

Reconnection:

THE HISTORY OF THE RECONNECTION OF THE UNITED STATES TO THE WORLD

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"I feel that if a war
came to threaten
this, I would like to
throw myself into
space, over the
city, and protect
these buildings with
my body."

Gari Wynand

This brief exploration would not have been possible without the support (emotional and otherwise) of:

Andrea Swartz for her feedback on the table, our competition, and drama, and for always making me push the limits of my creativity;

Julie Kratzner for helping me keep a handle on my glue responsibilities;

Everyone that made glue 2 an overwhelming success

Serena and Andrea (Dealia and Charisse) for enjoying a wonderful experience (and good beer) with me;

My parents for their expertise during the development of my table, not to mention every other project in my life;

Mollie for motivating my best work, and for not killing Irwin;

Ellen for agreeing to join me for that fateful cup of coffee - you mean more to me than words can describe;

and the Players' Lounge - Josh, Steve, and our frequent visitors (for a truly memorable and sometimes productive experience).

Thank you.

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JYK

What began as a realization of the inefficiency of the new American suburb as compared to its urban hub, evolved into a mission to maintain and improve the vitality of the city in the context of the dawning digital revolution.

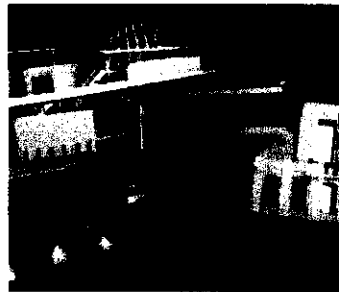
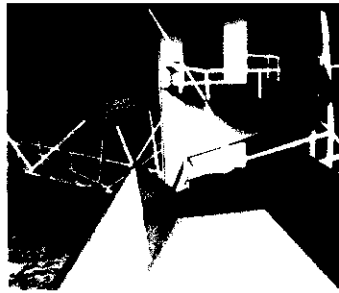
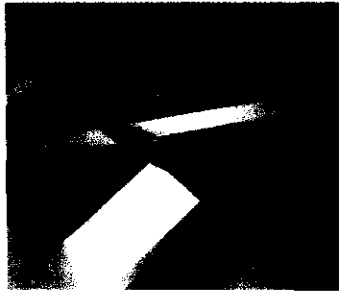
This report acts as a synthesis of study over the course of an academic year. Included within are initial assumptions, fragments of research, pertinent design precedent, application of these components to three design project phases, and analysis of the validity of the solutions produced. At various locations, information is either over- or under-detailed, each time in a deliberate attempt to streamline the efficiency of the study and buttress the clarity of the creation. Through this educational endeavor, new appreciations have been solidified and existing morals reinforced. Every partially completed component of the content will act only as a catalyst for continued study. The issues addressed herein cannot be abandoned, but instead will be the basis for design decisions made through the duration of a professional career.

Disclaimer: This study is founded on the assumption that human beings need each other, physically and socially (psychologically).

The emergence of civilization five thousand years ago resulted from villages of agrarian people producing surplus food. This farming surplus fueled the materialization of non-agrarian merchants and craftsmen, who established high-density centers for trading goods and providing services - cities. From this time, closely corresponding to the invention of written language, through the present, cities have provided civilization with the population and abundant resources necessary to fuel technological development. The evolution of technology, in turn, has marked the chronology of humankind's utilization of the earth and been the basis for recorded history. Now, for the first time, the density inherent in functioning, developing cities is no longer necessary. Thanks to technology, people may work collaboratively and obtain necessary material resources regardless of proximity to an urban center. This leaves cities to redefine themselves in the face of reduced usage and changing social function. The city must adapt, it must demand continued usage by the population.

Within the evolving city, a battle is being fought over the existence of the public realm. The last truly public urban space, where no person may be excluded because of appearance, membership, or social standing, is the street.

In order to preserve the benefits of the public urban realm, the street must be addressed and new civic interventions must be inserted sympathetically into this public domain. Further, the layers of history evident at every intersection should only be removed or altered when absolutely necessary - the waste of resources to achieve purely cosmetic change cheapens the rationale and impact every instance of true municipal improvement purveys. The city must continue to act as the backbone of civilization, and the people moving utilizing its resources must continue to engage with the physical city, and more importantly, with each other.



introduction/background

research/precedent

exploration 1 - players' lounge table

background

resolution

analysis

exploration 2 - 3rd year design studio

background

resolution

analysis

exploration 3 - chicago interventions

background

resolution

analysis

critical analysis

bibliography

drake

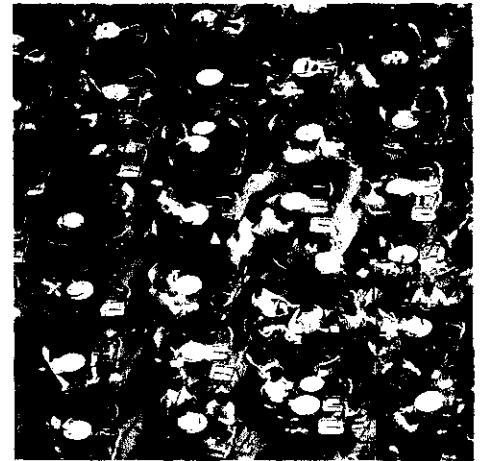


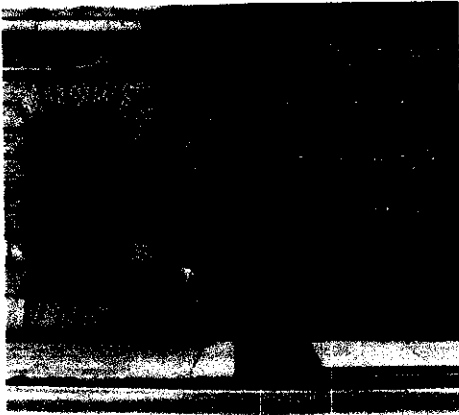
Civilization has entered a social revolution. The presence and active control technology has assumed over society is overwhelming. A person in the developed world may go to the grocery store, shop for gifts, trade stocks, and send messages instantly to the other side of the world all in a span of minutes and without moving more than a finger. Business that formerly needed to be conducted with a handshake can now be completed with a phone call or fax, and requires no physical proximity between the two meeting parties; "Mindwork no longer requires legwork. Commerce isn't impeded by distance (Mitchell 7)." However, this might not be in our best interests as a civilization. Technological development has opened up opportunities to develop more with less, from anywhere, for everyone. "There has been more information produced in the last thirty years than the previous five thousand (Prichett 20)." However, with this proliferation of information and technology, a dependance has formed, one that is slowly stealing civilization's spine. In the wake of a new global business, cultural, and industrial order, the individual and his connection to the tangible world around him is being compromised in the name of technological development. People who no longer know their neighbors can hardly be expected to respect or help those strangers, much less love them.

We need one another. Studies have shown that physical contact with an infant will accelerate the child's growth. In early childhood, in order for a person to develop as an individual (often marked by the ability to recognize oneself in a mirror), he must have the feedback of other individuals. Without outside reinforcement, self-recognition will never be produced and individuality will never be realized (Brehm 57). After a self-concept has been developed through childhood and adolescence, every adult human must continue to relate to other people. "Prolonged isolation often produces imaginary relationships...People, deprived of all human contact over long periods of time, may develop psychoses, including visual and auditory hallucinations (Rubin ix)." In the adult realm of personal

interaction, knowledge of confident kinesthetic positioning can be gathered only by first watching, then mimicking, and finally incorporating criticism into a well-developed demeanor. However, as speed and streamlining of the professional world become the norm, people continue creating new ways to avoid direct, face-to-face communication. The proliferation of the hands-off - fax-machines-on version of professional associations has encouraged the understanding of business associates as talking heads rather than individual human beings. "Instead of personal contact, we have developed procedures for lending a superficial level of personalization to these anonymous interactions so that we 'appear' to be personally concerned for another's welfare when, in fact, we are not (Vela-McConnell 5)." The elimination of direct personal contact will lead only to the deterioration of the individual personality, and in turn, the society inhabited by these individuals. Instead, as this interpersonal separation continues to be magnified, elements must be introduced into the built environment to counteract this developing separation; interpersonal connection spaces must inhabit the personal daily routine and demand to be used.

The advancing technological world and its subjected civilization necessitate a solution aimed at preserving and improving lines of direct interpersonal contact within the urban realm. Through an analysis of an urban hub and a program for increased operational clarity, a new form will emerge in harmony with the context. This resultant facility will initiate a new level of connection, not only between adjacent buildings and infrastructure, but also between the users of the space. The user will feel a connection both to other individuals sharing the space and to the forms and elements defining the space. Through this facilitation of connection, the oncoming technological reformation will not be left to divide the civilization that created it.



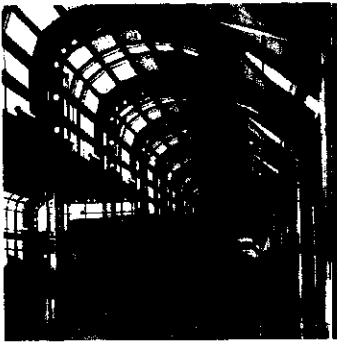


Despite the powerful impact of architecture on the aesthetic of a given place, and its apparent definition of that disparate location, true local identity can be established only through that locale's people and their customs. A particular population surrounds itself with a built environment that is an abstract self-reflection. Architecture is a geometric manifestation based on this abstraction, but may only be understood through the sensory filter of that local culture; the architect acts as a cultural prism, transforming culture into built form.

As the baseline for design conception, the users, uses, and existing context for each of the three design exploration components were defined. These three factors were then evaluated in reference to one another to produce the design criteria/program. Despite the radically different user groups associated with the table design and the two urban intervention designs, this common evaluation and criteria-production system allows the projects to be evaluated in reference to one another, regardless of scope.

Common themes emerged through the research and precedent collection phase, and are based on quotations, case studies, and self-imposed limitations intended to maintain a manageable scope. An incarnation of each of the themes is evident in every one of the design projects. The materiality of the various designs offers focus to elements denoted by dynamic textures, transparencies, and colors. These material anomalies focus the user's attention on specific connections, axial views, or functional opportunities. The aesthetic of dynamic equilibrium is evident in each of the design pieces; this objective pushes the constructs towards their apparent structural limit. The intentional preservation of the existing context also weighed heavily on the forms generated; each piece is inserted into the surrounding context, not as an opaque shroud over the face of the context, but instead as a new visual filter, allowing views through the new shell in order to intensify the awareness of both the original face and the new transparent screen.

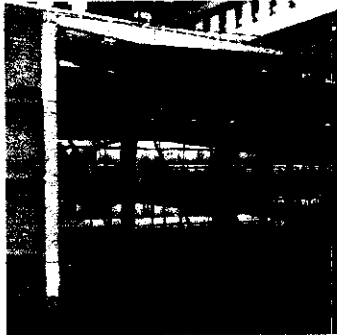
As overarching support for the common themes, organizing concepts were created: transparency solely as climate protection rather



O'Hare International Airport - United Airlines Terminal

Chicago, Illinois
Murphy / Jahn

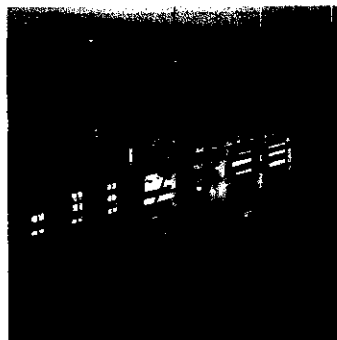
repetition of expressive structure and materials,
providing a platform for powerful intersections
and endpoints along the spatial axis



Lerner Hall - Columbia University

New York, New York
Bernard Tschumi

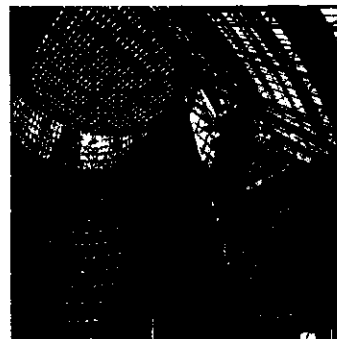
intermingling of transparent, translucent, and
opaque layers, both vertically and horizontally, to
achieve functional connections



Piggyback Building - Architecture School

Valparaiso, Chile
LWPAC

sympathetic integration of contrasting form to
original structure - edges of intersection redefine
thresholds and alter overall perception



State of Illinois Building - James Thompson Center

Chicago, Illinois
Murphy / Jahn

creation of interior public space, where the
functions of the building exists as a backdrop to
the central gathering space - the exterior building
skin no longer acts as a security checkpoint



BCE Place

Toronto, Ontario
Santiago Calatrava

expression of reclaimed interstitial space
for public gathering - expression of light
through dynamic structural form

than social divider, and contrast of form through intimate proximity (similar to the powerful division in the CPT). Both concepts provided a filter through which final design forms were generated. These criteria constricted the scope of each project individually, and give the collection of all the thesis designs an abstracted similarity, which bolstered the generation of new spatial form for each successive project, without constricting material or structural choices.

Transparency, as defined for this design study, has altered its definition in the urban landscape over the past century. Transparent surfaces formerly were the welcome sensory connection from the constricted, sequestered interior of masonry and concrete bearing construction back to the qualities of the public street. Through the development of steel, and the introduction of the modernist transparent curtain, the presence of transparent surfaces began to celebrate the division generated to either side of the glass. A new social hierarchy was quickly established, with the appropriately-dressed select few allowed to pass through the surface, while the general public was forced to remain on the outside looking in. The design of modernist towers, with its grand ground level atrium devoid of the qualities typically associated with the public domain, sliced a paper thin line through the public ground plane, changing the former desire of the interior dweller to reconnect with the exterior, into a new order, where only the privileged are able to traverse the threshold of the transparent social dividing line. Encroachments on the street necessitate new public interventions, focussed on providing all people an opportunity to pass through the transparent plane without fear of social or legal repercussions; the transparent surface must once again be used to connect, not divide.

Contrast generated in the built environment works to the benefit of both contrasting elements. In Chicago, the continued maintenance of every urban construct forces an aesthetic awareness on even the casual observer. The intimate proximity of contrast, of architectural style, of solid to void, and of utilitarian to sensual material selection, provides the canvas to which all new components in the urban field may add their textural layer.

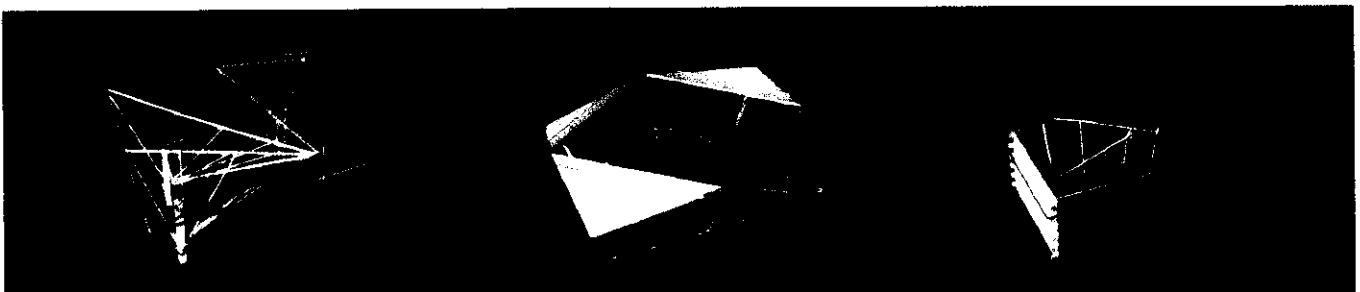


e x p l o r a t i o n . 1

Players' Lounge Table: *an exploration of full scale wood construction reflecting the personalities using, and the functions performed in an architecture student studio space. How might an intervention act as catalyst for small scale interpersonal connection?*

Initial Design Criteria

1. The table must function as a work surface for the lounge members' model making, laptop computers, and leisure materials.
2. The concept for the table must reflect the personalities of the players - Colin, Kyle, and Josh - three extremely similar, but unique individuals. The connections between the three pieces (not the pieces directly) stabilize the structure and supports the work surface.
3. The table must reflect the subtraction and much more meaningful addition that created and defined the Lounge: the loss of the fourth original studiomate, which provided the space necessary to create the Players' Lounge, and subsequently motivated others to frequently visit the space.
4. The table should emphasize the equality of experience from both visitor chairs.
5. The final structure should evoke the feeling of dynamic equilibrium, a quality evident in the surrounding studio space
6. The table must be easily movable, through minimizing fasteners, maximizing flat surfaces, and using resilient materials.



research / precedent

^{1.} "To function as a society, we need a common forum, open to people from all walks of life."

^{4.} "Over the years, we have seen the emergence of a new kind of city, one that is a place of shared life."

^{7.} "This ubiquitous principle is the need of cities for a most intricate and close-grained diversity of uses that give each other constant mutual support, both economically and socially."

^{10.} "What continues to draw a new generation back into the urban matrix? Cities still offer physical connections, sensory stimulation, and confrontation in ways that the virtual landscape only hints at."

^{2.} "The new drive of urban design should be to return to a sense of shared humanity, a sense of physical proximity and personal movement and a sense that the city is the best expression of a desire for collectivity."

^{8.} "The isolation of residential areas from retail spaces forces the nodes for interpersonal interaction to encroach on private space, making people feel uncomfortable sharing their private space with the public. People are left with the choice between sharing much or nothing, with many more choosing the nothing over the much."

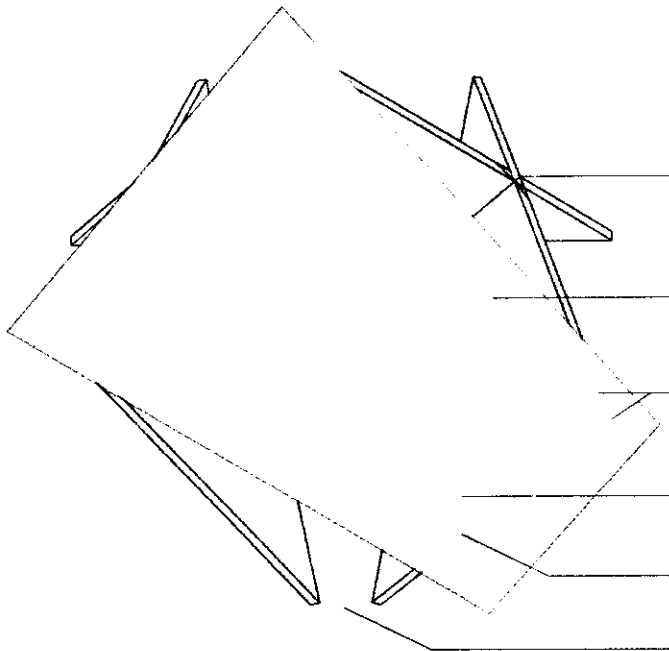
^{11.} "Investment today in the old city can pay for itself in new jobs, increased property values, and money saved by not building additional roads and utilities on the fringes of the metropolitan area."

^{3.} "...if a city's streets are safe from barbarism and fear, the city is thereby tolerably safe from barbarism and fear. When people say that a city, or a part of it, is dangerous or is a jungle what they mean primarily is that they do not feel safe on the sidewalks."

^{6.} "While [the city] may be stable in general outlines for some time, it is ever changing in detail. Only partial control can be exercised over its growth and form. There is no final result, only a continuous succession of phases."

^{9.} "Contemporary strategies for both the urban core and suburbia are based on a desire for a homogeneous body of inhabitants. This trend reveals a marked lack of interest in the challenge created through a confrontation with different ideas, values, and ways of life."

^{12.} **The city is the heart of civilization, and must continue to function as such.**



plan geometry:

@ floor - symmetrical about axis from lounge entrance

@ connection to surface frame - rotated 45 degrees to conform to the rectilinear space and adjacent seating

triangular surfaces overlap to represent the similarities of the lounge members' personalities - detailed to allow one surface to flow into the other [detail B]

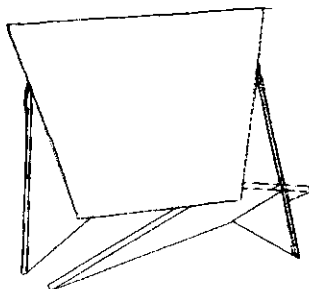
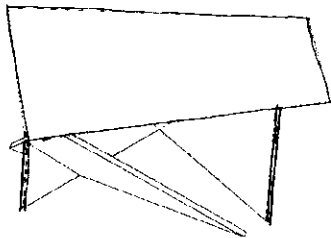
triangular surfaces positioned at 52 degrees from the ground plane (similar angle to the Giza pyramids)

surface frame and triangular surface edges use Australian Oak to visually reinforce the connections that stabilize the structure

fourth side of surface frame unsupported, representing the loss of support provided by the original fourth lounge member

secondary members curve into primary members to reinforce the connection [detail A]

missing fourth triangular surface leaves an opening through which frequent visitors are invited

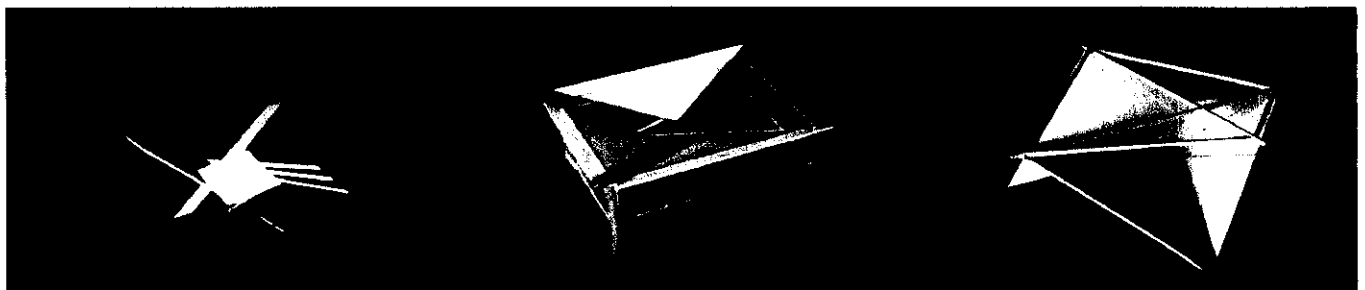


Five unique design responses were developed from the initial criteria. These five studies were then presented, along with an explanation of the six primary criteria, to twelve separate audiences. The reviewers were asked to choose the most successful study, studies, or components of the studies based on the criteria and their aesthetic tastes. The audiences included third year design students, thesis students, faculty, and a professional artist/sculptor/furniture designer.

A final design was created following the informal collection and evaluation of the audience responses. This final conceptual form was studied in five separate models, each used to refine the design for buildability, ergonomic responsibility, and aesthetic quality. A three-dimensional computer model and half scale physical model were then fabricated to resolve issues of constructability and spatial presence not explorable at 1:12 scale. Following minor alterations, the computer model was deconstructed and used as a template for the fabrication of the wood structure; without the computer model, the table, which has no right angle cuts or joints, could not have been realized within the restricted budget and schedule.

Following completion, the table was placed in the Lounge and successfully supported the loads applied to it (including feet) through the duration of the spring semester. The final construct consists of only five pieces (all with a depth less than two inches): three interlocking triangular surfaces; a surface structure acting under tension and bending; and a 1/4" pane of glass. The structure utilizes only gravity and a single screw to maintain its stability.

the table was a form
space, the form
interlocking triangular
components of the
of the table by
the table's
the table's form
form, applied to the
the final design
the table



e x p l o r a t i o n _ 2

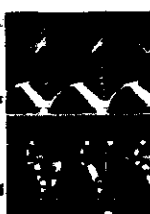
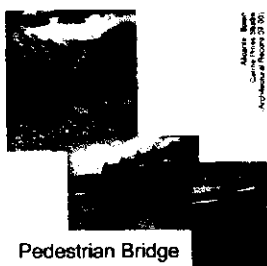
Indianapolis Bus Stop: *Eric Nay third year architecture design studio - an introduction to studio teaching and an exploration into the subtle interaction of pedestrian and streetscape.*

An extensive initial program was written for the design of a bus stop, payphone, information station, and public pay toilet pavilion. This program dealt with the complexities of user groups and the potential diagrammatic use of the four components in proximity to each other within the context of the central business district of Indianapolis, Indiana.

The program was significantly abbreviated before it was presented to the studio section as an eleven day studio project. Prior to beginning the project, the students spent three weeks developing an urban analysis of Indianapolis; this project acted as a preliminary study of form, materiality, and connections, in anticipation of the design for a Mid-Eastern diplomacy and study center.

Students were required to investigate and abstractly represent at least two pieces of precedent, intended not only to exhibit exemplary urban creations but also to investigate manifestations of their conceptual ideas in the completed work of professionals. The students were required to represent the materiality of their designs accurately in their final models, as well as designing, at full scale, a critical structural and material connection which would later be applied to the term design project.

This component of the thesis progression occurred at a time where



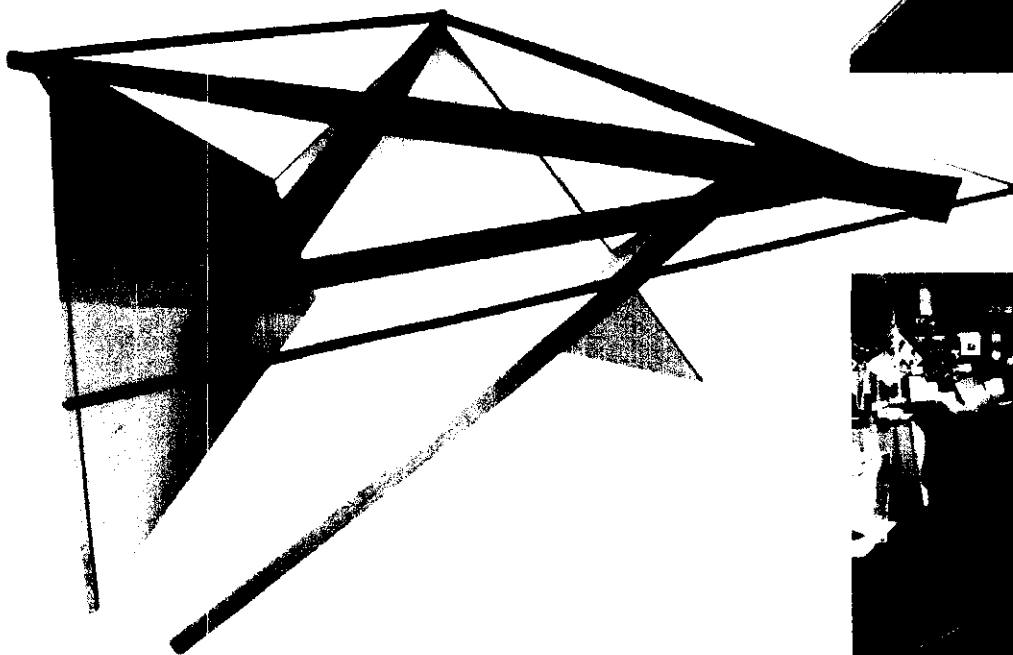
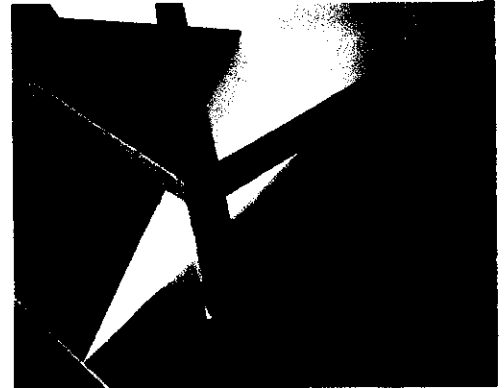
tkts booth competition

Tomas Salazar, New York City
Met plus John Cho and Tai Rojas
Architecture 03 00

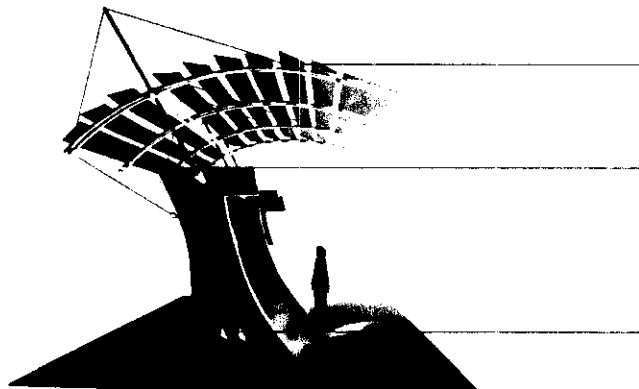
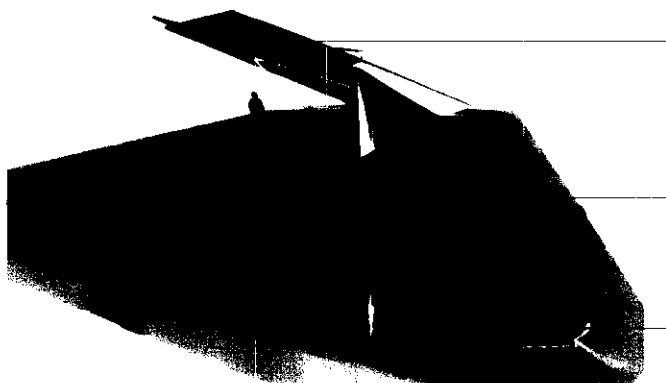
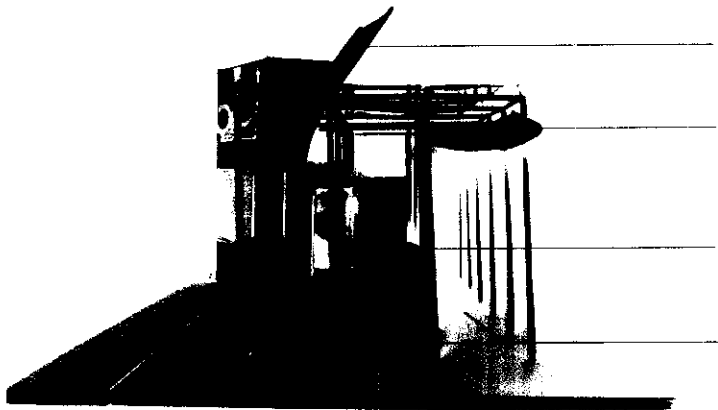


Despite the extensive labor involved in hand carving every connection, the table exhibits every one of the characteristics outlined in the initial criteria and remains completely structurally stable. The integration of computer modeling saved numerous hours and dollars, as many of the cuts would have had to be made by trial and error otherwise. However, the development of the design would not have been possible without the use of traditional model building, as many of the decisions made during the fabrication of the study models might not have been made without constant awareness of the physical form in three dimensions.

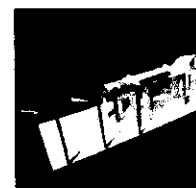
The ease with which the table may be disassembled far exceeded expectations, and the minimal material consumption was another positive outcome. The investments in high quality materials and in meticulous construction techniques are evident in the overall appearance and in detail.



drake



Eric_Urban



Heather_Schlam



Darren_Morley



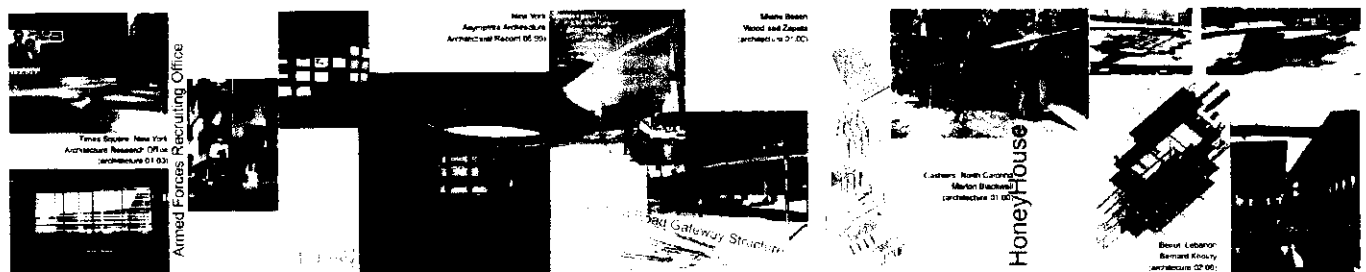
Bob_Patton

the theoretical rationale for the final urban design thesis project was solidified and the various design development options were being evaluated. The theoretical foundation was tested through daily critiques and two group reviews with the studio section. Ideas that had previously been accepted were negated or reinforced based on the conversations with the third year students, and how the general concepts of responsible urban design were being applied fifteen unique projects.

The variety of solutions, of which ten were analyzed for their effective components, was impressive considering the common filters each project was run through over the short duration. Even more impressive was the fact that a large portion of the students were able to produce a rough design, accept criticism, and make significantly noticeable improvements to their projects in only a few days.

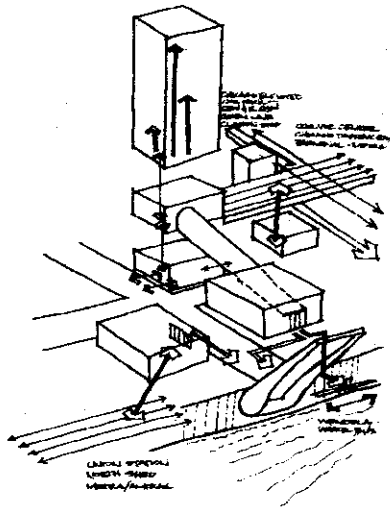
As a secondary intention of the experiment, the opportunity to interact with students in the role of the studio instructor shed a positive light on the educating potential of the professor, and the importance of providing constant critical feedback to developing design students.

theoretical rationale for the final urban design thesis project was solidified and the various design development options were being evaluated. The theoretical foundation was tested through daily critiques and two group reviews with the studio section. Ideas that had previously been accepted were negated or reinforced based on the conversations with the third year students, and how the general concepts of responsible urban design were being applied fifteen unique projects.



e x p l o r a t i o n 3

Chicago Urban Interventions: *Bridging the divide between systems of transportation, and, in effect, the population of the urban environment.*

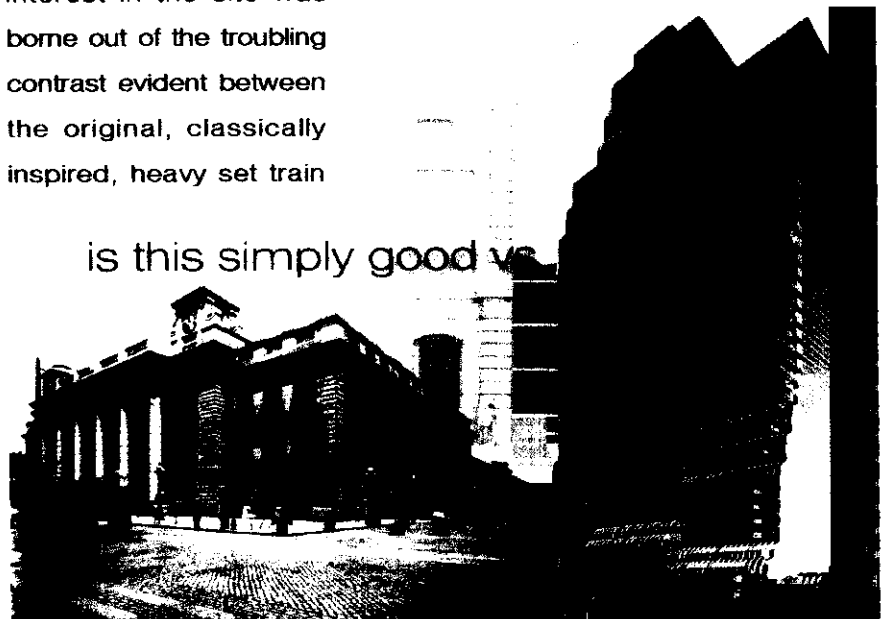


"Despite the existence of one of the best developed rail and bus transit systems in the Western Hemisphere, eight out of ten commuters in the Chicago metropolitan area rode to work in a car in 1990 (Young vii)." The system must improve, and continue improving, to attain new riders.

The site was chosen for the unique horizontal layers of human movement systems situated in close proximity to one another. Five unique layers of travel exist over, adjacent to, and below the train station: subway, river (river bus), street (pedestrians, automobiles, and busses), heavy commuter rails, and elevated rail. Despite the spatial immediacy of these systems, the five layers were irresponsibly disconnected. The function of public transportation is to provide the largest number of customers the most convenient service, which these pieces hinted at but which was never achieved. Improving the connections of these systems, bridging the divide between disparate layers of human experience and interaction.

A secondary interest in the site was borne out of the troubling contrast evident between the original, classically inspired, heavy set train

is this simply good vs

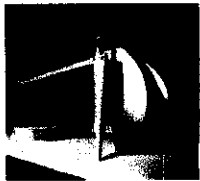




Matt_Peddie



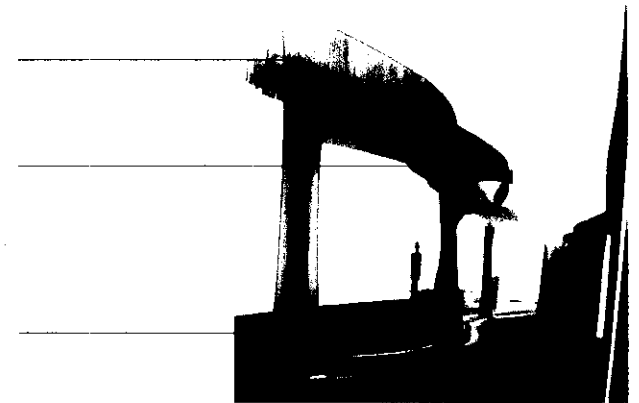
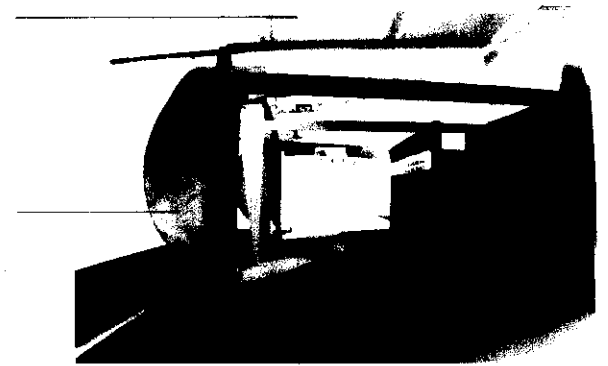
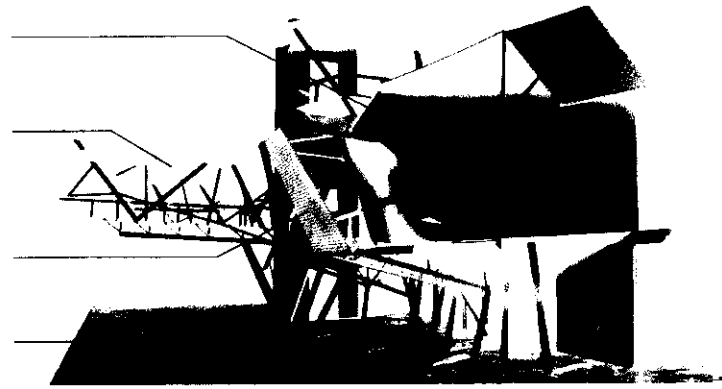
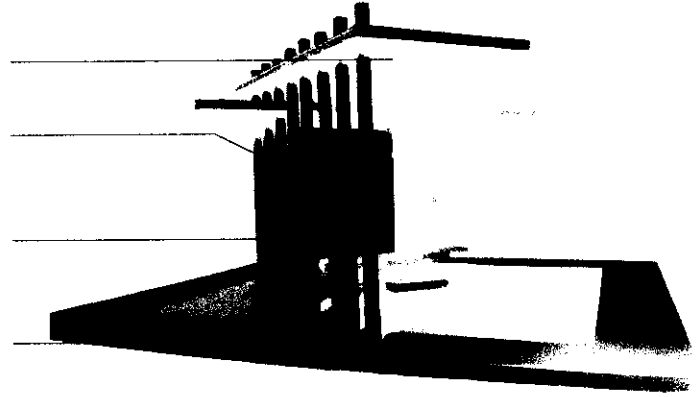
Sohith_Perera



Marie_Eckelman



Alexandra_Devito



drake

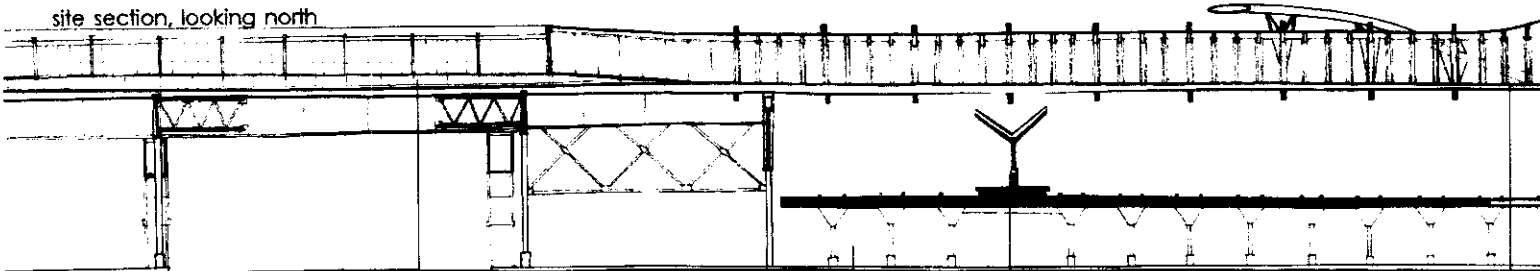
Chicago Transit Authority Transfer Station



Design for the transfer station included a new subway station, a vertical circulation core, intermittent stopping places, and a bridge linking the design to the existing elevated train station. The station is positioned on the eastern (Loop) side of the CPT tracks to encourage usage by train commuters, who currently must walk two blocks to access the Clinton elevated station, and who have no nearby access to the subway. The station also engages directly with the loft condominium buildings across Canal St. from the CPT.

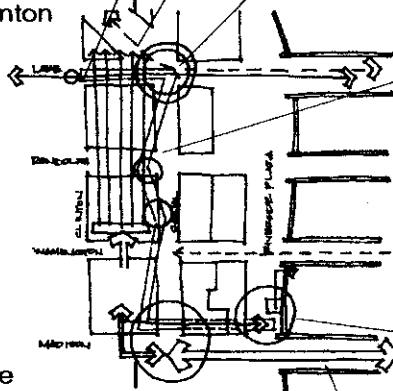
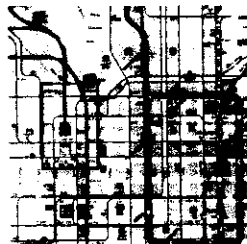
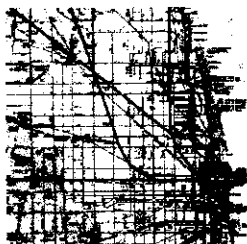
The founding concept for the transfer circulation core was drilling into the earth to expose the strata of transportation and human habitation to the public on the street. In response to the transparency organizing concept, the above-ground components of the station are reduced to delicate steel and glass forms, whose walls are used only for weather protection, not to stratify the public (access to the bridge and vertical core does not require payment). The core's shell may be opened during the non-winter months, keeping in place only enough protection to prevent passersby from falling into the circulation shaft. Despite their minimalist appearance, the steel components directly supporting the glass surfaces are excessively deep to abstract the thickness once necessary for openings in masonry-bearing construction (evident in the adjacent loft apartment buildings). Photovoltaic cell arrays are tied directly into the primary structure of the bridge, reinforcing the geometry of the sculptural structure, providing translucent sun shading to the bridge, and producing the electricity necessary to power the new below-ground station throughout the day. The

site section, looking north



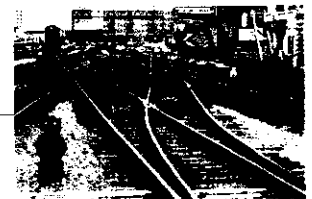
shed facade and its adjoining postmodernist glass office tower. The original Chicago Passenger Terminal (CPT) station was built in 1911, at the end of the American railroad boom, in anticipation of the continued burgeoning of rail travel. What ensued, however, was the emergence of automobile and air travel, creating a rapid decline in train ridership soon after the station was completed, and even more so following World War II. The station, which had been completed well over budget and never generated a profit, also was tagged by the press as a "Great Chinese Wall," stifling commercial development west of the elevated rail yard (Holt). Therefore, when railroad officials decided to raze the original station and build a mixed function office tower/rail station, there was very little public opposition.

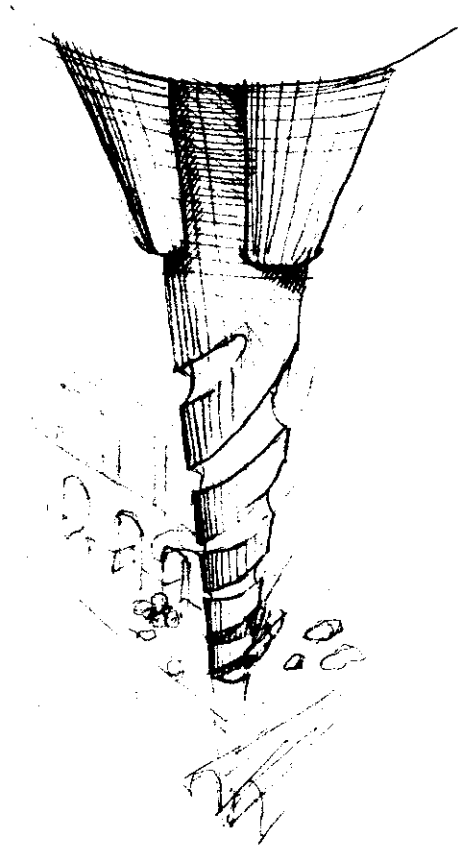
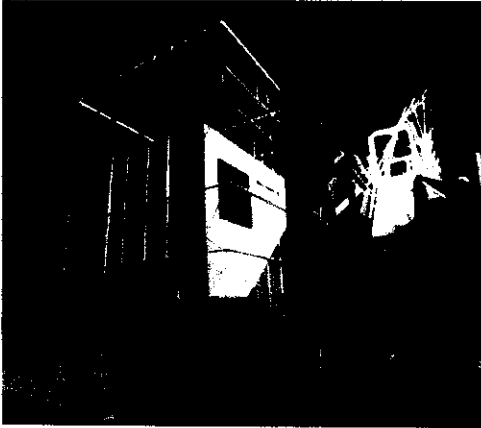
The Ogilvie Transportation Center, designed by Murphy/Jahn Architects, along with a new Clinton



elevated station, opened in the early 1980s. The contrast that was created between now and old, instead of being a reminder of the failure of historic preservation, reinforces the fact that the urban fabric is ever changing and continuously moving towards a more efficient future.

From thirteen early design intervention options, three were explored for their potential to connect the various strata of transportation and society.

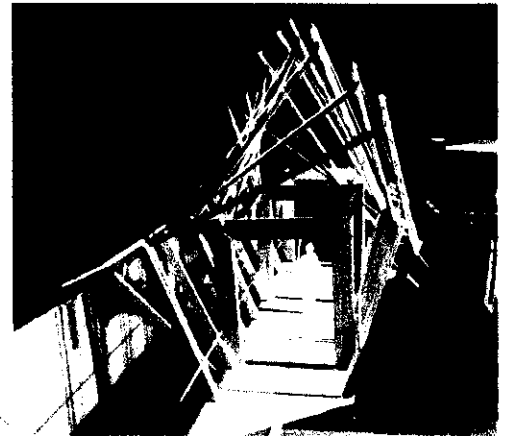
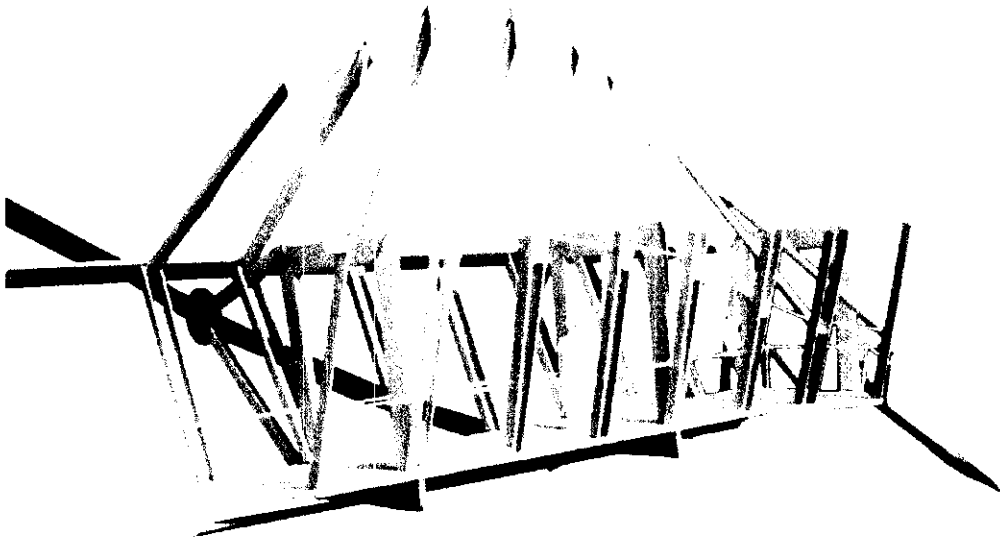




The transfer station, while successful at moving people through the space efficiently, needs further development to produce effective stopping and interaction points. During conceptual design the additional concept of complicated structural form, clear organization overpowered the stopping place rationale. This deficiency is correctable within the framework of the existing design form, as it requires subtle moves in plan and section to create a clearer definition of pressure corridors and strategic release points for human movement.

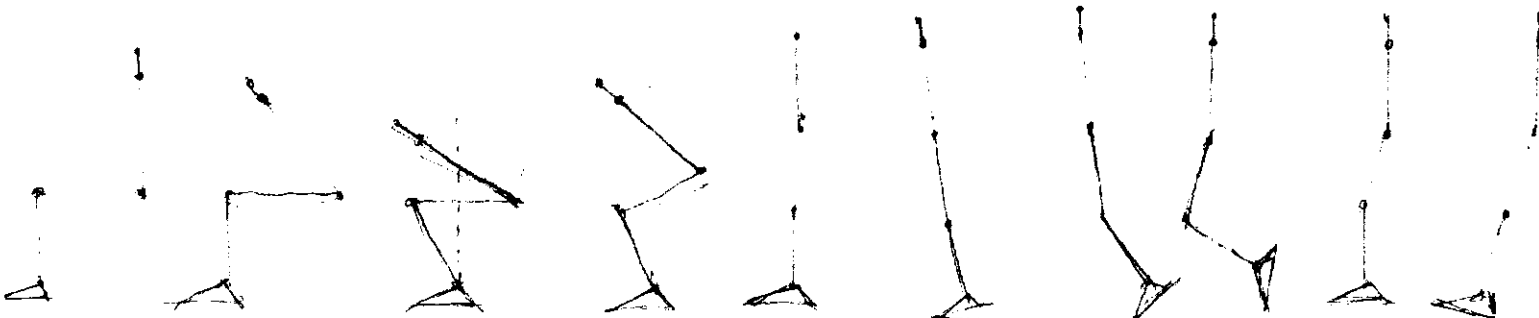
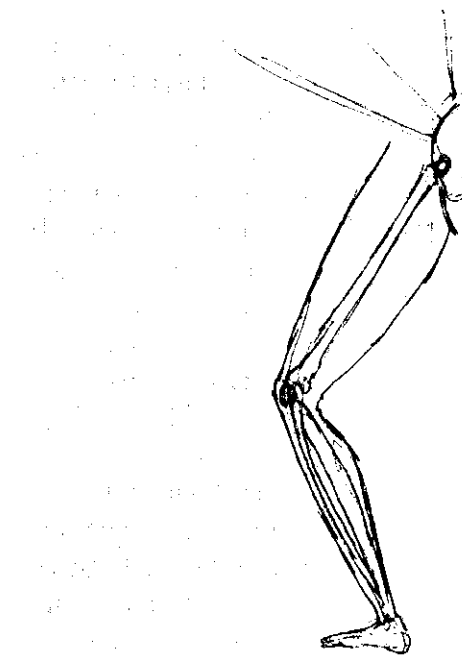
Additionally, the design has the appearance of being piecemeal, rather than being single, connected act of urban design. Through further design exploration, a sympathetic connection will be wrought between the circulation core and the bridge, conceivably without major design alterations to either component. Further study needs to be conducted into the structural details of the two visually disconnected pieces. A reevaluation of the existing moves, based on the original design objectives, might inform minor alterations or significant design changes, depending on the departure of one of designs from its original intent.

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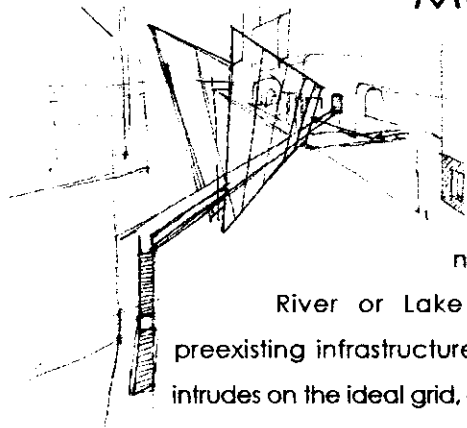
As a stand-alone design, the bridge is a strong solution. The dynamism of the modular structure is evident through its repetition and two atypical conditions. A visual dynamic is created by the primary structural member twisting around the exterior over the entire length, and by the roof plane marking the ascension of the surrounding context from low density, low lying buildings on the west to skyscrapers towering above the bridge on the east.

Further exploration for the bridge would include the study of material connections, primarily at the locations where the axial path is intersected (at the el station, CPT transfer, and descent into the transfer core). Further detailing of the superstructure is also necessary, in order to improve the aesthetic created between the twisting member and the passageway support frames, as well as eliminating the remaining discrepancies in grounding the main support pipe.

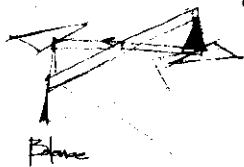
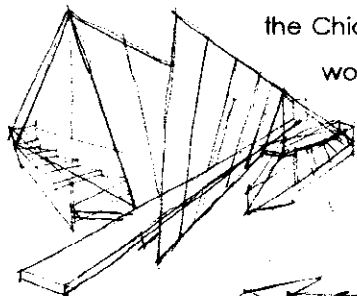


Madison - Canal Axis Terminus

CPT "Great Chinese Wall."



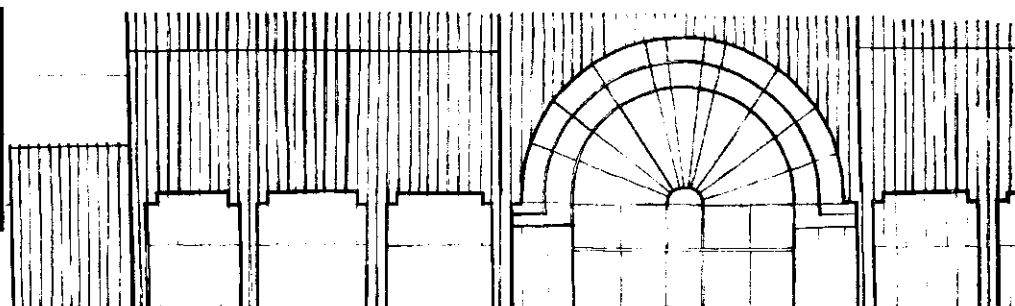
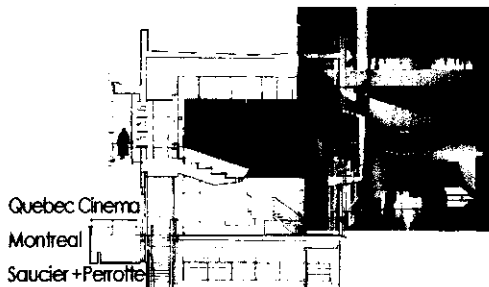
The imperfections in Chicago's gridiron city plan, where nature (Chicago River or Lake Michigan) or preexisting infrastructure (train stations) intrudes on the ideal grid, give rise to many of Chicago's famous landmarks (Wrigley Building, Water Tower, Art Institute, etc.). These axis-ending points stand in stark contrast to the unbound axial avenues existing throughout the rest of the city, and inherently carry with them special place-marking consideration. The potential growth of the city west of



the Chicago Passenger Terminal would be greatly buttressed by the creation of one of these axis-terminating icons, which may act as a catalyst for growth beyond the

In the immediate context of the CPT, there are no naturally-occurring imperfections in the city grid, so creating an artificial axis endpoint becomes the only option. As a result of this arbitrary endpoint situation, the concepts for the intervention revolved heavily around transparency, and determining what opacity, if any, is necessary to capture people's interest, while conveying the atypical location of the design. This led to the programmatic development of the icon as a public presentation screen, where everything from local news to sporting events to public performances would occupy one or both of the screens throughout the day. Also prescribed for the screen would be times of dormant transparency, corresponding to specific times throughout the average working day. The shift between complete transparency and functional presentation screen is accomplished through the use of glass whose transparency can be controlled by passing an electrical current through the array of panes. Electricity to power this feature might be supplied from the photovoltaic arrays integrated into the el/subway transfer bridge, thereby eliminating all operating costs that would otherwise be absorbed by the city.

The foreshortened geometry of the screen



accentuates its diagonal situation, thereby skewing a viewer's perspective from any vantage point.

Concurrent to the determination of the design's conceptual appearance, rationale was conceived for the financial potential of the terminus. The structure is positioned on the site to provide a direct above ground public link between the CPT and Union Station, as well as marking the endpoint of the planned Canal Street Retail Corridor. Therefore, Metra, which operates commuter trains from both stations would be considered a primary contributor, along with the ownership of the Ogilvie Transportation Center. Further significant support would be solicited from the Mayor's Office of Special Events, which is responsible for every public performance and installation, and numerous performance companies stationed throughout the city and suburbs (WGN-TV, Steppenwolf Theater, House of Blues, etc.).

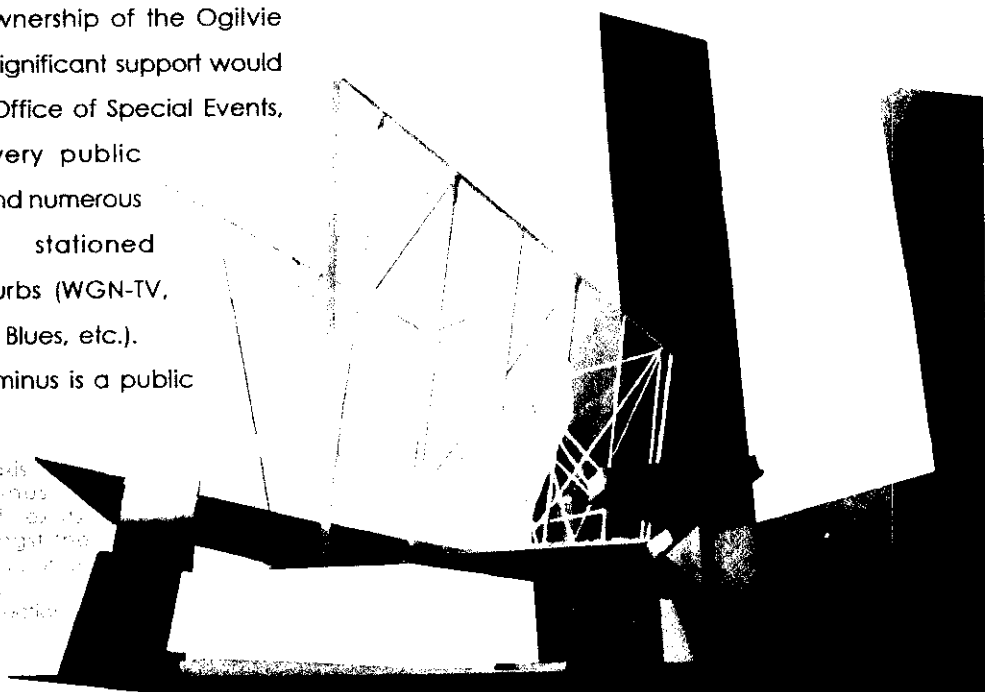
Above all, the axis terminus is a public

structure, whose bridge and seating area is open around the clock. Through this intervention, the culture of the city previously reserved only for the affluent may be shared with the interested masses.

In retrospect, the axis terminus is a viable conceptual project. Advancing from this point, the structure would have to be correctly sized and the seating design development must continue, but the potential financiers and usage are legitimate prescriptions.



the axis terminus as it exists amongst the public realm of the metropolitan

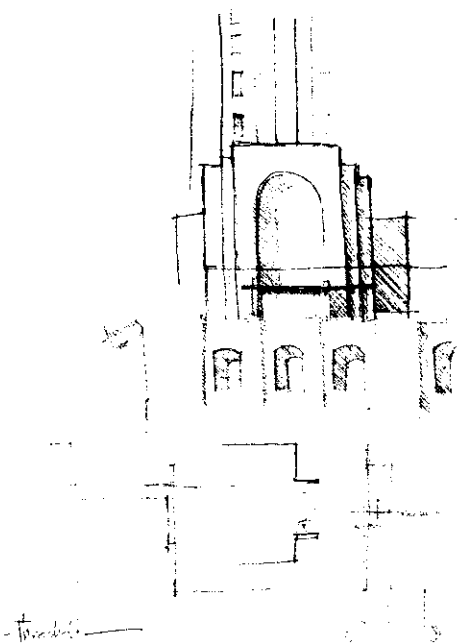


Chicago River Bus Station

The Wendella River Bus station was the final thesis exploration. Design development came following the formal critique for the CTA transfer station and axis terminus, thereby bolstering the clarity of the ideas in the station.

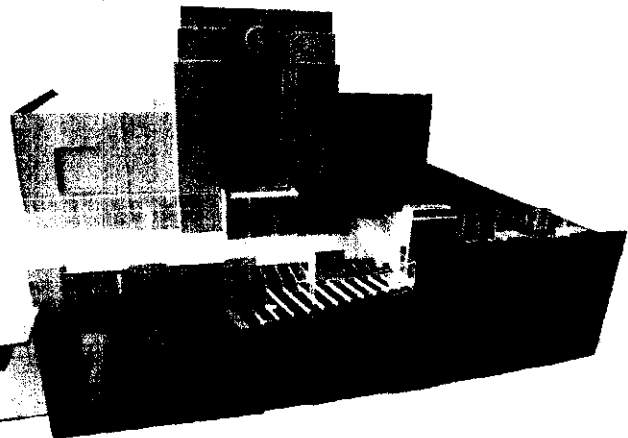
The current river bus station, situated between the stone-clad Art Deco Daily News Building and Civic Opera House, is a minimalist steel and glass hood covering an industrial-quality concrete staircase. The stairs lead to a cave-like makeshift station that reflects the low budget nature of the river bus service, complete with unmanned ticket booth, door out to the entrance platform, and two benches. Beyond fulfilling the basic need for vertical circulation and climate protection, the station is dark and aesthetically unpleasant.

In order to upgrade the quality of the station, a prescription was made for a collaborative financial investment - between the city, the Daily News Building owners, Metra, and Wendella - to utilize dormant space adjacent to the current river bus station, in concert with a redefinition of the human experience at the mouths of the Daily News Building ramp and Riverside Plaza. The rehabilitation and reconfiguration of this currently unused river level space will generate income to repay in initial renovation costs through the lease of small scale retail spaces, ideally suited for small eateries. The new street-river level connection provides pedestrians twenty-four hour access to the new river walk arcade, with security provided for the retail spaces by an operable curtain wall slicing through the ground plane and extending fifteen feet above grade. Above grade, this transparent surface gently curves in plan; at the staircase accessing the main plaza, a break in the curving planes frames the view from the constriction point northward towards the ideal contrast of massive to transparent building skins (the Art Deco Merchandise Mart vs. the curved green glass 333 Wacker Drive). The new public river arcade may eventually connect to another existing river walk north of Washington Avenue, giving rise to further responsible urban redevelopment.



A primary, fifteen foot high glass screen offset eight feet in from the river wall, defines the threshold between sidewalk and river, and a secondary screen hovering five feet from the river wall sandwiches the river arcade staircase between itself and the river wall. Just as each of the three thesis interventions has worked to establish ties between horizontal strata, the two glass screens act as vertical thresholds through which pedestrians are encouraged to pass; this increased interaction with the built environment also invigorates the advertisement of the river bus, whose riders would now be able to wait in a more comfortable atmosphere and have access to retail stores while they wait.

The removal of specific fields of masonry from the river facade arches and hand rail, and removal of concrete from the eight feet adjacent to the river wall, floods the river arcade with previously nonexistent natural light and provides access to the river patio, cantilevered off the river wall and cutting through the secondary screen. Additionally, the existing newsstand, located at the edge of the Madison Avenue Bridge will be replaced by a new stand, structurally integrated into the outer vertical glass screen and directed towards commuters walking towards the Loop.



< p r i m a r y _ p e d e s t r i a n _ m o v e m e n t >

drake



Riverside Plaza

seating penetrates skin at regular intervals along entire plaza and marks portals through skin

slice in facade directs views up river towards 333 Wacker and Merchandise Mart

skin cut to profile of pier; glass and stone separated by a 4" gap

space restricted from building side incorporated into river side patio

primary morning commuter exit

portal through skin on axis with Daily News Building portal

patio slices through all three vertical planes, acting as both pathway and stopping place

public entrance to river level, with access to River Bus station and speculative retail

outermost vertical skin sandwiches River Bus ramp and staircase between itself and existing river wall

primary inner skin defines new pedestrian threshold, as well as the recessed curtain enclosure for River Bus station and speculative retail at river level

at mid-descent, the entrance path passes through the exiting masonry skin

newsstand integrated into outer skin - products now focussed directly at approaching pedestrians

The river bus station, unlike the other two Chicago interventions, sympathetically responded to each of the design criteria, organizational concepts, and location specific challenges. The minimal appearance of the transparent vertical screens disguises the complexity of the overall intervention, while successfully acting as a window, mirror, and threshold to the surrounding built and human context. The glass surface achieves a social equality by impeding passage only where structure is necessary; in all other locations, the interplay of transparent planes produce double loaded benches, canopies, light fixtures, portals, and railings for the improvement of human interaction in the space. Further development on this study would include the addition of structural members (most likely thin steel bars) to the transparent planes, running perpendicular to the glass surfaces to create a greater sense of enclosure for the new pedestrian area, without diminishing the visual invisibility of the glass screen. A further exploration of the river arcade, and development of material connection details are also necessary to study and understanding of the human scale through the various spaces. A final step in the process would involve the connection of this intervention to a rehabilitated Riverside Plaza and river walk up and down river.

The intention of this study was to collaborate currently disassociated theories on the existence and future of cities: the city's changing function in the wake of the digital revolution; the city and its coexistence with the automobile; and the city's never ending regeneration and evolution in the forum of preservation versus new creation. Each of the five design components was undertaken to achieve cohesion between the three theories.

The table, despite its inherent abstraction of the three issues to the context of a smaller public environment, succeeded in adding an organizing element to the previously haphazard Players' Lounge space. The fact that the table was not efficient in utilizing precious free space was offset by the clarity of its design concepts. The construct acted as a conversation centerpiece for visitors, often causing passersby to stop and engage in the Lounge space for longer durations. The table served its primary function as a structurally stable work surface throughout the life-span of the Lounge. The table was, however, a dynamic element in appearance only; the concept of variable functional height was omitted to streamline the finished structural appearance. Incorporation of functional flexibility into the existing design would be the final stage of development. Further experimentation would include the application of the current construct's design language to a new context in order to test its universal validity.

The third year projects were successful at bringing key conceptual notions to the fore. The final solutions not only prescribed a narrowed collection of responsible urban intervention strategies, but also displayed many of these strategies through powerful tectonic forms, offering additional input into the later Chicago interventions. The surprising complexity of the solutions only reinforces the fact that even greater complexity might have been achieved with a longer project life-span and more collaboration between the studio members. This wish was achieved, in part, through the continuation of the bus shelter concepts into the following studio project.

The el-commuter rail-subway transfer station fell short of its expected success as a creator of shared public experience. The majority of the solution focuses on the long distance transfer of pedestrians from one of the connection points to the next, with little focus on the opportunities to stop. Through further development, design would focus intently on breaking the long spans (the unimpeded straight lines of travel) with nodes conducive to interaction. The lines, which may be thought of as pressurized pipes, would have release points, most likely at locations where the mode or direction of circulation changes, or where an icon might generate additional user interest. Additionally, more thought needs to be invested into the cohesiveness of the above ground components of the transfer station. Currently, the built vocabularies conflict, as each piece has its own structural image and presence, not necessarily folded into the overall built solution. This conflict in the new building only deteriorates its careful contrast to the existing train shed - a contrast necessary to clarify both pieces' importance to future urban evolution.

The conflicts evident in the transfer station are partially addressed through the axis terminus. Although the built construct lacks the stopping places necessary for chance interaction, the presence of the terminus in the streetscape creates impromptu public nodes at street level, near the Madison-Canal intersection. The success of the terminus as an extended-duration public social condenser would require additional development of the suspended seating areas, where people would feel comfortable stopping for longer periods of time. To achieve this successful street diversion, further investigation would determine both appropriate relationships to the sidewalk, street, and adjacent buildings, as well as suitable materials to create a comfortable experience on, and passing below, the terminus. The icon created by the terminus, unlike that of the transfer station, is unified and does not impede on the presence or importance of the buildings on the four street corners, instead defining a new volume above the street that acts as a signboard for a reinvigorated point in the city.

The river bus station acts as the design conclusion to the previous two interventions: users are given multiple options for interaction in and around the space; even when avoided, the solution creates awareness for itself and the surrounding built context through contrasting materials and increased options for pedestrian movement. The addition of the transverse structure shall only increase the subtle, human-scaled presence of the station and add to the variety of user experiences (unique views from afar, positioned parallel to the river, positioned perpendicular to the river, and from within the structure).

This exploration into a new urban dynamic led to various prescriptions for the proliferation of new elements in the city. Truly public buildings cannot divide themselves from the street, not even by the thinnest of barriers; in fact, the thinner the barrier, the greater the statement of separation. Buildings not intended to share their interiors with the public should not mimic the continuation of the street, but instead should define their boundaries clearly. Public buildings and spaces should afford free movement and security to all people, regardless of time of day or built adjacencies. Users for these proposed public areas should be varied throughout the day for security and efficient spatial utilization. Uses of these places should tie directly into the building - if the building is not necessary, it will never be preserved by the evolving city and was inherently unnecessary from the outset. Public buildings placed in the urban network should act as cultural mirrors, reflecting and accentuating the surrounding built context, while helping their users feel comfortable about their immediate surroundings. Cities manifest density: no building is the most important, and no urban element can define itself without its neighbors (for better or worse).

The city is a field of layers, continuously built one upon the next. As the city continues to mature, imperfections and missing pieces are slowly fixed and created. Only by understanding and respecting the functioning components of the city may new, improved, responsible additions be created.

Barnett, Jonathan. The Fractured Metropolis. New York: HarperCollins, 1995.

Boddy, Trevor. "Underground and Overhead: Building the Analogous City." Variations On a Theme Park. Michael Sorkin, ed. New York: Hill and Wang, 1992.

Brehm, Sharon S., Saul M. Kassin, and Steven Fein. Social Psychology. Boston: Houghton Mifflin Company, 1999.

Brownell, Blaine. Lecture. Ball State University College of Architecture and Planning. November 29, 2000.

Crawford, Margaret. "The World in a Shopping Mall." Variations On a Theme Park. Michael Sorkin, ed. New York: Hill and Wang, 1992.

Ezrahi, Mendelsohn, and Segal. Technology, Pessimism, and Postmodernism.

Goldberber, Paul. "As the Public Realm Shrinks." Metropolis. Susan S. Szenasy, editor in chief. New York. March, 2001. pp. 135-139, 179.

Greinacher, Udo. "The New Reality: Media Technology and Urban Fortress." Journal of Architectural Education. New York: Association of Collegiate Schools of Architecture, Inc., February, 1995. pp. 176-184.

Holt, Glen E. "Analysis of the History of the present North Western Terminal on West Madison Street." from Chicago Historical Society Archive.

Ivy, Robert A. "Toward a new urban architecture." Architecture. McGraw-Hill Publishing. March 2000. Vol. 188, No. 3. p.15.

Jacobs, Jane. The Death and Life of Great American Cities. New York: Random House, 1961.

Kahn, Louis I. "Order is." 1960. Programs and manifestoes on 20th-century architecture. Ulrich Conrads, ed. Cambridge, MA: MIT Press, 1964. pp. 169-170.

Kroll, Lucien. Lecture. Ball State University College of Architecture and Planning. March 20, 2001.

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

Migayrou, Frédéric. "Criticism: Asymptote: Installing the Eventual." Asymptote: Architecture at the Interval. By Hani Rashid and Lise Anne Couture. New York: Rizzoli, 1995.

Mitchell, William J. e-topia. Cambridge, MA: The M.I.T. Press, 1999.

Postman, Neil. Technopoly. New York: Vintage, 1993. p. xii.

Prichett, Price. New Work Habits For A Radically Changing World. Prichett and Associates, Dallas, TX.

Rand, Ayn. The Fountainhead. New York: Signet, 1943.

Rashid, Hani, and Lise Anne Couture. Asymptote: Architecture at the Interval. New York: Rizzoli, 1995.

Rogers, Agnes and Fredrick Lewis Allen. Metropolis. New York: Harper & Brothers Publishers, 1934.

Rubin, Theodore Isaac. One to One: Understanding Personal Relationships. New York: The Viking Press, 1983.

Sorkin, Michael, ed. Variations On a Theme Park. New York: Hill and Wang, 1992.

van der Rohe, Ludwig Mies. "The new era." Lecture. Vienna, 1930. Programs and manifestoes on 20th-Century Architecture. Ulrich Conrads, ed. Cambridge, MA: MIT Press, 1964. p. 123.

Vela-McConnell, James A. Who Is My Neighbor? Social Affinity In A Modern World. Albany : State University of New York Press, c1999.

Winner, Langdon. "Silicon Valley Mystery House." Variations On a Theme Park. Michael Sorkin, ed. New York: Hill and Wang, 1992.

Young, David M. Chicago Transit: An Illustrated History. DeKalb, IL: Northern Illinois University Press. 1998.