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right-of-way



*the significance of events within the
temporal forgotten spaces of the freeway*



Abstract:

The objective of this investigation was to attempt to resolve urban voids left behind by the space of the freeway. The study involved the interpretation of changing character, constant motion, adapting presence and other characteristics in order to define the freeway and the context within and around these paths of travel. The recognition that traffic, vehicular, or pedestrian brings life and activity to areas with central nodes and along major arteries of flow gave particular insight to the potential of inhabiting these large voids of lands that separate the city and urban landscape. While attempting to bridge communities and fill gaps, the investigation realized the important distinction between the temporal values of the freeway and the permanent society along side these high speed avenues. The different character of each changed the programmatic functions to be placed as the solution. For the permanent neighborhoods surrounding the freeway, which currently illustrate the lack of connection and sense of lifelessness and decay, a regional parkscape was created to introduce a new natural activity, full of meaning and life. This greenbelt, running along the urban scars, would link larger sections of the right-of-way by a bike path and walking trail producing supplementary activities for the nature preserve and recreational space. At the vast spaces of unused land within the freeway intersections, large “follicles” would create a node for social gathering and a node for connection between temporal and permanent, islands of community, and individuals with shared experiences at these intersections. A roadside motel was carefully studied for potential possibility and a drive-in theatre was proposed as another possible pragmatic space. The realization that purpose gave meaning and an experience for individuals to connect and share created an opportunity to rethink what is destination, space, and the potential qualities of human inhabitation within the voids of the freeway.

RIGHT-OF-WAY: THE SIGNIFICANCE OF EVENTS WITHIN THE TEMPORAL FORGOTTEN SPACES OF THE FREEWAY

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Project Summary:

Overview

Intersections and main arteries of the city are used as a network of transportation routes between destinations. The freeway system, a main contributor to this idea of linkage, is often this “space” that a large percentage of persons use to achieve their goal of finding ultimate “place”. Current freeway and transportation systems often separate communities, cities, and users through their consumption of land, space, and habitat. These depressed scars on the urban landscape are a “pseudo-space”, constantly in motion, changing in character multiple times per second, hundreds of thousands of times during the day. Transformation and adaptability are given a presence, appearing in both the experience of transporting between two separate destinations and the changing character of this high-speed space, which as a result creates an event: a daily ritual.

Regarding the current situation of the American society and its insistence on a lifestyle that consumes and encourages the fast-paced and momentary, certain issues have surfaced into the discussion of this culture and its relationship to architecture. This life based on movement, unconsidered consequences, speed, and the sprawl, vastness, and deterioration of the American metropolis have become the challenges that current and future communities, societies, and disciplines are immersed within. Observations based on topics such as: the events of our culture and their relationship to the freeway; the transformability, transportability, and temporal value of interaction with space and other physical relationships; and the spaces surrounding the freeway that have become the unknown or forgotten present a web of inter-connected relationships that form the basis of this investigation.

Filling the voids, the breakdowns, and the destroyed fabric of what once was a coherent urban landscape, this investigation is seeking to understand this cultural phenomenon and provide a product that resolves both temporal and permanent presence along the freeway. Creating places for use by all in a space that is primarily reserved for the automobile is the purpose and method for attempting this study. Bridging this vastness, events that are common to all, both shared and individual experiences will make these disregarded spaces alive with an activity that reveals itself along, above, and below the current arteries of active flow. Can connections be made at both macro and micro levels, provide a humanistic character to the mechanized space of the freeway? Can the vast spaces of unused landscape found within the environment of the freeway and surrounding landscape be infused with human inhabitation that responds to the context of hyper-temporality?



Circumstance

The intentions of this investigation are to recognize the possibilities of the urban landscape that has been separated by multiple high-speed arteries of the city. Accepting the understanding that the freeway system is in essence the mass-transportation system of most American cities, observations of the wasted or abandoned land and brown-fields surrounding the space of the freeway corridor will activate a sense of site. This transformation from forgotten and undermaintained to active, alive, and green will result from the idea of adapting these brownfield spaces into a parkscape, similar to the greenscapes that line riverfronts. The connection is strengthened by the realization that much like the river which produces scenic spaces, transportation, and development because of its path of flow, the freeway has become today's river of development. As a result, the possibilities of making this space a greenscape for all to enjoy along side the flow of traffic, might create more awareness of the potential of reshaping the negative conditions that have destroyed much of the urban American city. The use of land near major intersections or enveloping the freeway as it cuts through the city will provide the opportunity for many to experience larger "follies" of architectural space and advertise presence through the connections made with the automobile and the pedestrian. Travelers, passers-by, and members of the community surrounding the site will provide the activity and action that creates a sense of inhabitation.

At larger spaces that have increased devastation to the urban city because of their sprawling intersections, the culture that accompanies this fast-paced lifestyle of the freeway will be accommodated for, expressed, and also allowed to connect to the more permanent parts of the city along the freeway, becoming part of the urban context. The architecture will signify presence and an identity will flow from the programmed spaces. Human use, occupation, and activity will be the billboard that demands attention within these circumstances that are shaped by and within the freeway spaces. The constructed systems that integrate and form space, such as structure, lighting, accessibility, information, and technology will shift and mix with each other producing an event for human occupation or inhabitation.

With the understanding that events and architecture together provide the bridge over constructed divisions of social interaction, an environment that encourages reconnection and new connected activity is the desired effect. Bernard Tschumi states, "Architecture is as much about the events that take place in spaces as about the spaces themselves."¹ This environment that connects strangers to a relationship that intensifies aspects of community, city, place and space stimulates the desired activity of occupation, inhabitation, and interaction.

¹ Tschumi, Bernard. *Praxis: Event-Cities*. 1994. Cambridge, Massachusetts: The MIT Press, 1998. p. 13.



While the connection might be temporary, its bond necessarily does not leave with the packing up of a suitcase or the slam of a car door. Employment to maintain the green-scape, its “follies”, and the larger activities that occur within the freeway intersections, could develop a greater connection between the worker, the community and the larger scale of this regional program. As a result of this rethinking and reshaping of architecture, experience through the city and its space will alter the events and produce a new type of social interaction.² Instead, memories are shared and the continued change of the connection between participants becomes recognized in a subtle manner.

Could the possibilities and opportunities of this high-speed space provide solutions for how communities can reconnect or identify themselves, and provide a greater understanding of our culture and its relationship to the high-speed and transportable? A type of experience could develop, allowing transporting participants to consider the value of the permanent space along the freeway and the opportunities created by the temporal activity of the freeway could produce positive advantages for the permanent residents along the freeway edges, bridging destinations and introducing a reconnection of communities and place to temporal society.

² Tschumi, Bernard. p. 13.



Critical Positions Document:

The investigation into the need for social space to be formed along the paths of the freeway requires a framework that provides observations as to what the current state of our culture and societies characteristics are at this time. A recent TV documentary illustrated the high-paced, vehicular society that we in North America live today. The most memorable point regarded images that gave examples as to what persons are able to do within their vehicles on the average day. Simultaneous images displayed these events that signify our incorporated use of the vehicle with everyday tasks. Dining in the vehicle, automated banking commonly referred to as ATM banking, walking the dog while the driver remains in the vehicle, and the phone conversation, have become accepted actions that occur from the vehicle.³ This observation illustrates our dependence on the vehicle and other technologies as the way in which life is conducted. Further observations into our society can be seen, many of which that tie into the previously mentioned inter-connected topics including: the events of our culture; the transformability, transportability, and temporary qualities of contemporary space; and the spaces that have become the unknown or forgotten due to the physical presence of the freeway system.

The Transformable, Transportable, and The Temporal

The first strand of this web, the temporal usage of space within our culture, suggests that our society is easily ready to move or to transport itself, offering the realization that people learn to transform, or adapt to “new” spaces, situations, or circumstances. Common events occur everyday that prove that society has become increasingly more mobile and requires less attachment. For example, the TV diner proves that a meal might only be 5 minutes away and capable of easy transport, heated by the radiation of a microwave. Both of those inventions have been in use for much of the past half century, giving roots to even more current trends.⁴ Jerry Adler discusses in his article “Takeout Nation” that the current form of the American dinner has changed further. The microwave has evolved from a cooking device, to a warmer of yesterday’s leftovers from the restaurant.⁵ Adler specifies “sales of hot entrees [unsold chickens rejuvenated with a coat of barbeque sauce] in supermarkets were \$1.57 billion in 2002, up 38 percent in five

³ “The Weight of the World.” *The Nature of Things with David Suzuki*. CBC. CBET, Windsor, Canada. December 3, 2003

⁴ Adler, Jerry. “Takeout Nation.” *Health*. Feb 9, 2004. *Newsweek*. Feb 10, 2004. <[http:// www.msnbc.msn.com/id/4121245](http://www.msnbc.msn.com/id/4121245)>

⁵ Adler, Jerry. P.1-4



years...prepared foods have been the biggest growth category in each of the past four years.”⁶ This article observes an even more entertaining observation into our culture, including examples of the carry out culture such as sushi at the local 7-11, the breakfast burrito as the cross between Mexican and the American breakfast on the run, and the realization that pizza is indeed just a phone call away.⁷ Adler finally points out that restaurants are extremely knowledgeable about these statistics, pointing to the success of the fast food chain, Boston Market and their advertisements as “the home-meal replacement.”⁸

This speed of necessity has developed into other observable creations of our culture. Fast food and the drive thru continue to be easily understood examples of the relationship between the vehicle and the human. The pharmacy, once a place where one could have the ability to know their health care professional and why certain prescriptions were produced, has begun to be replaced by the drive-thru pharmacy. Human interaction has become increasingly avoided, and as a result, the trusted face has become lost, and skepticism as to what was prescribed becomes a more dangerous event while maintaining a quick in-and-out process for the patient.

The drive-thru liquor store has become part of the vehicular landscape, referring to the questionable need to purchase alcohol while driving. Laws continually stiffen and enforce the problematic issue drunk driving, but they are almost rendered to be inferior when establishments appear to contradict the importance of the laws.

Even the speed of breakfast has changed within our culture. Breakfast is no longer eggs, pancakes, and toast at the table with family. Instead, the table has been transformed into a transportable vacuum-sealed pocket package, replacing a bowl of cereal and milk with a condensed bar of preservatives and dried content. Even McDonald’s has transformed the shape of breakfast over the years, progressing from the “Big Breakfast” to the “McGriddle”. Is there really a difference in the amount of time spent between at home cereal and cereal “to-go” or breakfast at a sit down restaurant and breakfast forced into a sandwich? Nonetheless, this phenomenon of a culture on a run versus a culture that realizes opportunity of a slower paced connection with products and people has become an interesting cultural observation.

As a result of this fast-paced society, the average person spends 101 minutes each day driving to work, according to a recent article by Reuters.⁹ Conversely, about 170 minutes each day is spent watching TV and movies¹⁰, products of our fast-paced culture. The average commute to work can be anywhere from 20-35 miles within many American cities. In Detroit, these numbers are exaggerated even further. Detroit is among the top in both categories of commute time and distance within the nation. In fact, it could be said

⁶ Adler, Jerry. P.1-4

⁷ Adler, Jerry. P.1-4

⁸ Adler, Jerry. P.1-4

⁹ Reuters Limited. “Americans drive more than exercise.” Health-exercise. March 12, 2004. Reuters. April 22, 2004. <<http://msnbc.msn.com/id/4513740/>>

¹⁰ Reuters Limited. P.1-6



that Detroit is not only the birthplace of the automobile via the products and production of Henry Ford and the other auto companies that form the “big three,” but also of the concrete road, the freeway, and just maybe the traffic jam.

In 1909 the nation’s first stretch of paved highway was built on Woodward Avenue between 6 Mile and 7 Mile.¹¹ Today, Metro Detroit contains 22,576 miles of streets, almost enough to circle the earth at the equator.¹² In 1941 construction began on the first highway in the nation, the Davison freeway, which runs through Detroit and Highland Park.¹³ Today, Metro Detroit contains 309.5 miles of freeway that run throughout the city. Even the first usages of asphalt and the painted centerline were first applied here in Detroit.¹⁴

Architectural and constructed examples of this transportable/transformable culture could include the mobile home, the traveling exposition, the carnival, or the automobile. These situations have found a valuable way to describe our constant motion. For instance, the traveling exposition is not only a space that displays our culture, or our technologies, or our interests, but also a platform that bridges space and the exhibit and identifies its relationships to our culture. One example of this transportable space is the IBM Pavilion. It traveled around the world, primarily in Europe during the mid 1980’s, endorsing the technology of the computer and IBM, but also implying the significance of personal, home-based usage of the computer.¹⁵ Through the ease of transformation and movement via the traveling exposition, its target audience began to believe in the same capabilities for the computer itself. The pavilion also adapted to multiple sites extremely well such as in front of the Eiffel Tower or the Castello Sforzesco in Milan.¹⁶ This strengthened the message that computers were not just for lab use anymore.

In a similar fashion of endorsing technology and its message, so does the traveling space known as iMobile designed by Jennifer Siegal and the Office of Mobile Design. This project developed a strong concept for handling the needs of a changing society through a mobile trailer that transforms to advertise not only a company, but also technology.¹⁷ This movable and dynamic workspace evolves not only with the changing systems of information, but also transforms itself with a flexible skin, adaptable to multiple environments and needs. To quote the book PREFAB, “iMobile is a mobile work space, light and flexible. It is an asset into a society in a permanent state of change.”¹⁸

¹¹ Gavrilovich, Peter and Bill McGraw, eds. The Detroit Almanac: 300 Years of Life in the Motor City. Detroit: The Detroit Free Press, 2000. p.233-245

¹² Gavrilovich, Peter and Bill McGraw. P.233-245

¹³ Gavrilovich, Peter and Bill McGraw. P.233-245

¹⁴ Gavrilovich, Peter and Bill McGraw. P.233-245

¹⁵ Kronenburg, Robert. Portable Architecture. 1996. Boston: Architectural Press, 1996. p.10-19.

¹⁶ Kronenburg, Robert. p.10-19.

¹⁷ Bahamon, Alejandro, ed. PREFAB: adaptable, modular, dismountable, light, mobile architecture. 2002. New York: Watson-Guptill, 2002. p. 32-33

¹⁸ Bahamon, Alejandro. p. 32-33



While iMobile shows temporary presence by unleashing itself from its vehicle, it does provide the thought that life and vitality can be instilled in some existing framework through a mobile vehicle of space.

The design group LOT/EK also has provided some outlooks into temporary, transportable, and transformable space. Projects such as American Diner #1 and MDUS: Mobile Dwelling Units have provided insight about qualities of space the temporary can create.

In the example American Diner #1, a prototype for a shippable American diner, utilizes two shipping containers coupled together to create a usable space.¹⁹ Ready made, right to the door of its future owner and user, just like any other product shipped or manufactured, this diner also has the conceivable opportunity of hosting guests during its voyage to its destination and truly “compartmentalizes” two programs, the kitchen and the dining space. The treatment of the containers skin as transforming part of the whole gives the flexibility of the diner as an easily marketable image, and its ease of transportation gives the owner an advantage of displaying the diner and advertising and identifying its character.

The same qualities of transformation, transportation and temporary placement are also portrayed in the project MDUS. These mobile dwelling units provide a living space on a small scale for people such as the global traveler, and on a larger scale create a experiential brick and modular grid of wall, allowing users and viewers to become immersed within the walls solids and also its voids.²⁰ Common spaces are accessed not only through the corridors of circulation and services (electrical, mechanical, data, water, sewage, etc.) provided by the grid, but also by the temporal voids which can act as observation decks for the occasional inhabitants.²¹ The language of technology and transportability are a part of these units as well. The use of a shipping container implies a technology of multiple vehicles of transportation, as it requires movement and lifting by technological processes like cranes and other machines. Even the materials and services within the space, i.e. fiberglass surfaces and networks for computers and other services, evoke the presence of technology within the project.²² The transformation of the shipping container into livable space creates an event, punching extrusions outward onto the exterior elevations²³. A similar event occurs when the space is removed and its extrusions are temporarily collapsed for shipping. Even the livable space encourages transportation and

¹⁹ Lamster, Mark, ed. URBAN SCAN / LOT/EK. New York: Princeton Architectural Press, 2002. p. 2-5

²⁰ Lamster, Mark, ed. URBAN SCAN / LOT/EK. New York: Princeton Architectural Press, 2002. p. 78-83

²¹ Lamster, Mark, ed. p. 78-83

²² Lamster, Mark, ed. p. 78-83

²³ Lamster, Mark, ed. p. 78-83



travel. It appears to be dark and drab, with the only windows occurring as doors.²⁴ The temporal space hosts its users for bedtime, or lunch, but continues to drive the expression of movement and search for permanent and valuable space.

This exploration of the topic gives an understanding of this temporary, transformable, and transportable space. While no definitive answer can be assumed as the main absolute cause of our current trends, it is easily observable that this “progress” has occurred over a period of time. The mobile home and the TV dinner are trademarks of a time just after World War II when decentralization in city formation was preferred. The current precedents of transportable and temporal trends seem to be fixed upon the need to keep up with a society of vast separation, extreme disconnect, and desired individualism. Their creation is the result of the current situation of society.

Gathering these thoughts together, the common ideals of temporary, transformable, and transportable space are linked to our culture not only in case studies of architecture, but also in the simple objects that document the way we live or the way we discover our understanding and interpretation of society. The emphasis on movement, accessibility, and temporal travel create spaces that are used mainly for one utilitarian use, or that have scarred the landscape with their unconsidered consequences. These arteries have created spaces that provide a deeply rooted disconnect between society, community, and people.

The Forgotten Spaces of the Freeway and Its Intersections

While utilizing the freeway to get from destination A to destination B, the land that the freeway utilizes for high-speed travel is believed to be at a relatively minimal scale from the point of view of the automobile or the driver’s seat. Three lanes, maybe four, in each direction of travel, with on and off ramps intermittently, and the occasional high-speed intersection, allow the user of “the present avenues of the city” to believe that they are using a perfect space for transportation. Unfortunately, the driver and passengers seem to forget the landscape at the true ground plane until they re-merge from the sunken paths. The realization of how many people’s homes one may have driven past while on the way to hockey practice may not ever sink in. The contemplation of how many homes were raised, families displaced, and communities disconnected may not be imagined until an individual is given the information of what political, social, and ideological constructions were developed to uproot the diverse American city in the name of “progress.” As one passes by the endless off ramps and mergers, the isolated church, abrupt ends of a neighborhood, or decay of buildings and brown-fields, these spaces temporarily collect in the minds of a driver. In the few seconds it takes to pass by these “markers” of the past city, and the few minutes it takes to go cross-town without traffic, an experiential perception is instilled. Billboards, streetlamps, informative signs, a distorted cityscape, and brake lights are the only things primarily visible in this space.



²⁴ Lamster, Mark, ed. p. 78-83

Cloverleaves, exits, entrances, straight-aways, and service drives give the automobile this hierarchy of space. Stretching over the landscape, these spaces dissolve the former pedestrian scale of the city. On the freeway, these characteristics of these avenues blend together into a single experience, rather than individual components.

Mentioned in the past section, the amount of miles of freeway within the metro Detroit area is over 300 miles. The typical amount of land used to provide a three-lane freeway in each direction is about 295 feet. Approximately 50 percent of this set aside space for vehicular travel is consumed as right-of-way, better known as the un-maintained barriers of left over landscape along the edges of the freeway. If each direction of freeway consumes about 75 feet of roadway and 75 feet of potential green space in section, then consider the amount of potential park-scape available to the region if approximately 50 percent of the freeway were converted to a greenbelt. The possible accumulation of natural preserve and landscape to improve environmental issues, social disconnection, and the investment in property value that would run along both sides of the freeway could create a large change in the image of the city and improve the health and well being of its residents.

Investigations into the potential of these left over spaces of the freeway have all ready occurred in some real life examples. For instance, in a recent issue of *Metropolis*, a project improving the right of way between an airport and the waterfront within the city of Toronto was proposed as well as development plans for the city of New York and its upcoming 2012 Olympics.²⁵ These proposals investigated the types of textures that could occur upon this landscape, including natural greenbelts and park-scape within the context of paths of travel, expressive of the exiting location and the current investigation.

Another example of this investigation includes the work of a Philippe Barriere and his studios at the University of Kansas. Much of the work deals with the underwriting mission of reclaiming abandon urban landscapes for futuristic residence or architectural space. At a lecture at the University of Detroit-Mercy in spring of 2001, Barriere displayed the works of investigations that sought the potential of reusing the freeway landscape within a 35-mile radius of Kansas City.

During investigations in determining the site(s) for the thesis, the opportunity to re-think the physical space of the freeway was made available at a more human scale. Walking along the freeway space, as well as underneath, on top of, and within, I began to understand the vastness of the space of the freeway, and the boundary that it creates at a more pedestrian level.

At the intersection of I-94 and I-75, my experience of the movement, transformation, and border sensed by sound, sight, and physical feeling of the force of the moving vehicles, provided the re-realization of danger within the space. While in my vehicle, the space seemed active yet comfortable, and somewhat controllable even though in a more sequential order of travel and experience, I found that the opposite was the reality for those who venture to walk within and along this space of the freeway. Some people felt dark



²⁵ Gordon, Alastair. "Site Specific." *Metropolis*. Feb. 2004. 82-87.

and provided some sense of shelter, such as underneath an overpass or the intersection itself, but it was by no means a comfortable space, still threatening danger either by vehicle or by the unknown. Occupation of some spaces left vacant by the sprawl of the intersecting freeways left me with a view only few would dare to see. The feeling of being outside of the system that was running around these spaces made me appreciate the more human scale, instead of the dominant scale of the automobile or machine within the landscape of the freeway. The active bustle of early afternoon rush hour allowed me to realize that more qualitative, permanent presences were desirable, such as a school that had just let out for the day, as compared to the quantitative, changing space of the freeway and its constant motion.

Another intersection that I experienced was the I-96 and M-39 connector, in which the experience of the freeway was changed due to the event of construction and freeway closure. Walking primarily within the space that is not typically reserved for pedestrians, the sense of vastness and emptiness overwhelmed me. The distant and occasional rush of vehicles made the experience seem abnormal and unique. Views were directed to mainly cardinal directions, with the tops of buildings and sides of the freeway as the main views to be seen. Concrete dividers did not just divide eastbound from westbound, but also the reconnection of a community separated by the typically active roar of the freeway. The slow scale of speed of a railroad yard and its work, and the setting of the sun and quick fall of darkness provided the minimal activity of this situation, creating an event that made me understand the more tangible scales that a pedestrian can become aware of. The length of a mile as it curves in a serpentine fashion reveals that the Southfield exit must be far greater than a minute away, leaving my muscles to understand the distance of time that the vehicle travels at a greater rate than a pedestrian.

Other intersections have different experiences that prove similar realizations about the different scales of pedestrian and vehicular travel. For instance, the suburban freeway intersection covers a far greater expanse and offers even greater accessibility and presence of the automobile than the urban intersection. However, urban freeway interchanges seem to be more monumental in height, than their suburban counterparts.

Consequently, the space of the freeway has formed an understanding on two different levels, from the perspective of the automobile and from the perspective of the pedestrian. Spaces outside of the freeway meld in a blur that collects only for a temporary presence in the minds of the driver and passenger, disregarded as one process of thought leads to another process of understanding what is traveling before their eyes. Similarly, forgotten spaces that were consumed primarily for the construction of the freeway and left behind with no program to re-invite the pedestrian have also been disregarded. The experience of the freeway leads to the realization that these paths merge spaces together and can also merge the forgotten landscape together through their hidden spaces and collection of intersections that reconnect the American city.



Intersections as Connectors for Transportation and Separated Community

An interesting realization that these high-speed spaces of travel were in fact the only true mass transit line for the Detroit area and that the intersections suggested a opportunity to link not only the users to destinations but also to provide a space for pedestrians to experience interaction on a more local level. Even though it is immersed within the web of spun lanes, these left over islands of space between the intersections or even underneath the intersections could act as a bridge that reconnects two separated bodies of land. Can the suggestion of place and space within the space of vehicular travel be to far-fetched?

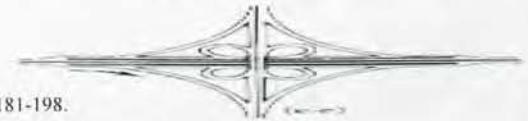
An understanding of the value of the intersection having a form of development within its left over spaces is important for several reasons. First, highway intersections have low land values. Second, because of their location and the very nature that the freeway intersections provide connections for thousands of people, they have an inherent visibility to them. For the same reason, billboards are placed alongside these spaces. As a result of these two reasons, the idea of development of these areas could be a greater opportunity for a developer who would see these two characteristics as advantages to the site.

Another reason to focus attention on these sites is found in the very identity of the concept of intersection. To “intersect” is defined by Webster’s as “to meet and cross at a point: cross; or, to share a common area: overlap.” This idea of crossing and overlapping space is further defined by research such as the book “Image of the City”, in which Kevin Lynch discusses the formation, organization and imageability of an urban section of a city. Primarily focusing on the distinct ideas of cognitive mapping, Lynch’s analysis results in five points used to describe the way finding behaviors of people within these areas. These five points are: paths, nodes, landmarks, edges, and districts.²⁶ The five points make identifiable values to the city and describe an areas formation and organization. The analysis that Lynch used for intersections was the term “nodes.” Adjusting the words to show their importance, “nodes” or intersections can also create interactions between the surrounding communities, individuals, and possibly separated parts of the city, creating reconnected interaction. As a result, nodes = intersections = interactions.

The information continues to support these intersections, especially in the article “Effects of Interactional Space on Neighbouring” by the research team Oddvar Skjaeveland and Tommy Garling. Their research and studies were done to question the break down of community in urban areas primarily in Norway.²⁷ The thoughts of the researchers bring to mind the theory of affordances by James Gibson, which observes that spaces give people a sense of what to do within the space. Consequently, affordances

²⁶ Lynch, Kevin. *Image of the City*. Cambridge, Mass: M.I.T. Press, 1962. p. 47

²⁷ Skjaeveland, Oddvar and Tommy Garling. “Effects of Interactional Space on Neighbouring.” *Journal of Environmental Psychology* 17 (1997): 181-198.



are important to design and planning because they allow the observer to perceive what is to be done within the space.²⁸ Skjaeveland and Garling state, "For example, to perceive a space as an interactional space, the individual must perceive that it possesses certain qualities that permit the intended activity."²⁹ This interesting point shows that it is important to signify the use and value of the space, much in the way that a corporate logo from the interstate can translate into the thoughts of good food, good service, and timely preparation.

Skjaeveland and Garling continue to give examples as to where this type of social interaction may occur. The team states, "one way is to form weak social ties. - Local social contacts that arise among nearby neighbors in the course of recurring visual contacts and from a limited shared interest in the locality which they jointly inhabit."³⁰ They continue with examples of such spaces, one of which is shared access into the residences of students, offices, or common circulation spaces.³¹

These ideas can be looked at through micro levels such as the idea of linking private residences with a common space, and at macro levels involving the social interaction of a large urban area, such as the mixing of interaction on left over spaces within the freeway intersection. Weak social ties and contracts could offer a form of interaction, and the construction of space would create a visible image for which the intersection and interaction could become an event that draws the attention of viewers that pass by and celebrate reconnected spaces that have resulted from this disconnection of sprawl.

Events and Their Relationship to Temporal Space

Of course, buildings or the act of building does require a need, program, or purpose to celebrate ideas and thoughts. Activities that may be similar to those taking place on the freeway itself need to be selected in order to propose inhabitation. For instance, within and along the freeway, events such as entrance and exit, an accident on the shoulder, and the daily rise and set of the sun occur. One might not have the individual experience of having their vehicle along the side of the road, but they will share the experience with other individuals, especially if there is a traffic tie-up

An example of the importance of the event and its relevance to architecture is the fireworks display at the Parc de la Villette that took place on June 20th, 1992, lasting more than half an hour in front of more than one hundred thousand people.³² Created by Bernard Tschumi, an understanding of the points, lines and surfaces that make up the projection

²⁸ Gifford, Robert. *Environmental Psychology: Principles and Practices*. 2nd ed. Boston: Allyn & Bacon, 1997. p.26-27

²⁹ Skjaeveland, Oddvar and Tommy Garling. p. 181-198

³⁰ Skjaeveland, Oddvar and Tommy Garling. p. 181-198

³¹ Skjaeveland, Oddvar and Tommy Garling. p. 181-198



of the fireworks display stimulates the organization of the park as well. A continuous rhythm provides the tempo for this understanding, giving a constant flow of information to the visitor.

In the book *Event-Cities*, Tschumi discusses the value of architecture, the city, and events and how they create an interrelated connection between each other.³³ The documentation of the fireworks display is done “in order to emphasize the ‘event’ dimension, the dimension of action, in what makes a city.”³⁴ Tschumi states, “Architecture is as much about the events that take place in spaces as about the spaces themselves.”³⁵ He continues to discuss the fact that his statement is not advocating for the design approach of form follows function. Instead, the suggestion of programs and spaces colliding in an organized intermingle: combining and implicating one another to form a new product of architectural reality.³⁶ Tschumi hints at the ideas of “crossprogramming”, “transprogramming”, and “disprogramming” as a way to realize this “intermingling”, and allow for the question of the construction of technology, not the technology of construction.³⁷ As a result of this rethinking and reshaping of architecture, experience through the city and its space alters the event and produces a new type of social interaction.

Similar to the fireworks display arranged by Tschumi, the carnival is another example of the importance of event and its relationship to its transportable architecture and the way it transforms a city. Its presence is only visual for a few days at a time, but its experience and presence within our memories of its space last without its structure. The memory of its experience can be recalled at anytime revealing a greater value to the event as a redefined space with individual value.

Those who are aware of its coming may hear through word of mouth, or a local bulletin. Many others recognize its arrival through the quick construction of its site. In a short amount of time, the space is realized. Adapting to its context, the event recognizes the need of whether it will have to supply its own veins of flow, or if the existing paths of activity will continue to create its atmosphere. Their action results in a catalyst for experiencing the event spatially. Without this transforming city there would be no event, no space. Visions of a vibrant village begin to form, as anticipation of its opening sets in.

With its inner space alive and active, a gravitational pull is exhibited by the event. From far away, structures, lights, and people visiting the site act as an advertisement leading others unaware with the opportunity to discover. As one comes closer, the site draws its visitors in to explore its magic of sounds, smells, and excitement of the senses. Consumption of the carnivals identity is subconsciously assumed. A walk through its space overloads the senses. The smell of buttered popcorn. The airy taste of cotton candy.

³² Tschumi, Bernard. *Praxis: Event-Cities*. 1994. Cambridge, Massachusetts: The MIT Press, 1998. p.16.

³³ Tschumi, Bernard.

³⁴ Tschumi, Bernard. p. 16.

³⁵ Tschumi, Bernard. p. 13.

³⁶ Tschumi, Bernard. p. 13.



The blur of motion. The rings of operated machines, music, games, and laughter. The feeling of a constantly changing presence of strangers who form temporary connections to each other's environment. Once these sensations begin to become part of the encompassing area's context this traveling city packs up, abruptly leaving its experiences with the memories of its audience, the retransformed environment vanishes without a trace.

The shared connection and experience of the event and of the space is what makes this temporal architecture important. Because the event gives a purpose to its landscape and its context, a new life, identity, and meaning become imposed on the setting. Martin Heidegger describes some of the same interesting concepts related to shared and individual experience in the essay "Building, Dwelling, Thinking." Within the second portion of the essay, Heidegger tries to answer, "In what way does building belong to dwelling?"³⁸ As an example to formulate his ideas, Heidegger discusses a more permanent structure, the bridge.³⁹ Showing the reader that the bridge is not just a utilitarian object, that the bridge has more use than a public crossing, he describes the way in which a bridge is built, how it gathers two sides of a river. This "gathering" or assembly is similar to the way the islands of emptiness within and under the freeway might be used to connect a separated city. Eventually, Heidegger comes to the realization that this bridge is a "space". This space links the two sides in a way that is similar to the way the water linked the two sides before the construction of the bridge. Consequently, location is a part of the idea of space because it has so much relevance to how the "space" is designed and constructed. Heidegger illustrates this by stating: "Accordingly, spaces receive their being from locations and not from 'space'."⁴⁰ As a result, there is a relation between location and space. However, Heidegger also suggests that there is a relation between man and space, a relation between the space and the extension of it. It serves not only as a "boundary"-not a limit but an entrance into the space- but also it gives a realistic idea of how the "space" is arranged. These spaces become even further realistic by the activities that they allow man to "dwell"⁴¹ in. There is a natural harmony because it not only provides a crossing but also provides an environment for other activities to take place. Therefore, Heidegger implements a suggestion that "space" is related to "dwelling" as it is related to "building". In the metaphor of a bridge we can see how this relationship is developed. "Space" is the bridge, while "building" and "dwelling" are the two banks of land.

At the end of this selected section, Heidegger discusses the idea that thinking is involved within these inter-connected webs of relationships. The author suggests that "thinking" is questioning and it is thought that makes a "dwelling" worthwhile, and that this "thinking" is involved from the very beginnings of "building." The formula that seems

³⁷ Tschumi, Bernard. p. 13.

³⁸ Heidegger, Martin. "Building, Dwelling, Thinking." *Rethinking Architecture: A Reader in Cultural Theory*. Ed. Leach, Neil. New York: Routledge, 1997. 100-109.

³⁹ Heidegger, Martin. p. 100-109

⁴⁰ Heidegger, Martin. p. 105

⁴¹ Heidegger, Martin. p. 100-109



to be suggested by Heidegger is that “building” is inter-related with “thinking” which then produces “dwelling”. This becomes a way for use to construct a successful possibility of “learning how to dwell.”⁴²

The images and illustration of the word “bridge” and its suggested “dwelling” of activities made me consider the events that take place on the Charles Bridge in Prague. Not only does the bridge provide a crossing over the river or flow of traffic, but also it provides a “space” for event to occur and take place; a peaceful place to walk and view the city and its surrounding environment; a place where you can think about life, architecture, and their meanings. Basically, the bridge provides a space for living, a “space” for “dwelling”.

Our culture has also produced works that display these ideas of the present as an event. Examples of this films such as *Koyaanisquatsi* and *Phone Booth*, and the TV series 24. These all display the idea of individual and shared experience on a more visible level. From outside of this “event”, the audience begins to learn of these inter-connections of individual and shared events and how they begin to impact each other. Consequently, the viewer is also sharing in the experiences of the actors and actresses and experiencing their own separate individual connection of experience. For example, in the movie *Koyaanisquatsi*, the moments in which we live become an emphasized movement, an exaggerated space of time that is not only visible from perspectives outside of the motion of a fast-paced society, but also within it. This can be seen in the perspectives of waiting at a train or subway platform, the view from the top of the tallest skyscraper, or the perspective of watching the sun trace its shadows on the landscape throughout the entire day. As a result, this movie makes daily transformation and everyday transportation an event.

Ultimately, what is important is the understanding that the present is the “bridge” connecting the past and future, and that our culture has an active role in making the future. The “bridge” is our active dwelling, the space in which we live and experience. These events become a structure, in which we view and/or experience its direct and indirect implications. Regarding the space of the freeway, the idea of event can create a list that has alternating levels of individual and shared connection. Morning rush hour, road rage, an accident, afternoon rush hour, and lunchtime are all events that are visible outside this space and also within the space of the freeway. A billboard, a sign giving information about where the next rest area or exit is, and even the rearview mirrors placed inside and outside of the vehicle offer momentary connections and temporary chances for interaction. The experiences that are visible within the environment of the freeway as well as the thoughts and mental processes that occur within the minds that are driving within the space of the freeway become the events of this changing landscape. Dance recital’s, a child’s ballgame, or a warm day in winter are events that have a certain amount of time before they expire and create their own event within the freeway as temporary guests fly by attempting to reach their intended final destination.



⁴² Heidegger, Martin. p. 109

Conclusion

While the current culture of society continues to operate and exist on this fast-paced trend, the consumption of an intense frequency of experiences has created consequences that impact our present and future lifestyles. The infrastructure built to expand these systems increases sprawl and the decline of the city core; damages the environment via CO-2 levels and its consumption of materials and land that once produced food on the table, cleansed the air, or provided habitat for wild creatures; and disconnects society to a level that encourages activities like road rage or school shootings. The need to reconnect the individuals separated by systems such as the freeway supports the ideas of using the left over spaces that once used to be occupied by past cultures. These spaces have a value that may be exploited by the insertion of activity. In a recent lecture at the University of Detroit-Mercy, Douglas Kellbaugh stated that the freeway infrastructure has a similar value to architecture and art as the Roman aqueduct.⁴³ Each is a structure that is built to support its culture but at the same time having expressive qualities about itself. The response to our current society of temporality is to both display the issues and concerns of this lifestyle while taking advantage of its characteristics. What character does the momentary environment of the freeway signify for possible activity and inhabitation within its space? Conversely, What character does the permanent urban fabric wish to provide to change its current negative image of brownfield conditions? San Diego urban designer and architect Teddy Cruz once stated, "As designers and architects it is our responsibility to show the possibilities."⁴⁴ His statement motivates this thesis to improve the connections of society through the forgotten spaces of the freeway.

⁴³ Kellbaugh, Douglas. "Friday's @ Five." University of Detroit-Mercy School of Architecture. Detroit, 3 Oct. 2003

⁴⁴ Cruz, Teddy. "Shifting Ground." University of Detroit-Mercy School of Architecture. Detroit, 26 Feb. 2003



Sketch Problem Documentation: *the man-made object*

In the first exploration entitled *[re] looking*, a consideration for the deeper meanings of a man-made object created the program. Searching for a man-made object that captured the every-day essence of its value and portrayed necessity, production, and creativity, I choose the peanut butter and jelly sandwich. Transportable in a plastic baggie, a brown bag, or even a boxed lunch, the sandwich represented a temporary quality, and what could be considered a temporal event as well. The event of making the sandwich, consuming its final product and enjoying its individual process, production, and consumption viewed as a type of critique, gave a new appreciation for what this every-day object can mean and what values it hides in its physical state as an object. By “re-looking” and re-evaluating the object, I understood the object to be something else, the idea of a piece of artwork or sculpture. The process lends itself to the emotional, creative, and humanistic approach that an artist ought to have within their relationship with their creation and work. The artwork becomes a blend of processes, each illuminating its relationship with the other pieces of its context, such as the slices of bread, the peanut butter, and the jelly are inter-connected to produce a final product for display and satisfaction. The critique determines the quality of the product while satisfying the need for its existence, much the same way that the arts are needed to represent a culture, but also provide an enjoyment of skill, creativity and craftsmanship. Documentation of the complete process from materials, to manufacturing, to consumption was done in a sequential fashion that did not easily reveal the sandwich as an object, but rather as an artwork of processes, similar to the poetry of describing the process of making or building the sandwich and hiding its identification as an object.

What I learned from the exploration

How the sequences of the process reveal individual character or identity. This is of great importance to the thesis because it encourages the ideas of thinking about the sequences of spaces and how one will enter, engage, and exit the constructed space as they move along the freeway.

The description and dissection

Blank canvases stacked along each other are selected to allow the painter the opportunity of quenching desire. A final creation is dreamt; the vision becomes reality.

Divided planes run parallel to each other. Their edges are a stark difference from the soft interior; dark, flakey, and a characteristic that defines shape. These planes connect with a mixed adhesive.

The manufactured glue produced combines a mix of contrasting substances to perform a sweet mortar, a concoction that sticks to the shape of any instrument it is applied to. The body wraps around the whole to demonstrate usability and versatility.

As the viewers tear through the work, they become immersed in a palatable expression. Layers of cool merge with bits of a past existence, giving to the merciless actions. Rolling through thoughts and actions, the critics reveal preferences about themselves, deeply rooted in their inner being. The gel of layers made complete, consumes its audience with an intense emotion; satisfaction.

Mobility becomes realized. Portability revolutionizes the way a society thinks, the way it lives.

The appreciation is celebrated by an acknowledgement of the process; the construction; the details. Crunchy or Creamy?

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Sketch Problem Documentation: *the ghost catcher*

The second individual exploration entitled *design [thinking]*, gave an opportunity to understand and interpret the precedent studies and the thesis summary in a new, adventurous fashion. With the program entitled “ghost catcher” the goal of the assignment was to document and identify the unknown spaces and no-man’s lands within the area of Detroit. Initial thoughts of “catching” brought to mind the ideas of a door or window “catching”, as in “being or getting stuck in the frame.” With this frame in consideration, a precedent came to mind. In the project, *The Suitcase: (Postcards and Paraphernalia) Redefining the Space of Tourism and Travel*, the final product results in a type of movable frame with panels and openings creating temporal space.⁴⁵ Christopher M. King of Cornell University explains:

The case studies were the first stages of an ongoing physical and thematic investigation of this multi-faceted topic, centering around the traveling body, be it tourist or homeless in reaction and interaction with differing environments and destinations. Here the issue of portable architecture centers on the mobility of the body in a highly congested environment, allowing the suitcase as companion, the chance to amplify its possible new role as ‘home.’⁴⁶

The idea of the frame with the realization of a project that documented transportable space merged together in my thinking and planning for documentation. As a result, I began to look at the idea of a frame, capturing the presence and character of the sites within an unknown context. The frame was to be used as a vehicle for documentation.

Three components began to emerge as the project began to develop. First, the frame would capture the views and visual images of the site and form a relationship and datum for the site. Each day pictures were taken to document the frame’s placement and its context. Once in the morning and once in the afternoon, the documentation began to form a type of ritual and event, similar to the round trip, which passes by a site twice.

Second, the frame began to capture activity and interaction with the existing environments of the site. Designed to capture the footprints, fingerprints, and possible hidden messages of the “ghost”, a floor with a surface that acted as my drawings of this activity was placed on top of a platform leading into or out of the frame. While most sites offered little data with exception of the wind direction or the probable amount of moisture in the air, the drawings began to suggest that either the sites were truly unclaimed or that the frame created a territorial presence, leading individuals to shy away from its authority. At the final site for this investigation, a change of activity was realized. Recorded in a deep

⁴⁵ King, Christopher M. “The Suitcase: (Postcards and Paraphernalia) Redefining the Space of Tourism and Travel.” *Transportable Environments: Theory, Context, Design and Technology*. Ed. Kronenburg, Robert. New York: Routledge, 1998. 37-43.

⁴⁶ King, Christopher M. p. 37-43

red dust of chalk, the pounded footprints of activity were captured and pressed into permanence by a driving rainstorm that lasted the entire day. The chalk bled into the framework and platform, creating a documentation of its weathered presence.

Lastly, the frame began to act as a framework for interaction. People who lived near the sites where the frame was placed began to ask, "What are you building?" Some suggested that it looked like a front door, an observation that denotes territory. Others wondered if a new building was under construction and began to formulate opinions about its construction or what its use might become. The activity even spread to undergraduate participants that assisted with the placement, transportation, and transformation of the frame. Placed in the bed of a pick-up and moved from unknown site to unknown site to be constructed and taken apart again, the frame provided a routine chance for myself to understand who other people and places were, and to appreciate those people and places for who or what they are and the opportunities and potential that lies before them.

What I learned from the exploration

Void space has the potential to become a center or place, if built constructs are placed in or near paths.



Day 1: Packard Plant @ night; strip 1



Day 1: Packard Plant @ night; strip 2



Day 1: Packard Plant *a* night; strip 3



Day 1: Packard Plant *a* morning; strip 1



Day 1: Packard Plant *a* morning; strip 2



Day 1: Packard Plant *a* morning; strip 3



Day 2: Grand River Ave. *a* night; strip 1



Day 2: Grand River Ave. *a* night; strip 2



Day 2: Grand River Ave. a morning; strip 1



Day 2: Grand River Ave. a morning; strip 2



Day 2: Grand River Ave. a morning; strip 3



Day 3: Hale Ave. *a* afternoon: strip 1



Day 3: Hale Ave. *a* afternoon: strip 2



Day 3: Hale Ave. *a* morning: strip 1



Day 3: Hale Ave. *a* morning: strip 2



Day 4: Livernois Ave. *a* afternoon: strip 1



Day 4: Livernois Ave. *a* afternoon: strip 2

- **Facts and Statistics:**

- Principals Hani Rahid and Lise Anne Couture have described the “Steel Cloud” as “an architectural assemblage of situations and spectacle where scale is purposely disconcerting. Here aquariums and suspended landscapes hover above the city’s skyline and oscillate to its arcane rhythms. The lifted horizon lines that configure and delineate this structure meld with the endless horizontality that is Los Angeles. This is a living monument, accommodating galleries, libraries, cinemas, parks, and plazas that are intersected by the fluid and transient space of the city. This is an architecture for the territories devoid of perspective depth, frames, or enclosure. The project’s potential role as connective tissue with the urban fabric by its reclamation for pedestrian, cultural, and recreational usages of an otherwise “dead” zone of space over a sunken freeway in a city center.”⁴⁷ An emphasized relationship between “linearity of the freeway and its space-time continuum of movement”⁴⁸ exists within this construct. According to Asymptote “technology (media, telecommunications, computers, etc.) represents the true shared cultural infrastructure.”⁴⁹ “Functioning as a monument to the largely intangible but highly pervasive forces at work in the modern information city, “Steel Cloud”: West Coast Gateway is a highly dynamic design seeking to embody the urban form of not only contemporary immigrant experience, but also the very character of late twentieth-century life.”⁵⁰

- **Relevance:** The project is relevant to the thesis because of its close connection in program and ambition. Asymptote is concerned with the interesting relationships between “time-space continuum.” As a result they are looking at various event that create a sense of losing track of time while participating. Driving in the automobile is connected to the movie theater, because of the similarities between both regarding one-way directional view, blurring images and the basic understanding of the sequence by the viewer, but not a detailed account of every single action. Asymptote’s proposal engages the viewer and the driver, and enforces this connection through the architecture. The landscape is situated to conform not to the ordinary composition but to challenge what planes surface and ground might become just as

⁴⁷ Smith, Elizabeth, Russell Ferguson, and Mike Davis. *Urban revisions: current projects for the public realm*. Boston: MIT Press, 1994. p.59-78

⁴⁸ Smith, Elizabeth, Russell Ferguson, and Mike Davis. p.59-78

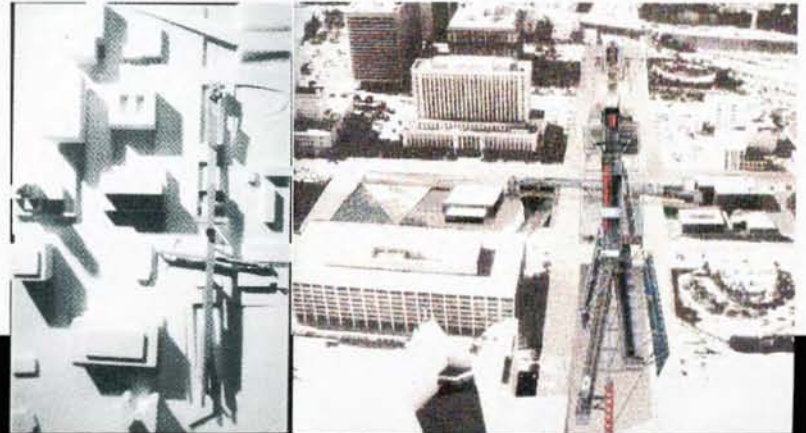
⁴⁹ Smith, Elizabeth, Russell Ferguson, and Mike Davis. p.59-78

⁵⁰ Smith, Elizabeth, Russell Ferguson, and Mike Davis. p.59-78

the stage set and freeway create idealized surfaces for usage over sometimes difficult surfaces or terrains. The proposal acts not only for function but also as a monument, one that displays the relationship between the construction of the proposal, its connection and value to the character of modern society, and its tie to the technology and the high-paced context of today's urban landscape and the context of the freeway.



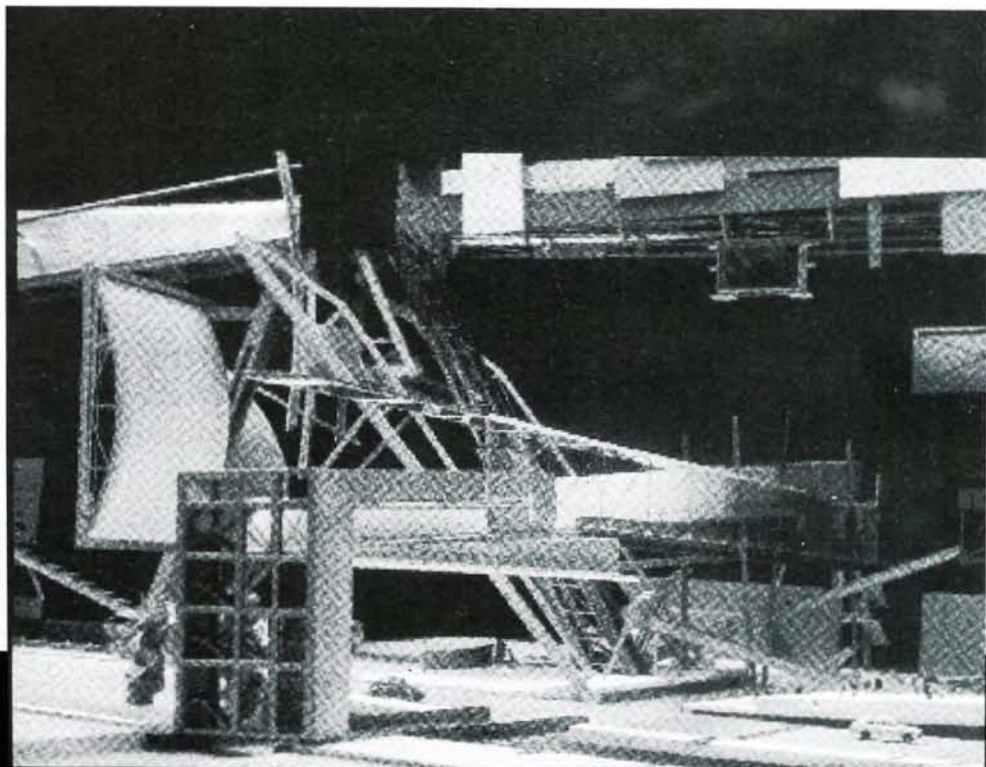
DEtailed Elevation Perspective



Context within city and the freeway environment



Detailed perspective revealing structure, surfaces, planes, and the interior character present within the construct.



Exterior perspective displaying similar characteristics of structure, surface, planes, and interior character.



An section cut through the freeway so as to give a perspective as to how the freeway and driver will interact with this environment.

- **Facts and Statistics:**

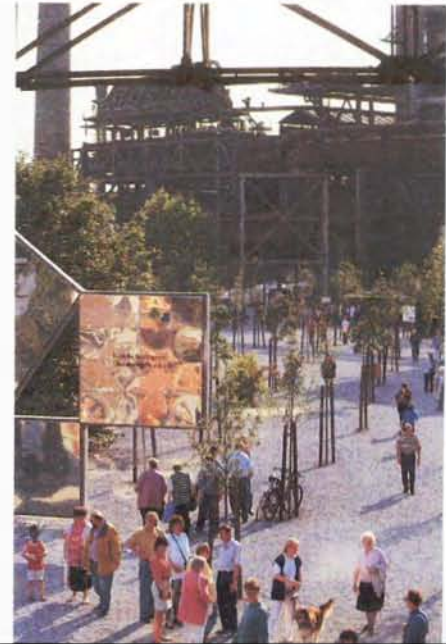
- "The Duisburg-North Landscape Park forms part of a larger park, the IBA Emscher, and it is born as a structural program of the state of North Rhine-Westphalia and the towns in the Emscher region, within which it forms a large green element. In an area of more than 200 hectares, the park includes a significant industrial monument, the former Thyssen blast furnace plant at Meiderich. The landscape is situated between the two suburbs Meiderich and Hamborn on various fallow lands of the coal and steel industry. Besides the conserved blast furnace plant and the colliery and coking plant, the sintering plant of the metallurgic plant, the iron and manganese store, were situated as well numerous railway tracks belonging to the company railways. The park conception intended to leave the existing vegetation to grow wild, including the defunct blast furnace plant in the heart of the grounds though changing the utilization partly in a conservationist manner. Close involvement of the people and varied choices in cultural and leisure facilities were priority objectives of the planning and building measures. The park offers recreational, sporting, and cultural facilities in a great variety of ways. The existing and recently laid paths and tracks are attractive for walkers and cyclists; the old buildings are being used by free climbers; large open spaces and a farming centre are ideally suited to children...For all these reasons the Landscape park has already made its name as a cultural venue. The blast furnace plant is also scenery of musical groups concerts and theatre ensembles, as well as a source of inspiration of photographic reports, films and a TV series."⁵¹

- **Relevance:** This project is relevant to the considered program because it explores the ultimate vision of active life within previously forgotten or neglected spaces. Emphasis on the green-scape and its relation to other singular places of activity begins to illustrate the vital link that the right of way can be towards reclaiming left over spaces. In Duisburg, the forgotten space was the industrial belts of the region. In Detroit, the freeways reveal decay and separation. As one drives past these neighborhoods above the depressed traffic flow evidence of urban blight can be seen through abandoned residences, vacant lands, and burned down houses. Investment in these arteries that in are currently brown-field's could lead to a positive impact on the forgotten landscapes. As a result of reexamining the past decisions to scar the

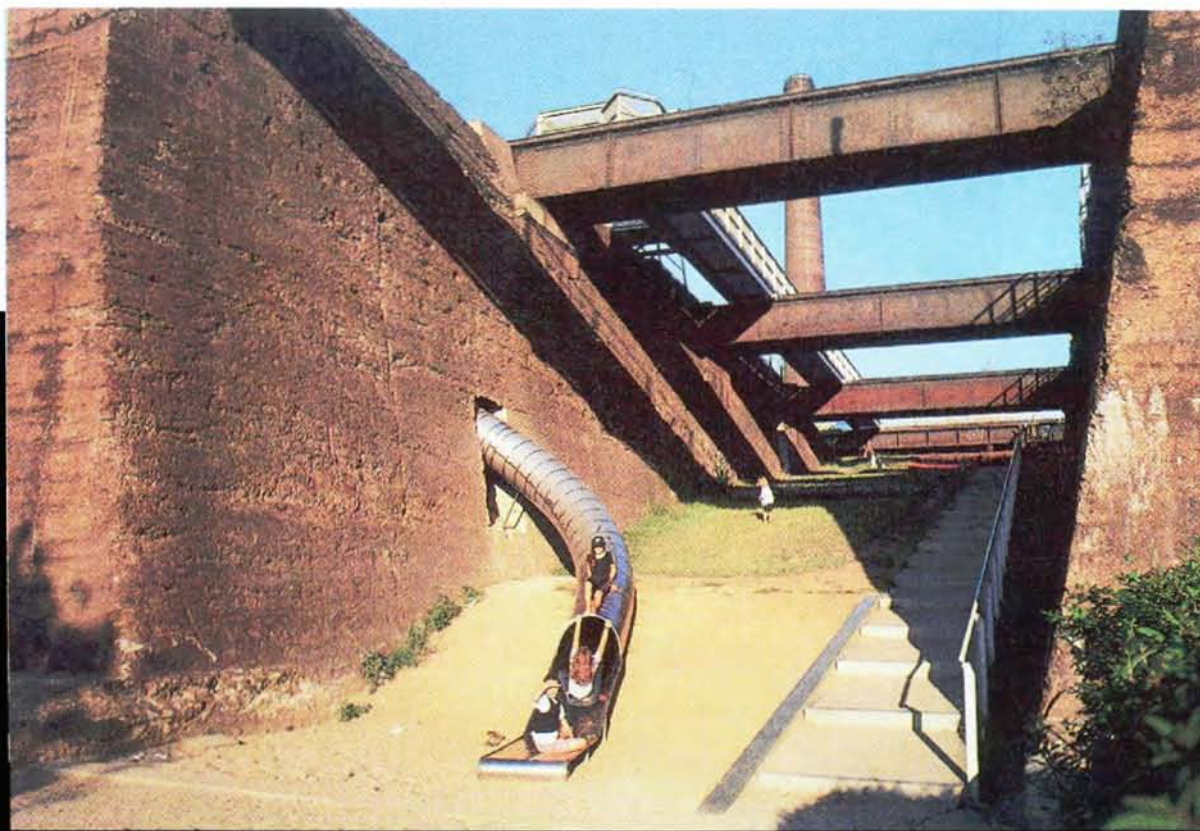
landscape for industrial purposes, Duisburg has gained not only a cultural and communal center for celebrating various events and activities, but also a link that stretches and connects various "places" to provide "spaces."



This metal path acts as a connector to other spaces, and edge between two sides of space, and a space that runs along the along higher definitions of edge.



At this plaza new elements are tied to the old to make this former plant a successful space for concerts, and create an interesting relationship between forgotten and unforgotten space.



Unique activities can revive voids of devastated landscape. For example a slide amongst a former blast furnace site.



This joint detail reveals much about the appreciation of the character of the past industrial identity and its age.

The beauty of the natural landscape is again allowed to flourish. As a result, nature redefines the evolution of the void space.



▪ **Facts and Statistics:**

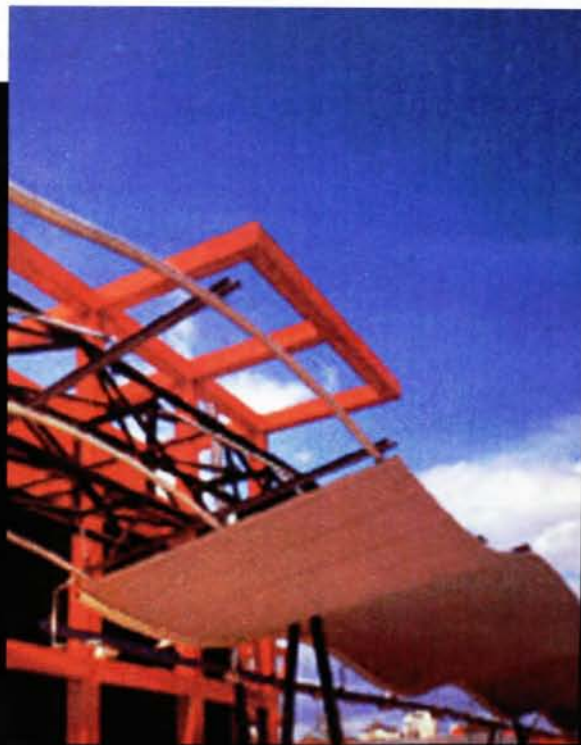
- Acting as a central connection and relaxation point for a major area of Paris, the 52 hectares of park, science, and culture within the Parc de la Villette create an environment that allows for enjoyment and understanding. Visitors are invited to multiple attractions including a science center, an amphitheater, and other amenities such as accessible green-scapes and plazas. Interesting elements known as "follies" dot the park, with 26 in all comprising a large amount of the organization of the park. No two "follies" are identical and the only common characteristic they directly share is that they are painted red. These "follies" carry various programs from a fire station to a hamburger joint. Tschumi orchestrates the parks archetypal elements, providing an understanding of infrastructure through color, texture, shape, pattern, etc. As a result, event is created by the planned structure and logic of the park.
- **Relevance:** This project is relevant because it considers the quality of space that can result from the planning of multiple different infrastructures in a cohesive unit. The built structures, "follies", and spaces reveal through iconographic organization, a valid tool for way-finding and understanding place and space. Services begin to become coded by a certain shape, color, or feeling, and relate to an entire grid of organized elements. Likewise, events begin to happen in between these structured programs and infrastructure providing a myriad of space. Circular and triangular spaces weave within the park and a canal runs through the middle through the park displaying unique characteristics for each type of event or circumstance. One extremely interesting element that occurs within the park is a space for the showing of outdoor movies. Similar to a drive-in, pedestrians rather than vehicles park themselves on the lawns of the "Prairie du Triangle" to view these displays of event. To conclude, Parc de la Villette becomes a good example of urban park-scape generated by infrastructure, providing a system and character to impose for easy way-finding and understanding within a space that could become unordered and lack human interaction.



A site plan of the entire Parc de la Villette and its context with Paris. The park attempts to coordinate different sets of infrastructure shaping the elements, paths, and organization of the park.



Each follie within the park is preplanned because of infrastructural organization. Tschumi identifies these "follies", the visible links and destinations of the park by painting them in a coat of red. Different activities occur with these spaces including a hamburger stand, a fire station, and other amenities.



- **Facts and Statistics:**

- This amphitheater is located along the Detroit riverfront, a waterway that can be noisy and busy with traffic at peak times of the year and within the day. The structure opened July 1984 and seats more than 6,000 people. The space plays host to numerous musical events with performers such as B.B. King, James Brown, Chris Issak, and even boxing events. Typically 40 acts are featured each summer from varying genres. Primarily jazz, pop, country, and blues perform at the venue.

On non-event days, Chene Park's green lawns are open to the public from 8am until 8pm. The tensile membrane covers approximately 6,000 square meters. This unique structure acts as a landmark along the riverfront, creates activity by its presence and purpose, and allows that activity to display itself during the use of the amphitheater and its context.

- **Relevance:** The project is relevant because its setup for event and non-event functions with the proposed site. Multi-functional for numerous events. The amphitheater considers the quality of space that connects and encourages interaction at any time within the year. As a result, the environment has a character that can change with the time of day, or the seasons. A blur between interior and exterior is created through the outer pavilion-like setting along the river.



Chene Park is situated along the Detroit Riverfront, providing a landmark for the city and an activity and grander purpose to the riverfront.

The use of tensile structures and tense canopies allow the amphitheatre to display its temporal qualities of the show. The tent like structure resembles that of the carnival or the tent, spaces that are transformed by activity and the life-like presence of movement and center.



MO

- **Facts and Statistics:**

A successful ballpark that incorporates a lawn-scape along the outfield for family oriented outings. The stadium is home to the minor league baseball team known as the Lansing Lugnuts and was opened in April 1996.

- **Relevance:** This project is relevant because it illustrates much of the characteristics of the existing slope of the right-of-way along the freeways. The ballpark takes advantage of this slope by providing an area that allows a family picnic, stargazing, or even the opportunity to listen to the natural setting of the surroundings. On the other hand, the existing freeway system does little to allow human inhabitation of these spaces. The most important observation is that this slope of the land does not need to be seen as an under-maintained brown-field or a flat surface with a retaining wall. Instead, the focus on the natural growth and maintenance of the right-of-way could allow a nature preserve to create green, alive, pedestrian accommodating edges that provide additional value and meaning to the surrounding landscape of the freeway and its depressions into the urban landscape.



ChThis venue for entertainment is traditionally a ballpark. Through its function, form and context, an event of shared and individual experience is produced.



One of the more intriguing parts of study within the ballpark is the purpose that is given to the ourfield. Typically forgotten space behind a fence, Oldmobile Park offers a unique experience to enjoy a family picnic, stargaze, and watch fireworks all on the natural carpet of a lawn.

Programming Precedent Analysis: *Ford-Wyoming Drive-in Theater/ Dearborn, Michigan/ architect: unknown*

- **Facts and Statistics:**

- 9 screens open year round (with in car heaters!!!!). Holds 3,000 cars. Built in 1951.

- **Relevance:** The importance of this site to the investigation is the fact that it is a surviving relic of the car culture. The drive-in theater displays part of the progress and evolution of technology in regards to the car, the film industry, and the products of a society of a certain timeframe. While today's drive-in theater has become the TV screen/DVD player in the dashboard and backseats of current automobiles, it is important to know where the idea had originally come from or was inspired by. Elements of the drive-in, character, and identity become understood and better observed from the actual presence of being at the space. A real life museum, the site allows observers to understand what is necessary to operate a successful and functional drive-in.

Entrance and Box Office into the surviving drive in theatre



One of the main concerns of the drive in theatre is the comfort at which the audience are able to view the motion picture and at what quality is the sound, volume, and sightlines for those within the comforts of their automobile.

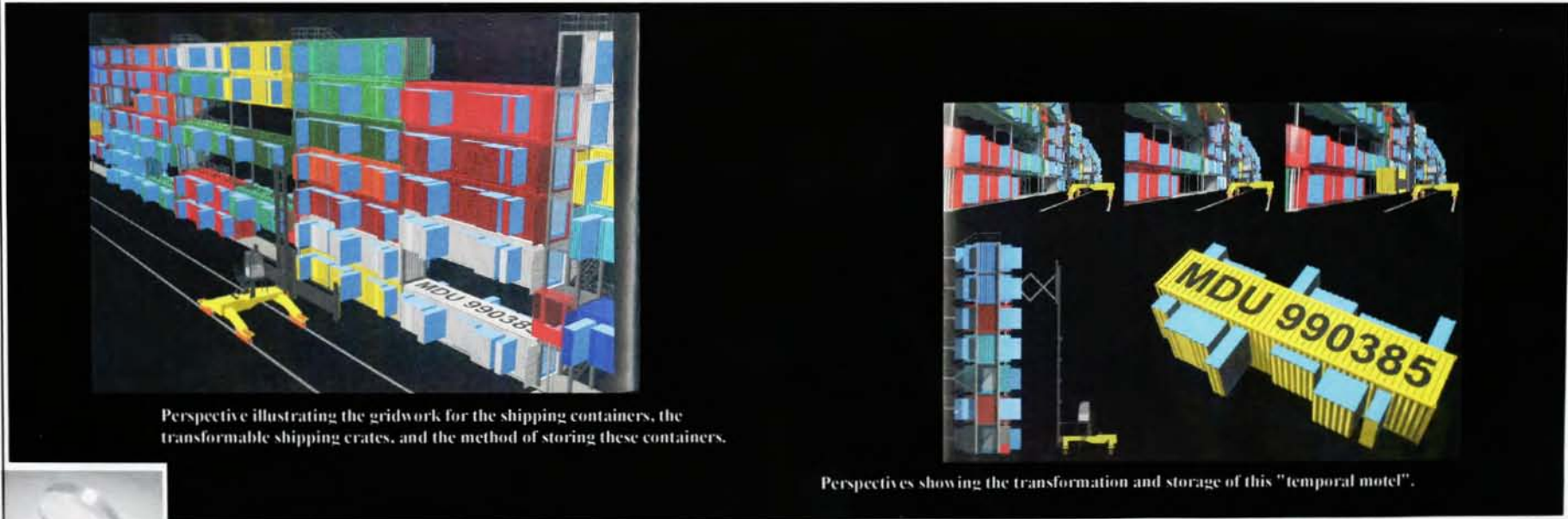
▪ **Facts and Statistics:**

- “A shipping container is transformed into a mobile dwelling unit. MDUS are conceived for individuals moving around the globe. The MDU travels with its owner from destination to destination, fitted with all live/work equipment and filled with the owner’s belongings. Once it reaches its destination, the MDU is loaded onto a vertical MDU harbor, to be found in all metropolitan areas around the globe. The harbor is a multiple level steel rack, measuring 8 feet in width (the width of one container) and varying in length according to the site. Its linear development profile is generated by the repetition of MDUS and vertical distribution corridors, elevators, stairs, and all service facilities (power, data, water, sewage) run vertically along these corridors. A crane slides parallel, along the entire length of the building, on its own track. The crane picks up MDUS as they are driven to the site and loads them onto slots along the rack. Steel brackets support and secure MDUS in their assigned positions, where they are plugged into all service systems. The vertical harbor is in constant transformation as MDUS are loaded and unloaded from the permanent rack. Cuts in the metal walls of the container generate extruded subvolumes, each housing a live, work, or storage function. When traveling, these sub-volumes are pushed into the container, interlocking with each other and leaving the outer skin flush to allow for shipping. When in use, all sub-volumes are pushed out, leaving the interior of the container completely unobstructed with all functions accessible along its sides. The interior of the container and the sub-volumes are fabricated entirely out of fiberglass, including all built in fixtures and furnishings. A central computer regulates airflow and temperature as well as lighting; it is connected to external communication networks and to monitors, speakers, and microphones distributed throughout the unit.”⁵²
- **Relevance:** This project is relevant to the considered program because it explores the ideas of units that are transformable and functional to the user or guest. This aspect creates a habitat that is spatial and at the same time textured. Planes shift to become new walls, shelves, or screens.

⁵² Lamster, Mark, ed. *URBAN SCAN / LOT/EK*. New York: Princeton Architectural Press, 2002.

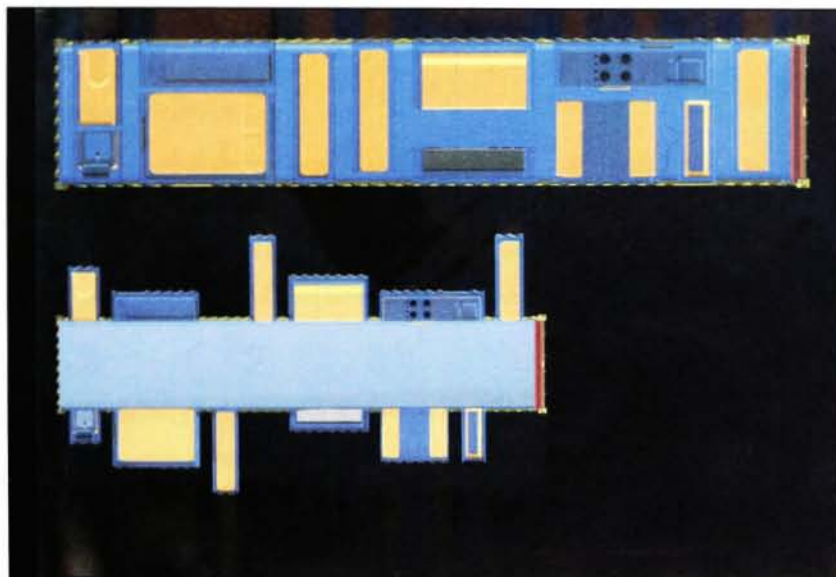
Another interesting concept is the usage of a framework that holds together modular spaces into one perceived object. The character of the motel is to look upon each single room as a separate unit. However, the whole perceived destination is not directly the unit, but rather the motel. Also, while the MDUS can be moved and transported to other destinations, the suggested event of arrival and departure could become a celebrated element. For instance, when guests first enter their temporary home they instantly turn on the light in order to view the space. Could this event become more expressive?

Finally, the traveler and the notion of the motel as the "second home" or "home away from home" bring interesting dynamics for the potential of a motel. Currently the motel room is designed and expressed as generic and uninspiring. The opportunities to reverse this standard of living and at the same time attract a market desiring creativity could make this program a successful springboard.



Perspective illustrating the gridwork for the shipping containers, the transformable shipping crates, and the method of storing these containers.

Perspectives showing the transformation and storage of this "temporal motel".



Elevation and plan view illustration the transformation of the shipping unit.



Interior perspectives of a lightweight, durable fiberglass shell with a windowless space.

Programming Precedent Analysis: *Yusuhara Visitor's Center/ Yusuhara-town, Kochi, Japan/ architect: Kengo Kuma & Associates, Tadahiro Odani & Associates, Plaza Design Consultant*

▪ **Facts and Statistics:**

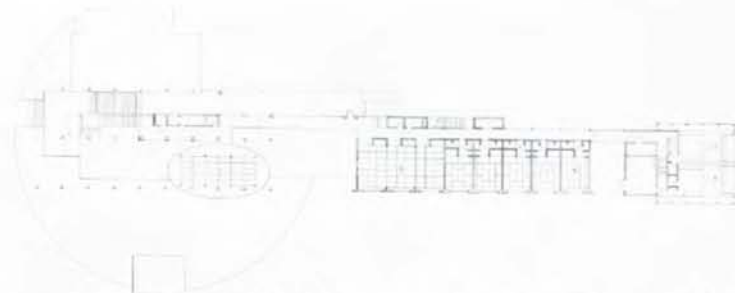
- “Yusuhara is a town located at the source of the Shimanto River, known as the cleanest river in Japan. Our aim was to create lodging facilities that are integrated with the natural environment, which is the biggest asset of the region, and offer to visitors to the town a life at one with nature they could never experience in a city. Use has been made of the warmth and diversity of materials traditional to the region and modern building that are open to nature has been created. Local cedar is used as structural material, and local bamboo, wood and Japanese paper are used as finish.” [Kengo Kuma]⁵³
- **Relevance:** This project is relevant because it considers the quality of space that an innovative and comfortable motel unit is capable of especially when mixing cultures and functions. Public and private can be related through opaque paper screens, and the opacity of light that the adaptable walls emit. Other ancillary programs such as a restaurant, banquet facility, public baths, and welcome center meet beautifully together through the consideration environments and space. Even the exterior reflects the interior condition by displaying the layers as the space is occupied.

⁵³ Yozo Shibata. *Hotel Facilities: Concepts in Architecture & Design*. Translated by Hiroshi Watanabe. Tokyo: Meisei Publications, 1997



E/W section 1:500

Sections and Qualitative Space Summary



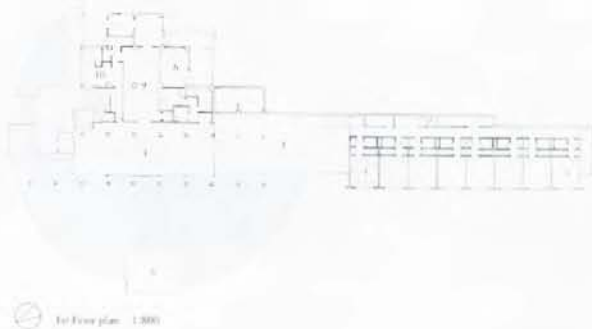
2nd floor plan

floor plans: Second (above) and first floor (below)



Night time elevation of the visitor center/ motel. Repetition, occupancy, and continuous columns display a space housing order, inhabitation, and constant movement and activity.

- 1 レストラン Restaurant
- 2 和室 Japanese-style room
- 3 テラス Terrace
- 4 客室 (洋)
- Guest room (western style room)
- 5 客室 (和)
- Guest room (Japanese style room)
- 6 機械室 Machine room
- 7 浴場 Bathroom
- 8 ステージ Stage
- 9 キッチン Kitchen
- 10 事務所 Office



1st floor plan 1:500



© 2011 by [unreadable] - All rights reserved in the restaurant

Interior perspectives of the restaurant and its influence by the Japanese culture creating a different and unique experience for guests to remember afterward.



Interior hallway that leads toward the motel units.



▪ **Facts and Statistics:**

- The main space study considered is the central lobby leading to local merchant, Fishbones (a local restaurant), and the Athenaeum Hotel. A Fountain signifies entrance, while at the same time calming to guests, acts as the core element of the space. Around this core, café seating surrounds the character of the fountain, bringing a pedestrian reverence to the interior. The kitchen is accessible to the needs of the guests, but at the same time is separated from disturbing the peace and nature of the inner core.
- **Relevance:** This project is relevant because it considers the quality of space that a grand lobby space is possible of when mixing in ancillary programs such as a restaurant, café, small retail shops, and executive offices and suites. These programs lead to other necessary functions such as the kitchen for the restaurant, the visible storefront for the local merchant, and the relaxing and awe-inspiring space of the hotel lobby.





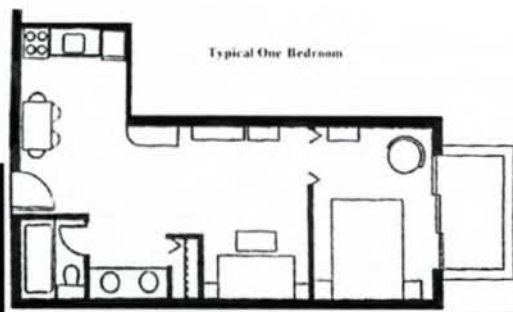
Panoramic images documenting the space and the character of space for the hotel's tranquil fountain and lobby area that acts as both entrance and center.

▪ **Facts and Statistics:**

- Oceanside resort that maximizes quality space for guests by allowing all to have a view of the ocean from their own personal balcony. Incorporates outdoor pool and spas with access to the beach.

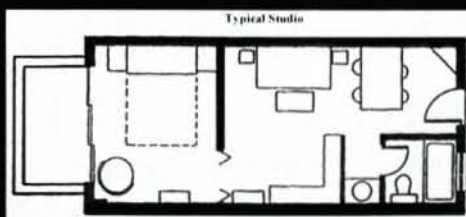
- **Relevance:** This project is relevant because it considers the quality of transparency and opacity of space for the guest. Illustrated from the way in which the guest first enters their room, spaces are blurred while simultaneously being separated. As the guest enters from the noisy, traffic-riddled façade via a covered walkway, the room admits its guests into their home away from home. Bathroom and shower are opaque, while the kitchenette and living space immerse the guest from entrance. Transparent screens that allow only glimpses of silhouettes and light separate public from private. The guest continues to move through the unit, reaching the bedroom through a threshold that reveals an experience that makes an event for the guest; the ocean comes into view. This experience will accompany the user every time they enter their bedroom, every time they wake up. As one opens the door-wall, the smells of sand and a salt spray fill the lungs of the guest. A short patio allows 2 or 3 guest the ability to people watch or stare into the horizon.

This blur of space through screens and other gestures such as threshold, have significance because most motels only have one window that provides one generic view - the parking lot.



typical one bedroom floor plan for the motel

typical one bedroom studio
 typical one bedroom floor
 plan for the motel
 floor plan for the motel



Exterior view from the pool area, which is on the same side
 as the ocean.



Interior view within a one bedroom motel unit.

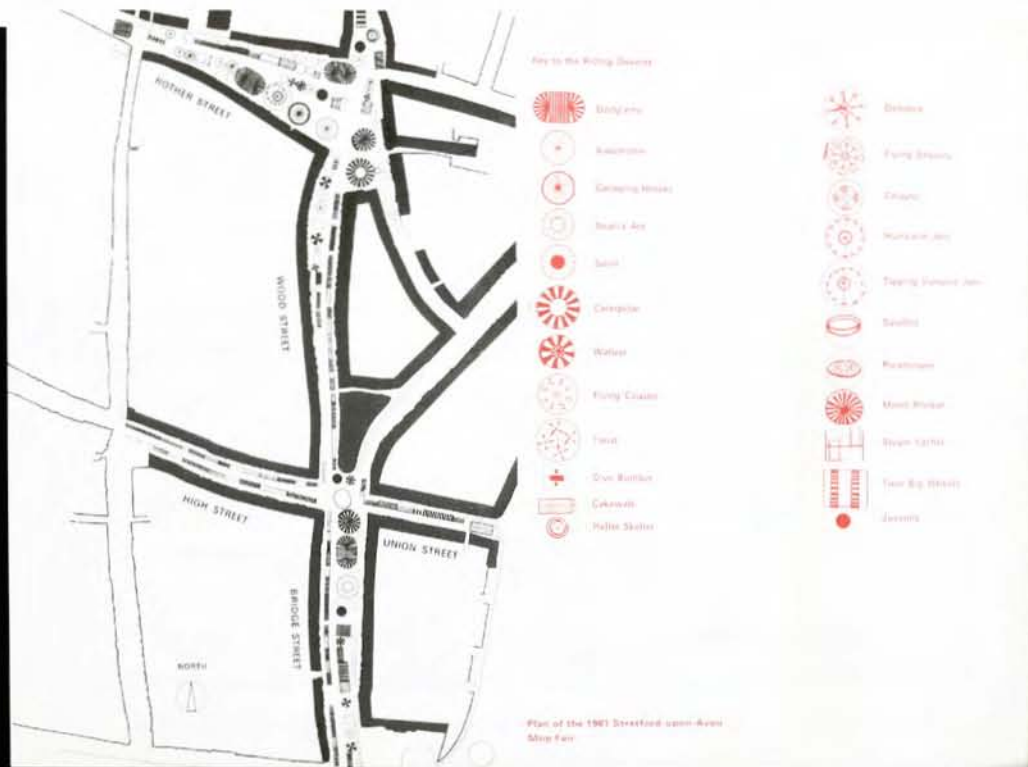
Precedent Studies: *The Carnival*

- **Relevance:** An example of a spatial event is the carnival or fair. Its presence is only visual for a few days at a time, but its experience and presence within our memories of its space last without its structure. The memory of its experience can be recalled at anytime revealing a greater value to the event as a redefined space with individual value.

Those who are aware of its coming may hear through word of mouth, or a local bulletin. Many others recognize its arrival through the quick construction of its site. In a short amount of time, the space is realized. Visions of a vibrant village begin to form, as anticipation of its opening sets in.

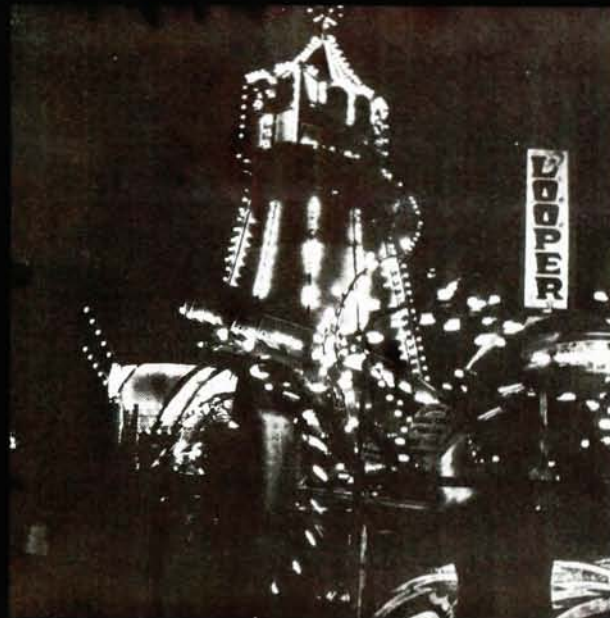
With its inner space alive and active, a gravitational pull is exhibited by the event. From far away, structures, lights, and people visiting the site act as an advertisement leading others unaware with the opportunity to discover. As one comes closer, the site draws its visitors in to explore its magic of sounds, smells, and excitement of the senses. Consumption of the carnival's identity is subconsciously assumed. A walk through its space overloads the senses. The smell of buttered popcorn. The airy taste of cotton candy. The blur of motion. The rings of operated machines, music, games, and laughter. The feeling of a constantly changing presence of strangers who form temporary connections to each other's environment. Once these sensations begin to become part of the encompassing areas context this traveling city packs up. Abruptly leaving its experiences with the memories of its audience, the retransformed environment vanishes without a trace.

Madri Gras in New Orleans, the winter carnivals in St. Paul and Quebec, and cultural expositions are other illustrations of this effect. Some events become the destination, i.e. the Michigan State Fairgrounds. Others emerge out of public paths and connecting spaces of the urban environment. The impacts on the layouts for the carnival differ between each situation. Adapting to its context, the event recognizes the need of whether it will have to supply its own veins of flow, or if the existing paths of activity will continue to create its atmosphere. Their action results in a catalyst for experiencing the event spatially. Without this transforming city there would be no event, no space.



Typical site plan and organization of carnival elements.

The glamour and magic of a carnival under the lights and the cover of night.



▪ **Facts and Statistics:**

- “The fireworks at La Villette were a three-dimensional version of the organizational principles of the park: the superimposition of systems of points, lines and surfaces. A system of notation (like a partition) defines the event in space and time. The fireworks, lasting half an hour, took place on June 20, 1992 in front of more than one hundred thousand people.”⁵⁴

A table that interprets plan, elevation, color, and the intensity of the fireworks compiles the documentation. The rhythm, every seven seconds, is used to record the information within the fireworks display. In 3 phases with 4 subsets per phase the points, lines, surfaces, and a “superimposition” of all three together is documented from the event. The evolution of space from its beginnings is revealed as a connected space within the fireworks, the sky, and the park grounds emerge.

- **Relevance:** *Good architecture must be conceived, erected, and burned in vain. The greatest architecture of all is the fireworkers': it perfectly shows the gratuitous consumption of pleasure.*⁵⁵

In the book *Event-Cities*, Bernard Tschumi discusses the value of architecture, the city, and events and how they create an interrelated connection between each other.⁵⁶ The documentation of the fireworks display is done “in order to emphasize the ‘event’ dimension, the dimension of action, in what makes a city.”⁵⁷ Tschumi states, “Architecture is as much about the events that take place in spaces as about the spaces themselves.”⁵⁸ He continues to discuss the fact that his statement is not advocating for the design approach of form follows function. Instead, the suggestion of programs and spaces colliding in an organized intermingle; combining and

⁵⁴ Tschumi, Bernard. *Praxis: Event-Cities*. 1994. Cambridge, Massachusetts: The MIT Press, 1998. p.16.

⁵⁵ Tschumi, Bernard. p.19.

⁵⁶ Tschumi, Bernard.

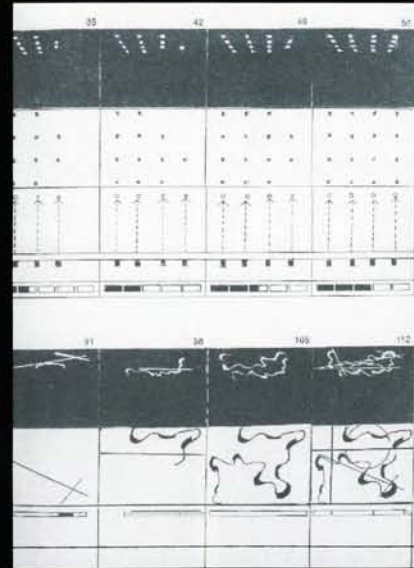
⁵⁷ Tschumi, Bernard. p. 16.

implicating one another to form a new product of architectural reality.⁵⁹ Tschumi hints at the ideas of “crossprogramming”, “transprogramming”, and “disprogramming” as a way to realize this “intermingling”, and allow for the question of the construction of technology, not the technology of construction.⁶⁰ As a result of this rethinking and reshaping of architecture, experience through the city and its space will alter the events and produce a new type of social interaction.



Fireworks for this event were scheduled by Tschumi to reveal in sequences of point, line, plane and shape, the order and infrastructure of the park.

Fireworks become a temporal spectacle, an event to enjoy with many and appreciate by oneself.



⁵⁹ Tschumi, Bernard. p. 13.

⁶⁰ Tschumi, Bernard. p. 13.

Precedent Studies: *Movies and TV shows, such as Koyannisquatsi, Phone Booth, and 24*

▪ **Facts and Statistics:**

- Our culture has also produced works that display these ideas of the present as an event. This documentation includes the ideas of display from individual and shared experience on a more visible level. From outside of this “event”, the audience begins to learn of these inter-connections of individual and shared events and how they begin to impact each other. Consequently, the viewer is also sharing in the experiences of the actors and actresses and experiencing their own separate individual connection of experience. In the movie *Koyaanisquatsi*, the movement at which we live becomes the space that is not only visible from outside the system, but also within it. This can be evidenced by the perspectives of waiting at a train or subway platform, to the view from the top of the tallest skyscraper, to the perspective of watching the sun trace its shadows on the landscape throughout the entire day. As a result, this movie makes daily transformation and everyday transportation an event.
- **Relevance:** These precedents are relevant to the abstract because they explore the characteristics that events can produce. The event exhibits a spatial quality elevating experience of the event to a different level. The temporary identity of the event reveals an emotional yet physical link to these transporting environments. The transformation links layers of prior community tighter through the interaction involved by the event. As a result, future interaction continues through the joint celebration of the event and foresight to acknowledge the possibilities of the event arriving again.



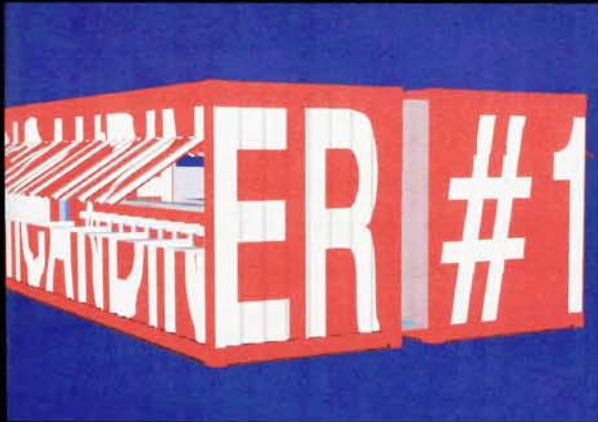
▪ **Facts and Statistics:**

- “In this prototype for a shippable American diner, two containers are coupled leaving a gap in between. Cuts in the corrugated metal skin of the containers create long horizontal windows along their sides. The restaurant name-American Diner #1- is printed with fluorescent paint on the outside, and runs around the entire volume, turning the building into its own three-dimensional sign. One container serves as the dining room, while the other houses the kitchen, entrance, and restrooms. A row of stools runs along the edge of the dining container facing a long counter that juts out of the opposite kitchen container. Sunlight pours onto the counter through the space between the two containers, which is sealed with glass. The container will be fully converted and furnished in the United States and then shipped to Japan for installation.⁶¹
- One interesting twist that this project takes is the exporting of a manufactured product for the United States to Japan, rather than the inverse. This might be some sign of hope for U.S. businesses that suffered from the successful Japanese invasion of manufactured goods during the last half of the twentieth century. Detroit was one of those cities that were hit hardest by this impact.

Some key characteristics that give further meaning to the project include the use of a transportable/transformable container and space. Ready made, right to the door of its future owner, just like any other product shipped, this dinner also has the conceivable opportunity of hosting guests during its voyage to its destination. The treatment of the containers skin as transforming part of the whole gives the flexibility of the diner an easily marketable image, along with where it was made. The connection point between spaces is an interesting blur between the kitchen and dining room, serving as the “bar” or main counter isle.

⁶¹ Lamster, Mark, ed. *URBAN SCAN / LOT/EK*. New York: Princeton Architectural Press, 2002.

- **Relevance:** This project is relevant to the abstract because it explores the transportable/transformable aspect of mobile architecture in a more dynamic way. Process is included from start to end product. Issues regarding shipping are considered. The flexibility of the skin to not only adapts to two different stages, open or transporting, but also utilizes itself as a promotional piece for the diner. Aspects of the process can be seen in the whole, reflecting its current and past states of space (i.e. industrial process, manufactured process, transportable process, Marketing process, ends up at your plate).



The Transformation of the diner is experienced as it travels as well as the event of opening and closing. Free advertisement wraps the container, producing an awareness of an unconventional dining experience.

Interior perspectives reveal that the character of the shipping container is preserved because of the need connection between two programmatic forms, the restaurant and the kitchen.



▪ **Facts and Statistics:**

- The work of Jennifer Siegal and the Office of Mobile Design appears to have much interest with the connection of mobility, space, and design. In the project iMobile, “a movable permanent connection to global communications networks with an ability to work as the advertising pavilion for the latest systems in information, hardware, and software”⁶² is introduced. This movable and dynamic workspace evolves not only with the changing systems of information, but also transforms itself with a flexible skin, adaptable to multiple environments and needs. To quote the book *PREFAB*, “iMobile is a mobile work space, light and flexible. It is an asset into a society in a permanent state of change.”⁶³ One interesting twist that this project takes is the exporting of a manufactured product for the United States to Japan, rather than the inverse. This might be some sign of hope for U.S. businesses that suffered from the successful Japanese invasion of manufactured goods during the last half of the twentieth century. Detroit was one of those cities that were hit hardest by this impact.

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- **Relevance:** iMobile has a very well thought concept for handling the needs of a changing society through a mobile trailer that transforms to advertise not only a company, but also technology. iMobile is transportable from site to site via a semi-truck. It does show some temporary presence by unleashing itself from its vehicle. One question that leaves me to consider the implications of the project is the statement, “The self-sufficiency and ease of transport of the piece takes in anywhere and

⁶² Bahamon, Alejandro. *PREFAB: adaptable, modular, dismountable, light, mobile architecture*. 2002. New York: Watson-Guptill, 2002.

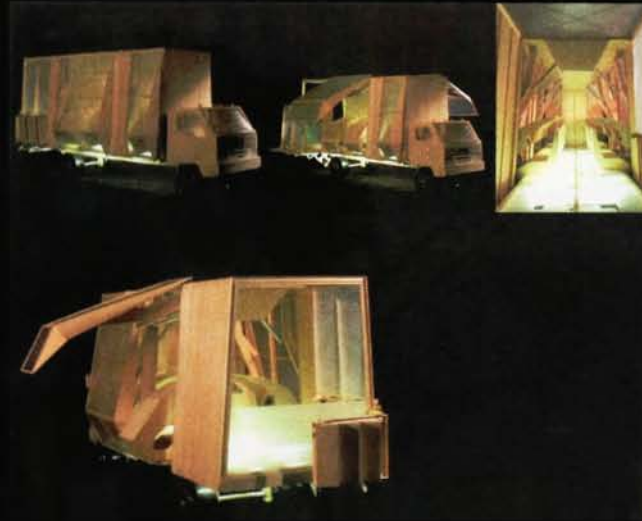
⁶³ Bahamon, Alejandro. p.33

lets it generate the model for a future city."⁶⁴ I believe that this type of space does have a good suggestion though; the thought that life can be instilled in some existing framework through a mobile vehicle of space.

This project is relevant to the abstract because it explores the world of the high-speed and borrows ideas from that changing existence. Mobile, flexible, transformable, and an identity that acts as image for a more deeper understanding of technology; these characteristics embody the attitudes of current high-speed development and growth.



Studies of the transformable office unit space include studies in motion and change within both exterior and interior conditions.



Transformation is displayed as an event, opening and closing., the energy and potential of a interactive office and workspace with portable amenities is available. Free advertisement wraps the container, producing an awareness of an uncoventional dining experience.

⁶⁴ Bahamon, Alejandro. p.32

▪ **Facts and Statistics:**

- The interior space of Clive Wilkinson Architects utilizes low-budget materials and strategies and in turn achieves a cost-effective, inventive space within an existing warehouse structure. The interior solution starts with an interest in alternative, sustainable strategies, including multiple 4-by-8 foot skylights for optimal daylight and only air conditioning work and task oriented spaces with low ceilings.

Shipping containers were used as “productive pods” and composed a “cityscape”, especially in regions where a unique placement of 2x3-stacked containers created what became known as a “six pack.” Colors distinguish what each “box” is to be used for. Rethinking what potential these cost-effective, creative spaces could do, holes for extra office space, entrances, views, doors, work space, and other elements related to site placement were programmed giving unique spatial qualities and experiences.

White Canvas “umbrellas” stretch from the roof supporting grid above, creating “neighborhood tents” that distribute air, diffuse light, and dampen sound. These spaces also provided a layer for the concealed distribution of air, power, and sprinkler systems. As a whole, the project reconsiders the value of economical, yet extremely innovative space as a solution to “office politics.”⁶⁵

- Clive Wilkinson Architects use of the space of a warehouse as a type of framework in which these elements are placed within a framework are based primarily on what functions have relationship to each other. One negative about the project is the lack of windows within a warehouse space. Designers and all people need creative views of not just architecture, but of other observable characteristics and objects as well.

I think that the project handles the warehouse space fairly well otherwise. The idea of the shipping containers creating a form of “Main Street” is an interesting condition within an interior environment. While the containers are more permanent, there is a foreseeable ability to believe that vehicles could carry the office to a

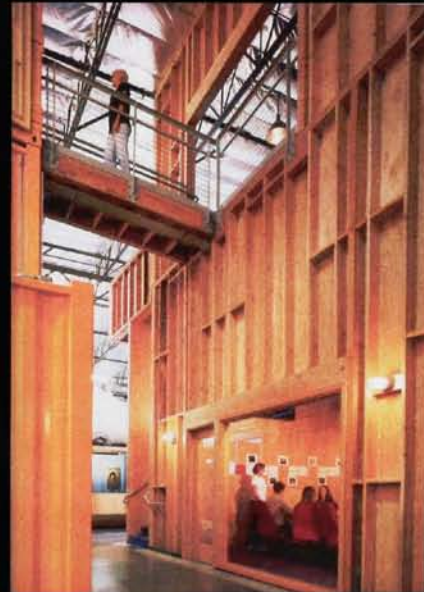
⁶⁵ Cohen, Edie. “Economy of means.” *Interior Design* May 2003: 254-261.

possible new site in the future. Other elements are nice too. A sense of work place is attached with industrial features and materials, and top-lit spaces from the skylights above with no major negative connotations.

- **Relevance:** This project is relevant to the abstract because it explores the concept of container at a different sense of site. The interior application of the mobile shipping containers and other industrial materials gives a sense of industrial performance that is portrayed in the workplace setting, flexible to any difficult situation, and a creative identity. Stacked containers reveal a connected space that is normally unimagined when passing by these common cargo boxes.

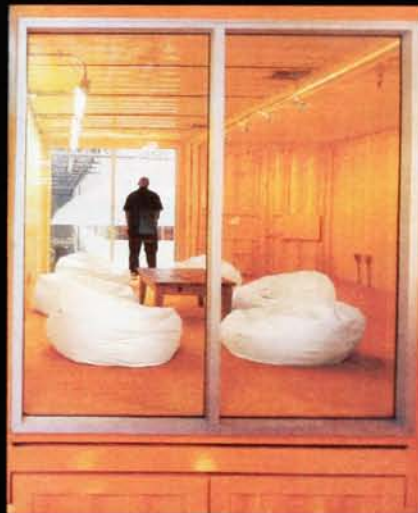


A main street of shipping containers, sheltered by tensile canopies, the unique look at the low cost and energetic space of the shipping container provides a solution for the office space of Clive Wilkinson Architects.





Stacked spaces are occasional opened by the removal of a container side. Expansive windows give a glimpse into the space inside these cargo boxes.



Site Analysis Documentation:

The process of understanding and identifying the sites and circumstances for this investigation involved a set of steps that provided information about the character and value of each place. While documenting the sites, a timeline was created illustrating the time of day of the observations. Recorded were important landmarks of time within the sites. These questions show the rigger of the timeline and allow the reader to understand and begin to sense what the sites feel like when present during this timeframe. When did the observer arrive? What were they doing during this time? What influences impacted the observer? Were there any senses triggered that indicated place within placeless-ness? When did the observer leave?

In addition to the timeline, a “section” of time, images were taken attempting to derive what the experience of time and the presence of change can do to the site. These images have been termed “ten-second sections” and look at either stationary points and the change over the period of approximately 10 seconds or provide panoramic images of the site ten seconds at a time. Other images were taken as well, indicating important characteristics, views, and the materiality of the site.

Finally, “narratives” were written for each site that looked at the moments of thought that a human may experience or think of while occupying the site, whether within, alongside of, or outside of the landscape of the freeway. At the intersection of I94-I75 the individual was a local student at an elementary school named Alex. No older than the second grade, the “narrative” attempted to look into the insight of a child and try to understand his feelings about where he attends school and what is important to him and his life. Similarly, at the intersection of I96-M39 the narrative looked into the personality of an everyday traveler that constantly passes the site and has formed a connection with the site over the past several years. Also named Alex, the individual attempts to describe all the thoughts that run through the mind of a driver while passing through the site. A character about the human being and about the essence of the site becomes revealed. For all the spaces between these two intersections, a narrative is left blank for persons who in some way are connected or know of these conditions to describe who they are, how they feel, and indirectly identify the character of the site.

The process of identifying site in this manner gave a deeper understanding of site, even temporary site, and resulted in a recognition of the changing character, and the value of sequence through the site. Shifting and transformation became adjectives and verbs for these sites, and their importance could be seen as possible factors that impacted the design of the project.



Overall Project Program:

The intent of the investigation as it turned from thoughts and concepts to the actions of the design process was to apply the proposal to a more regional context. Within the City of Detroit and the Metro Detroit area eight major freeways and interstates provide the main arteries and avenues of travel for the today's city. Over 300 miles of freeway run through the general area of the city, and the realization that about half of the space of the freeway is devoted to producing right-of-ways and brown-field conditions approximates the potential for a park-scape would tremendously green the by-ways of the city. 150 miles of park-scape could line Detroit's freeways providing an interesting connection between not only separated islands of the city, but also connections between the city and the outer suburbs, and the green-scape to larger interactions. The result would improve the image of the city, the health and well-being of its residents, and allow for a new respect to be formed for the freeway as a connector of not only destination but also of temporal society to permanent residents.

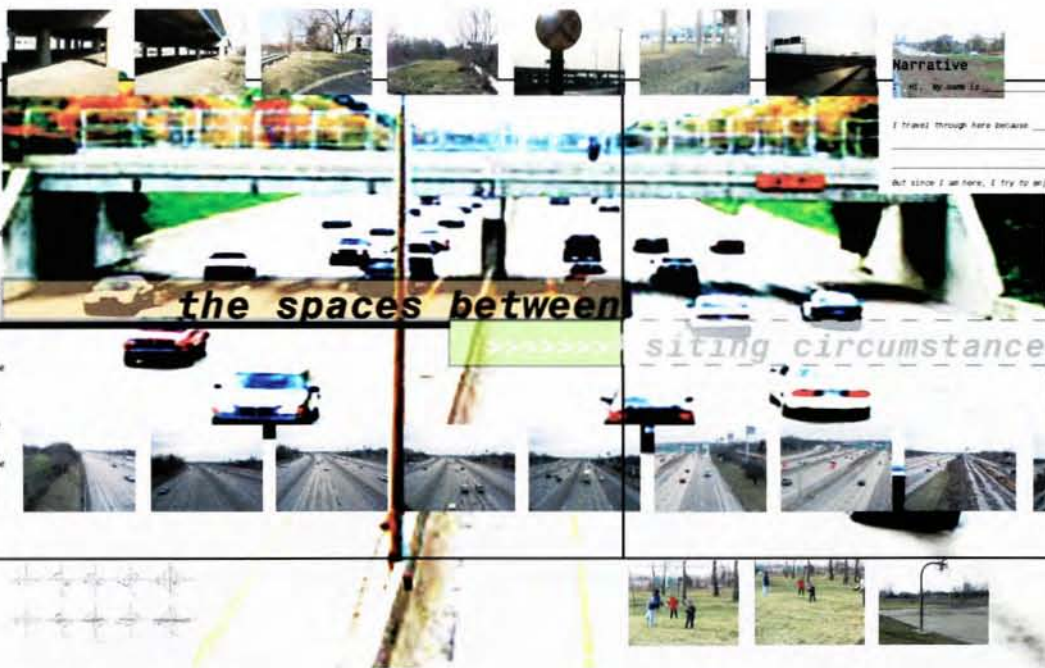
This greenbelt along the freeway paths would provide unique activities along side its edges. Basketball courts, a bike path, a bike rental and repair station, miniature golf, and other activities of recreation, relaxation, and enjoyment would improve the devastated city along the freeway and strengthen thriving areas of the metro area. Large intersections of the freeway would allow for larger "follies" to occur. A drive-in theater, a roadside motel, a performing arts center, or even a neighborhood could revitalize these dead spaces of urban landscape. Malls, shopping centers, and restaurants all ready occur along the corners of the freeway intersections in most suburban conditions, however, no built construction has taken advantage of the central core of the actual freeway intersection. The occupation of the center might allow for public space and privately owned public space to form a bond that is unknown to these current conditions.

Consequently, links between destinations, places, "follies", cities, separated and devastated communities of the city, and temporal culture to permanent society would evolve from the regional application of providing public space and green-scape within and along the freeway. Intersections would elevate interaction, and maybe social issues regarding obesity, violence, and diversity might become negated.



Time Schedule/Sections

- 4:40 arrive at the site.
- 4:45 Panarams.
- 4:46:30 - 4:47:40 10 second sections
- 4:48:30 - 4:49:40 10 second sections.
- 4:49 Church Panarams; discover that no one uses the sidewalk on this side of west 11 mile road.
- 4:51 Hub cap is within view of our walk along the gravel shoulder of the frontage road next to northwestern highway. the hub cap is unable to be seen because the fence is too unstable to climb over.
- 4:54 Numerous moving van gives extra advice regarding semis.
- 4:54:30 - 4:55:00 panarams; 10 second section.
- 4:55 Both the Lodge and the Weather can be seen from our angle as is the case with much of this area.
- 4:56 A large flock of birds flies overhead.
- 4:57 These flock of birds cloud the gray sky and occasionally rest on electrical lines and communication towers that cross and dot the extended intersection.
- 5:00 Even the local brewery has a service tower that lines the freeway and networks itself aside for public use to killing participants.
- 5:01 the cloudy day still has a glow of sunlight illuminating the gray color of the sky.
- 5:01 - 5:05 drive to the lower island of empty land within the intersection rather than documenting from the edges.
- 5:05 - 5:15 My partner and I try to understand the scale of the freeway, its signs and its construction equipment relative to the human body. We consider the uses of this equipment and who the user is.
- 5:15 Panarams - 5 second sections
- 5:17 Panarams - 10 second sections
- 5:18 Twilight has set in over the landscape.
- 5:21 10 second sections
- 5:27 Panarams - 5 second sections



Narrative
 4:45 - Panarams 10

This is my experience

I travel through here because _____
 _____ if I wasn't here right now, I'd be _____

But since I am here, I try to write _____
 I could not know this area well. If I could not find my destination I would _____

When I drive past another vehicle I think _____



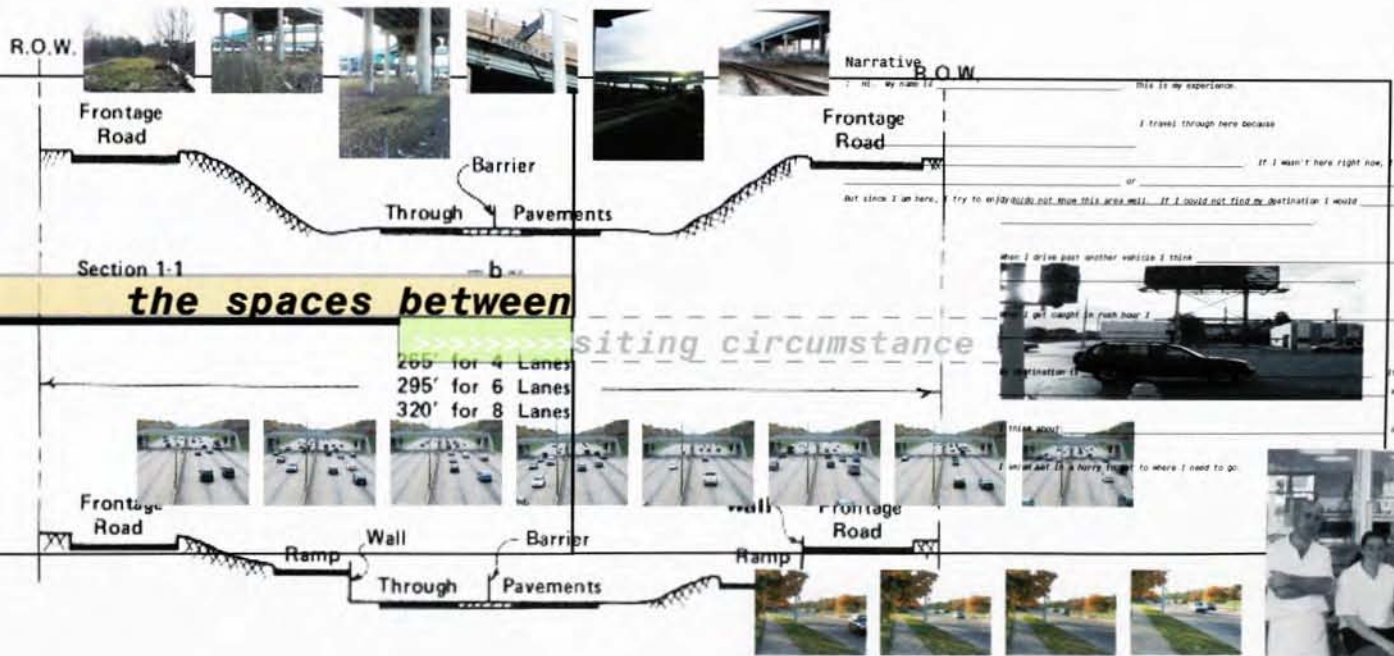
My destination is _____
 It is important to me because _____

I think about _____
 _____ as I drive _____



Time Schedule/Sections

- * 4:00 arrive at the site: road work slow down traffic on northbound Livermoir.
- * 4:02 car wash is open.
- * 4:05 I purchase a hot chocolate from Tom's Place Coney Island at the corner of Fenkell and Livermoir. There I meet Danny, a chef at the restaurant who apparently used to work at U of D Coney Island. He says that he recognizes me. Honestly, I've only been there once in over four years.
- * 4:08 Danny lets me know that the waitress who made my hot chocolate is having her birthday today. He asks if I can take a photo, kind of like a Polaroid photograph.
- * 4:09 Some cars run a red light at Fenkell and block the intersection as a result.
- * 4:10 The screech of brakes. That car needs to replace them before they get in an accident.
- * 4:15 Road work continues.
- * 4:17-4:18 I walk over the freeway.
- * 4:19 A man walks down Midland Street heading westward into the setting sun.
- * 4:20 A car honks its horn.
- * 4:21 10 second sections.
- * 4:25- 4:35 I warm up in my car.
- * 4:37 Someone honks their horn grand marquis for getting in their way.
- * 4:38 People pumping gas at the Mobil station.
- * 4:39 No one is pumping gas at the pump now.
- * 4:40 A man and a woman wait for the bus at the corner of Fenkell and Livermoir.
- * 4:42 Danny tells me that Donna is the name of the waitress.



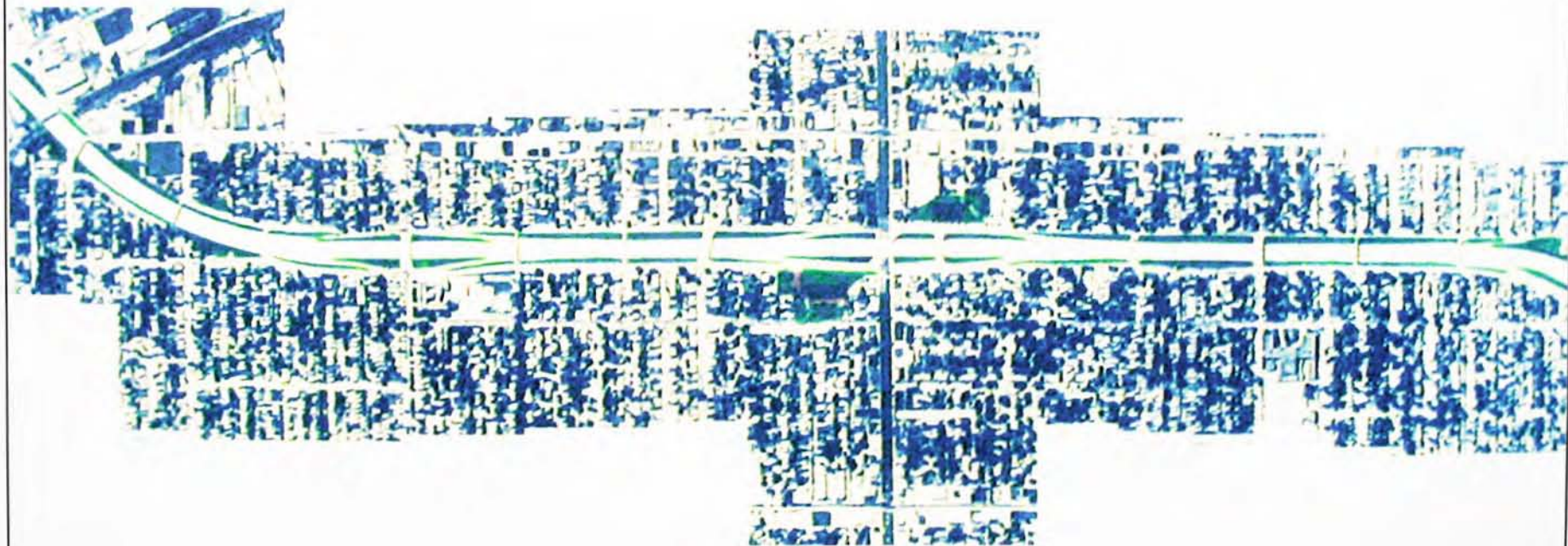
This is my experience
 I travel through here because
 If I wasn't here right now, I'd be
 or
 But since I am here, try to *withhold* out this area well... If I could not find my destination I would
 When I drive past another vehicle I think
 When I get caught in rush hour I
 destination is
 It is important to me because
 miles away.
 as I drive



the spaces between

siting circumstance

greenbelts & interactions



The Spaces Between: *Site Analysis + Programming*

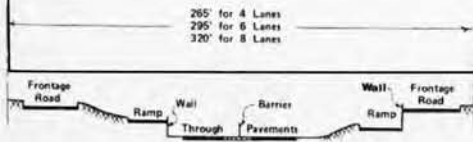
▪ **Site Data: Description**

- The surface of the site is sloped from the service drive down to the freeway entrance ramps and mergers. Cuts are made through the greenbelt for vehicular access and periodically the surface changes between lawns and green-scape to stone or other hard surfaces, especially underneath overpasses. Elevated structures and overpasses occur around the site as well, but 14-15 feet of clearance is provided so as to not interfere with the main program of the site. The challenges stem from the possibility of using the sloped space for primarily level activities.

Storm drainage and water runoff appear to be primarily non-existent, occurring only for the usage of the freeway. Most runoff will be able to drop down the sloped sides of the greenbelt into the freeway drainage system or become absorbed by the green-scape.

The general location of the programs on the site is to occur on an extremely large parcel of unused landscape. Access to the site by vehicle is possible through the shoulder of the freeway, service drive, or overpass. However, the standard vehicle is unable to utilize this green-scape. Pedestrian access is also gained through these vehicular access points or along points that merge into the path.

This area of Detroit has experienced mainly decline through the years. These spaces currently are predominantly under-maintained and illustrate a disregard for those who live near the space of the freeway and its landscape. These strips emphasize the decay of the urban landscape through the automobile. Visible images of decline are accentuated by the fast-paced frequency of blighted buildings, burned-down homes and separated communities.



Major arteries of vehicular flow intersect at this site. The lowest point of the site is the ground plane of the freeway operating primarily 3 lanes at a speed 55-65 mph. Service drives are typically 3 lanes at a speed of 35 mph, with one lane residential streets within the area traveling at 25 mph. Commercial streets and overpasses are usually 2-3 lane avenues of traffic running in each direction at a speed of 35-40 mph.

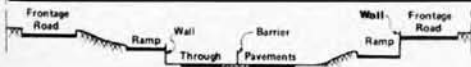
Site bearing capacity is primarily unknown at this time. However, the site is able to bear heavy machinery and small shelters or boxes for utilities and other infrastructure.

There is minimal landscaping provided on much of the site. Small and medium sized trees and other shrubs line the freeway edge to provide filler for the vast voids of space. Occasionally, lighting for surface roads and freeways may line the site.

Utilities appear to be housed within small buildings along the freeway. This infrastructure may or may not be adequate to service the new proposal.

Zoning requirements for this particular property are unknown at this time because the site is within the existing right of way.

265' for 4 Lanes
295' for 6 Lanes
320' for 8 Lanes

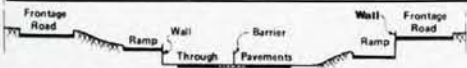


Project Program:

- **Space Details Sheet: *Spaces between; park-scape***

space:	function:	activities:	special considerations:	Equipment/Furnishings:
<ul style="list-style-type: none"> • Storage Stations • Bike Path • Pedestrian Path • Sitting areas • Urban intersection plazas • Landscaping • Lighting 	<p>storage of equipment</p> <p>path for cyclists</p> <p>path for walkers and runners</p> <p>areas for relaxation and sitting</p> <p>brick-scape that allows re-surfacing of bike path and an opportunity to</p> <p>Soften freeway edges, create a greenbelt</p> <p>nighttime safety, security, welfare, and park usage</p>	<p>pavilions and stands of temporary business</p>	<p>integration with paths and larger intersections</p> <p>grated steel mesh thick enough to hold loads and provide a slip resistant surface, drainage</p> <p>stone insets within a steel grid-work</p> <p>benches, steps, and railings</p> <p>cross ramps and city avenues</p> <p>diversity of plantings and distinction through separation of the order between wild and designed.</p> <p>path lighting elements occur every 20 ft; freeway lighting elements occur every 100 ft.</p>	

265' for 4 Lanes
285' for 6 Lanes
320' for 8 Lanes



▪ Programming: *Verbs*

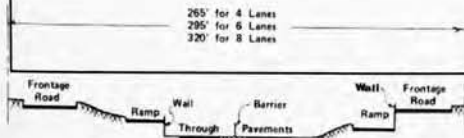
- **Reflect and come to a deeper understanding; a rite of way:** *bike path + nature preserve*

- The focus of this portion of the program is to reconnect the lost landscape that surrounds the scars of one form of urban decline. Follow the path. Connect to current choices in the past. The ceremony provides mental and physical space for personal understanding as well as an understanding that breaks down life, the impact of human b within this high velocity space, and hopefully instills meaning. Flows of individuals who provide traffic enjoy what is alive in a space that once was separated. Senses over branches, or chirps, or the rapid swoosh of traffic below. Awe of what is around and within fills the space, the individual. Absorbing the considered distractions, a journey December the change is seen with the individual body and outside its natural settings. The awareness of how footsteps, fingerprints, and the rustle of movement of a temp permanent surface location to change perspective on life. Intersections cross providing a deeper meaning and a chance for interaction.

Proposed Programming Features:

The client desires a program that will act as a natural community space and nature preserve to promote social interaction for the existing community and the The primary focus by the development is to reconstruct the voids between existing freeway intersections and the infrastructure that periodically overpasses t scape and natural pathway oriented to both the vehicle and the pedestrian. This park-scape and path is to host occasional users and visitors during the day.

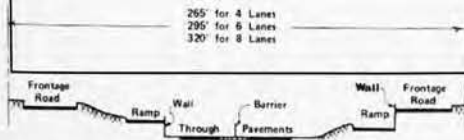
The space has the intentions of promoting interaction, but will also provide a usable greenbelt for exercise and reflection. Wild flowers and other natural pla in this strip offering a relief from concrete jungle and lawn-scapes. The natural conditions will allow travelers and users to experience the beauty of nature a of the freeway. The advantages of these plantings will also help reduce air pollution and CO2 emissions.



Occasional programs for exercise and activity will occur along this greenbelt. For instance, the roundtrip path connecting the follies that occur at various intersections of the freeway, can be used as a walking and/or biking trail similar to the trails provided by the national program called "rails to trails," or the countless other natural parks placed by government organizations. The path will follow along the freeway, elevating at large overpasses, and becoming elevated above the freeway and its shoulder when the situation for a cantilevered experience is allowed to occur. This challenge will also provide an opportunity for users to recognize where they are in respects to the urban fabric and avenues of the city. When possible within these greenbelts, other activities will be allowed to surface. Basketball and tennis courts, pavilions, bike rentals, and playgrounds ought to be considered for placement on top of larger areas of space between cloverleaves and on/off ramps. A precedent for this type of park-scape is the Park de la Villette by Bernard Tschumi in Paris, France, or the Landscape Park Duisburg Nord by Latz & Partners

Occasional shelters with these previously mentioned functions like bike rentals, equipment storage, maintenance sheds, and other functions will be placed approximately a mile or so apart from each other as well. These shelters are to be open, public structures preferably. The primary purpose of these shelters is to provide a space that provides activity, employment, and a community watch to protect the users of the bike path and of the freeway. Other purposes could begin to evolve from these shelters. Such purposes for programmatic elements include a payphone, a newsstand or even a miniature golf course.

Water fountains and restrooms could become another usage for these roadside shelters as well. This would provide both travelers and park users an opportunity to use somewhat necessary elements of built space and infrastructure. Similarly, an interesting lighting composition for the path and programmable planes and surfaces at night might encourage nighttime users of the park.



Schedule/Sections

5:00-5:05 6 cars are broken down on the side of the road; 5 are being attended to.

5:10 panoramic of M 39 northbound

5:11 3 people walk past my path and myself.

- o 1 male is asleep underneath the pedestrian bridge from where the panoramic was shot.
- o 1 teenager uses the pedestrian bridge to cross the freeway
- o 1 adult in his late 30's continues to walk along the service drive toward the end of the street.

5:12 1 car/employee of the Gateway Industrial Center leaves the exit only gate and driveway. Are they leaving for home?

5:20 Someone screams from their white catering van 'AAAAAAAAA' and drives past me.

5:20 I reply back with a loud burst of obscenities. No one hears my answers, the rush of vehicles overwhelms my voice.

5:22 A woman in a red pride blows her horn at me. I don't reply with obscenities.

5:23 a family continues to play out on their front porch.

5:26 an ice cream truck stops along the sidewalk. Enjoyment is brought through a mobile ice-box.

5:40 my vehicle and I embark on a mission; how long will it take to reach the other end of the express/local split during rush hour and construction?

5:44:20 The event of a rush hour 'anar!' begins at the M 39 stop sign. The clogged artery responds after the construction segment at I 96 and Schoelcraft Ave. during the drive 3 cars are seen on the side of the road.

5:46:26 My vehicle re-merges with the local segment of westbound I 96.



Narrative

Over the past 4 and half years, I pass by here everyday periodically. Some days the weather is beautiful outside and the bright blue of the sky provides a backdrop accentuating the freeway, the cityscape, and the movement of speed in the same sunline. The same sunrise shines on in the morning sunrise heating east toward the university, and again in the afternoon heading towards home. Still and void become all that I can see, as I squint my eyes and peer beneath my vision.

I read over the window just to get fresh air, but also to try to experience my run to whatever destination. The crisp, cool air makes a million sound as I pass by stationary structures that overpass and vehicles that are just too slow. The natural flow of traffic and air create an identity to this space.

Sometimes the sound of horns either from other vehicles or the industrial train, create an awareness of the temporary presence that everyone has in a fleeting blur of experiences of the way to point A to point B.

On gray days, the structures blend with the sky and a monotone color overwhelms my mind. At night some buildings reveal an another texture and glow while less active structure remain dark. Sometimes after a summer storm, the smell of rain gives me the the landmark speed record. It's here I've always been I pretend that I'm a power driver and I'm ready to break it setting the landmark speed record. It's here I've always been I pretend that I'm a power driver and I'm ready to break it setting the landmark speed record.

When I am not in a hurry to get to a place, I take it slow and prepare for what needs to be done during the day or mentally study for a substitution test.

I feel the turns of I want to. I feel the collapse of the overpasses providing a temporary relief as I travel underneath. I never know what it feels like going the opposite way at the exact same distance.

I probably shouldn't be thinking about all these issues while I drive but it's the only real conclusion upon that I have.

...ing on at the stationary places on the edge and the spaces between as I drive ...ly event, or made its something different, interesting, or infrequent.

What am I missing? There's no cell phone? I didn't leave anything at home did I?

I96 & M39 interchange

visiting circumstance



Location

Detroit, MI 48211

Find the...	Name	Intersection	Shortest route mileage
Closest police station	Detroit	Plymouth and Warwick	1.06 miles
Closest fire station	Detroit	Schoolcraft and Burt	2.9 miles
Closest hospital	Henry Ford	W. Grand Blvd and Lodge Freeway	9.33 miles
Closest elementary school	Dossin ES	Wadsworth and Faust	0.59 miles
Closest High School	Cody HS	Cathedral and Faust	1.5 miles

I96 & M39 interchange

visiting circumference

Closest office	Missy Fergon/Gateway Ind.	Glendale and Southfield	1.21 miles
Closest university	Wayne Co. Community College	Joy and Greenfield	2.5 miles
Closest playground/park	Judge C.E. Stein playfield	W. Chicago and Faust	1.22 miles
Closest cemetery	Grand Lawn Cemetery	MONIchois and Telegraph	5.76 miles
Closest public library	Detroit-branch	Fenkel and Grand River	3.18 miles
Closest museum/historic site	Children's Museum	Woodward and Kirby	9.32 miles

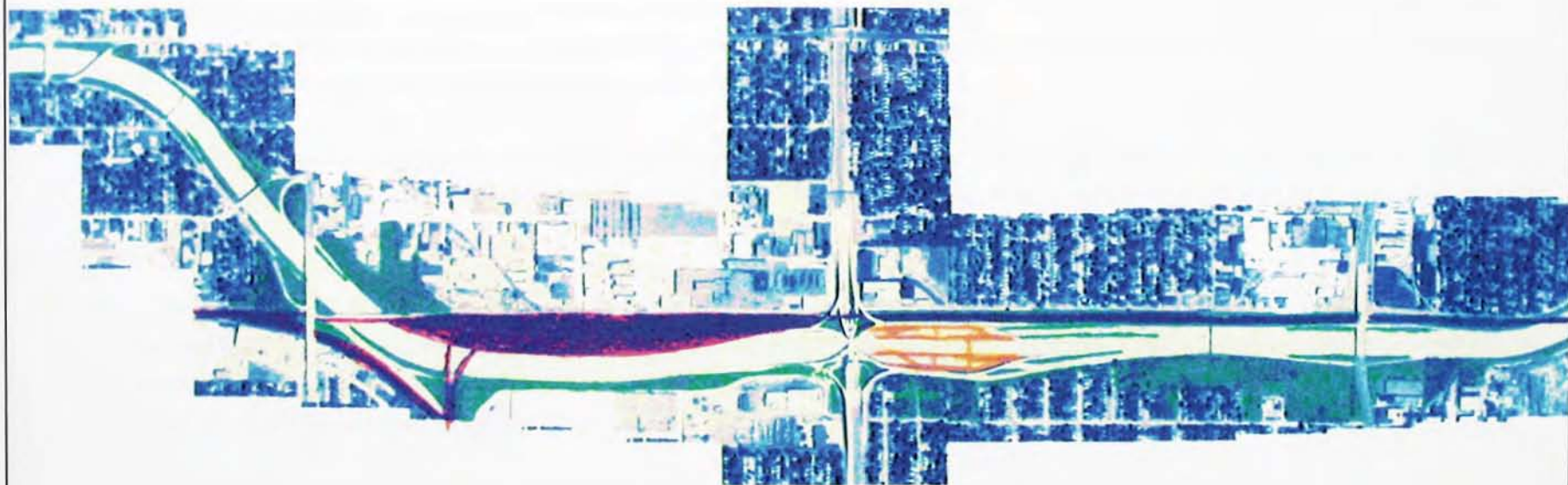
Miles from Downtown Detroit: 10.53 miles



I96 & M39 interchange

»»»»»»»»»»siting circumstance

greenbelts & interactions



Kozy Kamp
MOTEL

- **Site Data: *Description***

- The surface of the site featuring the motel is narrow and elongated with a peak formed by a slope made by both sides of terrain. Entrance ramps and mergers cut through the surface to form a division in the ground plane. Elevated structures occur around the site as well, providing an opportunity for additional usage of space either through the programs of the motel, or the park-scape. The remainder of the site is created by the voids left between the mixing bowl intersections and is intended for the usage of park-scape. The ground plane is of a similar character and slope.

Storm drainage and water runoff appear to be primarily non-existent, occurring only for the usage of the freeway. Most runoff for the current site will be able to drop down the sloped sides of the green voids into the freeway drainage system or be absorbed naturally. Drainage systems will be necessary for the elevated additions to be developed.

The general location of the programs on the site is to occur on 4 strips of green landscape between the freeway separations. These strips are about .20 miles long (1056 feet) and 40-50 feet wide, a total acreage of approximately 4 acres of unused landscape. Access to the site by vehicle will be through a separate ramp for entrance and exit and, if necessary, the shoulder. This bridge will be a one-way east, one-way west connector allowing one lane for parking and one lane for thru traffic. Pedestrian access will be also gained through this elevated bridge.

Located in an area of Detroit that has experienced decline in population, income, and other categories, the community has seen little in the way of new, major development. The character of the surrounding area and community can be described as mainly an industrial corridor along the Jeffries freeway with residential single-family dwellings surrounding these industrial complexes and infrastructure. The southwest corner of the intersection has a privately owned industrial warehouse and delivery center along with one of the Department of public works yards within the city. Residential use surrounds this industrial buffer. The northwest corner has a



similar character. An industrial distribution and shipping center is located here with ties to a railroad yard junction that fronts the freeway. This freight rail crosses I96 further west of the intersection and connects with the northeast corner. As the railroad continues to link with other lines east of the intersection, residential units cover both eastern corners. Neighborhoods are separated as a result of the vast freeway space.

Major arteries of vehicular flow intersect at this site. At the ground plane of the existing site, the Jeffries freeway (I96) operates 3 lanes express and 3 lanes local in each direction running east and west at speeds of 55-65 mph. The Southfield freeway (M39) operates below the surface of the Jeffries with 3 lanes of traffic running north-south at speeds of 55 mph. Service drives are 2 lanes at a speed of 35 mph, with 2 way residential streets within the area traveling at 25 mph. Commercial streets are typically 2 lane streets with a left turn median operating at a speed of 35 mph.

Site bearing capacity is primarily unknown at this time. However, the site appears to be able to bear heavy machinery and construction materials since its past usages have been construction centers for the process of roadwork and repair.

There is no landscaping provided on the site. The landscape is near the level of traffic so minimal obstructions are encouraged.

Utilities and their location are unknown at this time, but the supply might be located below the elevated structures forming the intersection on the site. This infrastructure may not be adequate to service the new proposal.

Zoning requirements for this particular property are unknown at this time because the site is within the existing right of way.



Project Program:

▪ Project Quantitative Summary: *Roadside Motel*

Space:	Number of spaces:	Net square footage per space:	total area:
• 1 Bedroom Unit	48	264 s.f.	12672 s.f.
• 2 Bedroom Unit	48	344 s.f.	16512 s.f.
• 3 Bedroom Unit	48	392 s.f.	18816 s.f.
• Parking Garage	1—166 parking spots	regular-162 s.f. each Handicapped-234 s.f. each	107,200 s.f.
• Receptionist	2	1200 s.f.	2400 s.f.
• Fire Stairs	8	308 s.f.	2464 s.f.
• Elevators	11	100 s.f.	1100 s.f.
• Conference Room	2	3000 s.f.	6000 s.f.
• Restaurant	1	5700 s.f.	5700 s.f.
• Kitchen	1	800 s.f.	800 s.f.
• Hostess area	1	300 s.f.	300 s.f.
• Bathrooms	2	200 s.f.	400 s.f.
• Racquetball Court	2	2400 s.f.	4800 s.f.
• Locker Rooms	2	1000 s.f.	2000 s.f.



• **Project Quantitative Summary: *Roadside Motel continued***

Space:	Number of spaces:	Net square footage per space:	total area:
• Swimming Pools/Saunas/ Shuffleboard	1	3000 s.f.	3000 s.f.
• Management Offices	5	240 s.f.	1200 s.f.
• Electrical Room	1	900 s.f.	900 s.f.
• Mechanical Room	1	1000 s.f.	1000 s.f.
• Laundry/Services/Storage	1	700 s.f.	700 s.f.
• Lobby	1	2100 s.f.	2100 s.f.



▪ Space Details Sheet: *Roadside Motel*

space:	function:	activities:	special considerations:	Equipment/Furnishings:
<ul style="list-style-type: none"> • 1 Bedroom Unit • 2 Bedroom Unit • 3 Bedroom Unit • Parking Garage 	<ul style="list-style-type: none"> • motel unit • motel unit • motel unit • vehicular 	<ul style="list-style-type: none"> • sleeping, bathing, storage • sleeping, bathing, storage • sleeping, bathing, storage • parking automobiles 	<ul style="list-style-type: none"> • privacy, adequate space and storage • privacy, adequate space and storage • privacy, adequate space and storage 	<ul style="list-style-type: none"> • bed, night table, luggage rack, lamp, toilet, sink, shower • bed, night table, luggage rack, lamp, toilet, sink, shower • bed, night table, luggage rack, lamp, toilet, sink, shower
<ul style="list-style-type: none"> • Receptionist • Fire Stairs • Elevators • Conference Room • Restaurant • Kitchen • Hostess area • Bathrooms • Racquetball Court 	<ul style="list-style-type: none"> • reservations • egress • lecture space • dining • food prep/storage • greeting area • restroom • recreation 	<ul style="list-style-type: none"> • accommodating guests • conferences, meetings • food prep, storage, service • cooking, washing dishes • waiting area • sanitary • racquetball 	<ul style="list-style-type: none"> • computer equipment and infrastructure • enclosed in glass to show activity 	<ul style="list-style-type: none"> • file drawer, printer, fax, internet, phone, intercom • toilet, sink



▪ Space Details Sheet: *Roadside Motel continued*

space:	function:	activities:	special considerations:	Equipment/Furnishings:
• Locker Rooms	storage, dressing area	storage of clothes, bathing	close proximity to pool & racquetball courts	lockers, showers
• Swimming Pools/Saunas/ Shuffleboard	recreation	swimming, recreation	wet surfaces, latent load	pool, shuffleboard, sauna
• Management Offices	office space	office, file storage	computer equipment and infrastructure	file drawer, printer, fax, internet, phone, intercom
• Electrical Room	utilities	electrical supply	power for all units and services	
• Mechanical Room	mechanical service	mechanical supply	enough equipment for public spaces	
• Laundry/Services/Storage	motel upkeep	laundry, janitorial, storage	proximity to management	washing and drying machine, adequate shelving
• Lobby	social space	greeting, meeting	seating and central meeting space	chairs, sofas, tables



▪ **Technical Systems Analysis: Roadside Motel**

Units: Occupancy group R-1, 2 hour fire rating on materials required, type I-B, Residential grade Sprinkler System NFPA 13 R

▪ **Life Safety:**

○ *Construction Requirements:*

- Height and area limitations: no more than 60' tall or 4 stories in height
- Fire Resistance Ratings: 2 hour fire rating on materials required, unlimited floor area per floor

○ *Means of Egress:*

- Travel distance: unsprinklered: 200 ft sprinklered 250 ft
- Number of required means of egress: min. 2 exits
- Remoteness: 75 ft.
- Egress width based on occupancy: 44 in.⁶⁶

⁶⁶ Allen, Edward and Joseph Iano. *The Architect's Studio Companion: Rules of Thumb for Preliminary Design.* 3rd ed. New York: John Wiley & Sons, Inc. 2002. p.9-401



Swimming Pool (indoor)/ Tennis courts (indoor)/ Lecture Halls: Occupancy group A-3, 2 hour fire rating on materials required, type I-B, sprinklered

▪ **Life Safety:**

○ *Construction Requirements:*

- Height and area limitations: no more than 180' tall or 12 stories in height
- Fire Resistance Ratings: 2 hour fire rating on materials required, unlimited floor area per floor

○ *Means of Egress:*

- Travel distance: unsprinklered: 200 ft sprinklered 250 ft
- Number of required means of egress: min. 2 exits
- Remoteness: 75 ft.
- Egress width based on occupancy: 32 in.



Restaurant: Occupancy group A-2, 2-hour fire rating on materials required, type I-B, Sprinklered

▪ **Life Safety:**

○ *Construction Requirements:*

- Height and area limitations: no more than 180' tall or 12 stories in height
- Fire Resistance Ratings: 2 hour fire rating on materials required, unlimited floor area per floor

○ *Means of Egress:*

- Travel distance: unsprinklered: 200 ft sprinklered 250 ft
- Number of required means of egress: min. 2 exits
- Remoteness: 75 ft.
- Egress width based on occupancy: 32 in.



▪ **Technical Systems Analysis: *Roadside Motel***

▪ **Structural Systems:**

○ *Parking Garage structure:*

- Appropriate material: Site cast Concrete two-way flat plate
- Typical economical span range: 12 ft. – 40 ft.
- Depth to span ratio in use: 20 in. columns, 20 ft. span, 9" depth of slab

○ *Motel units and levels of inhabitation structure:*

- Appropriate material: Site cast Concrete two-way flat plate
- Typical economical span range: 12 ft. – 40 ft.
- Depth to span ratio in use: 12 in. columns, 20 ft. span, 6" depth of slab

- Appropriate material: Steel curtain wall framing
- Typical economical span range: 5 ft. – 20 ft. tall; 2.5 in – 8 in sizes
- Depth to span ratio in use: 6 in. nominal stud size for studs over 15 ft. tall, 24 in. o.c.

- Appropriate material: Steel open web joists
- Typical economical span range: 12 ft. – 96 ft.
- Depth to span ratio in use: 18 in. depth of joists, 30 ft. span, 30 in. joist girder depth



▪ **Technical Systems Analysis: *Roadside Motel***

▪ **Mechanical Systems:**

○ *Motel/ Units:*

- Through-the-wall units: 24" - 26" width x 17" - 30" depth x 16" – 18" height
- Description: Contained in a rectangular metal box that is mounted directly in an opening in the exterior wall of the building, the only service distribution necessary to this type of unit is an electric cable or conduit.
- Advantages: ease of availability and installment; low initial costs; each room has independent temperature control; no ductwork or piping; operating costs can be lower.
- Disadvantages: high maintenance costs; short life expectancy; repairs occur within occupied space; equipment can become noisy and inefficient; Uneven air distribution within the room; no humidification available; High operating cost in temperature extremes; aesthetically unpleasing.⁶⁷

- Electric Baseboard Convectors: typically 3" deep and 7.5" high with elongated depths that run the course of the wall.
- Description: "Electric resistance wires in sheet metal enclosures are installed around the perimeter of the room at the junction of the floor and the wall. Room air circulates through slots in the enclosures by means of convection and is heated by the resistance wires."⁶⁸
- Advantages: quiet; distribute heat evenly; individual temperature control; low initial costs; no chimney required.
- Disadvantages: occupy considerable space along the wall perimeter; interfere with furniture placement; no air filters or humidifiers for the air; runs on expensive electric energy; a separate system is required for cooling.

⁶⁷ Allen, Edward and Joseph Iano. *The Architect's Studio Companion: Rules of Thumb for Preliminary Design*. 3rd ed. New York: John Wiley & Sons, Inc. 2002. p.158

⁶⁸ Allen, Edward and Joseph Iano. p.211



o Motel/ Public spaces:

- o VAV System: typically used in heating and cooling large buildings.
- o Description: "Air is conditioned at a central source. Supply and return fans circulate the conditioned air through ducts to the occupied spaces of the building. At each zone, a thermostat controls room temperature by regulating the volume of air that is discharged through the diffusers in the zone."⁶⁹
- o Advantages: high degree of individual control of temperature at a moderate cost; economical; self-balancing system.
- o Disadvantages: Cannot simultaneously heat and cool.



⁶⁹ Allen, Edward and Joseph Iano, p.148



▪ **Technical Systems Analysis: *Roadside Motel***

▪ **Other System Requirements:**

○ *Motel:*

- Elevators: 1 per 75 rooms plus 1 service elevator for up to 100 rooms and 1 service elevator for each additional 200 rooms; 2500 lb to 3000 lb capacity.
- Elevator sizes:
2500 lb elevator capacity: 6'-8" x 4'-3" inside car; 8'-4" x 6'-8" inside shaft
3000 lb elevator capacity: 6'-8" x 4'-9" inside car; 8'-4" x 7'-5" inside shaft
4000 –6000 lb freight elevator: 8'-4" x 10'-0" inside car; 10'-10" x 10'-8" inside shaft⁷⁰
- Vertical distribution:
Water closets: 1 per guestroom
Lavatories: 1 per guestroom
Bathrooms/ Showers: 1 per guestroom
Drinking fountains: none

○ *Restaurant:*

- Vertical distribution:
Water closets: 1 per 75 occupants
Lavatories: 1 per 200 occupants
Bathrooms/ Showers: none
Drinking fountains: 1 per 500 occupants⁷¹

⁷⁰ Allen, Edward and Joseph Iano. p.181



The Standard Motel Unit:

As with most motels, units are categorized as either singles or doubles, referring to the number of beds within the space. Typical units in most motels are generic in character and supply the perceived basics of the lodging standard. The five major functions of the roadside motel unit include a carport; an entrance/storage space; a sitting space; a sleeping space; and a bathing space. The equipment left for the guest to utilize within these units might include:

Entrance/storage

- closet, armour, or baggage rack
- large window to view the carport

sitting/dining:

- table for four with two - four chairs provided
- television with cable access and motion picture capability (VCR or DVD)

sleeping/bedroom:

- bed(s)
- individual unit air conditioning and heat diffusers
- night stand
- telephone
- lamps or wall mounts for lighting
- a mint and a bible



²¹ Allen, Edward and Joseph Iano, p.177

bathroom:

- shower
- toilet
- sink
- hotel provided towels
- and single-use soap, shampoo, and drinking glasses.

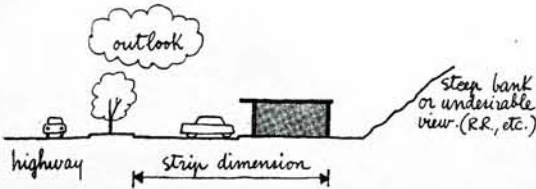
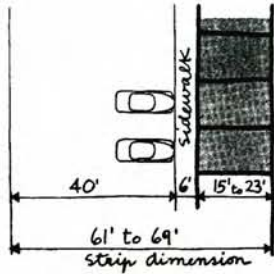
Only the shower and toilet are provided privacy, while the rest of the unit is open for multi-use space. One large window is punched into the façade, with large, unwieldy drapes attached for the possibility of privacy. Doors with 2 or more locks and a peephole provide a threshold between inside and outside.⁷²



⁷² Watanabe, Hiroshi. *Hotel Facilities, New Concepts in Architecture and Design*. Tokyo: Meisei, 1997.



The Standard Motel Unit: *Typical sizes and dimensions*



"The rental unit strip dimension, which becomes the basic planning element in these simple site plans, is made up of the rental unit, a pedestrian walkway, parking space, and access roadway." -Baker, Geoffrey and Bruno Funard. p.154

"A shallow site parallel to the highway will almost inevitably be best served by an elementary type of strip plan with front parking...too narrow for the units to be turned at right angles to the highway, and if they were moved far enough forward for rear parking, the rooms would be unpleasantly close to the highway."

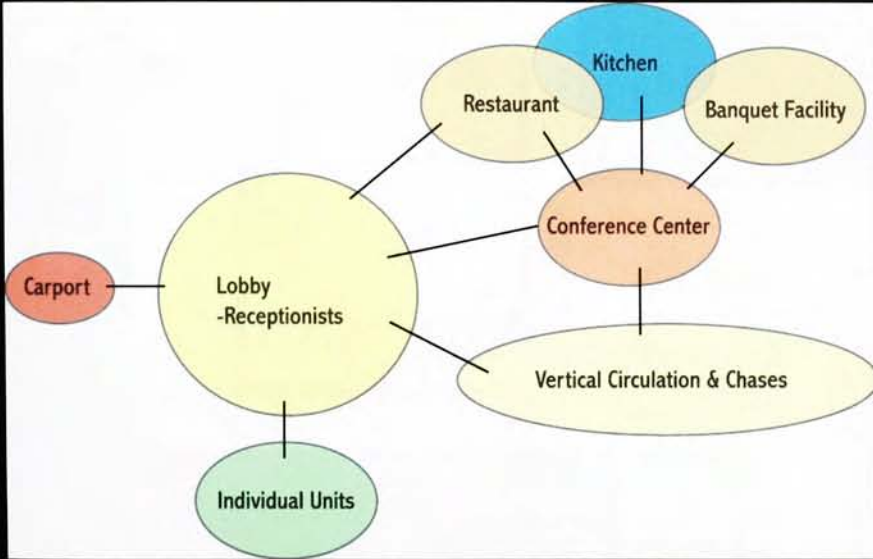
-Baker, Geoffrey and Bruno Funard. p.154

"If there is an opportunity for some outlook in the rear, even onto someone else's property, then the {space} can be greatly improved."

-Baker, Geoffrey and Bruno Funard. p.154

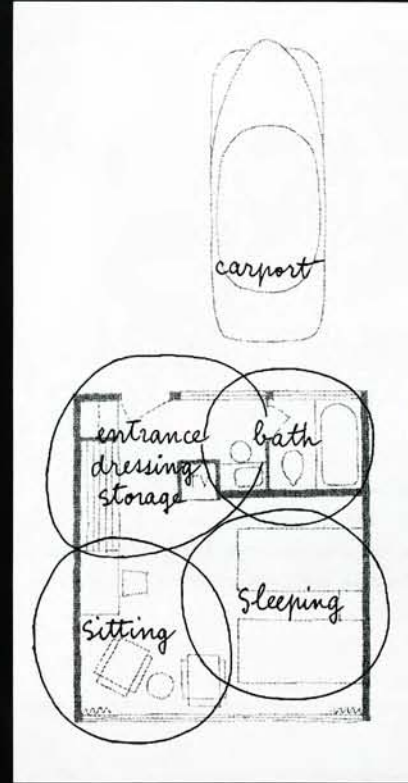


The Standard Motel Unit: Typical sizes and dimensions

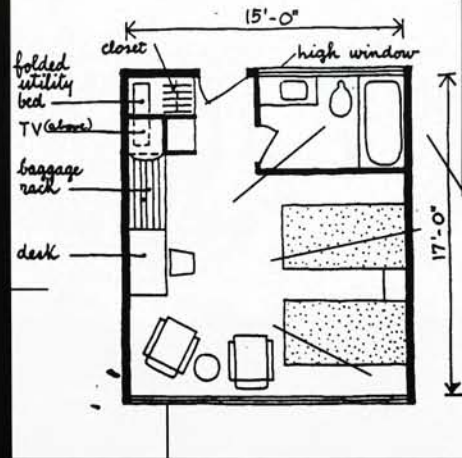


Idealized space diagram developed during the schematic phase of design. Details the flow and accessibility of the proposed roadside motel and its primary elements and connections.

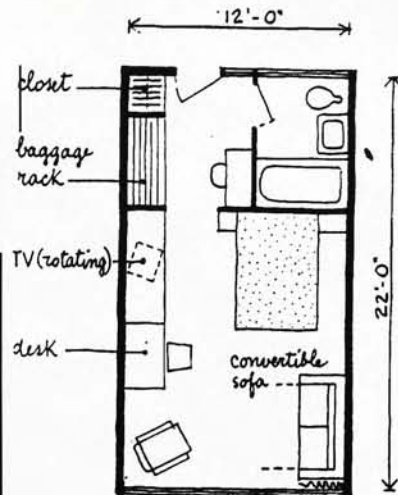
Suggested space bubble diagram by Geoffrey and Funard in their book, *Motels*, dating back to the beginning era of car culture, 1955.



The Standard Motel Unit: Typical sizes and dimensions



Suggested layout of space within a near square motel room diagrammed by Geoffrey and Funard.



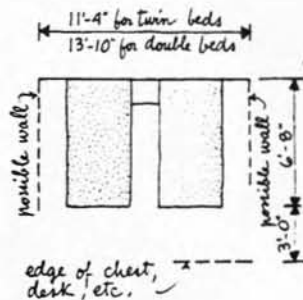
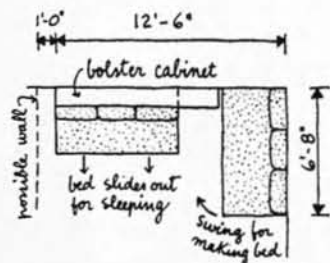
Suggested layout of space within an elongated motel room diagrammed by Geoffrey and Funard.



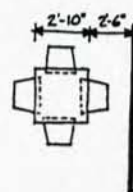
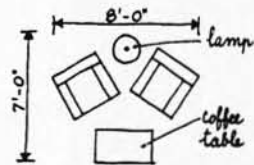
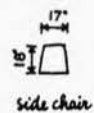
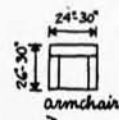
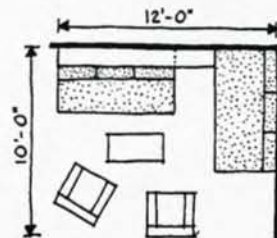
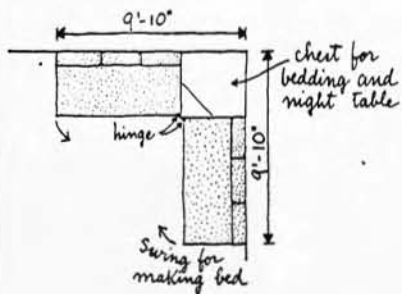
Idealized space diagram developed during the schematic phase of design for the possible flow and layering of space. Includes some additional spaces not included in the final program such as the kitchen and dining spaces.



The Standard Motel Unit: Typical sizes and dimensions



"Three typical bed arrangements. The two sofa bed plans each take less floor area than the onventional pair of twin beds at right angles to the wall. Space must always be provided for bed making." -Geoffrey and Funard. p.210

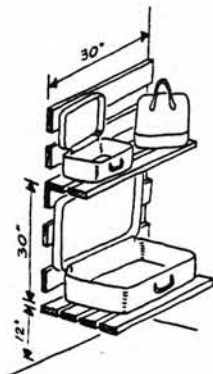
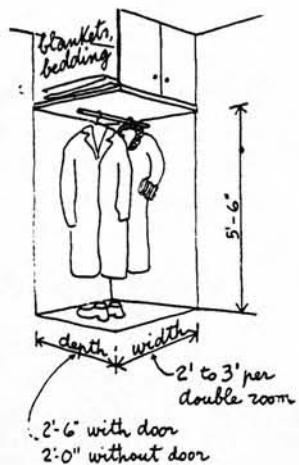


A variety of comfortable seating arrangements combining a single upright chair with a group of sofa beds and a coffee table.

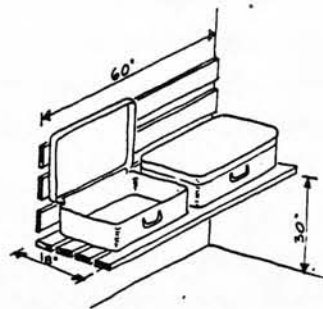
-Geoffrey and Funard. p.210



The Standard Motel Unit: *Typical sizes and dimensions*



"The baggage rack serves as bureau drawers. A single shelf is best, but if space is short, a double shelf is reasonable. Length depends on standard suitcase sizes." -Geoffrey and Funard. p.210



"The hanging closet for transients need not be closed, except for a dead storage space at the top." -Geoffrey and Funard. p.210



▪ **Programming: Verbs**

• **Kick back, get-away, disconnect, reflect:** *a roadside motel*

- Ready made units bring your house closer to the road. Throw away containers are used for temporary necessity. A feeling of shelter exists, safe from a blur of pavement and lights; the roar of moving machines; and the rush of time elapsed between day, morning, afternoon, and night. Vacancy in this grid of housing creates a rental membership with a temporal neighborhood. Living from a suitcase, adjustable settings reconfigure environment. Pull the shade or move a wall for a more private unit or display your preferences and welcome temporary neighbors to your momentary abode. Pack your blanket, pillow, tablecloth, silverware, kitchen sink, and cover your territory or appreciate the beauty of simplicity as a form of relaxation. There is no need to eat in your bedroom and the book of good news can be accessed through the connections made through the highly technical structure of the freeway.

Proposed Programming Features:

The client desires a program that will create units of temporary housing for travelers while having easy roadside access and is to act as a visible suggestion of place during the event of traveling on trips and vacations. Supplying a new social interaction that will help aid in the needs of travelers and the existing community is also a consideration by the group. The primary focus by the development group is to reconstruct the voids between the existing freeway intersection and its local/express divisions into an innovative roadside motel that is oriented to both the vehicle and the pedestrian. This motel along with additional programs to be shared by both the motel and the neighboring community is to host somewhere between 250-500 guests approximately.

Many of these guests will come into contact with the structure through the activity of driving along the freeway. Consequently, easy drive in access and exit from both local and express lanes is necessary. The drive is to lead to an inviting lobby space where receptionists are to confirm reservations either in person or by other means such as the cell phone, internet, or possibly through new communication systems such as the "On-Star" system. This lobby is to be welcoming and aid in the likelihood of choosing the motel because of good service, convenience, and quality spoken through both the employees and the architecture. A covered carport area is to be located as part of this experience aiding in the



comfort of prospective guests. While this entrance into the motel is a basic ideal for many other typical motels, the unique entrance off of the high-speed artery and its complications and opportunities will create something greater than the standard.

Shared public spaces for hotel guest only are to stem off this main lobby gathering area. For instance, a possible conference center could be placed to provide additional motel revenue. Similarly, a banquet facility could be provided. This banquet area could have connections to a more public restaurant/café with the kitchen located between the two for a sound buffer and increased service quality. An example of this typology of planning is the Atheneum Suite Hotel & Conference Center in Detroit, Michigan, which ties in a grand lobby center with its receptionist area and adjacency to a nearby restaurant.

Circulation corridors and service chases are to run vertically from this main lobby space acting as a gravitational center to the motel. Other vertical circulation and mechanical chases may be located near the ends of the structure along with secondary vertical chases and circulation that complies with code restrictions.

Horizontal circulation will lead guests to their units and should be open and well lit, especially during the day, as opposed to dark and compact. This space ought to have interesting views of the surrounding area as well as views that allow persons to check on their own personal automobile. These walkways could be indoor or outdoor, but should be sheltered as much as possible from inclement weather.

The vision for the motel unit:

The clients are eager to break this stereotype of motel design. They suggest that the list of industry standards for the typical unit is a good start, but the goal of the project is to attract a unique experience for the traveler. The developers have mentioned the ability to begin to blur the spaces of the unit, while at the same time dividing the uses. Privacy screens, half walls, and translucent barriers could allow guests to display their occupancy of space through a means of adaptable layering of spaces. As a result, the user could become the architect of their own space by moving into the space, displaying occupation, and allowing their suitcases and other luggage to create screens and provide a greater ownership of the space. Innovative materiality and lighting might begin to evolve from the context of the site.



An outdoor/indoor private patio ought to be considered so as to allow the unique activity of watching the fast-paced lifestyles of the persons and vehicles outside of the motels structure. This patio should provide the ability of utilizing a small table with chairs for 2 persons. Additional seating could be expressed through the shape and structure of the patio or through sliding doorwalls that encourage a blur between interior and exterior when possible.

Currently the typical dining space consists of only a table and chairs at most. The client desires an investigation into creating a space that just speaks of the temporary stay at the motel, and provides the necessities of allowing general expectations of the motel, while providing a quality stay for the visitor. The roadside motel could begin to become more of a temporary house, creating an alternative living situation for travelers and attaching new standards for the house to emerge out of progress.

The shared spaces created for both the community and the motel:

The voids of space left underneath the existing freeway structures can become usable and accessible through more motel and community programming. This space is to be also shared by both temporal and more permanent residents forming a community emphasizing a greater opportunity for social interaction. The possibility of an indoor/outdoor pool and spa ought to be considered for these spaces along with basketball and tennis courts. Weightlifting and other personal fitness spaces could also become part of the design scheme. Locker rooms for these spaces would be needed and public showers should be considered. A playground and adult relaxation space could evolve to provide parents and children an opportunity to use the void space as well.



Time Schedule/Sections

- 2:15 Go Lightly elementary school lets out
- 2:25 8th graders playing schoolyard football
- 2:29:30 Ferry St. traffic get green light at service drive intersection.
- 2:30:45 - 3:21:45 10 second sections of I75 entrance
- 2:36:10 - 3:37:10 10 second sections of southbound I75 # 194 eastbound
- 2:30 detroit fire engine sirens pierce the hum of a constantly moving sea of automobiles.
- 2:55 small school bus pulls up to the front door of lightly elementary.
- 2:58:50 three seagulls fly by the intersection of I75, the service drive, and ferry St.
- 4:00 - 4:01 10 second sections of I75 merger point looking southbound toward downtown
- 4:02 - 4:03 75 vehicles merge and/or continue their path southbound toward downtown on I75
- 4:04:45 - 4:04:45 71 vehicles are heading northbound toward Oakland County and/or the I94 interchange
- 4:05 flocks of sparrows fly over the intersection of ferry St. and the service drive.
- 4:30:45 a mother calls for their son... "Alexi?!"
- 4:30:50 the same mother demands her son to sit in his seat.



Narrative

I'm. My name is Alex. I go to school at Go Lightly Elementary and am in the first grade.

Our school has a swimming pool. Our principal and teachers say that we are lucky, as if we are the only school in the city to have a pool.

Our school is old and big. The oldest part of the building was built in 1920 under some other name, I guess. The new side is the back of the school. Maybe it's because I go to school with 900 other kids that the school is so big.

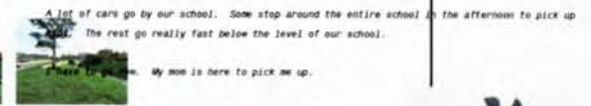
I hate the big kids in the 8th and 7th grade. They play football on the biggest patch of grass in the schoolyard all by themselves. All the young kids are stuck with the playground.

Mr. Wood is our vice principal. He says that we are talented. 70 percent of the students are accepted through tests and applications. The others are the children of local residents.

One famous girl named Diana Joss went to school here a long time ago. She was famous for the air swirls that she made outside sometimes, like turning garbage.

A lot of cars go by our school. Some stop around the entire school in the afternoon to pick up the rest go really fast below the level of our school.

Here to go now. My mom is here to pick me up.





I94 & I75 interchange



Location

Detroit, MI 48211

Find the...	Name	Intersection	Shortest route mileage
Closest police station	Detroit	Woodward and Forest	1.41 miles
Closest fire station	Detroit	Burroughs and Third	1.04 miles
Closest hospital	Detroit Medical Center	St. Antoine and Canfield	1.5 miles
Closest elementary school	Go Lightly/Balch ES	St. Antoine and Ferry	0.7 miles
Closest high school	Murray Wright HS	Warren and Rosa Parks	2.39 miles
Closest church			
Closest post office			
Closest factory complex	GM Truck & Bus Group	Hastings and Fiquette	0.18 miles
Closest college/university	Wayne State	Woodward and Warren	1.25 miles
Closest playground/park	Edward Tolan playfield	Mack and Hastings	1.79 miles
Closest cemetery			
Closest public library	Detroit-main branch	Woodward and Putnam	1.17 miles
Closest museum/historic site	Children's Museum	Woodward and Kirby	1.03 miles

Miles from Downtown Detroit: 3.25 miles

I94 & I75 interchange

siting circumstance

greenbelts & interactions



▪ **Site Data:** *Description*

- The surface of the site is primarily flat, with the exception of the cuts made by the entrance ramps and mergers. These cuts also provide sloped incisions that provide a type of solid vertical ground plane and enclosure. Elevated structures occur around the site as well, but most do not seem to interfere with the main program of the site.

Storm drainage and water runoff appear to be primarily non-existent, occurring only for the usage of the freeway. Some runoff will be able to drop down the sloped sides of the green voids into the freeway drainage system.

The general location of the programs on the site is to occur within a trapezoidal/triangular shape within the freeway interchange between I-94 and I-75 on a total acreage of approximately 17.8 acres parcel of unused landscape. Access to the site by vehicle is through the Ferry Street Bridge connecting separated sections of the urban landscape. Ferry Street is a one-lane east-west secondary traffic artery allowing parking on both sides of the street when available and appropriate. Pedestrian access is also gained through the Ferry Street Bridge.

This area of Detroit has experienced both renewal and decline. For instance, the southwest corner of the intersection has seen residential development including two story rehabilitation and infill projects. An elementary school promptly finishes the edge of the corner. The Northwest corner is part of the Milwaukee-Junction area and has seen many old factories left abandon. Opportunity for lofts and creative living and environments exists as a hope for the area. At the northeast corner, old factories are used at a fraction of their maximum capacity along with more recent industrial complexes. The southeast corner holds industrial uses including an incinerator that gives of fowl smells at times during the site. To the south an interesting perspective is created between known centers of the city. A local church and its steeple are in line with the Renaissance Center in the distance.



Major arteries of vehicular flow intersect at this site. Below the ground plane of the site, the Chrysler freeway (175) operates 3 lanes north-south at a speed limit of 55 mph. The Edsel Ford freeway (194) runs 3 lanes of traffic east-west at the same speed limit. Service drives are 3 lanes at a speed of 35 mph, with one lane residential streets within the area traveling at 25 mph. Commercial streets are typically 2 lane streets operating at a speed of 35 mph.

Site bearing capacity is primarily unknown at this time. However, the site is able to bear several vehicles and heavy machinery since its past usages have been construction centers for the process of roadwork and repair.

There is minimal landscaping provided on much of the site. Small and medium sized trees and other shrubs line the freeway edge and the occasional trees are placed within the middle of the site to provide filler for the vast voids of space.

Utilities appear to be housed within a small building along Ferry Street's north side. This infrastructure may not be adequate to service the new proposal.

Zoning requirements for this particular property are unknown at this time because the site is within the existing right of way.



Project Program:

▪ Project Quantitative Summary: *Drive-in Theatre*

Space:	Number of spaces:	Net square footage per space:	total area:
• Theatre/ Car lot	1-500 vehicles	283,140 s.f.	283,140 s.f.
• Utility/ Mechanical	1		
• Screen	1		
• Sloped Ramps for Vehicles	500 parking spots	regular-162 s.f. each Handicapped-234 s.f. each	
• Concession Stand/ Projection	1		
• Arcade	1		
• Box Office	1 with multiple gates		
• Landscaping			
• Playground/ outdoor space	1		
• Lighting and Sound	enough for all the users of the drive-in.		



81
DRIVE-IN
THEATRE

• Space Details Sheet: *Drive-in Theatre*

space:	function:	activities:	special considerations:	Equipment/Furnishings:
• Theatre/ Car lot	parking lot	audience	lighting, security, quality of picture, sound	vehicle, radio, ramps, lighting, signage, screen
• Utility/ Mechanical	energy supply	power, water, sewage, exhaust	safety, locating out of view	transformers and fuse boxes, generators
• Screen	Projection surface	large billboard, focal point	proper angle of view for all vehicles within the audience	structure behind, white surface
• Sloped Ramps for Vehicles	improve view	vehicular movie station	proper angle slope to see above vehicle in front	graded soil, drainage
• Concession Stand/ Projection	food service, projection booth	concealed equipment, food	the height of the stand, roof thickness, proper concealment	projector, food prep equipment, film
• Arcade	entertainment for teens	amusement	noise, volume, security	videogames, pinball machines
• Box Office	ticket purchase, entrance	sell tickets, count capacity	far enough way from streets to avoid traffic tie-ups	ticket dispenser, gate, cashier
• Landscaping	soften landscape	provide absorption of sound and light	sound, light, seasonal plantings, screening	trees, shrubs, flowers, natural plantings
• Playground/ outdoor space	entertainment for children	recreation, amusement	noise, safety, lighting, security	slides, swings, sea-saws, merry-go-round
• Lighting and Sound	enough for all the users of the drive-in.		volume and quality picture for each vehicle	



Program elements:

Portions of the following are from a 1949 article by S. Herbert Taylor, Chief Engineer of Park-In Theatres Co.; originators of the drive-in theatre concept; owners of patent #1,909,537. This information can be found at the web address: [http:// www.driveinworkshop.com/planning/planning.htm](http://www.driveinworkshop.com/planning/planning.htm)

Important points and factors to follow when designing and planning a drive-in theatre:

- The drive-in is ***a family theatre:***

Seventy to eighty percent of the business of any drive-in is family trade that tosses the children into the car. Even the baby can be taken along—since most well regulated drive-ins will provide free bottle warming service. Playgrounds for the small fry will pay dividends by assuring an early crowd for the first show.⁷³

The business must admit children under a certain age free. Movie programs must be attractive to and fit for older children. The place of business must be well policed and regulated.

- The size of the theatre:

In actual area a 500 car theatre will cover approximately six and one-half acres a 1000 car theatre twelve and one-half acres. This is the actual area of the ramps, the driveways, screen, etc. Squared up, the form in which such a site must usually be purchased, the areas are approximately sixty percent greater. This means that for 500 cars, a total of ten acres must usually be purchased; for 1000 cars, twenty acres. The additional ground provides room for landscaping, playgrounds, other entertainment features and future development.⁷⁴

⁷³ Login, Bob. "Planning the Drive-in Theatre." Bob Login's Drive-in Theatre Workshop. 24 Jan. 2004. <[http:// www.driveinworkshop.com/planning/planning.htm](http://www.driveinworkshop.com/planning/planning.htm)>.

⁷⁴ Login, Bob. <[http:// www.driveinworkshop.com/planning/planning.htm](http://www.driveinworkshop.com/planning/planning.htm)>.



- The selection of the site:

Drainage: A low, flat piece of land can often be purchased for a small sum but the necessity to obtain drainage may increase grading costs from four to ten times normal. A flat piece of land with adequate drainage, even if the pitch were slight, will prove economical from a grading standpoint. This is particularly so if you can cut into the land approximately two feet at the low point and still obtain drainage.

For drainage purposes, side pitch of the theatre should not be less than 0.4 percent and for purposes of comfortable sitting not more than 4.0 percent. The theatre may be drained to both sides or across the theatre from one side to the other, depending upon the topography of the site and the drainage conditions. In one case, it proved economical to drain from both sides to the center. This required a pipe drain with inlets through the center of the theatre. This is usual.⁷⁵

Grading/slope: The ground can slope toward the screen but preferably at not more than four feet in 100. It may slope away from the screen, but preferably at not more than three feet in 100. It may slope from one side of the theatre to the other, but preferably at not more than five feet in 100. Grading cost should be added to land cost in appraising the value of any site.⁷⁶

Location: The site for the theatre must be within easy driving distance of a population center. There should be at least 50,000 people within a reasonable distance. The lot itself should be adjacent to, but not necessarily on, a well-traveled highway.⁷⁷

Utilities and Infrastructure: Easy access to three-phase electric power is very important and if city water and sewer connections are adjacent to the lot, the cost of wells can be avoided.⁷⁸

⁷⁵ Login, Bob. <<http://www.driveinworkshop.com/planning/planning.htm>>.

⁷⁶ Login, Bob. <<http://www.driveinworkshop.com/planning/planning.htm>>.

⁷⁷ Login, Bob. <<http://www.driveinworkshop.com/planning/planning.htm>>.

⁷⁸ Login, Bob. <<http://www.driveinworkshop.com/planning/planning.htm>>.



- Planning ahead and common mistakes:

In a number of locations, poor drainage layout makes parking virtually impossible after heavy rain because of residual water or viscous mud. Even more serious are the impediments to clear vision. In many theatres, the screen is either too small or too large for the ground area it serves. In others, it is impossible for patrons parked in the rear to get a full view of the projected picture. Patrons unfortunate enough to be parked at the end of ramps in some locations see a pronounced keystone effect when viewing the picture because the designer, whose zeal for cash customers temporarily submerged his better judgment, planned the theatre with too great an angle from the center line.

There are a large number of drive-ins that cause heavy traffic tie-ups because the operator failed to provide for proper entrance and exit drives and adequate parking or holding areas.⁷⁹

- Visibility of the screen/ the slope of the ramps:

Visibility is so limited and framed by the windshield of a car, that all sight lines must be kept clear in a drive-in theatre. This means that not only must the occupants of any car be able to see the bottom of the screen over the car ahead, but also the car must be so aimed that the entire picture (perhaps 44' vertically) can be encompassed within the windshield, usually 12" to 14" high. Imagine yourself in the rear seat of an automobile looking through the narrow windshield; or better, get into one, and you see how different this is to indoor visibility conditions.

The front of the car is elevated for the aiming operation by use of a ramp and the driver can control the angle of the car by the distance he drives up the ramp. It is not enough to just throw up a series of ramps. Each ramp must be related to the proceeding one so that patrons parked in that ramp can see the entire screen over the cars ahead.⁸⁰

⁷⁹ Login, Bob. <[http:// www.driveinworkshop.com/planning/planning.htm](http://www.driveinworkshop.com/planning/planning.htm)>.

⁸⁰ Login, Bob. <[http:// www.driveinworkshop.com/planning/planning.htm](http://www.driveinworkshop.com/planning/planning.htm)>.



- The screen:

Screens vary in size from 40 feet wide to 140 feet wide (nom.) and in shape from vertical flat to sloped to sloped-concave. The advantages of the sloped-concave screen are the reduction of distortion and a better return of light to the theatre, resulting in a brighter picture.

Distortion is reduced because all points on the screen are much more nearly equidistant from the projector lens than in the conventional screen. This eliminates unnatural elongation at the center of the theatre, and greatly reduces it at the sides.

The screens are so large that they constitute a structural problem of the first magnitude. The top of a large screen is approximately 75 feet off the ground.

Following this plan, the screen can become similar to a glorified signboard. These structures are imposing whether of the vertical, the sloped or the sloped-concave design.⁸¹

- Concession-Projection buildings:

The structural problem of the concession and projection buildings is to occupy as little height as possible. Too high a structure spoils parking in too many ramps to the rear of the structure. This dictates that these buildings be built with as thin roofs as consistent with safety, so as to make available as much working height as possible on the inside. The roof elevation should conform to the sightlines of the ramp immediately behind it, and should be carefully engineered.⁸²

- The box office and entrance/exit:

The box office should be located far enough from the highway to allow storage of from 100 to 200 cars ahead of the booth. This is to prevent backup of cars on the highway.⁸³

⁸¹ Login, Bob. <<http://www.driveinworkshop.com/planning/planning.htm>>.

⁸² Login, Bob. <<http://www.driveinworkshop.com/planning/planning.htm>>.



- Electrical installation:

The projectors and projector lamps must be the largest and most powerful manufactured and the equipment in the concession stand also draw a heavy load. Driveways and walkways must be illuminated and the ramps must be identified by lighted numbers. In-car speakers must be connected by a cable buried underground. For maximum patron safety, the installation of a 110-foot pole, located at the rear and equipped with a battery of vari-colored floods is important. These bathe the whole theatre in a soft glow while the pictures are being shown; soft enough to prevent interference, but bright enough to allow safe walking. Between pictures, the floods are brought up much brighter.⁸⁴

- Landscaping:

Landscaping is strongly encouraged to fill up voids, improve image, and provide screening and guest usage.⁸⁵

- Main engineering problems:

One of the most critical of these is the grading problem, where proper design can mean the difference between a modest cost and a staggering one. To illustrate this, just one-inch error in elevation over the area of a seven or eight hundred car theatre, throws estimated earthwork out 1,000 cubic yards. This is because of the tremendous size of the theatre.

The "sight" problem, that of providing adequate visibility, is a most important engineering one; as are also the design of screen, projection and concession booths, electrical layout, entrance and exit drives, parking areas, etc. The entrance, exit and parking facilities call for a high degree of traffic engineering.⁸⁶

⁸³ Login, Bob. <<http://www.driveinworkshop.com/planning/planning.htm>>.

⁸⁴ Login, Bob. <<http://www.driveinworkshop.com/planning/planning.htm>>.

⁸⁵ Login, Bob. <<http://www.driveinworkshop.com/planning/planning.htm>>.

⁸⁶ Login, Bob. <<http://www.driveinworkshop.com/planning/planning.htm>>.



▪ Programming: Verbs

• Watch.... The temporal.... Event: *the movie theater*

- Viewing the activity of moving, adapting space from a static, seated setting, change creates a sense of scale for time. Leaning back or springing forth, levitated platforms allow viewing of moving images from a one-way perspective. The hue of light overwhelms the viewer and the airy space between the viewer and the screen. This display is sensed visually as if promoting the motion picture. Sound surrounds and fills the individual space around the chair. The intense feeling of a change in mood or the intrigue of realizing a new script become a part of the experience, as motion continues on to the next board. The blur between image and text can come from the small set of gears or the complex science of a "rover". In this space, ceiling is typically as compact as a car or can sometimes have the option of a "sky dome" or moving outdoor "convertible" pavilion.

Proposed Programming Features:

The client desires a program that will act as a center for entertainment and interaction with the community and passer-by. The primary focus by the development group is to reconstruct the voids between the existing freeway intersection and its structures into a movie theater that is oriented to both the vehicle and the pedestrian. This drive-in theater/amphitheater is to host somewhere between 250-500 guests.

A portion of this amount will be seated in an outdoor pavilion-like space that allows pedestrians to gather and walk on a more human surface such as a soft-scape or lawn. The possibility of an overhead shelter to protect guests during inclement weather is to be considered.

While the main event to occur at this site would be the alternative movie complex, the possibility of the space holding other events should be considered for extra revenue. Events such as a fireworks display, a New Year's Eve celebration, a small concert, staged performances, and other spectacles could evolve from the space. A suggested example of influence for this type of amphitheater space is the Chene Park Music Theatre located along the riverfront of Detroit, Michigan, which hold various events from **boxing to concerts** when the proper climate is available.



A ticket booth and gate system would be needed for the admittance of guests. Ticket scanners or a card scanning system would be needed to aid in a quicker speed of service.

A projector and screen sized appropriately for the scale of a drive-in theater should be located appropriately and be unobstructed from the screen. The possibility of a stage built for seating and occasional performances should be also considered.

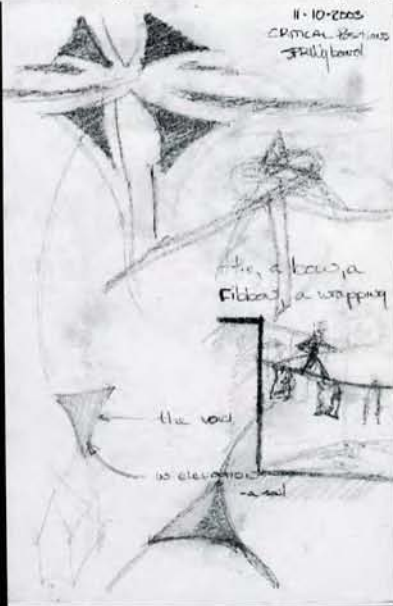


Documentation of the Design Process:

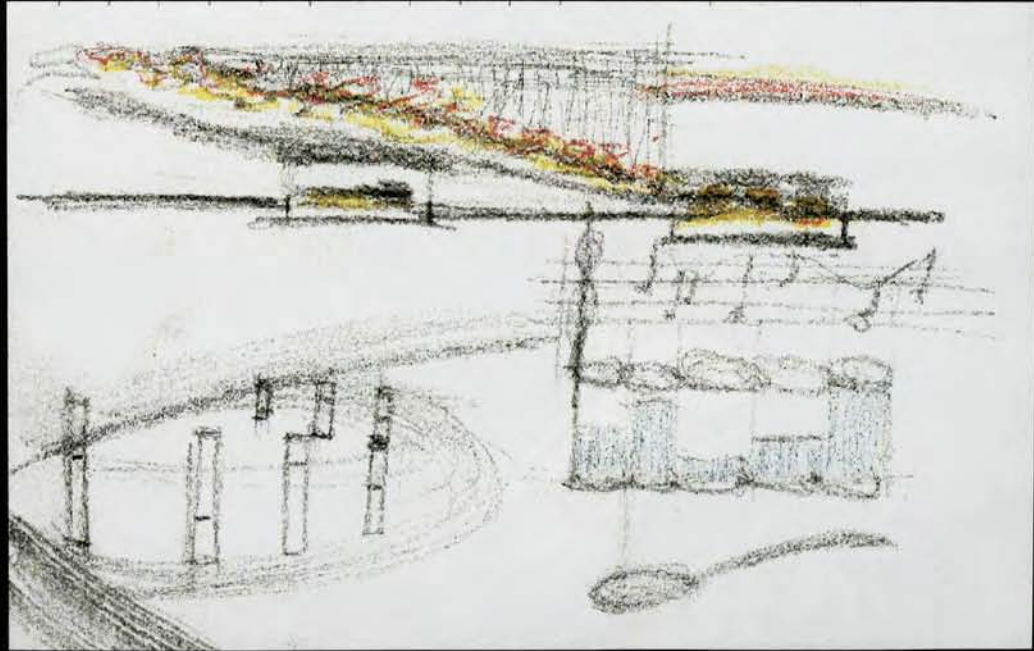
>>>>>>>>>character sketches

Schematic Design

Throughout the process of schematic and preliminary design, the importance of character, identity, context and motion were major concerns of the design strategy. Shifting elements, spatial sequences, studies of flow and form all impacted the thoughts of what potential structures within these freeway voids could evolve. Details were considered and disadvantages of the site and the program were recognized. These details evolved the spaces, which produced elevations, sections, and plans of the potential space.



Initial character sketches: the left deals with the intersection seen as a ribbon; a connector. beginning to think of what identity a ribbon has.



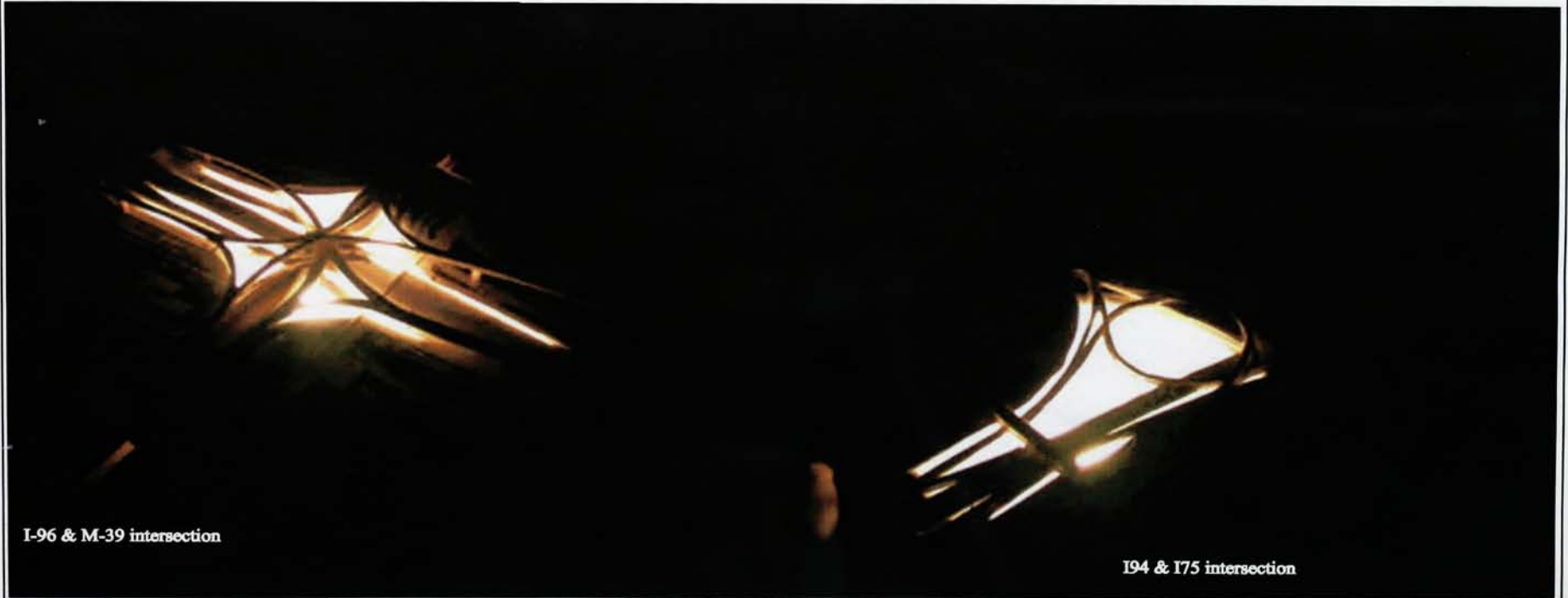
At right, sketches deal with the sense of sound. Could the freeway echo the noises of the car or of the rapid movement of flow to produce a form of wind instrument?

Documentation of the Design Process:

>>>>>>>>>>initial sketches

Schematic Design

Initial sketches began the process illustrating the dynamic character of the freeway its changing motion and the potential of occupying and inhabiting the voids of the freeway. These sketches display an energy, with quick movement and motion along with slower changing character being observed simultaneously.



I-96 & M-39 intersection

I94 & I75 intersection

Documentation of the Design Process:

>>>>>>>>>>initial sketches

Schematic Design

Initial sketches began the process illustrating the dynamic character of the freeway its changing motion and the potential of occupying and inhabiting the voids of the freeway. These sketches display an energy, with quick movement and motion along with slower changing character being observed simultaneously.



I-96 & M-39 intersection

I94 & I75 intersection

Schematic Design

Models of the freeway intersections and their voids were studied and documented. The evolution of these models deals with the potential energy of filling the voids, the designation of activity that would separate and become part of the blur of the freeway, and the overall motion of passing by these structures. Images of the voids filled with light, filled with color, and the existing spaces dulled to a blur of black and white, illustrate the potential of what could be.



I94 & I75 intersection

Color fills the voids just as activity, purpose, and inhabitation will celebrate a vibrancy for these forgotten spaces of the freeway.

Documentation of the Design Process:

>>>>>>>>>>motion studies

Schematic Design

Baseball card models document motion as a dynamic event, an experience. These opportunities allow for the structures to recognizably elongate themselves and create an intuitive event. As a result, the structures create a presence through experience.



Singular images become filmstrips through the act of slicing the images and elongating them in a third dimension .

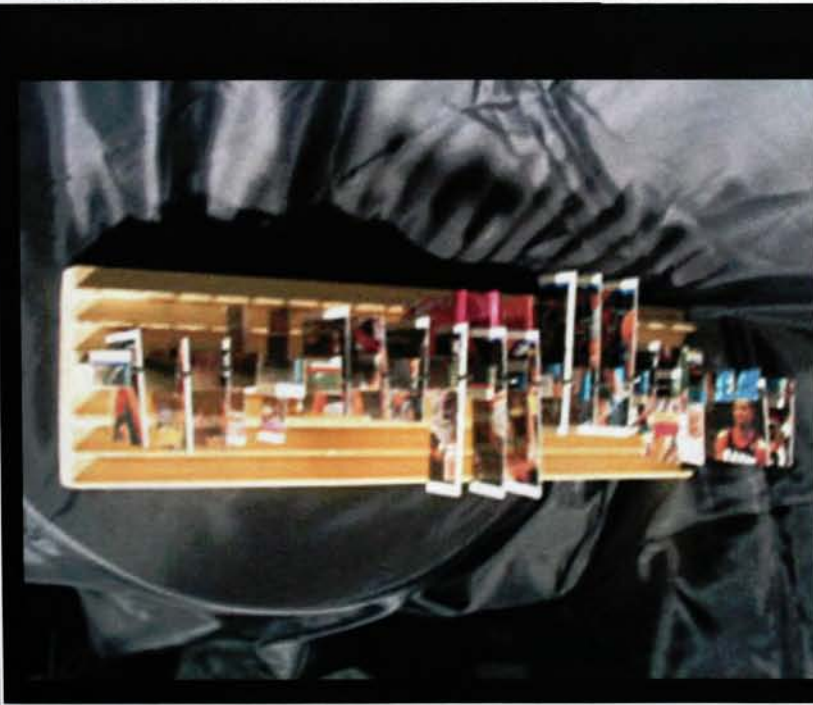


Documentation of the Design Process:

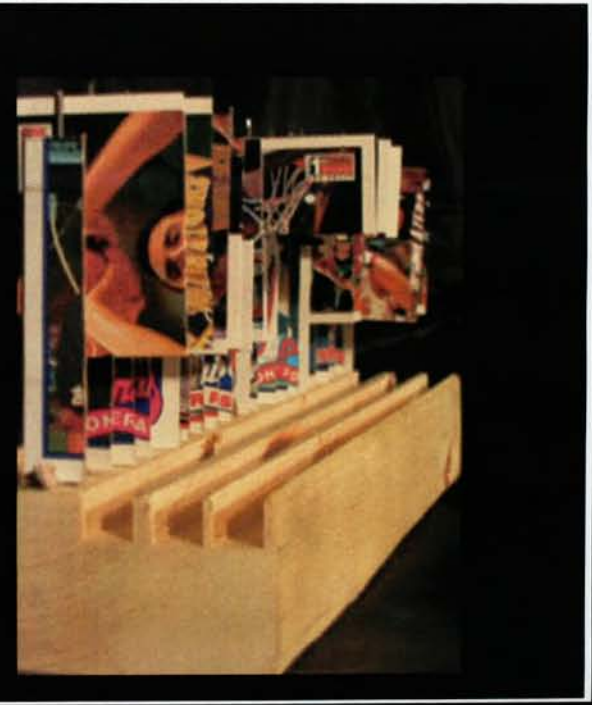
>>>>>>>>>> motel studies

Schematic Design

This motion was seen as the opportunity and the character of the structures within the voids and also the freeway. This process continued to influence the design of the motel, with shifting planes and rhythm giving a sense of what the potential structure might look like. Spaces that cantilevered covered both the ramps leading into the motel or the freeway on the opposite side. The potential for outdoor patios could be seen. A glimpse of the transforming process of the motel could be seen.



Motion studies become integrated with the motel and the form and shape of the structure begins to develop.



Schematic Design

Moderately scaled models of both intersections were made to understand context and how details would become addressed within the construction of the site and space. At the intersection of I96-M39 the importance of discovering where an embedded grid of columns and structure could be placed within the freeway and its voids was displaced through the act of modeling.



Studies lead to the realization of floor plates and the integration of a structural grid.



Documentation of the Design Process:

>>>>>>>>>>drive-in theatre studies

Schematic Design

Similarly, the intersection of I75-I94 studied the implementation of a one screen drive-in theatre within the freeway intersection and the needs for vehicular and pedestrian access and the importance of creating a space that not only meet the programmed requirements, but also met the issues of driving the automobile and keeping pedestrians safe.



Studies in texture and motion continue as well. In the top view, context is denoted. Ferry street is the vehicular and pedestrian access bridge into the island of void to become the drive-in theatre. Concessions are located on the south side of Ferry street, and the drive-in theatre lies north of the bridge. Parking is easily accessible, with a path leading to a park in the center node of the freeway.

Documentation of the Design Process:

>>>>>>>>>>drive-in theatre studies

Schematic Design

This medium scale study led to more in depth models dealing with more details in scale. The intersection of I75-I94 investigated the potential of raising the drive-in on platforms and structure, increasing land use, minimizing driver distraction with by angling the movie screens downward, and a smooth vehicular surface in which to occupy. Consequently, the design rethought the potential of the drive-in as being a theatre of several small screen audiences, rather than one large audience. However, because of the



More detailed studies challenge the typical notion of drive-in theatre by using multi-platforms and screens.



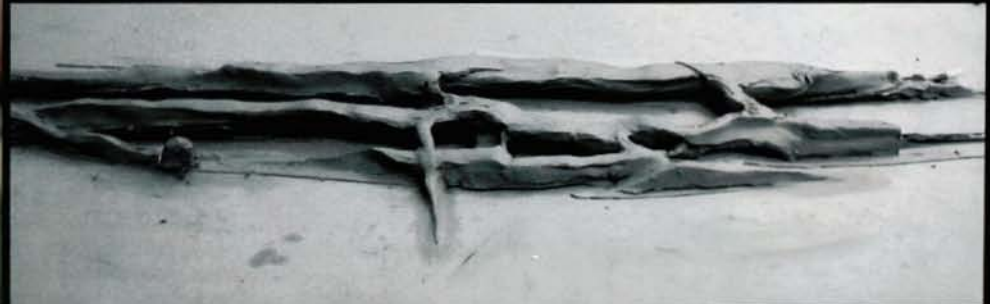
Schematic Design

Studies continued by re-looking at the ideas displayed in previous models. One example shows the desire to bridge across these voids to existing urban landscape. This model became a method for the re-thinking of bridging the landscape by pedestrian access.



Bridging the community through the motel like the fingers that reach through the sides of the motion study model.

This clay model attempts to look at the action of motion and flow from the freeway shaping the motel



Documentation of the Design Process:

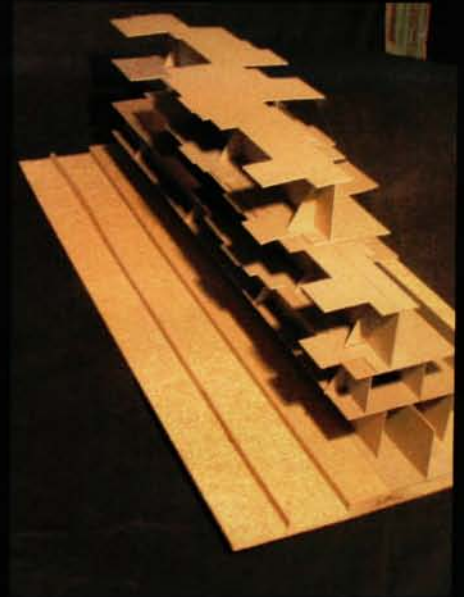
>>>>>>>>>> *motel unit studies*

Schematic Design

Clay models were done to illustrate the dynamic flow of activity of the freeway and how that could impact the form and shape of the motel. These studies allowed me to think of the hierarchy of spaces and which areas of the building wanted to become shorter or thinner.



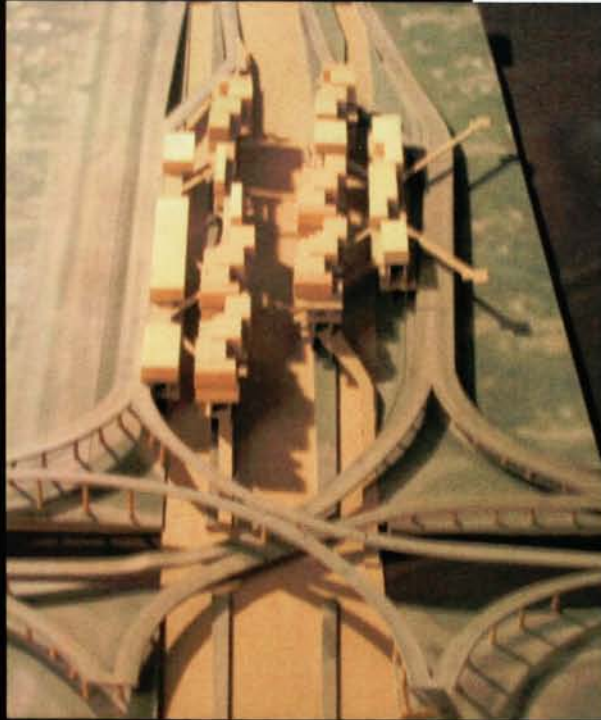
Adapting three unique sets of units and fitting them into a pattern that locked units into place and provided social space, the pattern of units evolved.



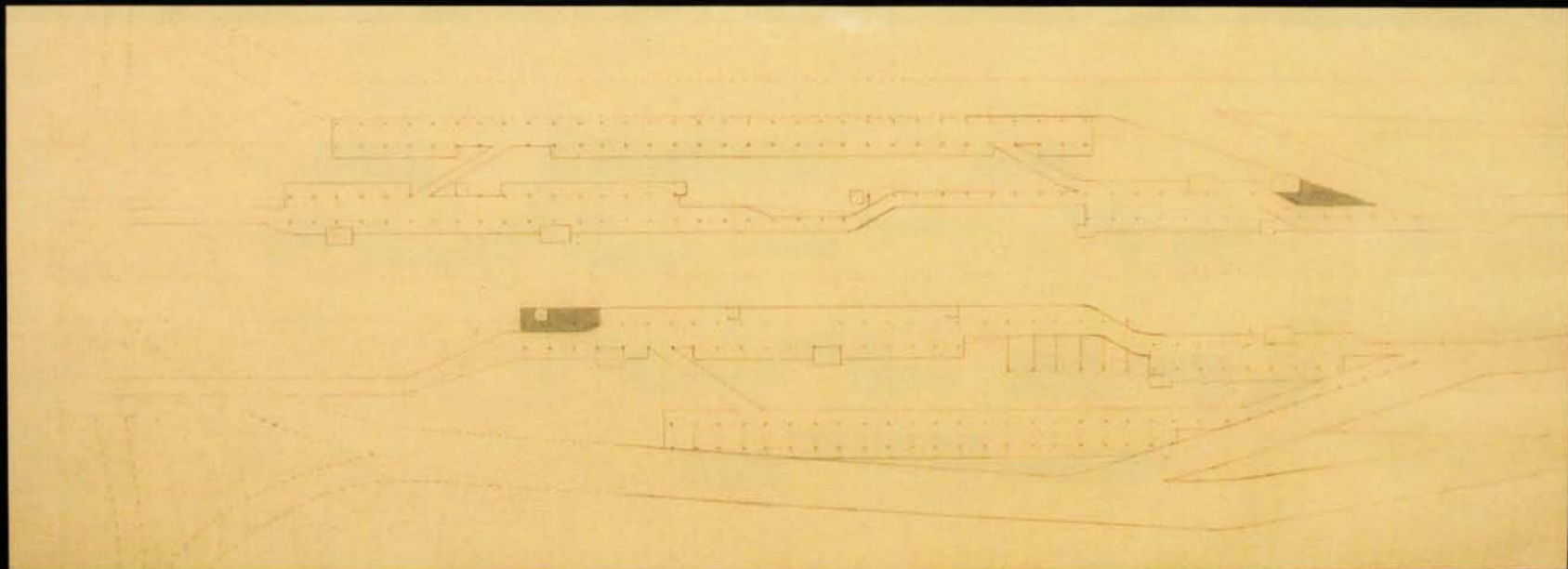
Schematic Design

The process made me realize the identity of the freeway, its changing character and what advantages and disadvantages the site had in regards to structure, space and activity. This investigative process allowed the thesis question to change from “Can human interaction occur within these freeway voids?”, to “How can human interaction be provided and what is the qualities of the space?”

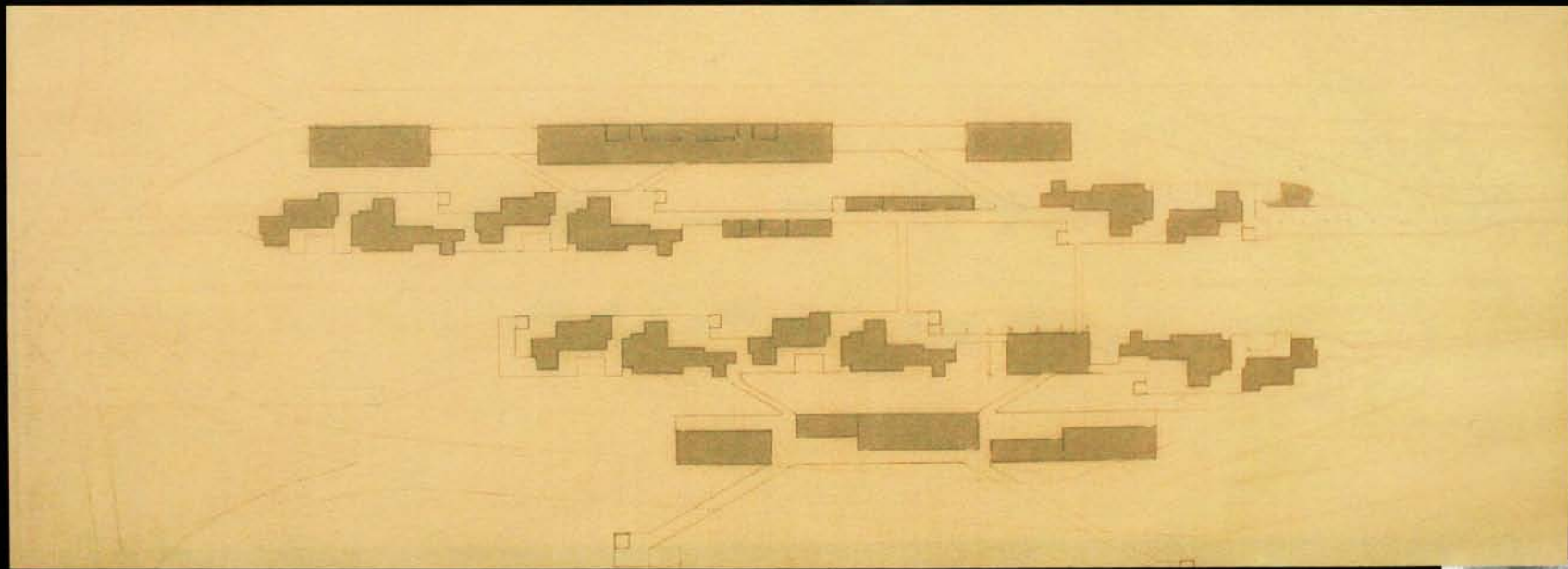
>>>>>>>> **site models**



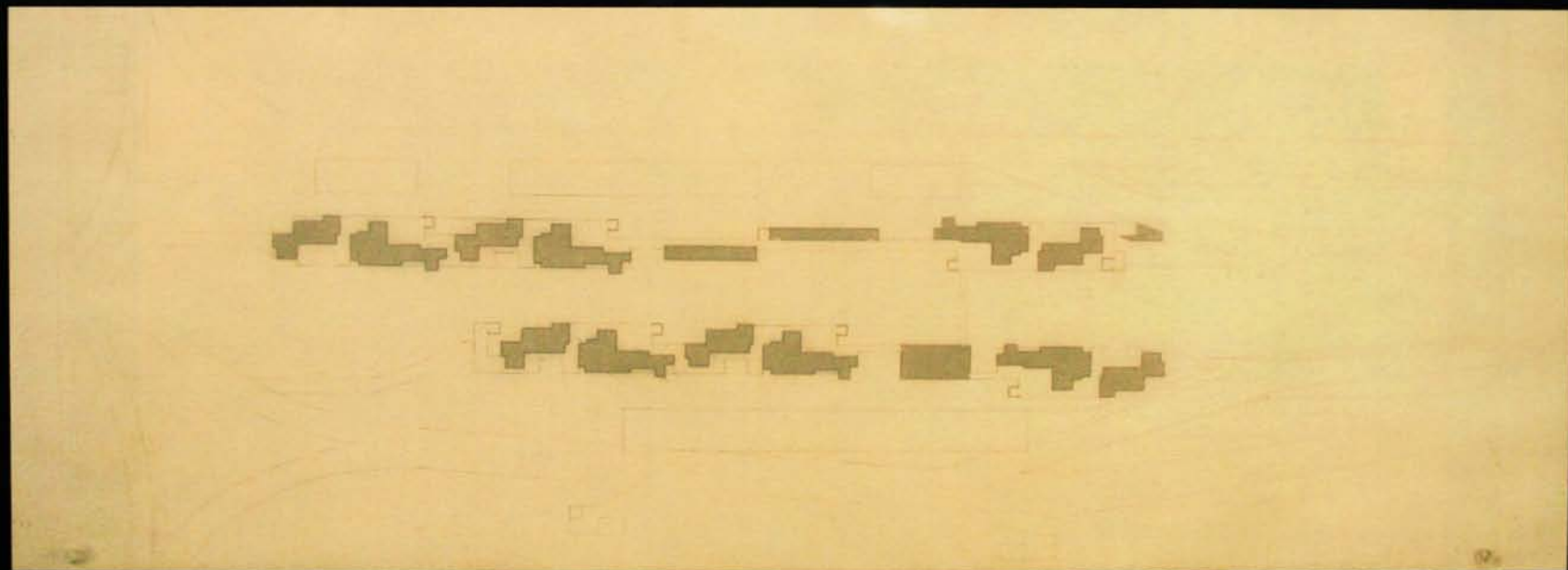
parking level



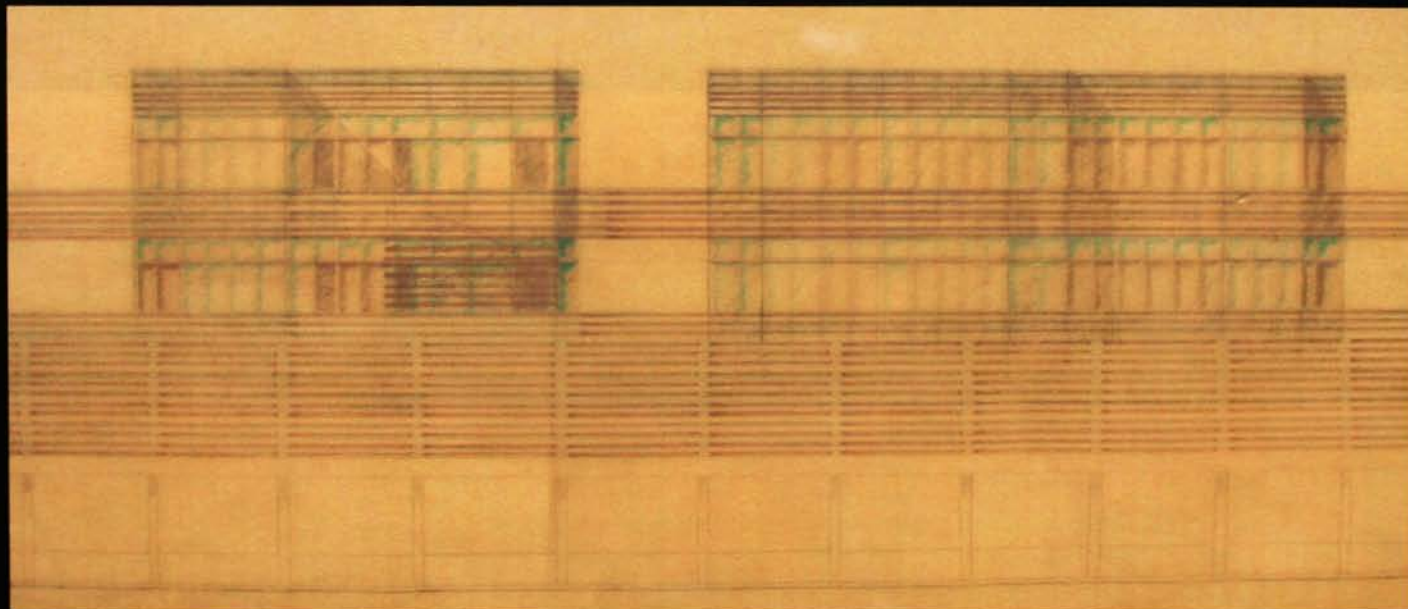
>>>>>>>> **first level of inhabitation**



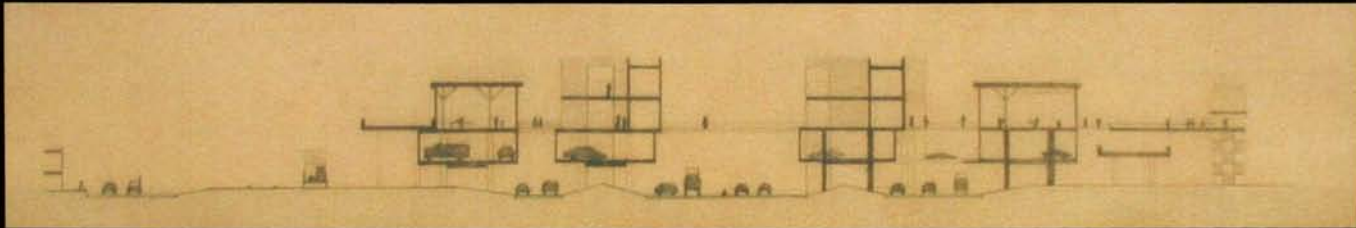
>>>>>>>> **second level of inhabitation**



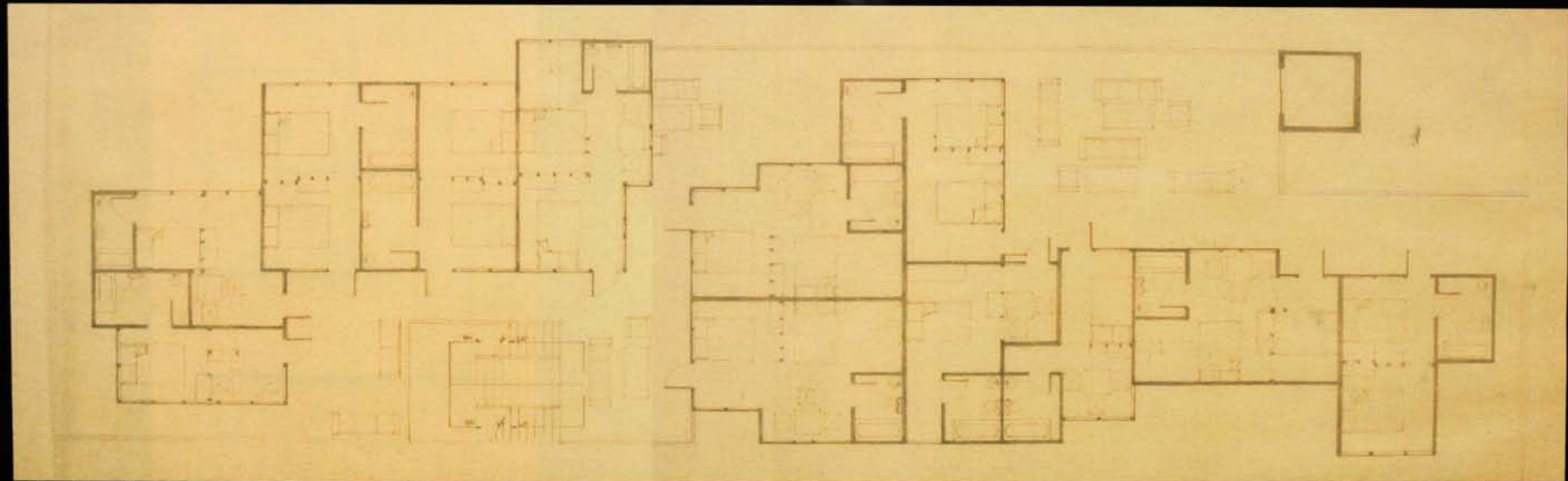
>>>>>>>> **large elevation of units**



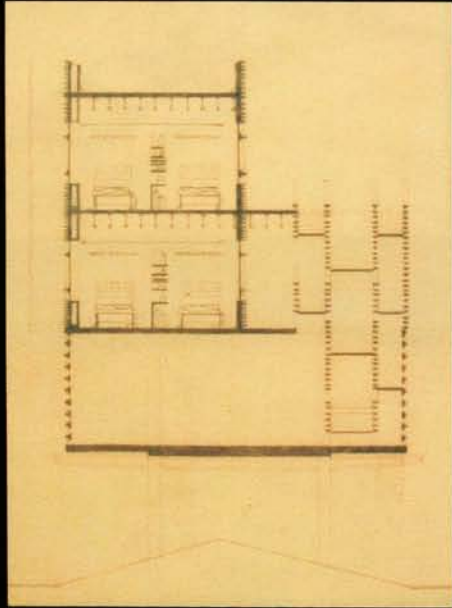
>>>>>>>> elevations & sections



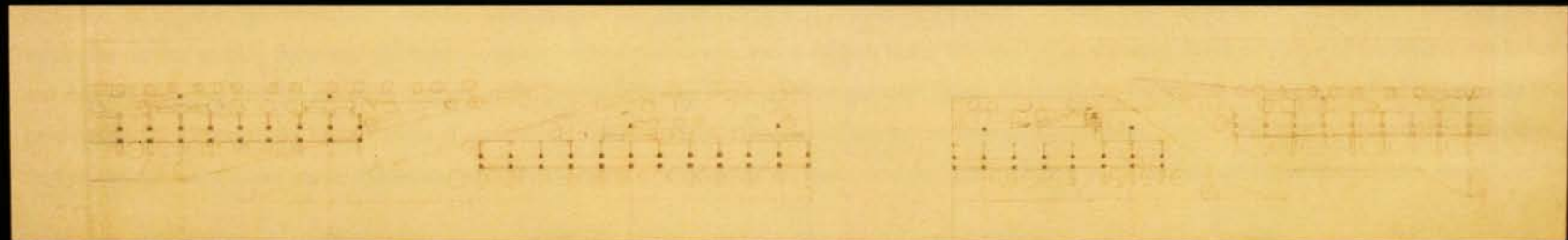
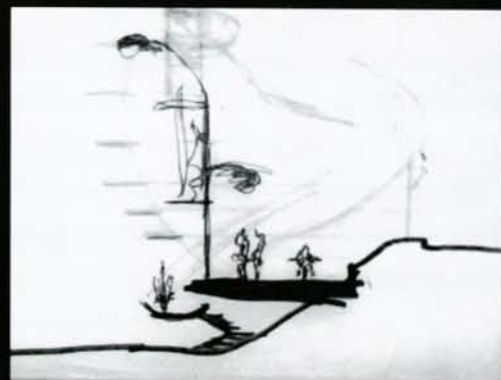
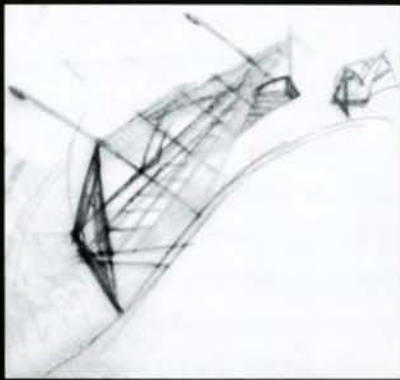
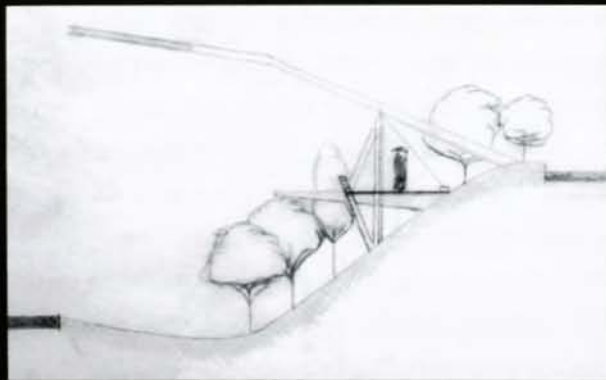
>>>>>>> **large floor plans**



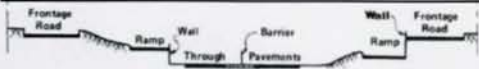
>>>>>>>> large scale sections



>>>>>>>> *right of way parkscape*



265' for 4 Lanes
295' for 6 Lanes
320' for 8 Lanes



Conclusion

While the thesis and the final project seem to stem from the same nature of the investigation, it is important to understand that there are some flaws and issues regarding the final solution. These errors are learned through time and experience, and the mistakes may not have created the perfect solution or design in this case, but their occurrences allows for a more personal growth. This retrospect into feelings for the design and what has been learned from the project is as important as overall design quality and the impact of a grade. Instead, the important focus on what has evolved from this process of investigation and studies creates an appreciation for a well-conceived mission and execution of a project and design.

Over the course of the thesis, the process of designing has displayed the need to examine all details of the design and determine exactly their importance to the investigation. Careful consideration of what is important versus what is just a good idea would have saved time and kept the design concepts in tact with core concepts and goals of the project. It would have been a good idea to distinctly establish a set of 5 goals or concepts that each program would have solved or addressed. This need to simplify would have allowed the design to strive on a solid core rather than attempt to stabilize itself on several shaky foundations for core ideals.

Also, the art of the presentation brought a new understanding of how to express and sell my ideas. The need to provide information that both corresponded to the thesis question and its exploration of facts, and the representation of the thesis within the programmed structures and designs would have provided a better understanding of the project.

Throughout the year, many times I have asked myself, "What would I do to change the results of the spaces and of the project?" If time could be turned back, I would have narrowed the scope of the investigation sooner. Attempting to accomplish three final designs by the end of the year, while barely having enough time to study one of the programs within the site and quickly document the implied character of the park-scape, was a difficult task. This method of slimming down the scope of the project would have saved time and relieved concerns over the complete entirety of the project, allowing focus on more personal details like resolving the spaces to imply a more humanistic character. It would have been a good opportunity to do a series of sketches that dealt with the sequences of movement through the roadside motel. This chart of sequences would have assisted in the design process, and allowed me to understand what the character of spaces and the movement through the lobby, the restaurant, or the recreation area would have looked like.

Another important consideration that came about after much of the design product was finished was the possibility of relocating the motel and additional quarter mile away from the freeway intersection. This would have resolved much of the concerns with hierarchy, traffic flow and may have in fact created even more activity within the voids.

These issues of confronting the existing freeway structures proved to be a disadvantage, a major concern, and decreased the potential visibility and accessibility of the program and the design.

One solid point that was learned, and the thesis did instinctively recognize, was incorporating the important role that traffic, pedestrian or vehicular activity and flow, has on the life and vibrancy of a city, or even a community. The intersections that the thesis investigated were in areas that have been decimated by the evolution of a vehicular society and culture. Without traffic, a temporal injection of activity, neighborhoods died and dead ends were literally formed. By re-injecting traffic either by vehicular means or by simple paths of nature within these devastated areas a new re-growth could occur.

Studies into texture at both large scales of the building and personal scales would have helped refine interior spaces further, possibly leading to a greater understanding of the project. Important values continued to be learned including the concern of not being excited by the final design because of too much immersion within the current task of the project. It is important to look at the project from an unfamiliar standpoint as well as an extremely knowledgeable viewpoint. The lack of excitement of the design resulted in an even greater issue of finishing the design, because of known flaws and the intents to go back to correct issues with the design. The lists of "wishes" and "could have done's" kept piling, inhibiting a quality piece, mainly because it was too late in the design process.

The realization that the thesis question had shifted during design to, "How does human inhabitation occur within the freeway?" did not come until now. Hindsight is an important skill, however it does not redesign or rebuild buildings or spaces. As a result, it is important to have a clear set of goals, concepts and strategies in advance. These carefully selected thoughts and points impact the process of discovery, exploration, and investigation further creating a better-finished product.

The investigation still leaves thoughts of the potential the thesis question, and gives hope to continue to observe and rethink the possibilities of what could be done to change and activate the void spaces within and around the city.

What can occur in the middle of the freeway? What could improve the image of the city and its abandoned or void spaces? How can the automobile be better integrated with the pedestrian to provide spaces of community and destination? These questions continue to persuade an attempt to provide a solution during continued investigations in architecture and design.

Annotated Bibliography:

Adler, Jerry. "Takeout Nation." Health. Feb 9, 2004. Newsweek. Feb 10, 2004. <<http://www.msnbc.msn.com/id/4121245>>

- Concerned with the current state of society and culture and its dependence on temporal values, including the automobile, the quick meal, and the television or movie.

Bahamon, Alejandro, ed. PREFAB: adaptable, modular, dismountable, light, mobile architecture. 2002. New York: Watson-Guption, 2002.

- Collection of small-scale projects that deal with the ideas of adaptability, modularity, dismount-ability, lightness, and mobility in architecture.

Baker, Geoffrey and Bruno Funard. Motels. New York: Reinhold, 1955.

- Provides insightful information about the programmatic functions of the motel, including space diagrams, unit sizes, and furniture sizes.

Braithwaite, David. Fairground Architecture: The World of Amusement Parks, Carnivals, and Fairs. New York: Frederick A. Praeger, Inc., 1968.

- Concerned with the architectural relationships of the carnival to space, the author records a history of this traveling fair as well as the experiences that transport and transform within the site. Dealing more with construction, decoration, and layout the book focuses primarily on the nostalgic appearance of the carnival, documenting its existing condition in the year 1968.

Branch, Mark Alden. "Smart Growth?" Architecture July 2003: 27-28.

- "Anti-sprawl developments are getting mixed reviews." *This issue considers thru the review of current projects, the connection between both technology and transportation.

Ching, Francis and Cassandra Adams. Building Construction Illustrated. 2nd ed. New York: John Wiley & Sons, 1991.

- Formulates one of the most informational books published regarding standard sizes of materials, equipment, and structure. Provide sizes, span ranges, and illustrations as to how buildings and spaces are constructed and formed.

Cohen, Edie. "Economy of means." Interior Design May 2003: 254-261.

- Reviews a project where an office space was designed and constructed with the use of shipping containers in order to create a certain type of character for the group and its space.

Cruz, Teddy. "Shifting Ground." University of Detroit-Mercy School of Architecture. Detroit, 26 Feb. 2003

- Inspirational works and quotes. Provides an exciting look at how architecture and urban planning can mix together to create functional and interesting spaces.

Donoff, Elizabeth. "On the boards: Smarch-Bern West Train Station-Bern, Switzerland." Architecture July 2003: 38.

- Reviews the spatial experience depicting rail travel and the concepts of arrival and departure. *This issue considers thru the review of current projects, the connection between both technology and transportation.

Gavrilovich, Peter and Bill McGraw, eds. The Detroit Almanac: 300 Years of Life in the Motor City. Detroit: The Detroit Free Press, 2000. p.233-245

- Collects interesting stats and data about the city of Detroit and the metro area in time for the 300th anniversary of Detroit.

Gordon, Alastair. "Site Specific." Metropolis. Feb. 2004. 82-87.

- Considers the recent proposals that inhabit the right-of-way within the cities of New York and Toronto. Provides illustrations for the proposals as well.

Handa, Rumiko. "Body, World and Time: Meaningfulness in Portability." Transportable Environments: Theory, Context, Design and Technology. Ed. Kronenburg, Robert. New York: Routledge, 1998. 8-17.

- The article discusses important considerations of theory for the transportable environment, including the role of culture and precedents as a layer that creates a connection between past examples of meaningful architecture with current examples. For instance, the geometrical layout of a theatre by Vitruvius or Palladio has been a continued language in other theatres such as Tado Ando and Aldo Rossi's separate portable theatre's.

Heidegger, Martin. "Building, Dwelling, Thinking." Rethinking Architecture: A Reader in Cultural Theory. Ed. Leach, Neil. New York: Routledge, 1997. 100-109.

- Discusses the idea of a "bridge" as the present situation connecting past to future. This "bridge" becomes our active "dwelling", in which we live and experience. This experience of the present creates an even that links and forms a structure between what exists and what life could be.

Jakle, John, Keith Sculle and Jefferson Rodgers. The Motel in America. Baltimore: John Hopkins University, 1996.

- Provides statistics of American hotel chains, timelines, and some information about the space requirements and relationships of the motel.

Kellbaugh, Douglas. "Friday's @ Five." University of Detroit-Mercy School of Architecture. Detroit, 3 Oct. 2003.

- Concerned with the decay of the urban American city, Kellbaugh uses illustrations of the contrasts between the urban planning and development of the city to the suburb. This graphics represent the careful planning of the suburb with respect to the automobile, rather than the pedestrian. Statistics are displayed to relate what this suburban planning model has done to deteriorate society. Armed with the theory of transportation-oriented development, Kellbaugh believes that TOD's create an answer to "Repairing the American Metropolis."

King, Christopher M. "The Suitcase: (Postcards and Paraphernalia) Redefining the Space of Tourism and Travel." Transportable Environments: Theory, Context, Design and Technology. Ed. Kronenburg, Robert. New York: Routledge, 1998. 37-43.

- The article discusses important investigation into the theory for the transportable environments, including the role of nomadic culture and its value to understanding the possibilities of portable architecture. The physical interpretation entitled "Suitcase 2" is also an important springboard for thought.

Kunstler, James Howard. The Geography of Nowhere. New York: TOUCHSTONE, 1993.

- Considers the consequences of the highway system in a more current context.

Lamster, Mark, ed. URBAN SCAN / LOT/EK. New York: Princeton Architectural Press, 2002.

- Interesting collection of projects dealing with the idea of transportable/transformable containers and space.

Lynch, Kevin. Image of the City. Cambridge, Mass: M.I.T. Press, 1962.

- Discusses the formation, organization and image-ability of an urban section of a city. Primarily focusing on the distinct ideas of cognitive mapping, Lynch's analysis results with five points used to describe the way finding behaviors of people within these areas. These five points are: paths, nodes, landmarks, edges, and districts. The five points make identifiable values to the city and describe an areas formation and organization.

Makker, Kirin, ed. "Place." Crit 55 (2003): 1-72.

- Rethinks the definitions, identity, characteristics, and values of space and place.

Margolies, John. Home Away From Home: Motels in America. New York: Bulfinch Press, 1995.

- Collects numerous images of the motels from the past half century, illustrating the glory and the interest of these spaces to vehicular culture.

Mumford, Lewis. From the Ground Up. New York: Harcourt, Brace and Company, 1956.

- Collection of articles written for The New Yorker that predicts and considers the consequences of the design and construction of freeways during their early stages.

Rappaport, Nina. "Working on the Railroad." Architecture July 2003: 56-61.

- "A Swiss train station is crafted on site by local steelworkers." *This issue considers thru the review of current projects, the connection between both technology and transportation.

Rashid, Hani and Lise Anne Couture. Asymptote: Architecture At The Internal. New York: Rizzoli, 1995.

- Recent works of the firm Asymptote are produced including the "Steel Cloud" proposal, one of particular interest to this investigation.

Reuters Limited. "Americans drive more than exercise." Health-exercise. March 12, 2004. Reuters. April 22, 2004. <http://msnbc.msn.com/id/4513740/>

- A startling article about the devastation that the automobile culture has done to society's health and well-being.

Skjaeveland, Oddvar and Tommy Garling. "Effects of Interactional Space on Neighbouring." Journal of Environmental Psychology 17 (1997): 181-198.

- Their research and studies were done to question the break down of community in urban areas primarily in Norway. The teams findings lead to a discovery that social interaction, for no matter how long of a time, is extremely valuable because it forms social contracts that latter are used to form stronger bonds of community.

Smith, Elizabeth, Russell Ferguson, and Mike Davis. Urban revisions: current projects for the public realm. Boston: MIT Press, 1994. p.59-78

- Contains more useful information about the "Steel Cloud" proposal by Asymptote.

Stevens, Mary Anne, ed. New Connections: New Architecture, New Urban Environments and the London Jubilee Line Extension. Verona: EBS, 2001.

- Discusses the idea of re-linking decaying urban centers via transportation lines that promote center for these communities and create activity and development.

Tschumi, Bernard. Praxis: Event-Cities. 1994. Cambridge, Massachusetts: The MIT Press, 1998.

- Reviews the relationship between architecture, the city, and events. “There is no architecture without the city. No city without architecture.” (p.12) “Architecture is as much about the events that take place in spaces as about the spaces themselves.” (p.13) Included projects (i.e. Parc de la Villette, Fireworks, 1992) present this relationship that can be seen in three-dimensional space and experience.

Watanabe, Hiroshi. Hotel Facilities: New Concepts in Architecture and Design. Tokyo: Meisei, 1997.

- Reviews many different sizes and contexts of hotels and motels within Asian countries. Includes information on the Yusuhara Visitor’s Center by Kengo Kuma & Associates.

Webb, Michael. “Reviving Dead Malls.” Architecture April 2003: 41.

- Reviews a competition offering ideas to regenerate failing shopping malls. One of the included proposals presented ideas about the possibility of transportable/transformable anchor stores.

“The Weight of the World.” *The Nature of Things with David Suzuki*. CBC. CBET, Windsor, Canada. December 3, 2003

- An intriguing documentary about the devastation that the automobile culture has done to North American society’s health and well-being.

Waltersdorf, Arther F. “Carnival Architecture: the structures of a Century of Progress.” American Architect July 1933: 10-21.

- Valuable introduction that emphasizes the thoughts of this investigation. Original article discusses the structures, spaces, and experiences of the architecture created for the exposition of Chicago celebrating the one-hundredth anniversary of the founding of Chicago.