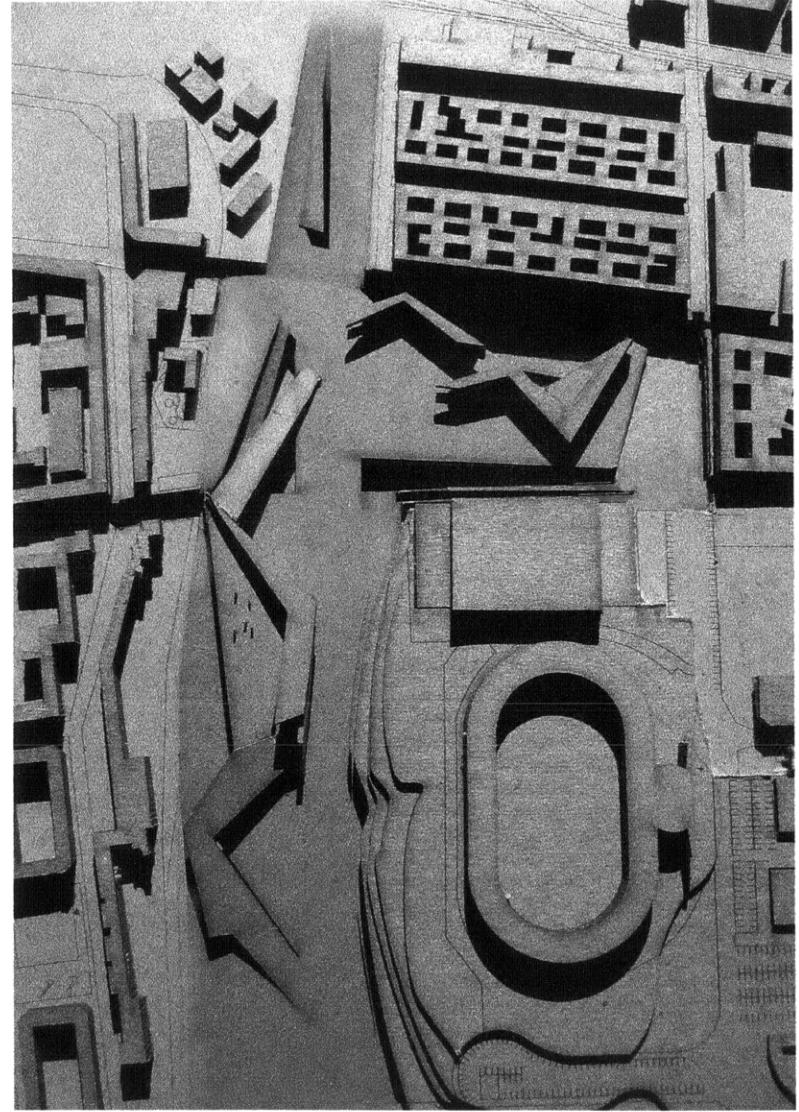
Through a series of investigations, I began to explore the notion of connectivity and tension above ground, while attempting to “lighten-up” the formal arrangement and architecture of the buildings, both metaphorically and structurally.

My final design for a cantilevered structural system, where the formal aspects of a German public square are offset by the non-traditional form of the buildings (both in architecture and arrangement), deals with the notion of connection, tension, and a stimulation of architectural landscape. It is, however a departure from the act of depressing architecture into the landscape. The landscape in this instance, is re-formed above ground, and instead of traversing the site outdoors, visitors traverse the site through the ramp system within the buildings.

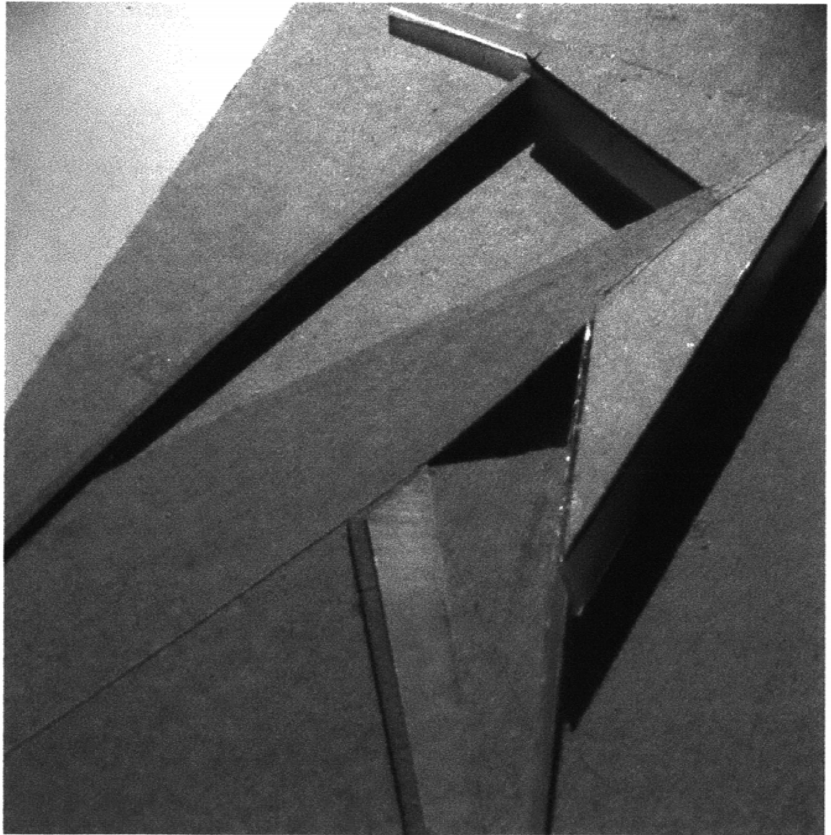
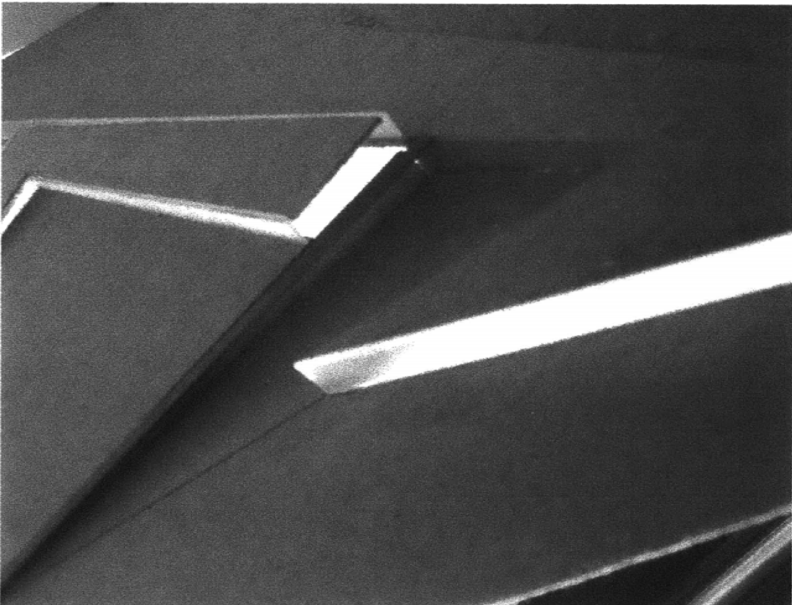
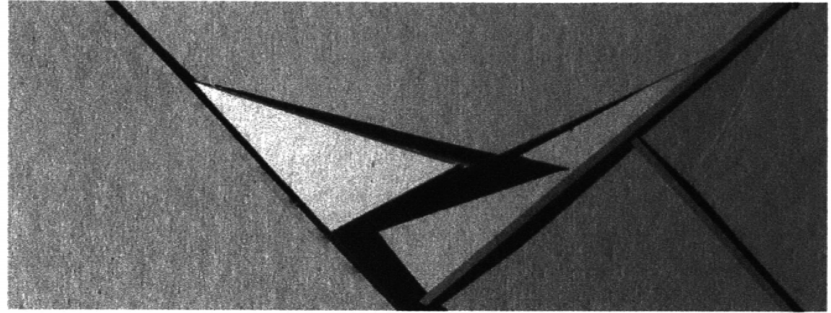
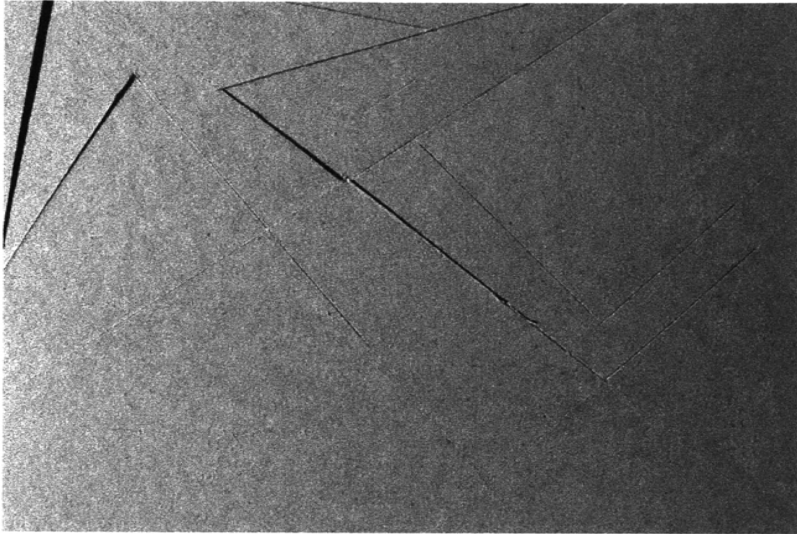
Following my initial design investigations, I chose to connect the site through architecture, rather than the seamless unification of habitation and landscape.

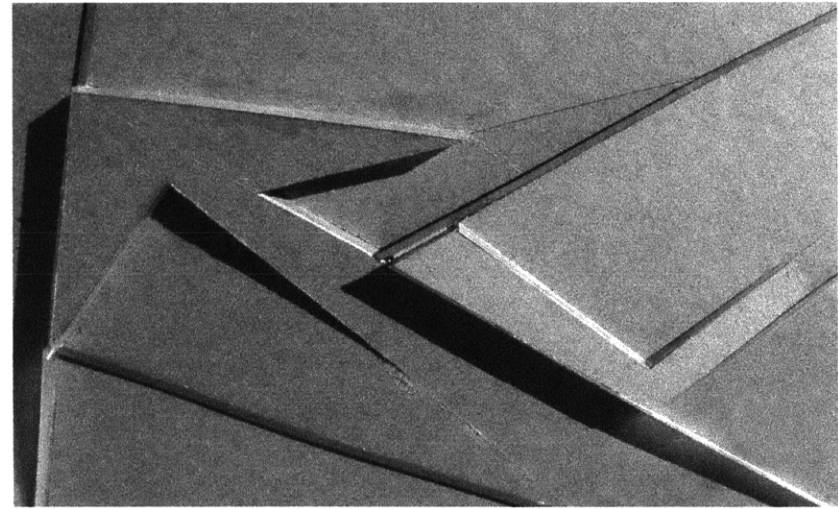
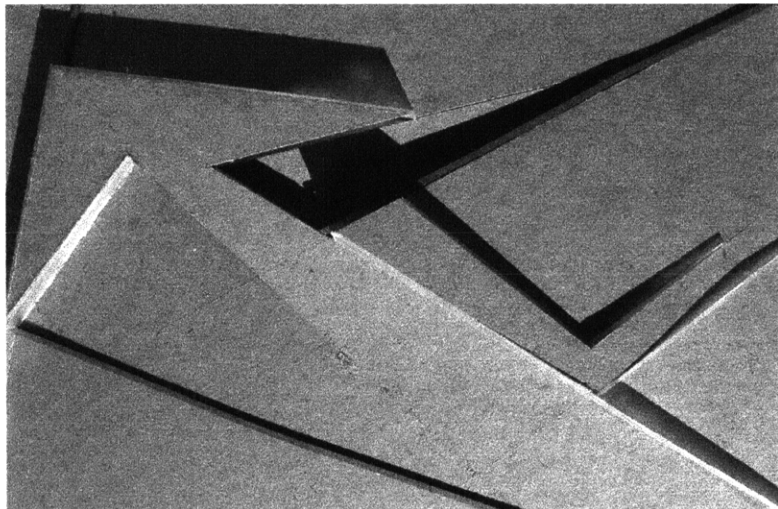
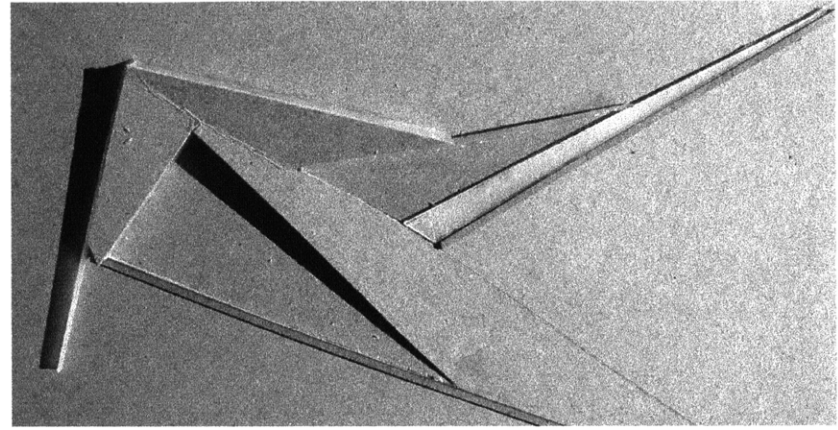
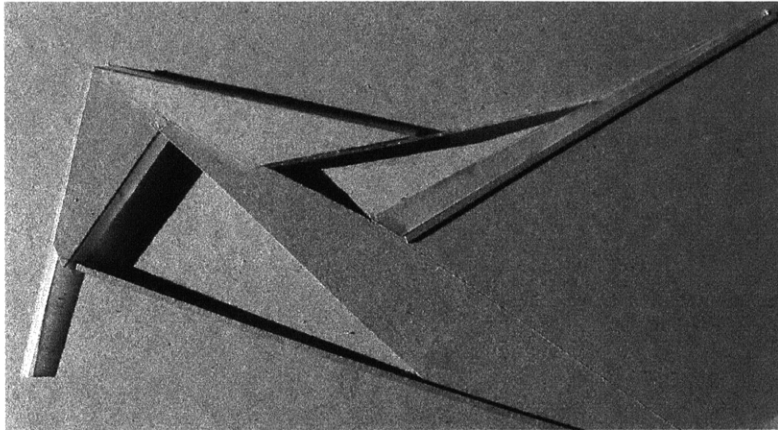


Process images of generating connective corridors in the landscape and bridging major East-West Junctures at Mauerpark

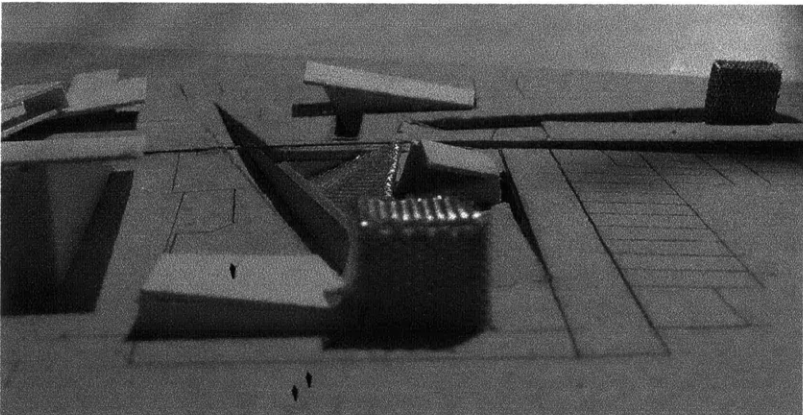
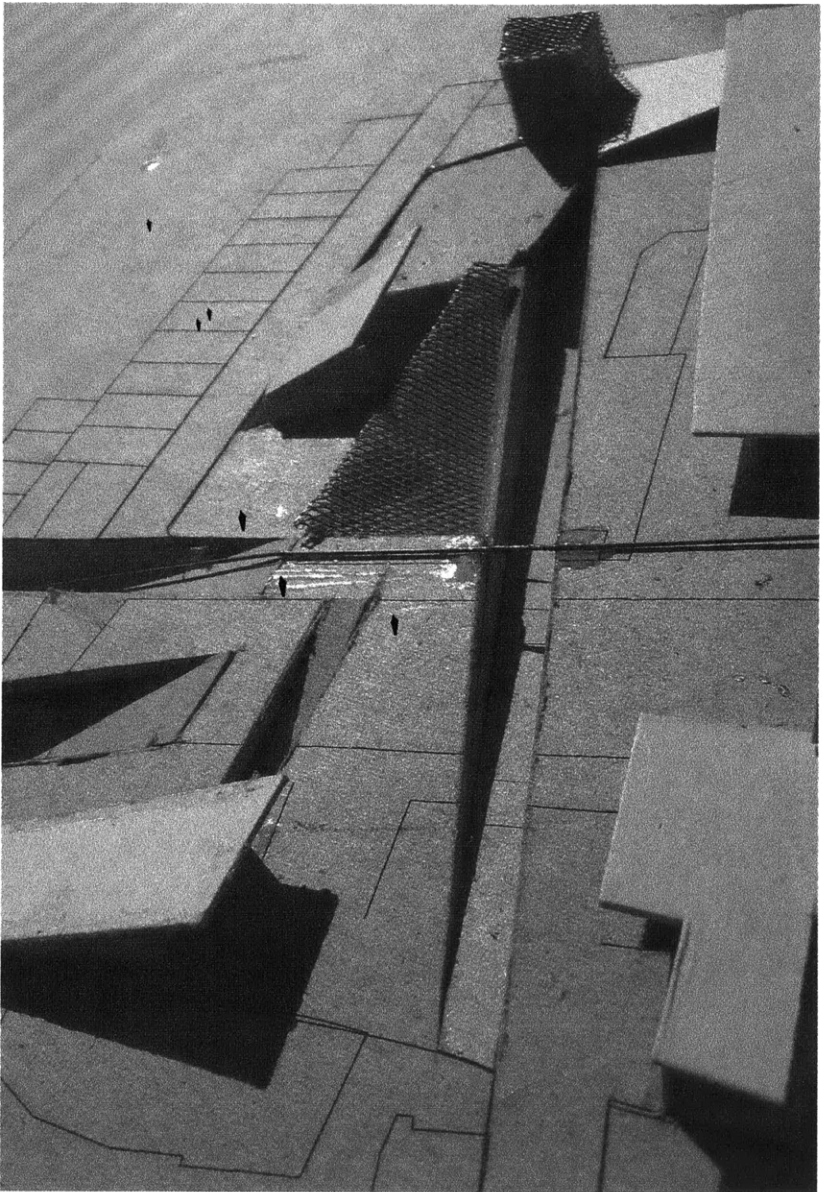
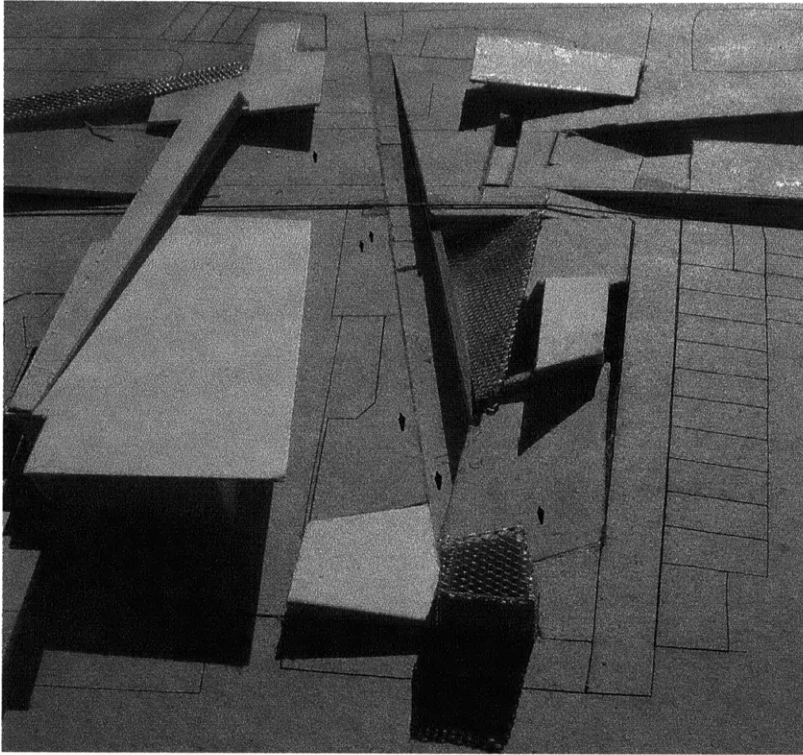


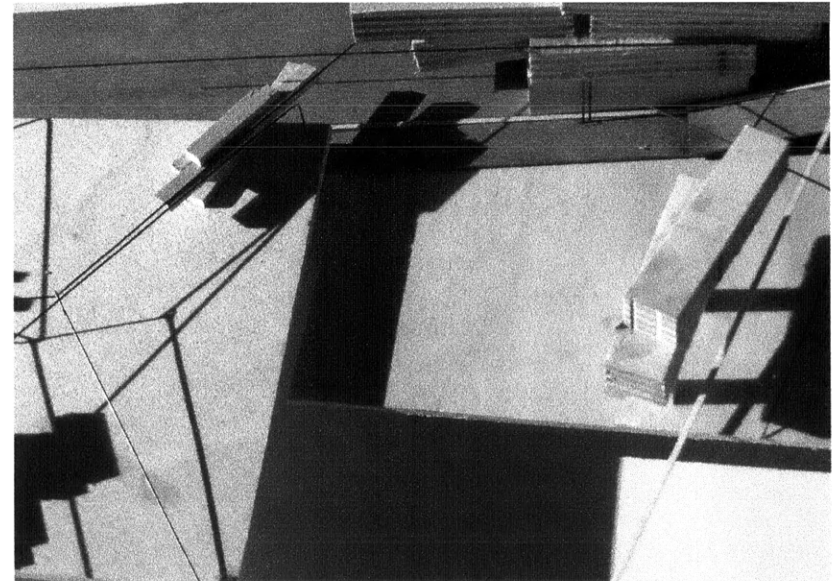
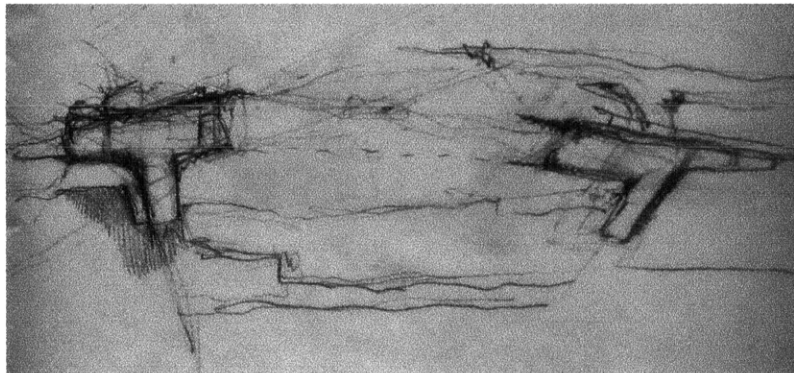
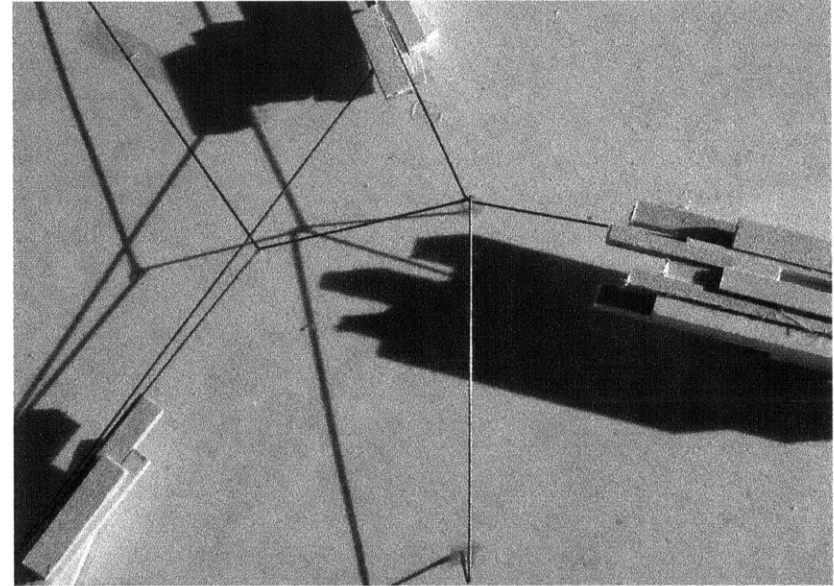
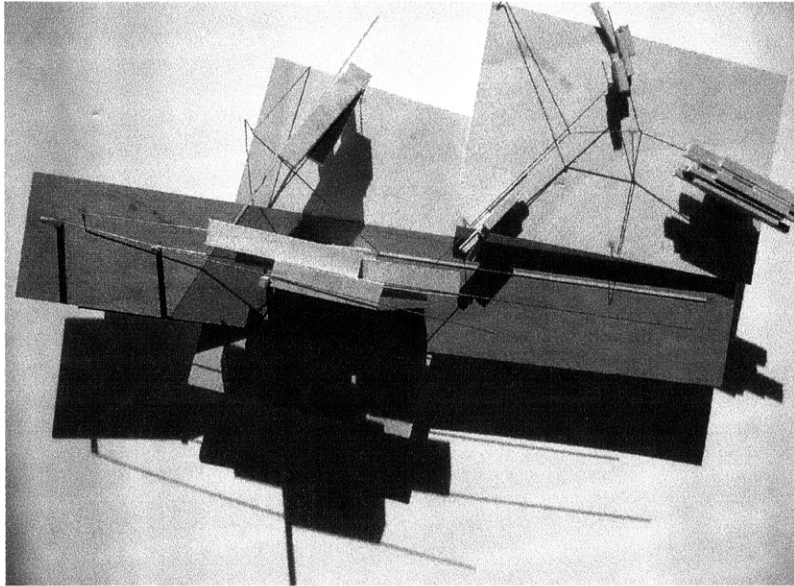
Process images of form generation via connective corridors between major East-West Junctions at Mauerpark





Process images of landscape generation system. While not used in my final design, this system allowed me to utilize cuts within the landscape to nest program and architecture. This highly syncopated system did not adequately address the nature between structure and urban connection. I therefore began to elevate the architecture as opposed to depressing it into the landscape.



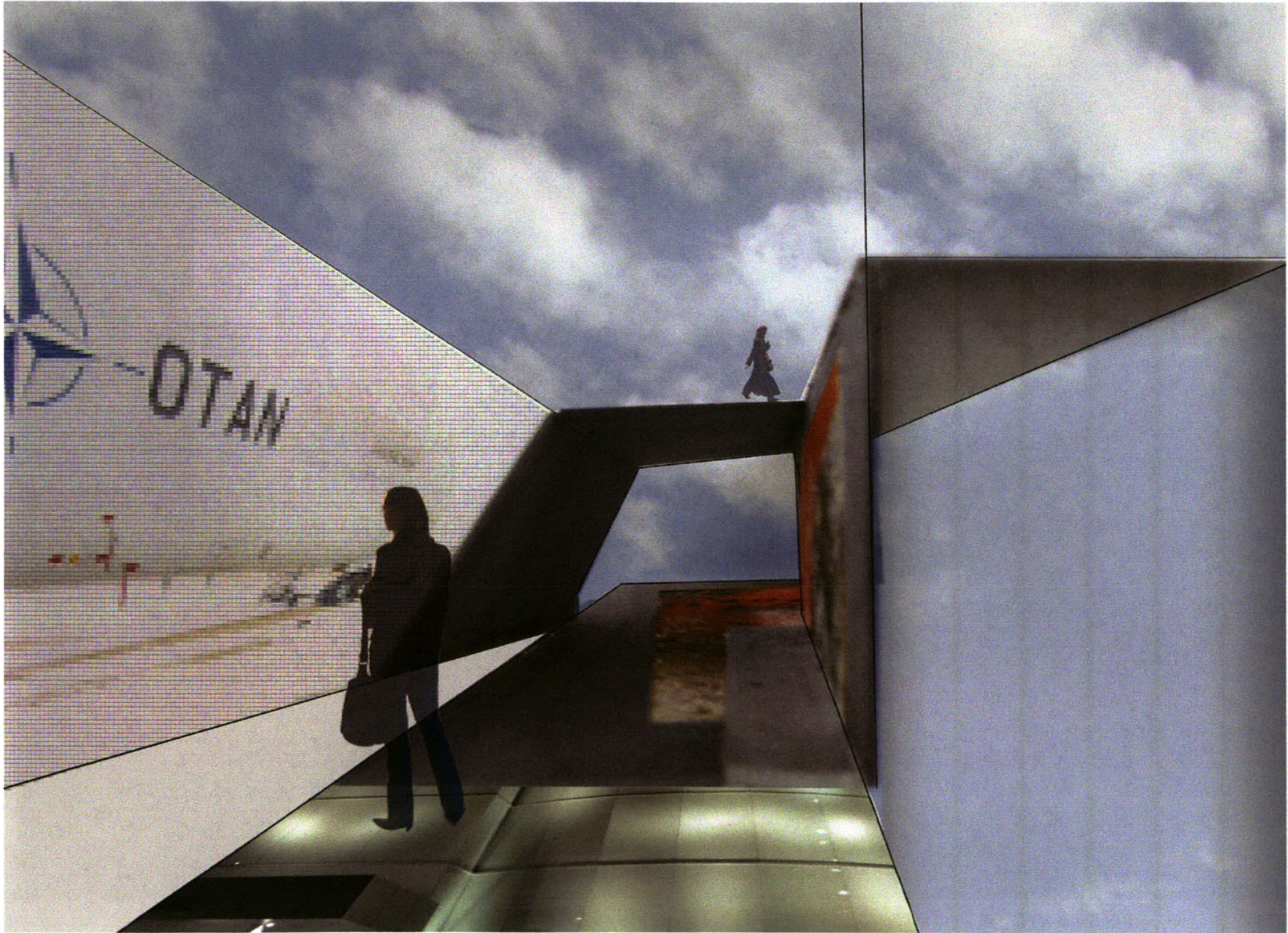


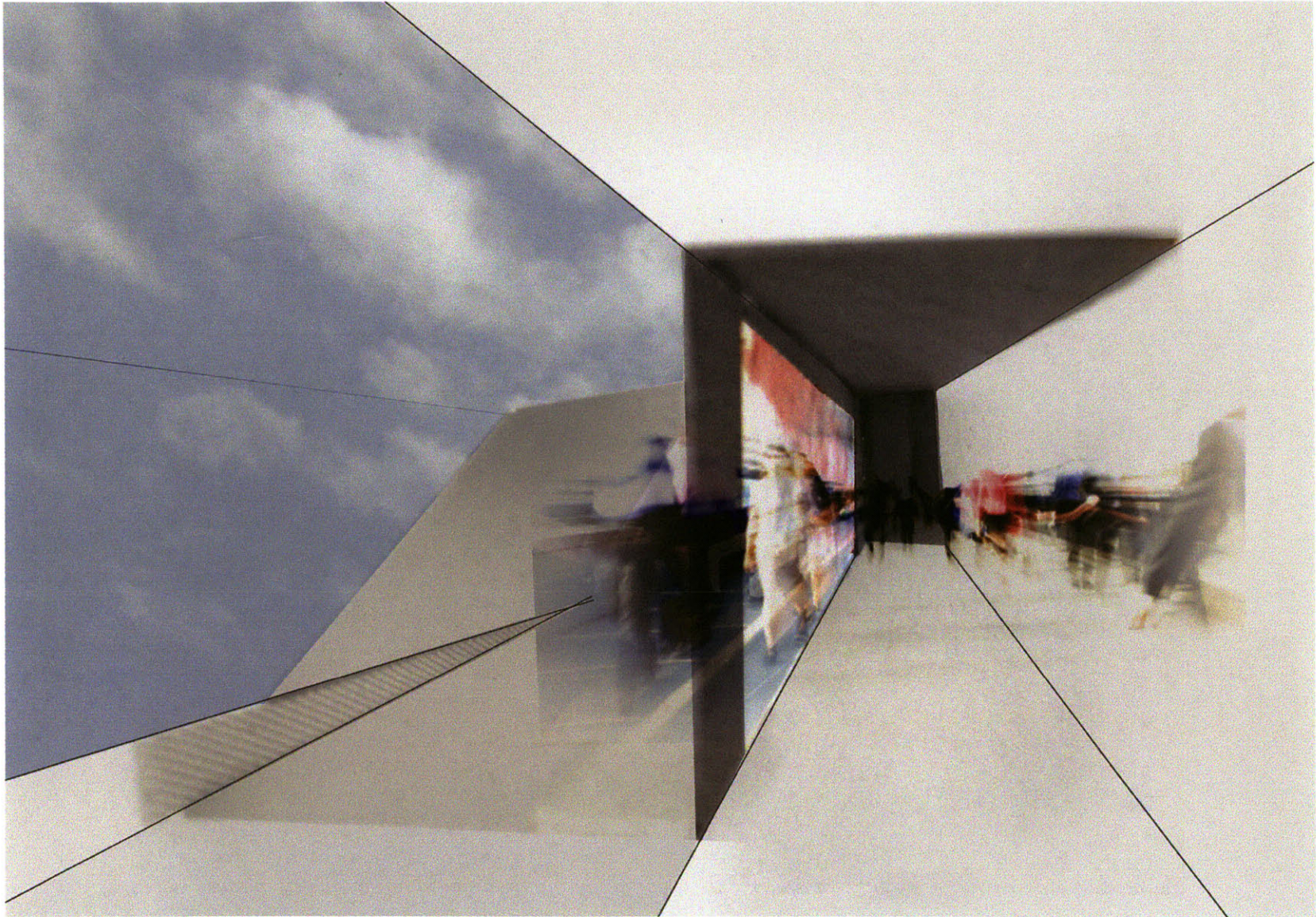
Process images of initial investigation between structure and tension and the architectural manifestation of a connected political system.





Atmospheric Collages of initial investigation of connective transportation and urban tissues and the architectural manifestation of an urban network.





Atmospheric Collages of initial investigation of elevated gallery space.

\\ BIBLIOGRAPHY

Barnstone, Deborah Ascher, *The Transparent State: Architecture and Politics in Postwar Germany*, New York: Routledge, 2005.

Book, Tommy. "The Urban Field of Berlin: Expansion--Isolation—Reconstruction." *Geografiska Annaler. Series B, Human Geography*, 77-3, (1995): 177-196

Boyer, Catherine, "The Great Frame-Up: Fantastic Appearances in Contemporary Spatial Politics." *Spatial Practices: Critical Explorations in Social/ spatial Theory*. Eds. Liggett, H. and Perry, D Thousand Oaks, CA: Sage. 1995

Cepl, Jasper. "Oswald Mathias Ungers's Archipelago for a Shrinking Berlin." *Shrinking Cities, Vol. 2 Interventions*. Ed. Philip Oswald. Berlin, Germany: Hatje Catz Verlag, 2006.

D'Hooghe, Alexander. The Terrifying Beauty of Absence: Transparency in Modern Architecture. *This Century Review*. <http://www.thiscenturyreview.com/>

Hayden, Dolores. "Place Memory and Urban Preservation." *The Urban Design Reader*. Eds. Larice, M., and Elizabeth Macdonald. New York, NY: Routledge, 2006. 194-203.

Huysen, Andreas. "The Voids of Berlin." *Critical Inquiry*, 24-1, (1997): 57-81.

Jordan, Jennifer A. *Structures of Memory : Understanding Urban Change in Berlin and Beyond*. Stanford: Stanford University Press, 2006.

Koepnick, Lutz. "Forget Berlin." *The German Quarterly*, 74-4, (2001): 343-354

Ladd, Brian. "Center and Periphery in the New Berlin: Architecture, Public Art, and the *Search for Identity*." *A Journal of Performance and Art*, V. 22-2 (2000): 7-21.

Ladd, Brian. *The Ghosts of Berlin: Confronting German History in the Urban Landscape*. Chicago: University of Chicago Press, 1997.

Libeskind, Daniel "Daniel Libeskind mit Daniel Libeskind: Potsdamer Platz." *Radix-Matrix: Architekturen und Schriften*. Ed. Alois Martin. Muller: Munich, Germany, 1994.

Lynch, Kevin. *The Image of the City*. Cambridge: M.I.T. Press, 1960.

Lynch, Kevin "Dimensions of Performance" *Imaging the City: Continuing Struggles and New Directions*. Eds. Vale, Lawrence J. and Sam Bass Warner Jr. New Brunswick, NJ: Center for Urban Policy Research, 2001.

McLelland, Charles E. "The Berlin Wall: From Cold War Symbol to Cultural Artifact." *Up Against It*. Rice, Leland. Albuquerque, NM : University of New Mexico Press, 1991. 3-36.

Rogier, Francesca. "Growing Pains: From the Opening of The Wall to the Wrapping of the Reichstag." *Assemblage*, 29 (1996): 40-71.

Rowe, C, Slutzky, R. "Transparency: Literal and Phenomenal Indigenous Architecture." *Vol. 8 Perspecta. The Yale Architectural Journal*. New Haven: Yale School of Architecture, 1963.

Scheffler, Karl as quoted by Anne Costabile-Heming. *Berlin: Orchestrating Architectural, Social, and Artistic Change in Germany's New Capital*. Eds. Costabile-Heming, Carol Anne, Kristie A. Foell, Rachel J. Halverson. Berlin, Germany: Walter de Gruyter GmbH, 2004

Till, Karen E. *The New Berlin : Memory, Politics, Place*. Minneapolis: University of Minnesota Press, 2005.

Venturi, Marco. "Platz and Plans." *Design Quarterly*, 158 (1993): 32-36.

<http://www.stadtentwicklung.berlin.de>

<http://www.googleearth.com>

<http://www.nato.int>