



[http://www.depts.ttu.edu/hillcountry/junction/Junction%20Past/pages/03\\_jpg.htm](http://www.depts.ttu.edu/hillcountry/junction/Junction%20Past/pages/03_jpg.htm)

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Spring 2006

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Spring 2006

**Motel In Junction, Texas**  
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**A Thesis in Architecture**  
**Submitted to the Architecture Faculty**  
**of Texas Tech University in**  
**Partial Fulfillment for the Degree of**  
**MASTERS OF ARCHITECTURE**

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## **Table of Contents**

### ***Introduction***

Introduction 01

### ***Theory***

Theory 03  
Focus 03  
Language of Architecture 04  
Language of Design 05  
Method of Design 06  
Space 09  
Formal System of Design 12  
Conclusion 17  
Bibliography 18

### ***Facility***

History 20  
Facility Type: Motel 23  
Precedents 24  
Analysis 28  
Activity Analysis 32  
Spatial Summary 41  
Bibliography 47

Introduction  
Theory  
Facility  
Context  
Design Response  
Conclusion

## ***Contents***

## **Table of Contents**

### ***Context***

Place	49
Demographics	51
History	52
Conditions	57
Description	65
Analysis	66
Bibliography	74

### ***Design Response***

Introduction	76
Analysis	77
Spatial Relationships	82
Design	86
Refine	90
Final	95

### ***Conclusion***

Final Presentation	108
--------------------	-----

Introduction  
Theory  
Facility  
Context  
Design Response  
Conclusion

## ***Contents***

As humanity continues to develop, more emphasis is placed on conservation, sustainability, and preservation. These issues are direct reactions to the growing concerns that many see as the implicit factors shaping the future of design, yet these issues have been inherent throughout the ages. Shelters were made to address issues of protection and refuge, thus there was an inherent reflection of the surrounding environment. A sensitivity to the materials and resources of the local palette offered careful and unique outlooks about construction. Today the concept of a world economy and temporary society have steered design toward the taller, sleeker, and more stark image of the high rise. These have little or no reflection of their environment, rather, they are just another protruding tree in a forest of depravity.

People now are more defined through their automobile than their dwelling. The automobile has allowed a more universal connection across the United States and the world. Thus, architecture should embrace the change and recognize the influence that this mobile society continues to exert on the economy, daily routine, and quality of life. Architecture should not merely accommodate the vehicle but should constitute an extension of the environment where the activity does desist, but melts into the next state.

The opportunity now is to reevaluate the current situation and find that if in our materialistic conquests we have lost our individualism and underestimated the significance of self. With this is the opportunity to find it through its link with the natural untamed environment.

***Introduction***

**Theory**

**Facility**

**Context**

**Design Response**

**Conclusion**

***Introduction***

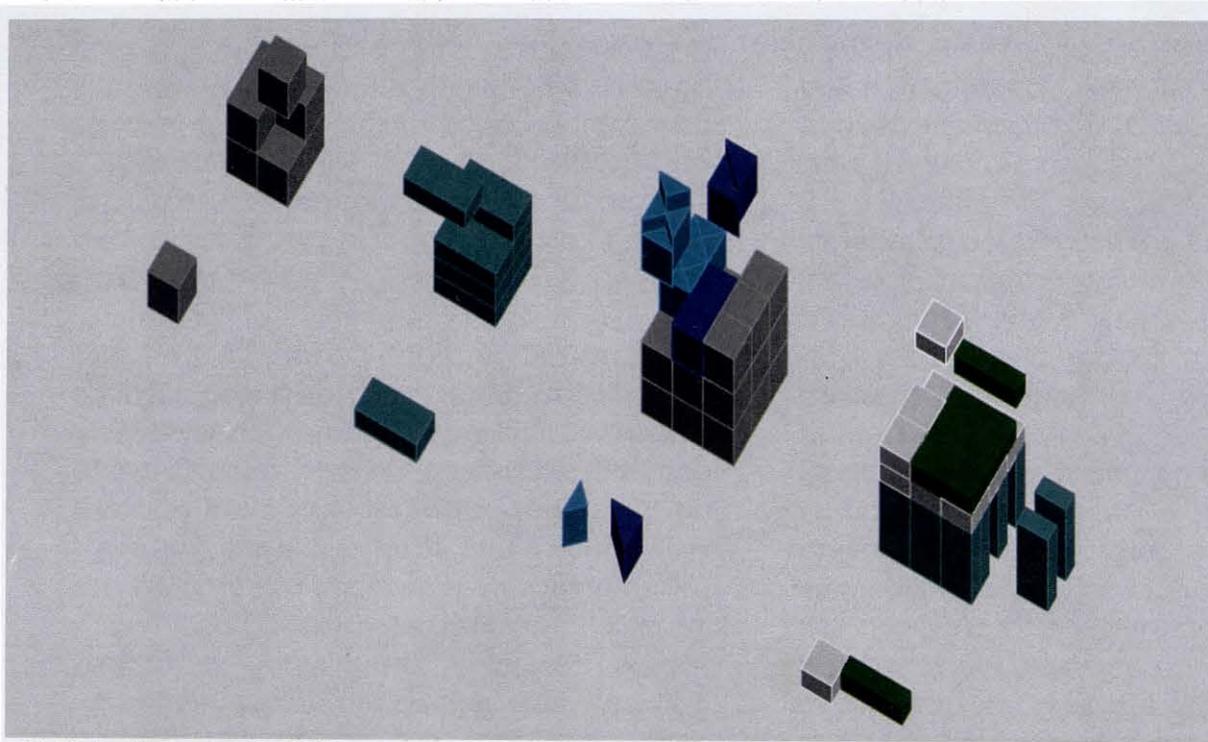


Fig. 1.1 - illustration by author

**Theory**

**Introduction**

*Theory*

**Facility**

**Context**

**Design Response**

**Conclusion**

*Theory*



**Theory** – Architecture is the orchestration of human occupation and movement through space. Forms are generated to address such complexities. These can be controlled to produce a clear, consistent language of a design generated through the use of shape grammars.

**Focus** – The primary focus of this project is to instill order on the natural, uncultivated environment through specific contextual and site issues. The site reveals the building through the circulation through it, through the way it sits in the earth, and through way the site reacts to the built environment.

1 – Circulation consists of: natural pedestrian movement, vehicular access, wind flow, layout of building elements, and nature's use of the site, including water, animals, and sun.

2 – Site, which addresses how the building reacts to the site, whether it sits on, soars above, or is nestled into the site depends on how the site offers potential for each.

3 – Reaction of the site to the building includes issues of how the flood waters flow through, how the sun materializes through shade and shadow on areas of the site, and how the building and site interact over time through weathering, movement, and human use.

Because the site is so rich in diversity and complex in placement, it has become the driving factor in the arrangement of elements upon it. The highway, main street, the river, the bridge, structured vegetation, evident slope, and views are all considered in the production of this design. Each plays significantly different roles and potentially counteract solutions to other problems.

**Introduction**

*Theory*

**Facility**

**Context**

**Design Response**

**Conclusion**

*Focus*

**Language of Architecture** - "The cult of consistency leads to idolatry." Adorno

A language for architecture has already been established. One that seeks control, one that offers means for suppression, and one that worships precedents for the resurrection of new buildings. The Classical, a regimented style, replicated to the point of exhaustion in a world that has long passed the need for such ideas. The architecture of today has been influenced by notions of 'space' and 'time,' yet, there is still a desire to digress and revert to the styles of old. It is a symbol, it speaks a language, it talks of style, academia, and accomplishment – these notions associated with the building are only evident to the planners and historians, so why are they still here? It is a disease, an idea spread by those who were unable to

express themselves as individuals, and unable to create something unique that could still carry the same influence as that associated with the 'masters.' Thus, plagiarism was born, this was not the theft of ideas, rather, the literal theft of symbols that carried meaning in one context, which were simply ratified in use in another. Through misuse and misunderstanding, the styles of yesterday have become meaningless. The masters of the time had their own language. Unique to the individual, and so complex and forward thinking that no one could see the relevance of the architecture as a specific moment in a specific place and time. Because of this, people would copy the material aspects that constituted the building, but would use them with no haste as a symbolic reflection of what actual

**Introduction**

**Theory**

**Facility**

**Context**

**Design Response**

**Conclusion**

**Language of  
Architecture**

architecture they were trying to copy. Even concepts of symmetry and window placement were applied, the use of which lent to such control and monopolistic thinking that they were literally confined to the 'box.'

**Language of Design** – The point that is being reiterated is that creative spirits started from scratch. There was not a limiting principle or style that controlled the thinking, rather, it was a blank slate with a unique context and character to be exploited through architecture. By using an inventory or list method, one is able to account for all of the 'pieces' that constitute a building, but are starting from scratch as to the construction and order to be identified through the use of these elements. This allows the designer to start

with a blank palette on each new and progressive project. Words, in this case that are used to describe the meaning behind the symbols cannot be used, they mean nothing except that given to them by context so they must be analyzed as to the relevance and nature of the meaning in each specific use. An instance of this is a window, which in the Classical style was used to divided the geometry of a room for the sole purpose of maintaining strict control. In the modern context, the window carries an array of messages: light, views, placement, security, and form are just a few of the many messages that a sole window could portray, and addressing these have ramifications on what it is trying to say about each. This would be addressing an individual window that could offer greater expression and mood of a room through the

**Introduction**

*Theory*

**Facility**

**Context**

**Design Response**

**Conclusion**

*Language of  
Design*

introduction of controlled natural light, as well as revealing on the exterior of the intentions within. This façade, created of unique openings specific to the interior becomes unfinished, which later allows it to fit in the context of the surrounding environment because everything that is modern must relate in an observant way to its collective context.

**Method of Design** - Designing in perspective gives only to the two-dimensional world. Perspectives are done on a flat surface and therefore in reality have no depth, to solve this, one must look first at the volume itself, and later the planes that define it. Pulling and pushing walls, breaking ceiling planes and removing floor planes are all examples of ways to shape a room and create complex systems of space within a space.

Spaces are not confined to four walls, a ceiling, and a floor plane. For instance, a cube or box can be defined by three edges, inferring the other sides. This can be done through materials or with the suggestion of planes. Considerations for defining space deal with gravity and support. Vertical planes must support the horizontal, both floor and roof slabs. With this in mind, there are numerous configurations that could be utilized. Some of these include pillar supports on the ends, cantilevering of planes off central supports, or supports that are separated to bear the areas of greatest stress. Vertical planes also act as division between spaces, they do not need to extend fully from floor to ceiling, and can take on many different configurations. The horizontal planes are defined by the humans occupation of the space.

**Introduction**

*Theory*

**Facility**

**Context**

**Design Response**

**Conclusion**

*Method of Design*

The intention is that the form relates to the function. Cantilevers for instance, in Frank Lloyd Wright's Falling Water lend to the emphasis of floating planes that Wright was infamously known for. The concept of the



Fig. 1.2 - <http://z.about.com/d/architecture/1/0/q/8/flwfallingwater02-at.jpg>

cantilever was to bring the supports in for stability. The form and structure act simultaneously to create an integrated and clear concept of cantilevers, for Frank Lloyd Wright's Robie House.



Fig. 1.3 - <http://cache.eb.com/eb/image?id=5844>

## Introduction

*Theory*

**Facility**

**Context**

**Design Response**

**Conclusion**

*Method of Design*

Space needs no exact borders that would limit human perception or circulation. It must allow movement freely through the space. This allows for humans to observe the building as a whole and not limit themselves to one perspective, such as that of the Parthenon and other buildings that were designed completely from one point of view. This is evident through the use of entasis that made the monument seem perfectly proportioned from a distance, but looked bulky and expanded up close.

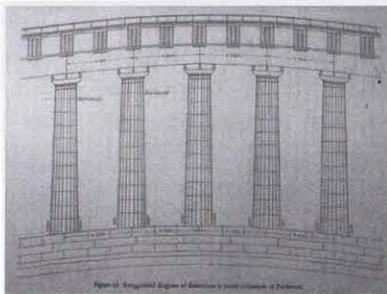


Fig. 1.4 - <http://www.utexas.edu/courses/introtogreece/lect20/img10entasis.html>

The primary view for the Parthenon was set as a perspective to those walking up to it.



Fig. 1.5 - [http://www.aeria.phil.uni-erlangen.de/photo\\_html/topographie/griechenland/athen/akropolis/parthenon/parth284.JPG](http://www.aeria.phil.uni-erlangen.de/photo_html/topographie/griechenland/athen/akropolis/parthenon/parth284.JPG)

## Introduction

*Theory*

Facility

Context

Design Response

Conclusion

*Method of Design*

**Space** - Architecture has the power to do what music can't (Walk through doors, view through windows, etc.) – Summerson

Aristotle said that space is 'the body's container,' yet there is much dispute, both scientifically and in other fields as to whether or not space exists. From the architect's view, space is clearly evident, whether it can be defined scientifically or not. Space, through an architect's eyes, cannot have physical form because it is the exact limitation of the thing it fills. Through the eyes of science, space is that which is defined by the material. It cannot be defined without reference to a solid that gives it form.

Space is a complex and multifaceted concept by which there is no easy explanation. The best way to describe it is to

explore the systems that make space comprehensible. On a very basic level, space is defined by the perception of form that is gathered from the variations of light and dark. After all, the perception of reality as a visual means must be afforded by light. Early science knew of space, yet were unable to describe it until they utilized the 'Cartesian Space' concept that allowed them to visualize space as a three-dimensional expansion of reality, a measurable concept from a scientific standpoint. Later, Newton distinguished between what he called absolute space and relative space. Absolute space cannot be detected by the senses, it becomes measurable in relative space, which means space that is unique to itself and infinite. Relative space is actually the measure of absolute space with a coordinate system. As a view of Physics,

**Introduction**

***Theory***

**Facility**

**Context**

**Design Response**

**Conclusion**

***Space***

absolute space is defined as remaining similar to itself and immobile. As space was considered relative, so to was time. Time in this sense is defined by the events that happen in sequence – in this case there is no way to distinguish one portion of time, the same concept as space.

Einstein gave three main concepts of space in Physics, they are:

1. The concept of space depends entirely on the material object. This implies that the concept of empty space has no meaning and without specific place and material, space does not exist.
2. Space is a reality that appears to the material world. It is able to exist independently of material objects.
3. The concept of space as a four-dimensional field. This constitutes the three dimensions of space and one of time.

Einstein's Theory of Relativity proves that space is actually a field and not an empty space.

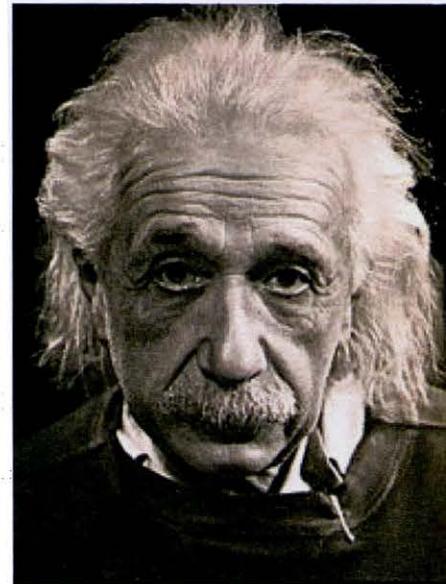


Fig. 1.6 - [http://www.leksikon.org/images/einstein\\_albert.jpg](http://www.leksikon.org/images/einstein_albert.jpg)

**Introduction**

***Theory***

**Facility**

**Context**

**Design Response**

**Conclusion**

***Space***

Scientific works have fueled the understanding and development of the concept of space, but there are still areas that lack understanding. From the architect's perspective lies the complexity of 'experiencing space. This entails the quality of the space, the definitions of its boundaries and the overall comprehension of a space. To add to the complexity is the fourth dimension of time, which entails movement through the space as a sequence of events. There is not one controlled viewing area like that of a painting which only allows one significant viewpoint, or even a sculpture that demands only the viewing area directly around it. Architecture as space requires movement in space, through areas, outside, This means inside, outside, at a distance and even touching the architecture. To control this is a very daunting task for any single

mind to comprehend, then there are the conditions of the space such as lighting, comfort and all of the basic human demands that must be met as well as the quality of the space.

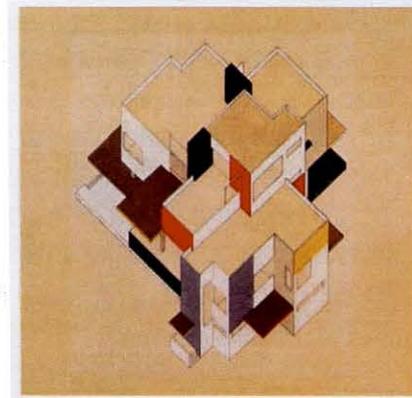


Fig. 1.7 - <http://www.kmtspace.com/kmt/Ds-86e-d.jpg>

The De Stijl movement was the first to realize the relationship between time and space as a four dimensional design process.

## Introduction

*Theory*

**Facility**

**Context**

**Design Response**

**Conclusion**

*Space*

**Formal System of Design – Shape Grammars** offer the control necessary for addressing complex systems and situations in a design. Factors of a language are addressed through the use of symbols, the basis of any language. A symbol, in this case a block, represents the base for the starting point of the language. Another block is utilized in the transformation of this language. By exploiting all of the symmetries of a block, there is a language of designs that are generated for one spatial relationship – the essence of space in architecture. This just means that a unique spatial relationship can have many variations, yet maintain the same innate characteristics of that relationship. Space can be physically manipulated through the use of these spatial relationships to develop new designs or utilized to document or expand on a current

system of design.

Shape Grammars are concerned with form and composition rather than social, cultural, functional. This allows for the elementary units of space to be explored. It also allows for different areas to be explored. For instance, as a language of design is developed, it can be manipulated to form anything from the layout of a building to the design for a staircase. In this case, form is a fundamental part of the expression of a design. Form constitutes all of the material composition of a building, but because of the elementary relationship between units, the design maintains a consistent language of spatial relationships. Grammars allow for the manipulation of styles. In this instance, a grammar could be created to reflect that of the layout of a motel, with relation to door

**Introduction**

*Theory*

**Facility**

**Context**

**Design Response**

**Conclusion**

*Formal System of  
Design*

location and even corridor layout. Once a design is developed for the spaces, it can be exploited to generate new, innovative designs that can be quickly evaluated and measured for the success of potential application. Taken from a basic relationship, the grammars allow for very complex three dimensional arrangements with the same relationship.

To understand the application, here is a graphical introduction:

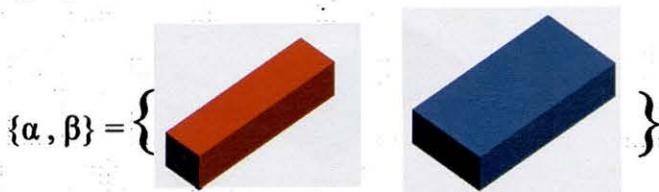


Fig. 1.8 – illustration by author

Here the shapes are labeled:  $\alpha$  is the pillar and  $\beta$  is the oblong, there is no spatial relationship yet.

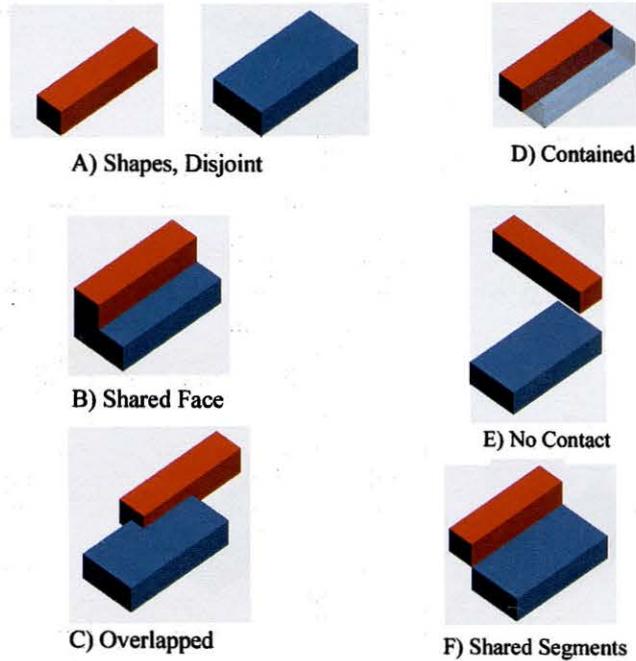


Fig. 1.9 – illustration by author

Spatial relationships of pillar and oblong.

## Introduction

*Theory*

**Facility**

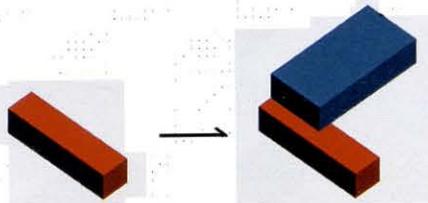
**Context**

**Design Response**

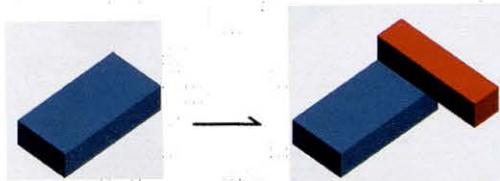
**Conclusion**

*Formal System of Design*

**Addition Rules:**



Type 1:  $\alpha \rightarrow \alpha + \beta$

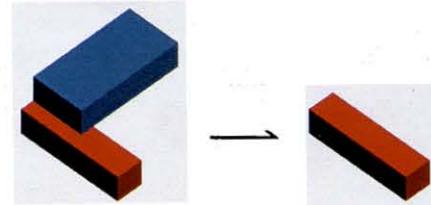


Type 2:  $\beta \rightarrow \alpha + \beta$

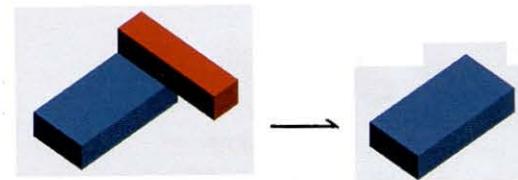
Fig. 1.10 - illustration by author

Rules are used to control the application of elements and maintain spatial relationships.

**Subtraction Rules:**



Type 3:  $\alpha + \beta \rightarrow \alpha$



Type 4:  $\alpha + \beta \rightarrow \beta$

Fig. 1.11 - illustration by author

Two basic rules of application are the addition and subtraction of elements.

**Introduction**

*Theory*

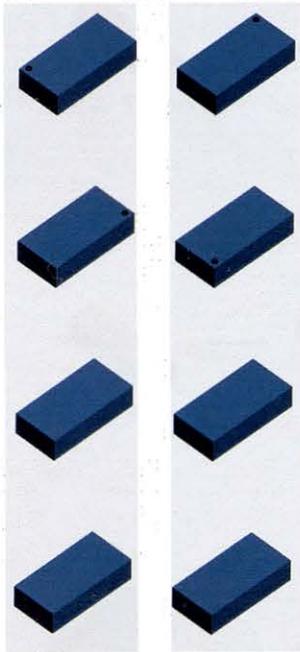
**Facility**

**Context**

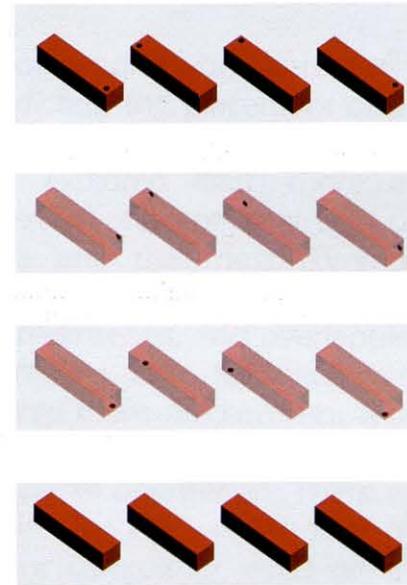
**Design Response**

**Conclusion**

*Formal System of Design*



Possible Labelings for Oblong  
 Fig. 1.12 – illustration by author



Possible Labelings for Pillar  
 Fig. 1.13 – illustration by author

Labels are used to dictate to derivation of elements. It is a control that maintains consistent application of elements.

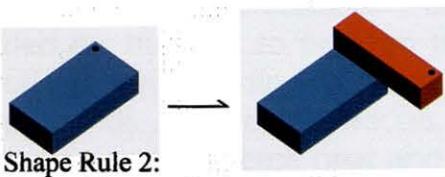
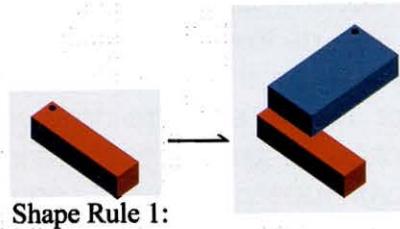


Fig. 1.14 – illustration by author

The derivation of designs work with at least two rules that dictate the placement of the shape to the former. With these designs, which will be explored later, there are consistent derivation concepts that turn up. Some examples are: the most common, infinite growth, pinwheel designs, designs that turn in on themselves, and overlapping designs. This means that for each new spatial relationship there are constant types of derivations, but each new one is unique to the specific spatial orientation. There are many possibilities for derivations and the system allows for complexity, even on the simple level a cube can have sixty-four different symmetries, meaning that the cube offers the possibility for 64 different derivations. Other rules can be used to simplify, like subtraction, or rotation, like a different label used on the same shape.

## Introduction

### *Theory*

### Facility

### Context

### Design Response

### Conclusion

## *Formal System of Design*

**Conclusion** – because of the complexities of the modern world, there must be a system of control used to filter out the useless data and utilize the relevant information. If there is no filter, no direction, then the project can be very ambitious, but will still lack meaning and clear expression of an idea, both visually and spatially. There is no way to address all of the problems of a design, so this offers a hierarchy and means to address the most pressing and consequently the most rewarding aspects of a design.

Design is utilized to address human occupation of a building. Space is created through the materialization of objects needed for humans to perform their tasks. Materially, the building has to reflect to direct needs of the individuals, such as protection from extreme heat and cold, and the availability of natural sunlight.

The language of a design is not a generic symbol that is understood only in academic circles. A language is derived from the context, the user, and the architect to related specifically to that moment in time. 'Masters' of architecture realize this and mannerists can never associate them with a particular 'style.' This is simply because even though there are recurring qualities of an individual, the Master architect remains humble and attentive to the project at hand, starting each project anew as a blank slate to be turned into a painter's masterpiece. Space and time are both classified as relative because they are defined by activities that bring them into existence. They are both essential to the observance and understanding of a a complex system of forms that combine to create the essence of Architecture.

**Introduction**

**Theory**

**Facility**

**Context**

**Design Response**

**Conclusion**

**Conclusion**

Introduction

**Theory**

Facility

Context

Design Response

Conclusion

**Bibliography**

## Bibliography

Inoue, Mitsuo. Space in Japanese Architecture. New York: Weatherhill, 1985.

Knight, Terry W. Transformations in Design: A Formal Approach to Stylistic Change and Innovation in the Visual Arts. New York: Cambridge University Press, 1994.

Krier, Rob. Elements of Architecture. London: Academy Editions, 1992.

Leupen, Bernard. Design and Analysis. New York: Van Nostrand Reinhold, 1997.

Summerson, John N. The Classical Language of Architecture. Cambridge: M.I.T. Press, 1966.

Ven, Cornelis van de. Space in Architecture : The Evolution of a New Idea in the Theory and History of the Modern Movements. N.H., U.S.A.: Van Gorcum, 1987.

Zevi, Bruno. The Modern Language of Architecture. New York: Da Capo Press, 1994.



Fig. 2.1 -  
[http://www.depts.ttu.edu/hillcountry/junction/Junction%20Past/pages/11\\_jpg.htm](http://www.depts.ttu.edu/hillcountry/junction/Junction%20Past/pages/11_jpg.htm)

**Introduction  
Theory**

***Facility***

**Context**

**Design Response**

**Conclusion**

***Facility***

**Facility**

**History** –In the early part of the twentieth century, there were few of the amenities available to today's interstate traveler. Most of the time camping was the only alternative. Whether it was the side of the road, in a designated area, or in a farmer's field, these traveling enthusiasts relied heavily on their mode of transportation, but had little provided shelter along their excursions. Towns began welcoming these tourists and their money, yet complained of the lack of concern and respect given by these passers-by.

As this group of travelers began to grow, the eastern U.S. realized the market and offered the concept of 'tourist homes.' These were in essence local apartments that were offered out during peak times of travel, particularly April, May and June, and after Labor day. During these periods

reduced costs were offered as incentive to occupy these homes. Each home was a unique reflection of the owner who lent it out. Although these were the first "mom and pop" motels, they were not directly related to the modern motels that line the freeways, rather these were located in centralized areas of the city.

As the Depression took its toll on America in the 1930's, people began to find more cheap and profitable solutions than that offered by camping sites alone. This included setting up a gas pump, building or assembling prefabricated shacks for temporary stay. These were little more than four rickety walls, which could be acquired for a mere one dollar. To add a mattress for two the cost would increase 25 cents. This resembled the essence of a motel in that one pays at the register, is escorted to their

**Introduction  
Theory**

**Facility**

**Context**

**Design Response**

**Conclusion**

**History**

room and given the bare minimum to sustain one's self. This consisted of a bucket of water from an outside water well and a bundle of wood for a fire during the winter, with blankets and sheets costing an extra fifty cents.

Cottage courts came as a reaction to these rather unpleasant living conditions. These were standardized along a common motif and frequently organized around a public lawn. Owners began to realize the underlying characteristics that influenced travel and began to locate themselves in areas of high interest. Unlike the downtown hotels, these areas were designed with the automobile in mind. This is first time that a person was able to park under a carport near, or directly adjacent to one's room. The correlation between and dependence of the automobile and the room becomes

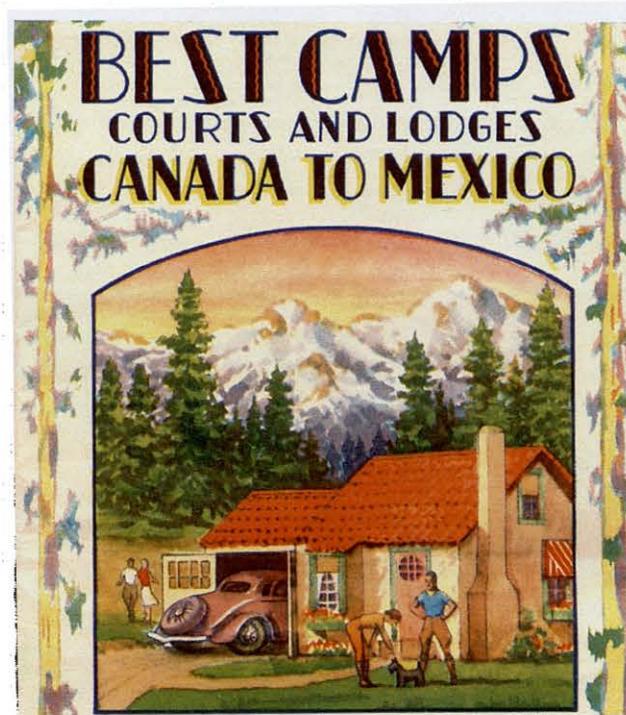


Fig. 2.2 - [http://www2.sjsu.edu/faculty/wooda/motel/history/best\\_camps.jpg](http://www2.sjsu.edu/faculty/wooda/motel/history/best_camps.jpg)

**Introduction  
Theory**

***Facility***

**Context**

**Design Response**

**Conclusion**

***History***

blatantly obvious shaping the foundations of the modern motel.

During the 1930's and 40's the second world war took precedence over all things related to travel, including tires, gasoline, and especially leisure time. During this time Dwight D. Eisenhower envisioned great highways that spanned the U.S. and connected the whole country.

As these gained prominence, highways like route 66 provided the opportunity to experience the American landscape and experience everything it had to offer. Reflective of this lifestyle, temporary stops began lining these corridors in order to offer solace and sleep for weary travelers. These 'motels' as they came to be called were rather plain and bare on the interior but bold and reflective of

regional styles on the exterior.

Motels like this one in Tucumari, New Mexico were reflective of the regional styles. These 'motels' were oriented toward the highway to attract drivers from a distance. Most were very colorful and bright to signal attract the eyes of tourists.

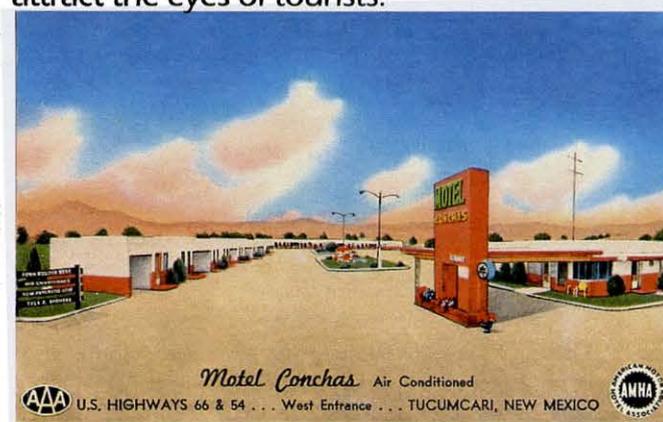


Fig. 2.3 - <http://www.bygonebyways.com/66PC-NM-Tucumcari-Motel%20Conchas-NoPM.jpg>

## Introduction Theory

### Facility

### Context

### Design Response

### Conclusion

### History

**Facility Type: Motel** – The motel is viewed as a public lodging establishment primarily for use by automobile travelers. Motels serve the traveler and offer quick and easy access, therefore placement is usually away from major urban areas and directly adjacent to main highways and thoroughfares. The layout and orientation of a motel is generally reflective of the automobile and the population density. The scale remains smaller and more direct than a hotel: instead of building up, motels tend to expand to fill the site. Motels differ from hotels in that the former has facilities for free parking on the premises, are seldom more than three stories high, and offer occupants direct access to rooms without having to pass through a lobby. These differences in layout are the most dramatic dividing elements of motels and hotels, but

there are several characteristics that can be attributed on a different scale. Cars are usually situated relatively or directly adjacent to the rooms in a motel. Motels tend to offer fewer amenities than a hotel, this is because the motel is generally viewed as a place to rest for the night. Motels are not cheaper or of a lower quality, rather, the rooms and the layout are more efficient and less oriented towards entertainment and more toward comfort. Motels can be seen as logical heirs to the earlier American public houses. The distinction between motels and hotels, however, is very difficult to make, especially in the case of the so-called motor hotels, which combine the characteristics of both types of establishment. In the 1980s and 90s, some midrange motels began to offer suite accommodations and other features once found only in hotels.

**Introduction  
Theory**

**Facility**

**Context**

**Design Response**

**Conclusion**

**Facility Type**

**La Tourette** – this complex, designed by LeCorbusier was chosen not as a model for a motel, but for the congruity of problems to be addressed.

First, the terrain offers a challenge for the footprint of the structure. The support system, the attention to the area around, and the way the building sits in the landscape are all issues that were addressed through the investigation of this building.



Support for the structure was accomplished through very slender and long concrete planar walls. The use of these was to provide defined spaces with the supports.

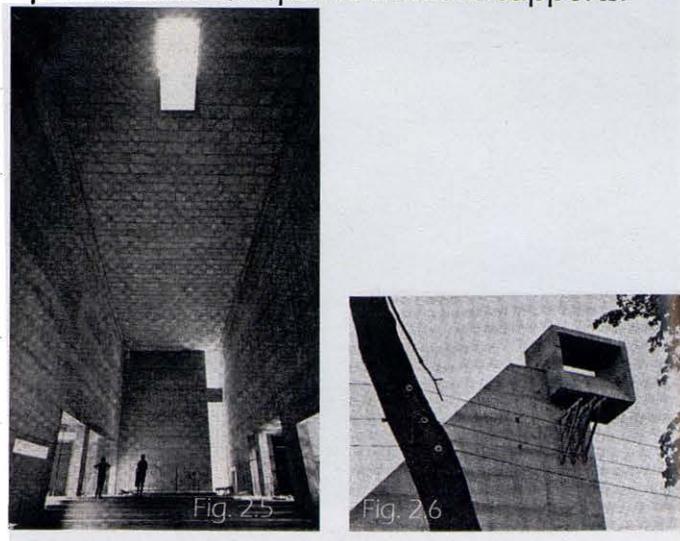


Fig. 2.4-6 - Le Corbusier. Couvent Sainte Marie de la Tourette Eveux-sur-l'Arbresle. Tokyo: A.D.A. EDITA Tokyo, 1971.

**Introduction**  
**Theory**

**Facility**

**Context**

**Design Response**

**Conclusion**

**Precedents**

Another issue facing the design was the aspect of public and private space. This is a solace monastery and a place of worship. There is a dichotomy of public and private in the design. The public areas exist on the lower levels and in the courtyard areas formed by the extents of the design. The private areas are small and modest with each monk having his own area to dwell and contemplate. The extents of the rooms are formed on the outside with rows of boxes facing the exterior landscape.

The overall feel of the complex is that of quiet meditation, a feeling intentionally conveyed in the design and a fitting abode for monks. The courtyard flows out of the building and into the landscape. As the building rises and the terrain falls, this expression is highlighted through the supports that narrow as the building

extends out. The accolades of this intension are clear as the building stands out as a stark monument in the landscape.

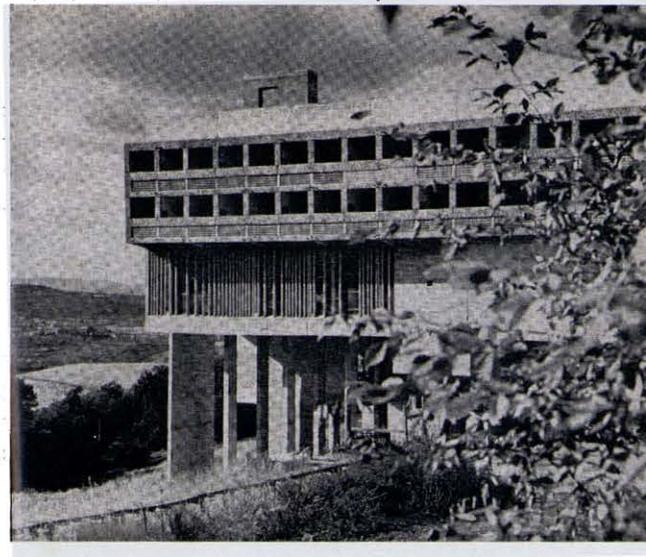


Fig. 2.7 - Le Corbusier. *Couvent Sainte Marie de la Tourette* Eveux-sur-l'Arbresle. Tokyo: A.D.A. EDITA Tokyo, 1971.

**Introduction**  
**Theory**

**Facility**

**Context**

**Design Response**

**Conclusion**

**Precedents**

The second level plan shows clearly the routes to and from worship. The public areas are well defined with interstitial areas between with less structured requirements. This attributes to the idea of contemplation with areas to stop and meditate, there is almost no allowance for haste. The footprint also allows areas of nature to flow in.

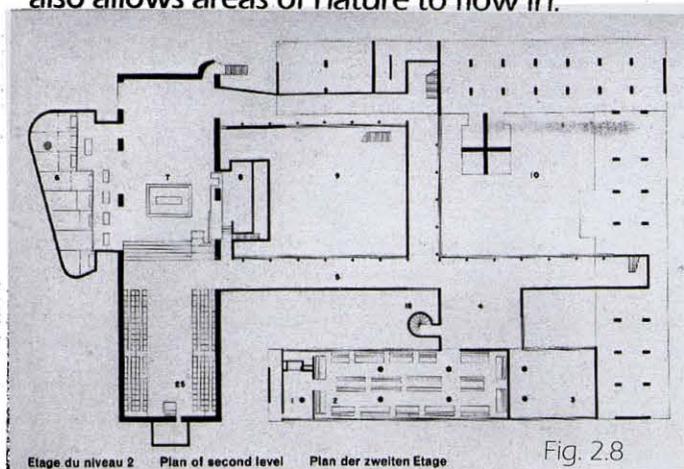


Fig. 2.8

The fifth level plan shows the individual rooms. The actual scale is evident from the size of the doorways to the rooms. Living quarters were efficient but not constrained, and lent to the overall layout of the courtyard and attention to nature.

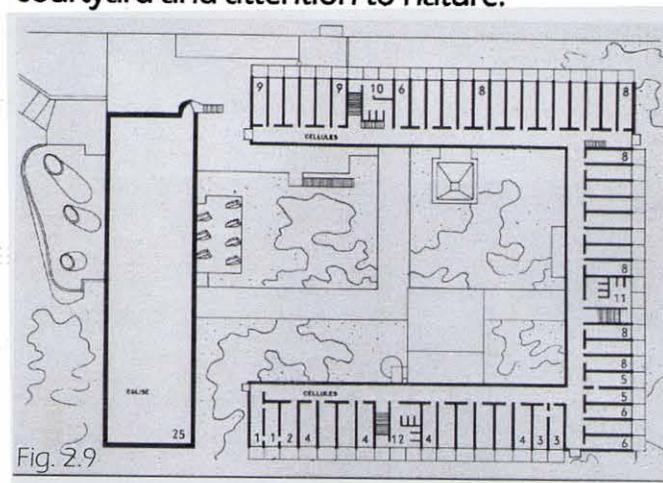


Fig. 2.8-9 - Le Corbusier. Couvent Sainte Marie de la Tourette Eveux-sur-l'Arbresle. Tokyo: A.D.A. EDITA Tokyo, 1971.

## Introduction Theory

*Facility*

**Context**

**Design Response**

**Conclusion**

*Precedents*

Neurosciences Institute – in California shows a dramatically different approach to the landscape than La Tourette. As opposed to the artificial seating itself on the natural, Williams and Tsien allow sparse areas of vegetation and water to protrude into a man-made landscape.



The interior of the institute utilizes a variety of materials, some for support, others for cladding, but all meet at an understandable moment. The warm wood offers a clear contrast to the cold materials of the floor and support walls.



Fig. 2.8-9 - Williams, Tod and Tsien, Billie. Williams Tsien : Obras = Works. 2G. 1136-9647; n.9 = 1999/1. Barcelona, Spain: G. Gili, 1999.

Introduction  
Theory  
**Facility**  
Context  
Design Response  
Conclusion

**Precedents**

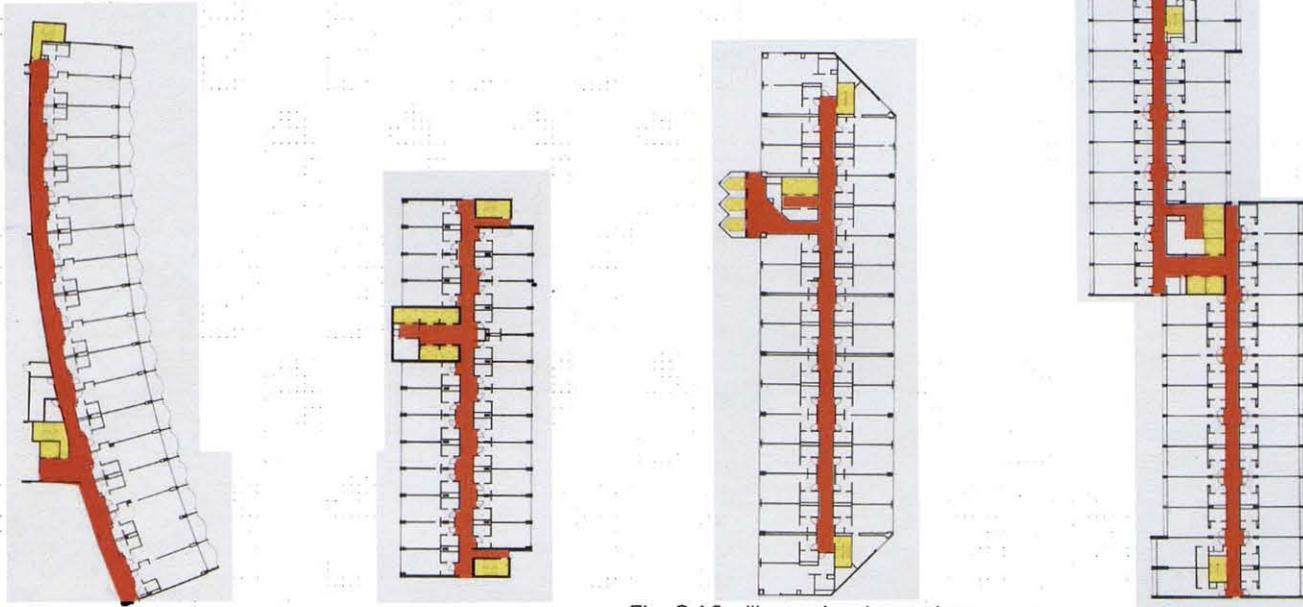


Fig. 2.10- illustration by author

**Layout Studies** – The circulation routes of most motel and hotel layouts consist of long arms with rooms flanking a corridor and vertical circulation taking place on the

edges and in the center. The areas of red show vertical circulation while the areas in yellow show vertical circulation such as elevators and stairs.

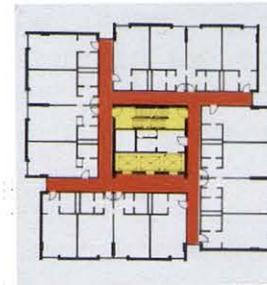
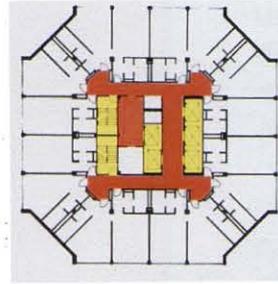
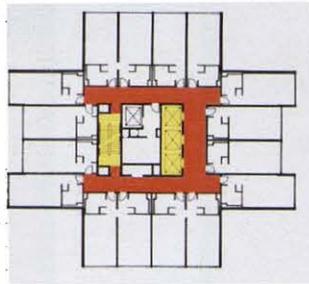
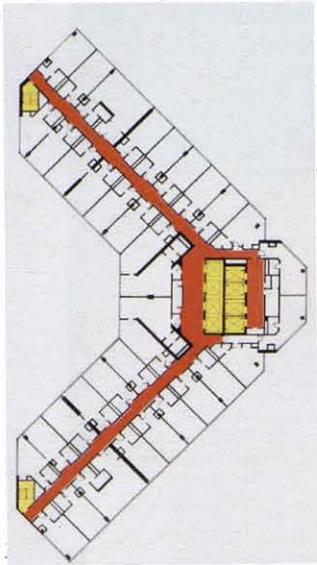


Fig. 2.11 – illustration by author

Other layouts take the shape of pinwheel and central arrangements. These are usually found in high-rise buildings that need a small and efficient footprint. As with before,

the red shows horizontal circulation to the rooms and the yellow is the vertical circulation that allow the connection between levels.

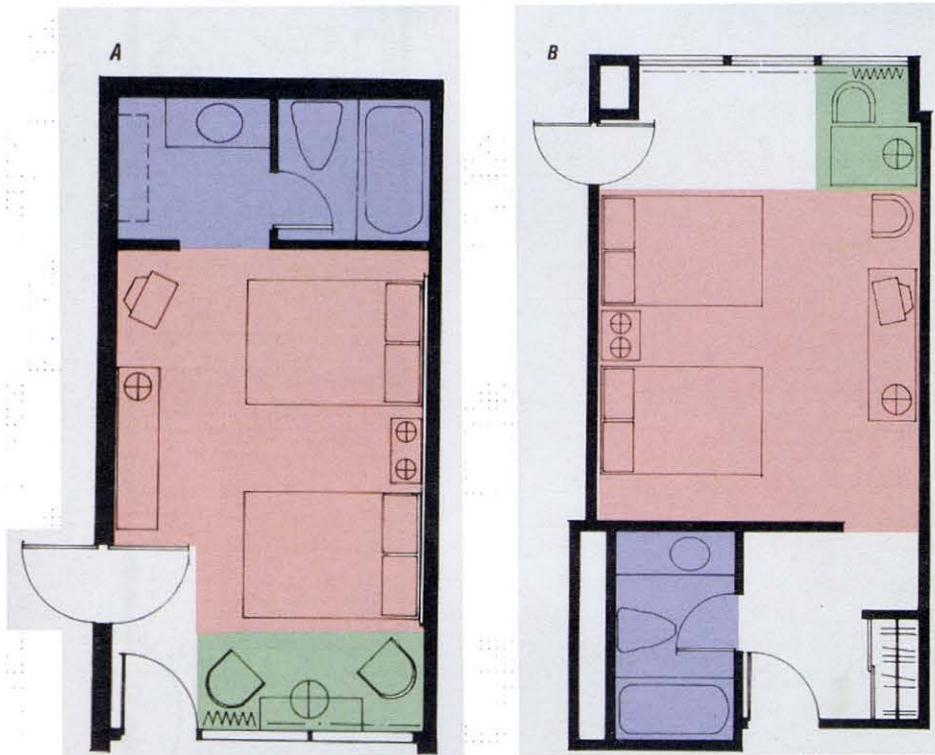


Fig. 2.12 – illustration by author

**Room Layout** – These are generic motel room layouts that show the relative location of areas of most predominant use. The green represents dining/lounging, the red area represents living/sleeping, and the blue represents the bathing area. Each of these areas remain separated and easily distinguishable from the other. The circulation areas of the room are minimal and overlap most of the living area. The overall orientation is the elongated 1:2 length to width ratio. This allows for sufficient layout of furniture and living space in a small area.

**Introduction**  
**Theory**  
**Facility**  
**Context**  
**Design Response**  
**Conclusion**

*Analysis*

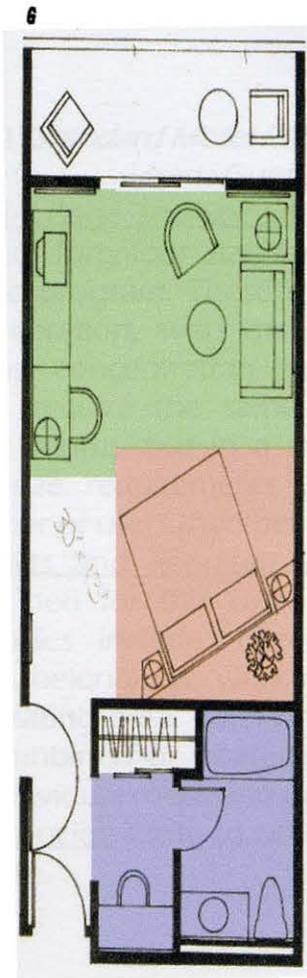


Fig. 2.13 – illustration by author

**Room Layout** – This room layout extends to almost 1:3 width to length. Access is next to the bathing area clearing the rest of the room for lounging and sleeping. The balcony is also part of this area. By pulling the bathroom to the front, it allows a water wall to run vertically that actually doubles as an insulated noise barrier from traffic passing outside. The bed faces out offering a view out of the room which offers visual relief from the feeling of being confined on all sides.

The most efficient layout for a motel room is a rectangle because it allows for the easiest circulation from one area to the next and stacks easily as a block with adjacent rooms.

Once again, the blue is bathing area, the red is living/sleeping and the green area is devoted to lounging and socializing, which extends out onto the balcony.

## Introduction

## Theory

## Facility

## Context

## Design Response Conclusion

## Analysis

### Unit I (*Standard Motel Rooms*)

Users: Guests (2)

Space Usage and Speculations: There are a total of forty-four standard rooms denoted in the program. These require a utilitarian consideration, with the concept of these rooms concentrating on efficiency. The users require the same amenities as the other rooms, but in a condensed version. The size requirements coincide with the number of users (two per room).

Artifacts and Requirements: The standard issue bed for this room is a king. Other amenities include: television, storage for user's belongings, work area, lounge area, and eating area. Each of these aspects can be combined or treated individually based on individual room and user considerations.

Adjacencies: Close to other guest rooms on the site.

### Unit II (*Large Room with balcony*)

Users: Guests (4)

Space Usage and Speculations: There are a total of six large rooms with balconies denoted in the program. This space is allotted for four persons, but will easily accommodate up to six. Extended stay should be accommodated through amenities and space considerations.

Artifacts and Requirements: The standard issue bed for this space is one queen bed. Other amenities include: television, storage for long term stay, storage for user's belongings, work area, lounge area, and eating area. This space should be self-sustaining for longer periods of time.

Adjacencies: Close to other suites on the site.

Introduction  
Theory

**Facility**

Context

Design Response

Conclusion

**Activity Analysis**

## Lobby

Users: Guests, employees, and administration

Space Usage and Adjacencies: The lobby accommodates many different functions:

The registration desk must be able to hold at least two employees and be oriented for ease of check in. It should be oriented within sight of the lobby entrance area. This area is the focal of the lobby and should be denoted as such.

The check-in area is contained within the Registration desk. It is devoted to the assigning of rooms and checking out guests at the end of their stay.

The receptionist / information area is contained within or close to the registration desk. Here, employees address guest's concerns about the motel services, check-in /check-out times, and the local community.

The concierge works directly with the reception and information area. This job constitutes making sure the customer stays satisfied. It services guests' needs and offers suggestions for dining and visiting the area. Because it serves the guests' wishes and demands, it might be beneficial to be placed by the kitchen to fulfill room service requests.

The seating / lounging area needs to be flexible to address the influx of guests. It must be of sufficient size to accommodate large traffic flow at check-in or other busy times, but remain at a more intimate scale. It can potentially be placed near the bar area. Circulation should be straightforward with obvious connections to vital public areas and connected access routes for rooms and suites.

Introduction  
Theory

**Facility**

Context

Design Response

Conclusion

**Activity Analysis**

Lobby space is free space that initiates the user to the site. It should be naturally lit and have a more public scale, both in height and dimension.

Luggage storage is a small consideration, but a big area which needs to be addressed to free the circulation area of bags and clutter. It should be close to the front desk, but out of mainstream traffic.

Artifacts and Requirements:

The registration desk obviously requires a counter for working and a counter work area for employees. Also computers, telephone and chairs are required.

The check-in area houses a computer, phone and relevant check-in materials.

The receptionist / information area must have access to relevant information to address guest concerns. This means a computer, brochures, service

communication, and telephone.

The concierge requires a flexible desk space with access to much of the information available to the receptionist desk.

The seating / lounging area should have furniture for sitting, places to store luggage, and tables to set belongings.

Circulation requires no explicit artifacts.

Lobby space requires no explicit artifacts.

The luggage storage area requires storage racks and luggage moving carts.

*Public Spaces:*

**Recreation Space – Swimming Pool**

Users: Employees, administration, and guests

Space Usage and Speculations: A swimming area for guests and employees.

Artifacts and Requirements: This area will address both sun and shade for the pool

**Introduction  
Theory**

**Facility**

**Context**

**Design Response**

**Conclusion**

**Activity Analysis**

area, allowing for different environments of use.

Adjacencies: This space is in the public area, located centrally and close to the guest rooms.

#### Recreation Space – Pool Deck

Users: Employees, administration, and guests

Space Usage and Speculations: A deck that is connected to and overlooks the swimming pool

Artifacts and Requirements: This area will utilize sun and shade. The consistency of the footing should be rough to allow for a firm grip around a wet surface.

Adjacencies: This space is in the public area, located centrally with adjacency to the lobby area, and in close relation to the guest rooms.

#### Recreation Space – Pool Lounge area

Users: Employees, administration, and guests

Space Usage and Speculations: An enclosed space that overlooks the pool area.

Artifacts and Requirements: This space will be able to open up to the pool area.

Artifacts and Requirements: lounge furniture, pool table, miscellaneous games, and television. This space requires views of the pool with sufficient natural lighting.

Adjacencies: This area is directly adjacent to the pool area. Also this area should be close to the lobby area for short term entertainment of guests.

#### Function Spaces

##### Meeting Rooms

Users: Employees, administration, public, and guests

Introduction  
Theory

**Facility**

Context

Design Response

Conclusion

**Activity Analysis**

Space Usage and Speculations: An area where formal meetings can be conducted along with visual and audio presentations.

Artifacts and Requirements: Desks, chairs, tables, computers, phones, projection equipment, and screens are required artifacts. This area could have views, but direct sunlight needs to be at a minimum because of the contrast needed during digital media presentations.

Adjacencies: To the administration area. Also, this area needs to be accessible to the public. Also close to the other function spaces.

### **Ball Room**

Users: Employees, administration, public, and guests

Space Usage and Speculations: A formal gathering area for users, employees, and

the public to conduct gatherings. Use is flexible to provide a background for various potential activities in the space.

Artifacts and Requirements: Tables, chairs, media equipment are artifacts required for this space. The space needs to be able to regulate views and exterior light

Adjacencies: This area needs to be located in a central location with adjacencies to public areas. Also close to the other function spaces.

Function Spaces (Motel)

Banquet Room (1)

Users: Employees, administration, public, and guests

Space Usage and Speculations: A formal dining and social function space that serves as a background for banqueting festivities.

Artifacts and Requirements: Tables, chairs, formal dining ware, and service areas are

**Introduction  
Theory**

**Facility**

**Context**

**Design Response**

**Conclusion**

**Activity Analysis**

artifacts required for this space. The space needs to be able to regulate views and exterior light.

**Adjacencies:** This area needs to be located in a central location with adjacencies to public areas. Also close to the other function spaces.

#### **Front Office**

**Users:** Employees, administration and guests

**Space Usage and Adjacencies:** The front office accommodates a variety of different functions:

The front desk acts as a buffer for the rest of the front office. It is the first line of help for a guest or customer. It should be placed in a common area within the front office.

The information area is intended to access the whole site and be a mediator between guests, workers, and administrators.

The reception area acts to hold users until they are asked into a different area.

The work area is just that. It is the office space that is required for employees to perform their jobs.

The computer room is for workers and IT personnel. It houses the network computers and other electronic monitoring systems for the site.

The copy room allots space for electronic media, and offers a workspace that requires a larger area.

Storage deserves consideration as it acts to organize and allow for quick access to stored files, mail reception, and a safe deposit box.

#### **Artifacts and Requirements:**

The front desk naturally requires a desk and chair for the employee.

The information area requires a desk and a

## **Introduction Theory**

### ***Facility***

### **Context**

### **Design Response**

### **Conclusion**

### ***Activity Analysis***

chair.

The reception area requires furniture for waiting.

The work area requires ample space for computers, telephones, and other instruments used by employees

The computer room is for workers and IT personnel. It houses the network computers and other electronic monitoring systems for the site.

The copy room includes a copier, printer, fax, and telephone, including a workspace.

Storage deserves includes shelves and open space, but it also houses a mail reception area and a safe deposit box.

#### **Executive Offices**

Users: Employees and administration

#### Space Usage and Adjacencies:

The executive offices contain a range of

different functions:

The manager's office is at the top of the hierarchy and must be placed within the administration as such. This room is representative of the whole site and needs distinguishing elements to denote this presence. The secretary needs to be close to the manager's office. Also, the assistant manager should follow in rank of the offices. The private entertainment space is allotted specifically for the manager and other executives. It is a place to entertain guests and business partners. It should have great views and orientation toward the rooms and suites. This space should be located close or adjacent to the manager's office.

The secretary works for the executives and needs to be located in relative distance of the manager's office. The secretary also needs quick access to information and

**Introduction  
Theory**

***Facility***

**Context**

**Design Response**

**Conclusion**

***Activity Analysis***

relevant services of the office so that responsibilities can be distributed to the appropriate areas.

The personnel supervisor works for the employees and needs an office or space of easy access. This person is in and out of the office a lot of the time and occasionally works with the accounting office to organize pay, therefore the office should be within a relatively close distance of the accounting area.

The assistant manager acts along side the manager and works more thoroughly with other employees and must be positioned to accommodate this.

The copy room allots space for electronic media, and offers a workspace that requires a larger area.

Storage deserves consideration as it acts to organize and allow for quick access to

stored files, mail reception, and a safe deposit box.

#### Artifacts and Requirements:

The front desk requires a desk and chair for the employee.

The information area requires a desk and a chair.

The reception area requires furniture for waiting.

The work area requires ample space for computers, telephones, and other instruments used by employees

The computer room is for workers and IT personnel. It houses the network computers and other electronic monitoring systems for the site.

The copy room includes a copier, printer, fax, and telephone, including a workspace.

Storage includes shelves and open space, but it also houses a mail reception area and

**Introduction  
Theory**

***Facility***

**Context**

**Design Response**

**Conclusion**

***Activity Analysis***

a safe deposit box. Activities: Supervising, informing, administering, directing, working, meeting

Artifacts and Requirements: Artifacts are: computers, printers, desks, chairs, and storage areas. This area maintains and oversees the experience of the resort. Workers in this area should maintain the same environment and feelings as the guests at the resort. Because this area requires administration duties, it should be situated to exploit views of the complex.

Introduction  
Theory

***Facility***

Context

Design Response

Conclusion

***Activity Analysis***

*Subsistence*

Guest Rooms

<u>Room Type</u>	<u># of rooms</u>	<u>Sq. Ft./Room</u>	<u>Sq. Ft.</u>
Unit 1	44	288	12,672
Unit 2	6	432	2,592
	50	Sub-Total	15,264

*Congregation*

Public Space Total 15,264

<u>Lobby</u>	<u>Sq. Ft.</u>
Registration Desk	128
Check-in Area	96
Receptionist / Information	96
Concierge	288
Seating / Lounge Area	96
Circulation	1,000
Lobby Space	1,536
Bellman / Luggage	192
Sub-Total	3,304

Introduction  
Theory

**Facility**

Context

Design Response

Conclusion

**Spatial Summary**

<u>Pool Area</u>	<u>Sq. Ft.</u>
Swimming Pool	1,152
Pool Deck	864
Lockers and Storage	128
Pool Pump and Equipment	96
Pool Lounge Area	864
Sub-Total	3,104

<u>Function Spaces</u>	<u># of spaces</u>	<u>Feet/Space</u>	<u>Sq. Ft.</u>
Meeting Room	2	576	1,152
Ballroom	1	1,152	1,152
Break Rooms	2	192	384
Conference Rooms	2	576	1,152
Sub-Total		3,840	
Total		10,248	

Introduction  
Theory  
**Facility**  
Context  
Design Response  
Conclusion

**Spatial Summary**

*Labor*

Administration

<u>Front Office</u>	<u>Sq. Ft.</u>
Front Desk	128
Information	64
Reception	96
Work Area	96
Fire Control Area	64
Copy Room	96
Security	96
Computer Room	128
Storage	
Mail	32
Safe Deposit box	32
Files	32
Sub-Total	864
<u>Executive Offices</u>	<u>Sq. Ft.</u>
Manager	192
Private Entertainment Space	384
Secretary	64
Personnel Supervisor	96
Assistant Manager	96
Reception Area	256
Sub-Total	1,088

Introduction  
Theory

**Facility**

Context

Design Response

Conclusion

**Spatial Summary**

<u>Shared Administrative</u>	<u># of spaces</u>	<u>Feet/Space</u>	<u>Sq. Ft.</u>
Restrooms			
Men's	1	288	288
Women's	1	288	288
Storage / Copy	4	64	256
	Sub-Total	832	
	<b>Total</b>	<b>2,784</b>	

**Service Space**

<u>Service Areas</u>	<u>Sq. Ft.</u>
Receiving	256
General Storage	768
Trash	192
Shipping / Receiving Office	288
Equipment Storage	1,024
Maintenance Shop	512
Cleaning / Sanitation Area	192
	Sub-Total
	3,232

**Introduction**  
**Theory**  
**Facility**  
**Context**  
**Design Response**  
**Conclusion**

**Spatial Summary**

<u>Employee Areas</u>	<u># of spaces</u>	<u>Feet/Space</u>	<u>Sq. Ft.</u>
Changing	1	96	96
Storage	2	96	192
Restroom			
Men's	1	288	288
Women's	1	288	288
Individual Storage	1	32	32
	Sub-Total	2,432	

<u>Laundry</u>	<u>Sq. Ft.</u>
Laundry Room	1,152
Soiled Laundry	96
Clean Laundry	96
Cleaning Supplies	32
	Sub-Total
	1,376

<u>Housekeeping</u>	<u>Sq. Ft.</u>
Linen Storage	288
Cleaning Supplies	96
Uniform Storage	96
	Sub-Total
	480

Introduction  
Theory

**Facility**

Context

Design Response

Conclusion

**Spatial Summary**



## **Bibliography**

Brooks, R. Gene. Site Planning: Environment, Process, and Development. Englewood Cliffs, N.J.: Prentice-Hall, c1988.

Lynch, Kevin. Site Planning. Cambridge, Mass.: MIT Press, c1984.

Rubenstein, Harvey M. A Guide to Site and Environmental Planning. New York: Wiley, c1987.

Russ, Thomas H. Site Planning and Design Handbook. New York: McGraw-Hill, c2002.

**Introduction  
Theory**

***Facility***

**Context**

**Design Response**

**Conclusion**

***Bibliography***



Fig. 3.1 - [http://www.depts.ttu.edu/hillcountry/junction/Junction%20Past/pages/09\\_jpg.htm](http://www.depts.ttu.edu/hillcountry/junction/Junction%20Past/pages/09_jpg.htm)

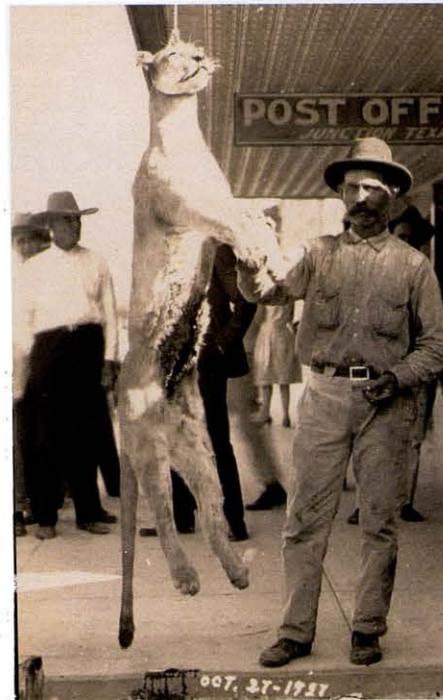


Fig. 3.2 - [http://www.depts.ttu.edu/hillcountry/junction/Junction%20Past/pages/17\\_jpg.htm](http://www.depts.ttu.edu/hillcountry/junction/Junction%20Past/pages/17_jpg.htm)

**Context**

**Introduction  
Theory  
Facility**

**Context**

**Design Response  
Conclusion**

**Context**



Place – Junction, known as the “land of living waters”, is located on the Edwards Plateau in southwest central Texas. It is the largest town in Kimble county with a population of 2,654, it is also is the county seat and constitutes the vast majority of the population in the 1,274 square miles of Kimble county. Kimble county remains relatively isolated and scenic, with rolling hills that range from 1,400 to 2,400 feet above sea level and more year-round flowing streams than any other county in Texas.

Junction is located on the western edge of the Texas Hill Country along Interstate Highway 10. It is also served by U.S. Highways 83 and 377. The town is a short distance from the U.S. 290 intersection with I-10. The town is located close to the intersection of I-10 and 290, and sees many

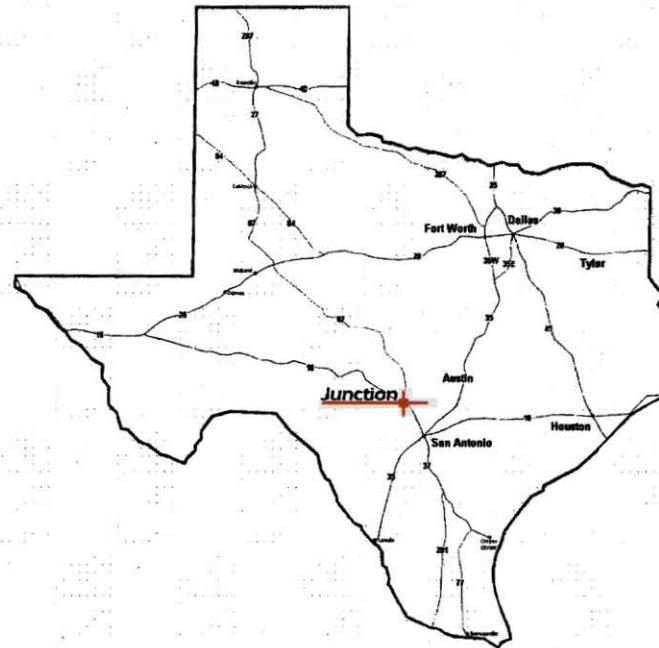


Fig. 3.3 – illustration by author

Introduction  
Theory  
Facility  
**Context**  
Design Response  
Conclusion

**Place**

travelers and visitors along these main thoroughfares.

The town of Junction is a literal junction of major highways. It is the ideal hub or stopping point for many vehicular travelers. El Paso depends on industrial supplies that are shipped via east Texas and Junction is the ideal stop for many truckers, both for refueling and as a rest area. For those that come from San Antonio and Austin, the majority constitute visitors and tourists that like to spend their time shopping and experiencing the slower pace of small town life. Still other travelers see Junction as the ideal stop between most major cities in Texas and bordering states.

The major cities that Junction acts to link directly are Austin, San Antonio, Laredo, El Paso, San Angelo, and Dallas. There are numerous other Surrounding areas that are

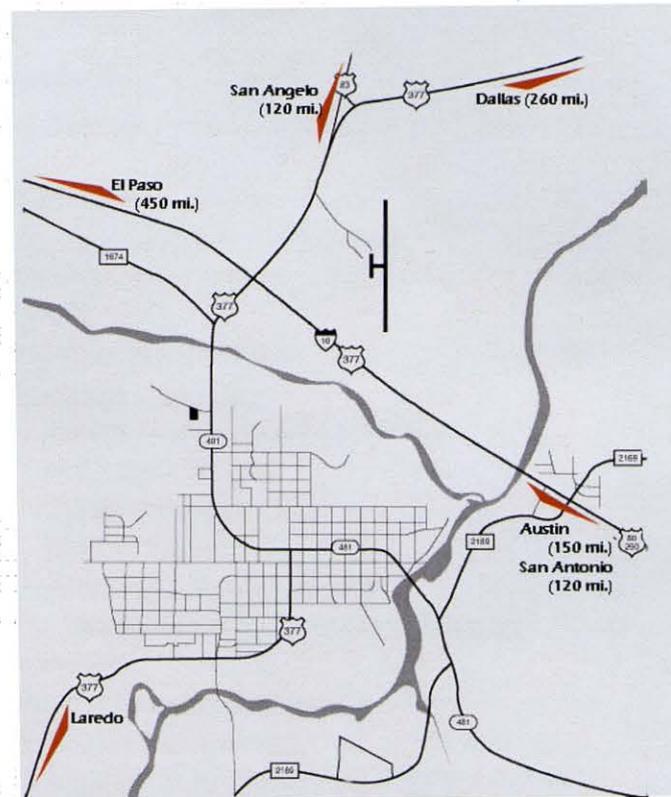


Fig. 3.4- illustration by author

## Introduction Theory Facility

## Context Design Response Conclusion

## Place

facilitated by the accommodations provided by Junction.

**Demographics** – There are two dominating business markets found in Junction. The first is the retail trade market that caters to the many tourists and visitors. Of these twenty-nine retailers, the majority consist of gas stations, (8) and food/beverage stores(8). The rest of this area is generally focused on auto retail and building supply.

The other dominant business of Junction is that of accommodation and food services. There are 24 total businesses that fit this category. There are a variety of choices on these accommodations that range from small motels to large hotels, RV areas and other camping sites. There are also 17 food and beverage places for dining that range from fast food to home cook diners. Real

estate has also become a lucrative venture in this area within the past few years.

Population: 2,654

County: Kimble

Median household income: \$25,833 (year 2000)

Median house value: \$47,500 (year 2000)

Races in Junction:

White Non-Hispanic (69.5%)

Hispanic (29.0%)

Other race (11.1%)

Two or more races (1.6%)

American Indian (0.8%)

For population 25 years and over in

Junction:

High school or higher: 64.9%

Bachelor's degree or higher: 11.2%

Graduate or professional degree: 4.7%

Unemployed: 3.9%

**Introduction  
Theory  
Facility**

***Context***  
**Design Response  
Conclusion**

***Demographics***

**History** – The first mention of the Kimble County area was denoted in the Republic of Texas documents in 1842, when 416,000 acres of the present county were included in the Fisher-Miller Land Grant. This consequently extended the area to reach from the Llano River to the Colorado River. Due to the untamed nature of the land and frequent attacks from Indians, the number of settlers in the area began to sharply decline which forced the once established Texas Ranger post to shut down. Up to around the 1880's, the county consisted of immigrant settlers from the northern regions of the southern states.

There continued to be problems for settlers as the Comanches raided the area frequently until around 1874 and 1875, when Gen. Ranald S. Mackenzie stepped in and corralled them to a reservation and

slain all their horses. As mentioned before, the untamed nature of this area lent harbor to the wild at heart. Outlaws such as Rube Boyce, the McKeever's, the Dublin Gang, and John P. Ringoqv of the Mason County War were noted to be frequents of this area. It was not long until action was taken to restore order in the area and in 1877 the Texas Rangers based at Bear Creek performed a roundup of these outlaws which were then taken as prisoners back to Junction City to stand trial.

As the area became more secure the county was an ideal place to settle. Because of the vegetation and terrain, ranching became a sustainable way of life. There were also farming endeavors, but the same characteristics that lent to the success of ranching, such as the hilly terrain and the dense scrub brush, turned out to be the

**Introduction  
Theory  
Facility**

***Context***  
**Design Response  
Conclusion**

***History***

downfall of farming in the area. Soon the economy was based heavily on two primary types of ranching: cattle and sheep.

**Technical Formation** – Later, in the 1920's as the U.S. economy evolved and grew, Kimble County became a unique tourist area and a highly touted hunting destination, this led to the incorporation of Junction as a town in 1927. Junction became the chief center of trade as well as the main commercial shipping center for the entire county. Following in its ranching heritage, Kimble County has maintained a primarily agricultural economy, with more than 90 percent of its total land area, used for agriculture. The 1978 census showed that there were 381 farms and ranches in the county, and in 1984, 90 percent of its \$10 million income came from livestock and crops. The remaining 10 percent came

primarily from recreation.

**Flooding** – The city of Junction is surrounded and bisected by the Llano river, while this river is generally a calm, dry rock bed, there were a few prominent years that nature used as a reminder to the power she still holds. This serves as a stark reminder, that among control of other things and the damming up of rivers, this area will never be completely tamed.

June 14, 1935 – Junction, Rainfall estimates of more than 20 inches in western Edwards County fed the huge flow of water down the Nueces River, which led to record levels in the town of Junction.

*Flood line - 16 feet.*

*Water level at the time - 43.30 feet.*

November 4, 2000 – Llano River, Junction

*Flood line - 16 feet.*

*Water level at the time - 34.8 feet*

## Introduction Theory Facility

### Context

## Design Response Conclusion

### History

View: Looking East from top of Borden Ice Company. June, 14 1935

Flood of 1935, town of Junction.

Fig. 3.5 -  
<http://www.depts.ttu.edu/hillcountry/junction/Junction%20Past/junctionflood.htm>



View: Becker Hotel in Background. June, 14 1935

Flood of 1935, town of Junction.

Fig. 3.6 -  
<http://www.depts.ttu.edu/hillcountry/junction/Junction%20Past/junctionflood.htm>



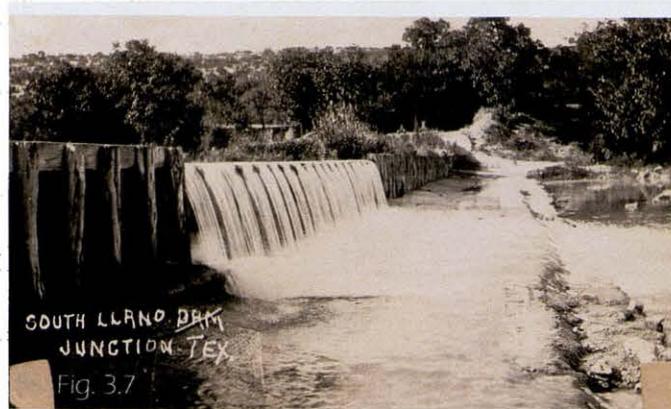
Introduction  
Theory  
Facility

**Context**  
Design Response  
Conclusion

**History**

**View: 6.4 Mile Dam, New State Park  
Junction**

Fig. 3.7 -  
<http://www.depts.ttu.edu/hillcountry/junction/Junction%20Past/junctionflood.htm>



**View: Borden Ice Company Mule Barn in  
Background. June, 14 1935  
Flood of 1935, town of Junction.**

Fig. 3/8 -  
<http://www.depts.ttu.edu/hillcountry/junction/Junction%20Past/junctionflood.htm>

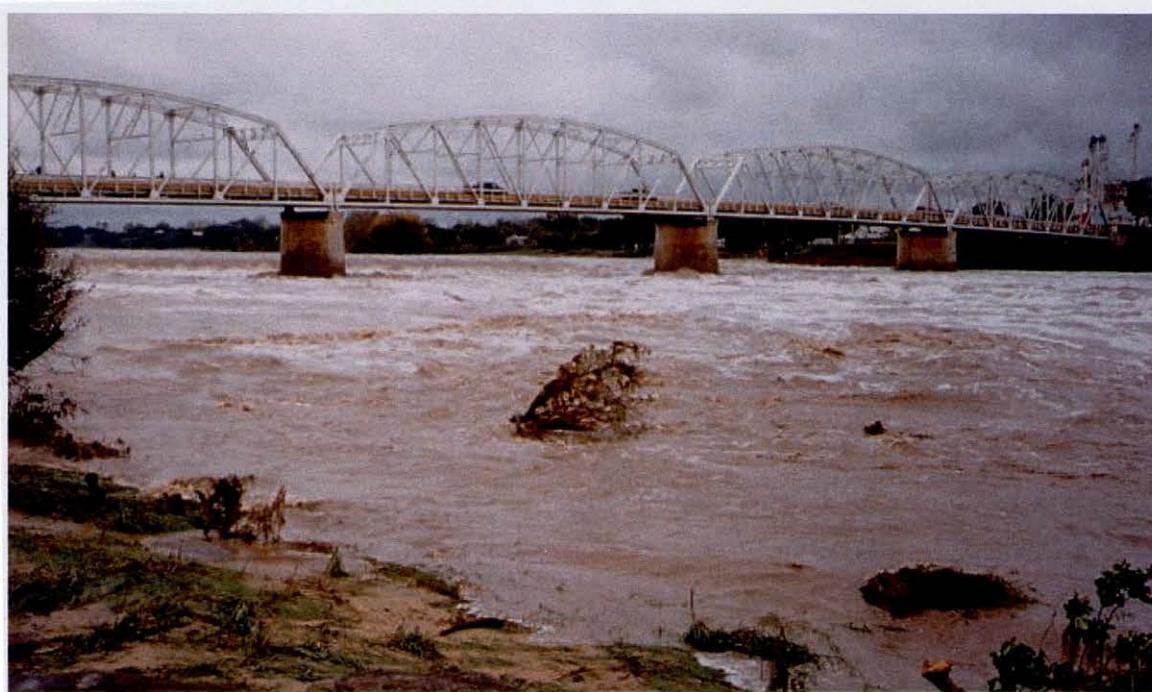


**Introduction  
Theory  
Facility**

***Context***  
**Design Response  
Conclusion**

***History***

Fig. 3.9 -  
<http://www.texasfreeway.com/Austin/photos/flood/llanoflood.shtml>  
Photo taken at  
approximately 1 PM,  
November 4, 2000.



**Introduction**  
**Theory**  
**Facility**

***Context***  
**Design Response**  
**Conclusion**

***History***

**Condition** –The site is unique in that the northeast corner is bounded by a major interstate highway: I-10, the west and northwest edges are formed by the main street of Junction, and the south and west corners are very vague with no visible boundaries.

**Issues**

1. Interstate 10 brings tremendous traffic through Junction, yet it does not divide the city, rather it sits on the outer edge and divides the hustle and bustle of quick travelers to the north and the small town atmosphere of the south. The intention here is to reconcile the traffic corridor with the small town pace through the direction and clarity of the site.
2. The Main Street of Junction is the pride of the town, it maintains a spirit that

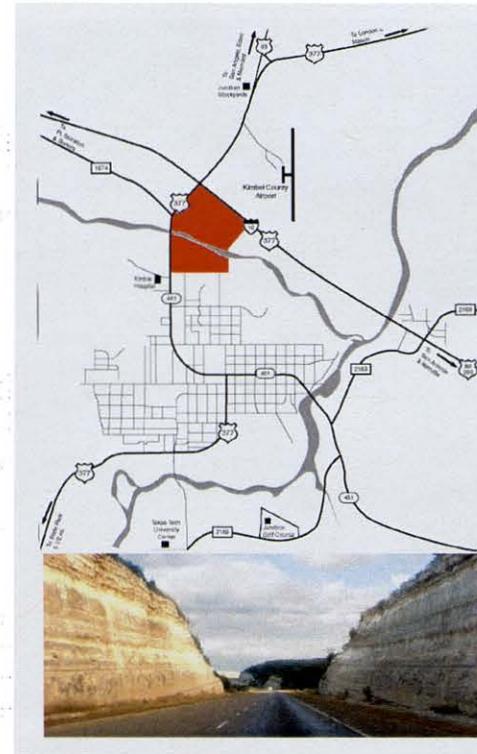


Fig. 3.10 - [www.junctiontexas.net/images/JunctionLodgB.jpg](http://www.junctiontexas.net/images/JunctionLodgB.jpg)

Introduction  
Theory  
Facility  
**Context**  
Design Response  
Conclusion

**Conditions**

requires one to slow to a substantially different pace, one that admires the current conditions, and one that pays homage to a different way of life.

3. The southern and western edge fade back into nature, a view in this direction offers picturesque views of the rolling terrain, and offers only the slightest glimpse of trucks traveling along I-10, yet the sound of the water is more than enough to drown out the remote sounds of the road.

**Condition** – The Hill Country inevitably endows nice sites for building. This site is no exception, rather, it is a complex collection of both undulating terrain, various vegetation and manmade objects such as the bridge that hovers over the landscape.

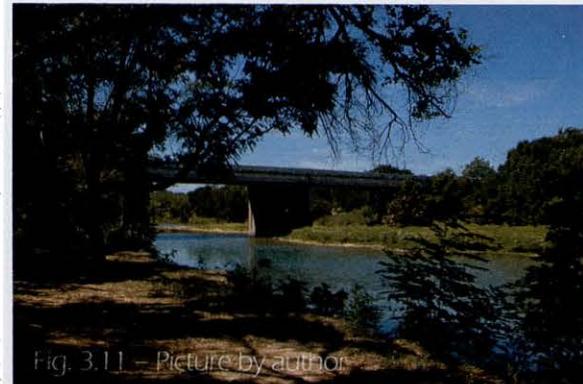


Fig. 3.11 – Picture by author



Fig. 3.12 – Picture by author

**Introduction**  
**Theory**  
**Facility**

**Context**  
**Design Response**  
**Conclusion**

**Conditions**

## Issues

1. The terrain of the site has been formed by years of flooding and drainage. The form is that of a v-shape that funnels to the lowest point in the middle, which inevitably constitutes the bed of the river.
2. Different areas on the site offer different views and experiences. At the outer edges of the site, the user is still tied to the city, the highway and to the demands of human concern. Descent to the river begins on a light note with sparse vegetation and expansive views. As one progresses, old pecan trees that line the river act as a buffer to both the sights and sounds of the town and highway. This is also the lowest point of the site, where only the most



**Introduction**  
**Theory**  
**Facility**

***Context***  
**Design Response**  
**Conclusion**

***Conditions***

domineering hills are noticed in the distance. The river itself offers clear avenues in both directions offering for nice views of the sunrise in one direction and sunset in the other.

3. The bridge, originally perceived as a static, yet insulting comment of man on such a pristine landscape has become the center of attention for the project. It hovers as a heavy solid mass perfectly proportioned to the river and the rest of the site, across the river supported only at the necessary points, which coincidentally coincide with the massive girth of the pecan tree bases.
4. The bridge as a separator. Although there is no material separation of the site from one side to the other, the



Fig. 3.15 - Picture by author



Fig. 3.16 - Picture by author

**Introduction  
Theory  
Facility**

***Context***

**Design Response  
Conclusion**

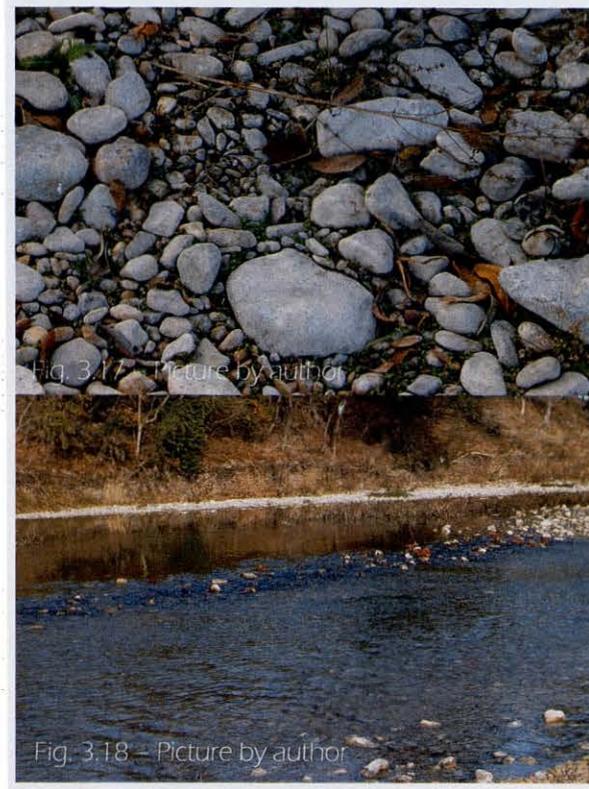
***Conditions***

bridge creates an obvious barrier from the RV park across the road. The shadow underneath and vegetation around the bridge act to create a natural, yet completely understood edge that separates the two sites yet allows the water to flow unfettered from one site to the next.

**Condition** –The Llano River meanders through the site, coming in from the west and flowing through the southeast edge. It is the most dominating feature of the site both from an aesthetic standpoint and a legal standpoint.

**Issues**

1. The river consists of rock ranging from pebble-sized to large stones and even sparse boulders. The water clarity ranges from about a foot to perfect

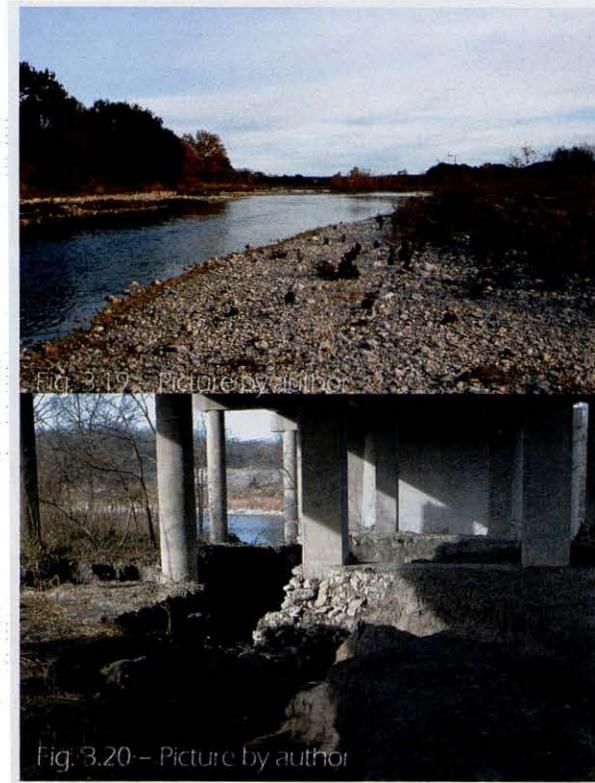


**Introduction**  
**Theory**  
**Facility**  
**Context**  
**Design Response**  
**Conclusion**

**Conditions**

clarity depending on the time of year. The depth ranges from about 6 feet to less than 2 inches and the change in terrain creates areas of white water throughout the site. The river also maintains different species of fish such as bass, and waterfowl such as ducks.

2. The river and the site allow for different kinds of recreation such as: fishing, boating, floating, wildlife viewing, hiking, and swimming. These potential uses offer a unique experience for both the stop and go traveler and the one that seeks Junction out as a destination.
3. The river offers attributes such as serene views and picturesque sunsets. It is also the source of great rage and fury, which the town has witnessed first hand.



**Introduction**  
**Theory**  
**Facility**

**Context**  
**Design Response**  
**Conclusion**

**Conditions**



The flood zone lays at the top of the site, which obviously puts the majority of the site under the flood plane. This is a decisive design factor and offers the chance to create a unique response that can resolve potential disaster and embrace the respect the town has garnered for mother nature.

**Introduction**  
**Theory**  
**Facility**

***Context***  
**Design Response**  
**Conclusion**

***Conditions***



Fig. 3.22 - Picture by author

**Introduction**  
**Theory**  
**Facility**

***Context***  
**Design Response**  
**Conclusion**

***Conditions***

**Description** – The area highlighted is the potential area for building on the site. It is obvious to see the trails that have already been established on the site. Also, the vegetation on the site remains sparse and separated except along the river's edge.

This site was chosen for the motel because of the relative distance from main corridors of travel and for the natural beauty of the surroundings. It offers a complex challenge for addressing heavily trafficked areas, definite slope, flood zone, and preserving the natural environment.

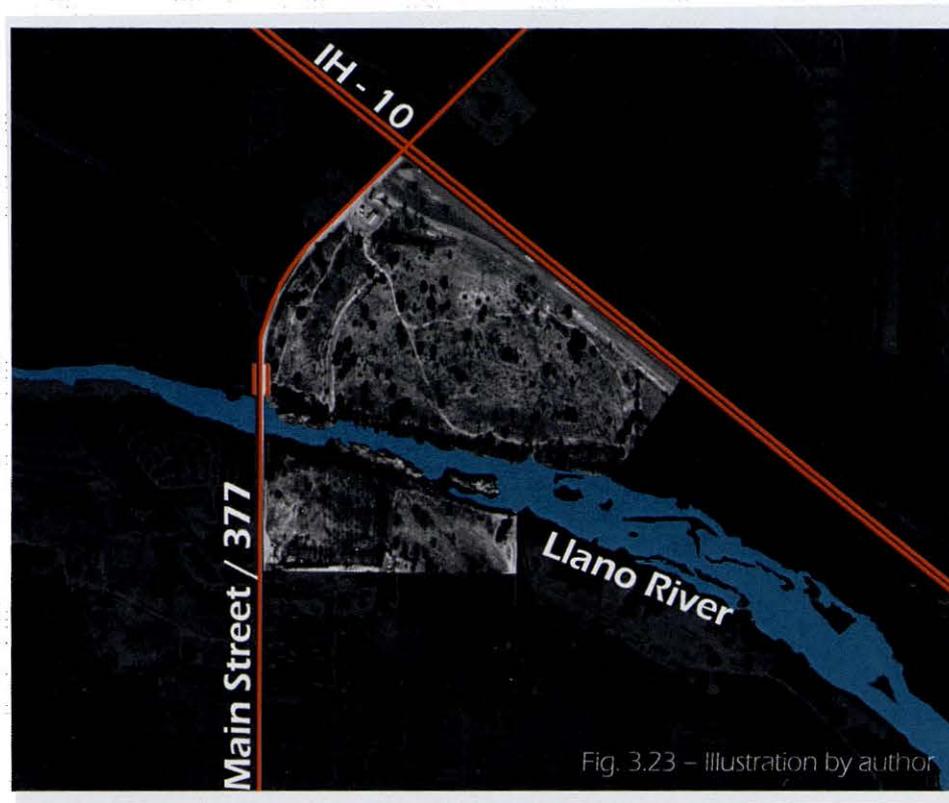


Fig. 3.23 – Illustration by author

**Introduction**  
**Theory**  
**Facility**

**Context**  
**Design Response**  
**Conclusion**

**Description**

**Topography** – The river divides the site into two distinct sides. The side to the left is uniform, but much steeper than the terrain on the right. The terrain also offers direction of movement on the site. The potential entrance and use of the site will be explored in the design section. Because the left part of the site has the most viable place for entry, traffic will disperse from the upper edge at the steepest point down to the more uniform ground closer to the river.

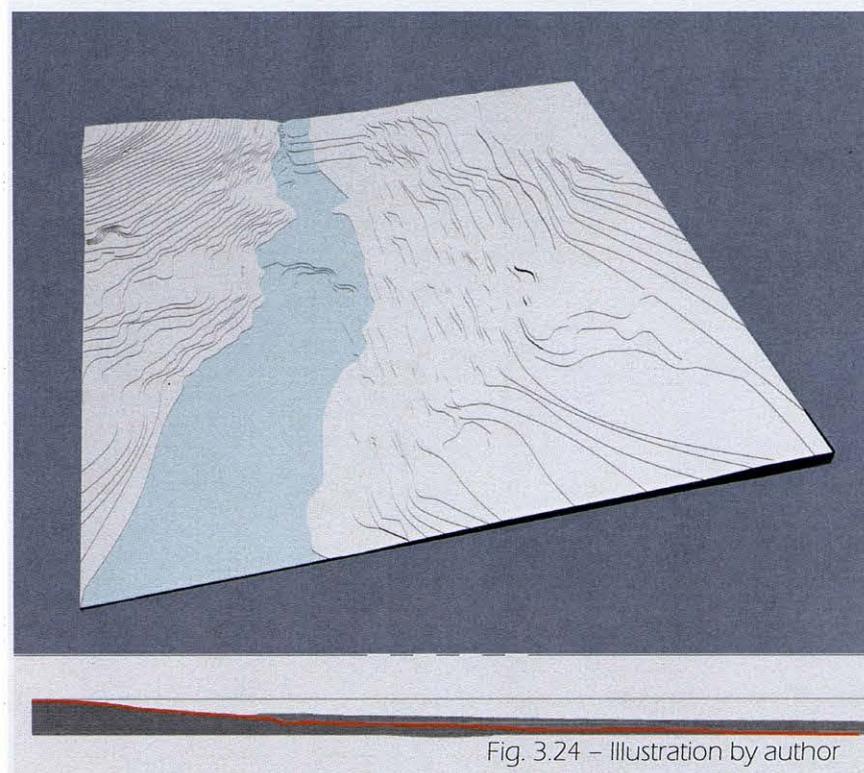


Fig. 3.24 – Illustration by author

**Introduction**  
**Theory**  
**Facility**

***Context***  
**Design Response**  
**Conclusion**

***Analysis***

**Hydrology** –During a flood, waters will climb much quicker on the north end, so the south end, although smaller, lends itself to more ideal conditions during times of drastic water level changes. The flood plane for Junction is measured at 1709' above sea level, this means that the majority of the site sits under the flood plane. Design issues will address areas that are allowed beneath this level such as: parking, recreation space, and other non-permanent aspects.

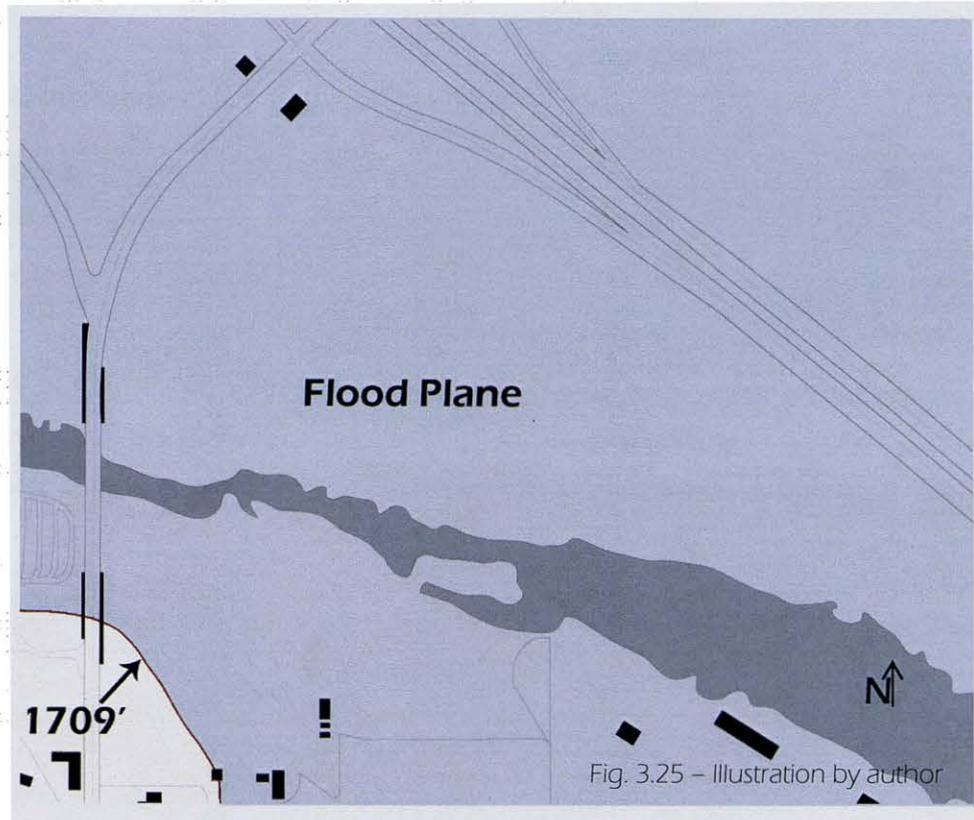


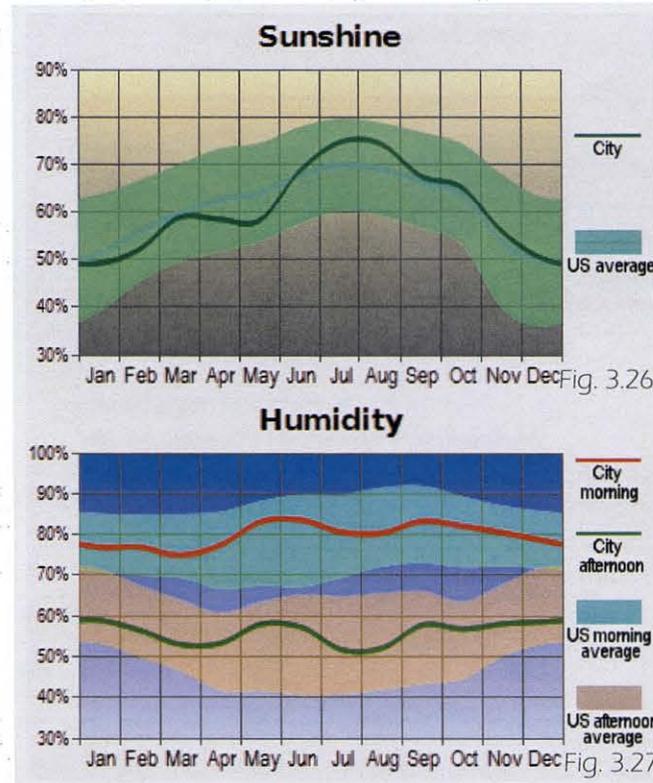
Fig. 3.25 – Illustration by author

Introduction  
Theory  
Facility  
**Context**  
Design Response  
Conclusion

**Analysis**

**Average Temperature -**  
**Average Days of Sunshine: ~ 300 (includes partly cloudy)**

Fig. 3.26 - <http://www.city-data.com/city/Junction-Texas.html>

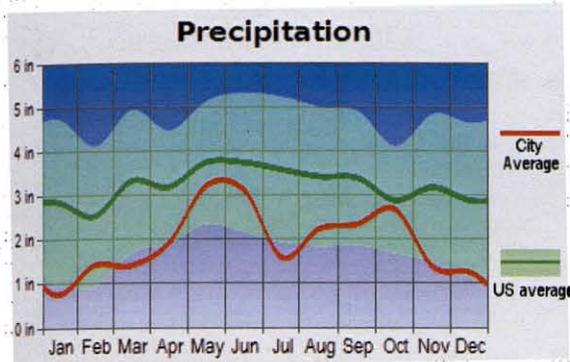


**Humidity -**  
**Climate - Temperate, Humid Subtropical:**  
**Mild winters; hot summers**  
**Humidity:**  
**Morning Average: 55%**  
**Afternoon Average: 80%**

Fig. 3.27 - <http://www.city-data.com/city/Junction-Texas.html>

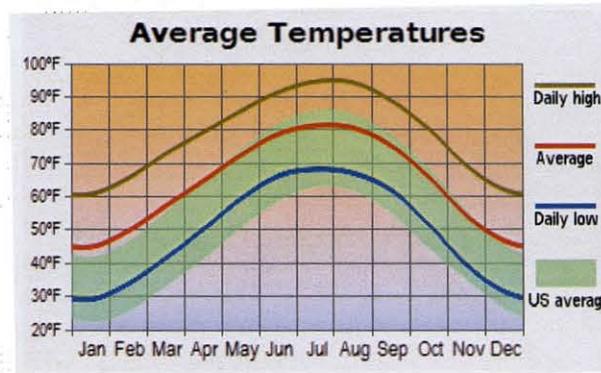
**Introduction**  
**Theory**  
**Facility**  
**Context**  
**Design Response**  
**Conclusion**

**Analysis**



**Precipitation -**  
**Average Rainfall: 17.4 inches**

Fig. 3.28 - <http://www.city-data.com/city/Junction-Texas.html>



**Average Temperature -**  
**Average: 65 degrees Fahrenheit**

Fig. 3.29 - <http://www.city-data.com/city/Junction-Texas.html>

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg. High	61°	66°	74°	82°	87°	92°	95°	95°	88°	81°	71°	64°
Avg. Low	31°	35°	44°	52°	60°	66°	68°	67°	62°	52°	41°	34°
Mean	46°	51°	58°	67°	74°	78°	82°	82°	76°	67°	56°	48°
Avg. Precip.	0.9 in	1.6 in	1.3 in	2.1 in	3.6 in	2.8 in	1.7 in	2.5 in	2.8 in	2.4 in	1.3 in	1.1 in

Introduction  
 Theory  
 Facility  
**Context**  
 Design Response  
 Conclusion

**Analysis**

**Circulation -**  
Description of vehicular traffic around the site.

Fig. 3.30 - Illustration by author

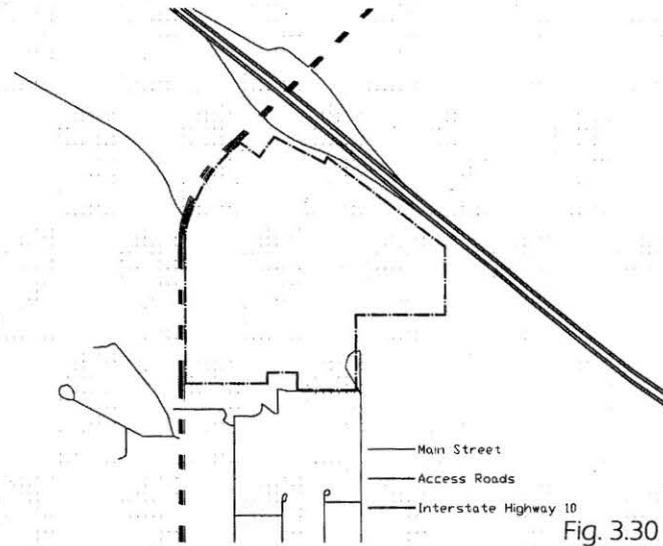


Fig. 3.30

Far Right: Areas of entry to site

Right: existing natural pedestrian paths on site

Fig. 3.31 - Illustration by author

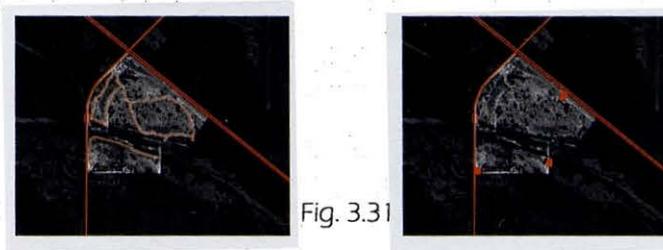


Fig. 3.31

Introduction  
Theory  
Facility

**Context**  
Design Response  
Conclusion

**Analysis**

**Average Temperature -**  
**Average Days of Sunshine: ~ 300 (includes partly cloudy)**

Fig. 3.32 - <http://www.city-data.com/city/Junction-Texas.html>

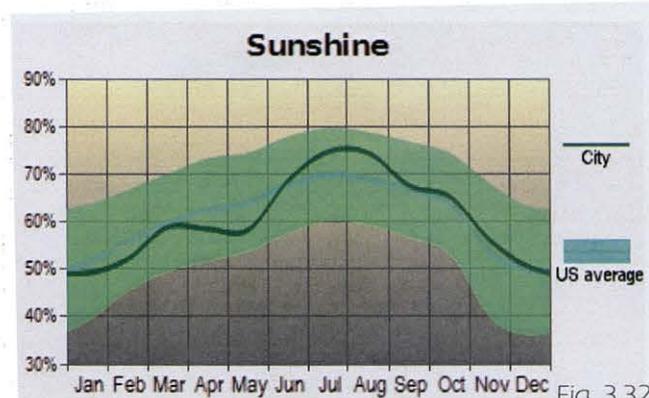


Fig. 3.32

**Humidity -**  
**Climate - Temperate, Humid Subtropical:**  
**Mild winters; hot summers**  
**Humidity:**  
**Morning Average: 55%**  
**Afternoon Average: 80%**

Fig. 3.33 - <http://www.city-data.com/city/Junction-Texas.html>

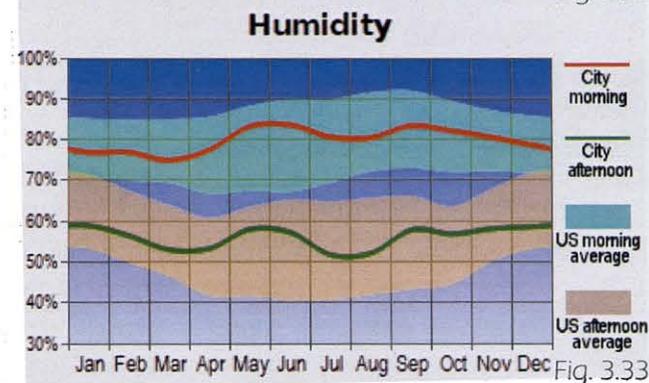
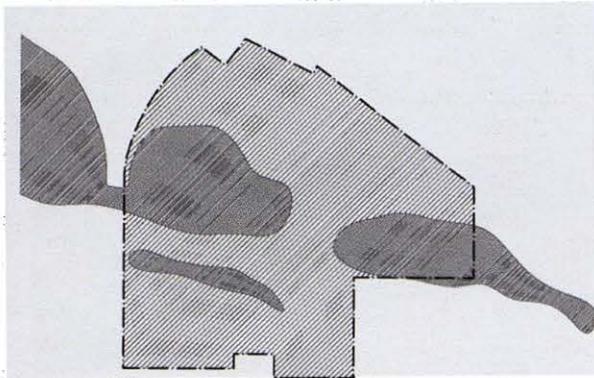


Fig. 3.33

**Introduction**  
**Theory**  
**Facility**  
**Context**  
**Design Response**  
**Conclusion**

**Analysis**

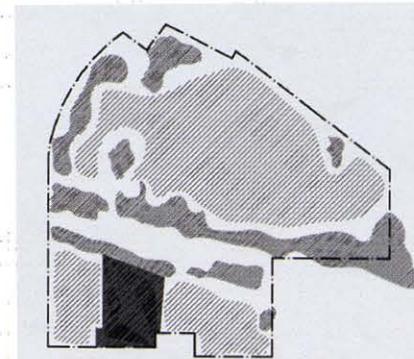


[Diagonal Lines] Site Extents  
 [Solid Grey] Wildlife Areas

Fig. 3.34 – Illustration by author

**Wildlife -**

The bridge acts as a visual barrier for the site but it also allows for wildlife to traverse from one side to the other. Dense cover and close relation to the water offer the most domineering areas for wildlife.



[Diagonal Lines] Sparse Vegetation  
 [Solid Grey] Dense Vegetation  
 [Dark Grey] Structured Planting

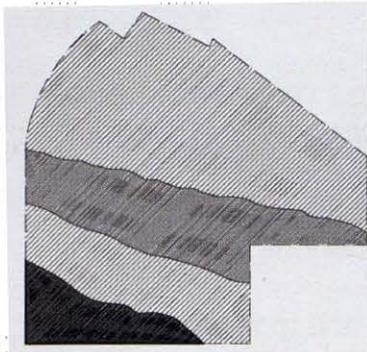
Fig. 3.35 – Illustration by author

**Vegetation -**

Most of the dense vegetation lies along the banks of the river. There is also a planted orchard that consists of young trees with small trunks. There are also areas of local grass.

Introduction  
 Theory  
 Facility  
**Context**  
 Design Response  
 Conclusion

**Analysis**



- Very Gravelly Loam - De
- Frio Silty Clay Loam - Fr
- Nuvalde Clay Loam - NuB

Fig. 3.36 - Illustration by author

**Soils - Geography -**

The soil is dispersed from area flooding. From Silty Clay Loam at the base of the river to Nuvalde Clay Loam at the top of the site, there is a unique variance among textures on the site.



Fig. 3.37 - Illustration by author

**Structure -**

Because the town consists mainly of modest residential dwellings and the commercial buildings consist of retail stores, the footprints of most buildings remain small and relatively dispersed.

- Introduction
- Theory
- Facility
- Context**
- Design Response
- Conclusion

**Analysis**

## **Bibliography**

Frampton, Kenneth. Le Corbusier: Architect of the Twentieth Century. New York: H.N. Abrams, 2002.

Stipanuk, David M. Hospitality Facilities Management and Design. East Lansing, Michigan: Educational Institute of the American Hotel & Motel Association, c1992.

Velthoven, Willem and Seijdel, Jorinde. Multimedia Graphics: The Best of Global Hyperdesign. San Francisco, CA: Chronicle Books, c1996.

Introduction  
Theory

Facility

**Context**

Design Response

Conclusion

**Bibliography**



**Introduction**  
**Theory**  
**Facility**  
**Context**

***Design Response***  
**Conclusion**

***Design Response***

**Design**



**Introduction** – To this point research has been used to extract the most predominant issues of the project. Because of the site and its location, it has become the primary driving factor of the design. Shape grammars were used to explore the layout of motels and to offer a starting point for the layout of the site. Initial site studies and diagrams offered the starting point for the design. A system was constructed to logically address each issue in an orderly manner. These steps do not have to occur simultaneously, but offer the basic outline that shapes any project. From this point, the analysis and the design become less detached and certain areas begin to blur into others. Last, because of the leverage of the site, organization is complex and related to the issues of traffic through the site, both pedestrian and vehicular. The challenge of

the design is to reconcile with the existing site. Reconcile, because there have been so many affluences around it that it has put up barriers, and tried to re-grow from the scars of other projects that have acted to seal the site on all sides. What was natural has been confined, it as been intruded upon, but this is the opportunity to save it. By building out of respect and consideration for the site as a living landscape the architect can acknowledge the admissions of the site and retain the 'essence' of it. The question to all of this is that: if the site is so sacred and any if built space could potentially be a complete detriment to it, then why build on it? The answer is because the lack of action will not solve the problems that society has posed. It is the action that can be preventative, that can offer a clear direction, and can fix the evils of former destructions.

**Introduction**  
**Theory**  
**Facility**  
**Context**  
***Design Response***  
**Conclusion**

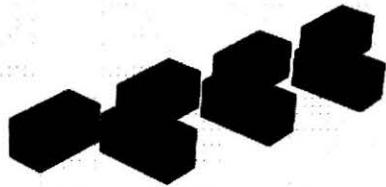
***Introduction***



Rule 1



Rule 2



**Initial Analysis** –the shape grammars are used to derive orientations of rooms and basic layout principles. The block represents the current extents of a motel room. The spatial relationship is manipulated for different types of arrangements, some are viable, while others may be completely unrealistic. The point is to develop many



Rule 1



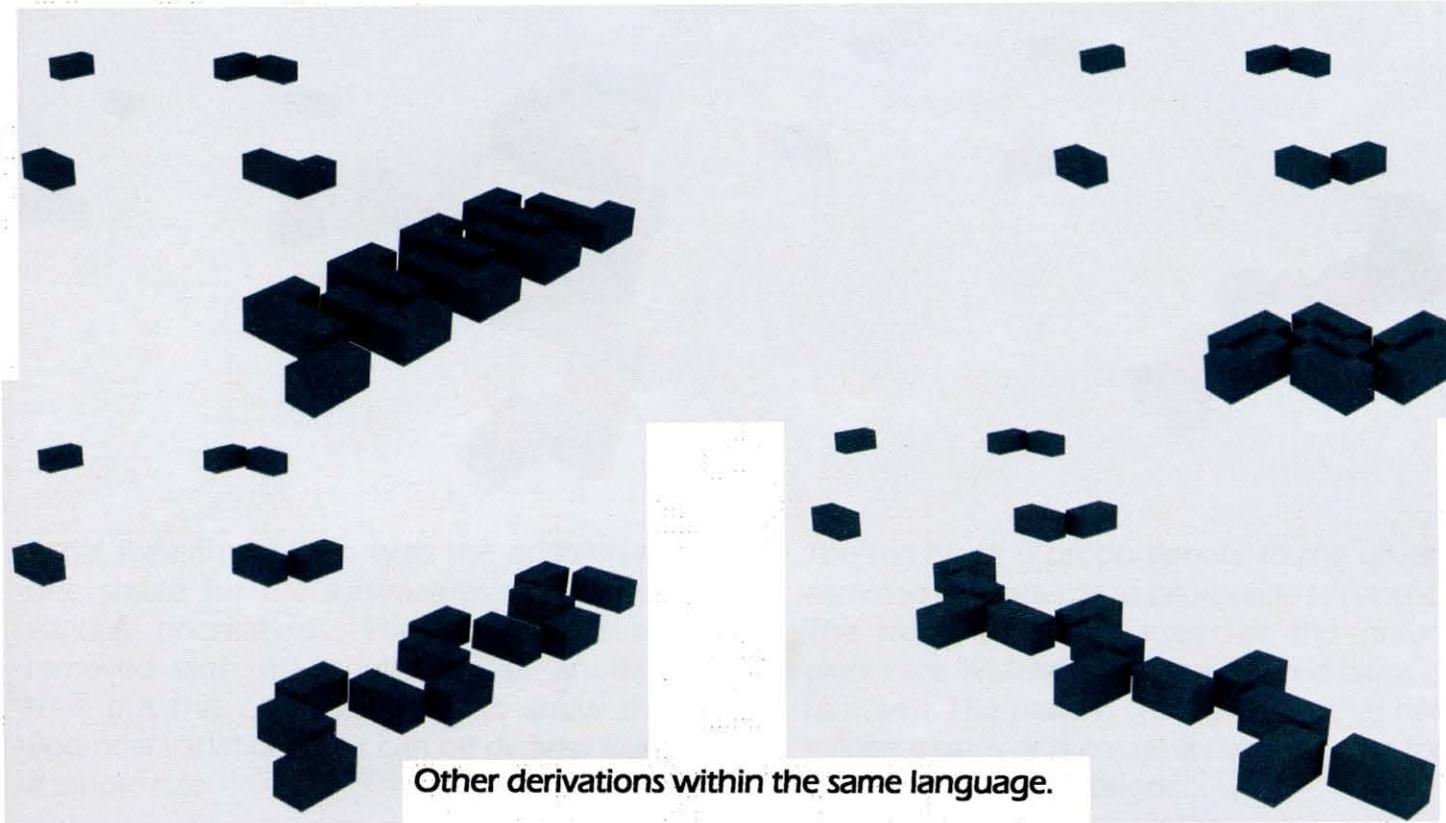
Rule 2



variables of the same language that can be used to resolve different situations. The two layouts shown represent the same initial spatial relation with the variation coming in the second rule of application that determines the direction for the derivation. In this case, the derivation is done in relation to a horizontal plane for simplicity of levels.

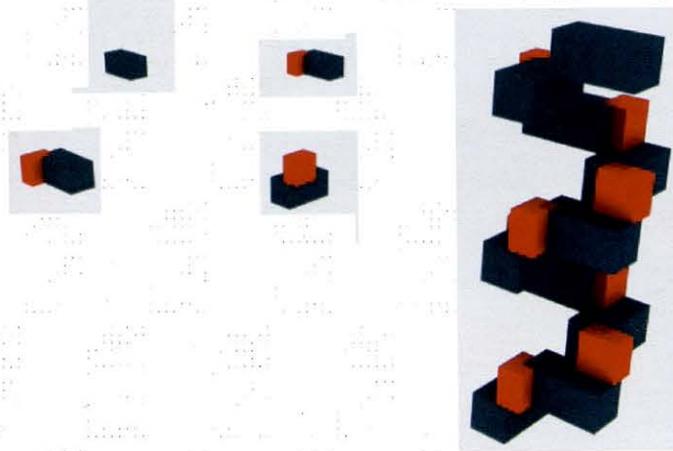
Introduction  
Theory  
Facility  
Context  
***Design Response***  
Conclusion

***Analysis***

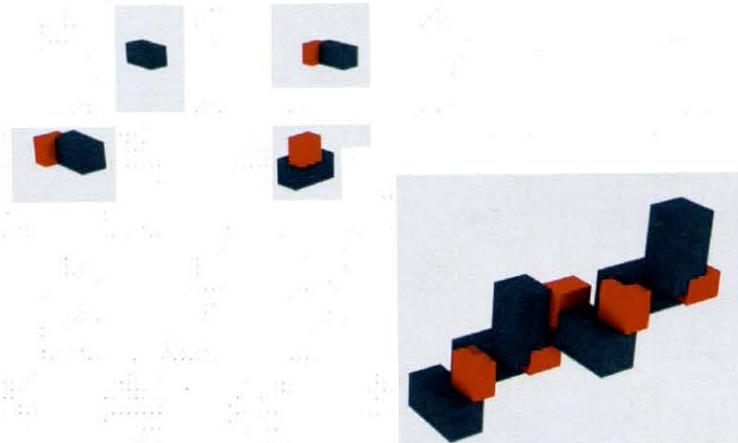


Introduction  
Theory  
Facility  
Context  
***Design Response***  
Conclusion

***Analysis***



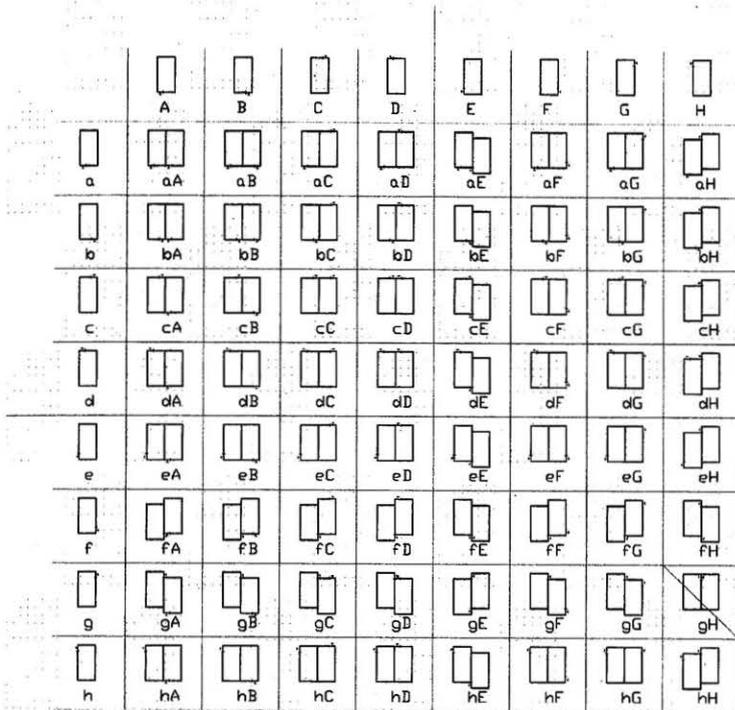
Initial Experimentation with the addition of one shape for the symmetries that derive various orientations. The shape can be removed with the application of another rule, but this case was used to show the potential variations that can be derived from a simple rule.



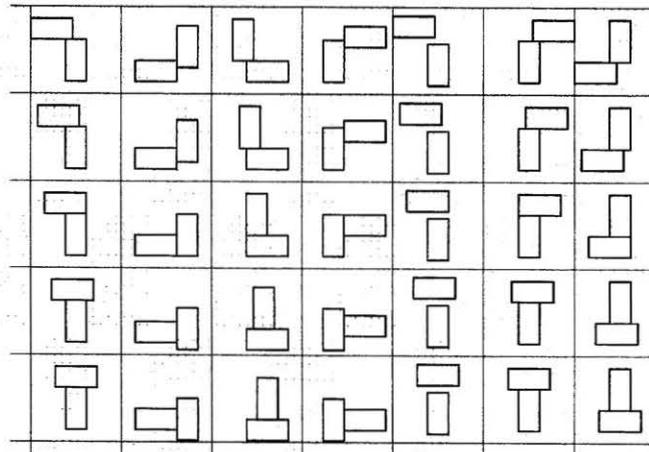
The red block is proportionate to the green allowing for patterns to be visually apparent. The transformation pattern of the green pieces are evident even after the red block is removed. The pattern creates a field that has infinite planes and create a complex grid for three dimensional design.

Introduction  
Theory  
Facility  
Context  
*Design Response*  
Conclusion

*Analysis*



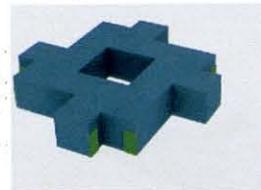
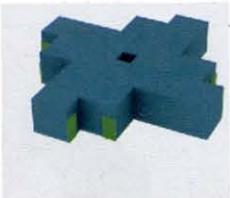
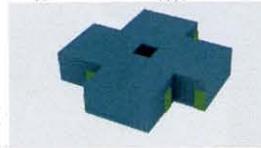
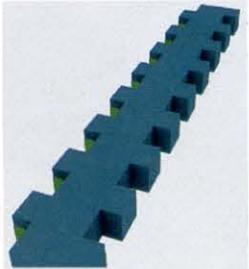
Initial studies of entry placement for room.



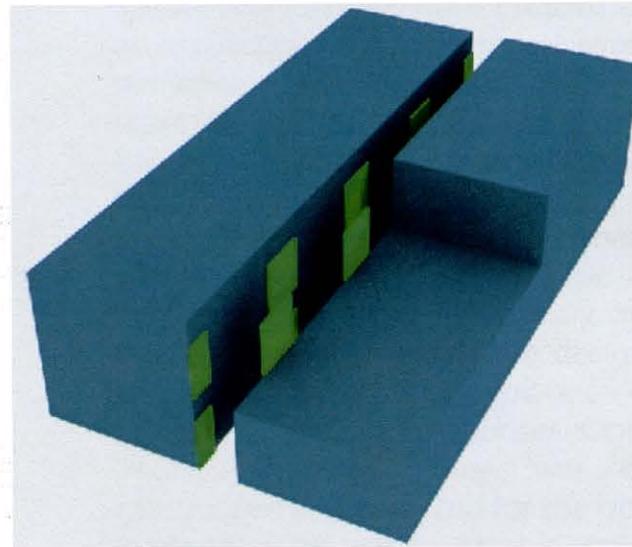
Studies of room relationships. Once derived, each was evaluated to the relevant efficiency and the potential layouts that each relationship could produce.

Introduction  
Theory  
Facility  
Context  
**Design Response**  
Conclusion

**Analysis**



Experimentation of layouts with entry points marked and accounted for.



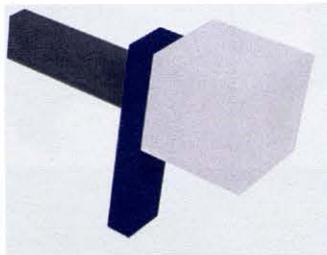
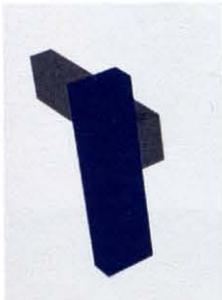
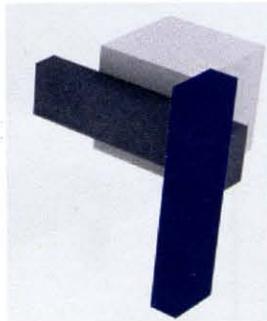
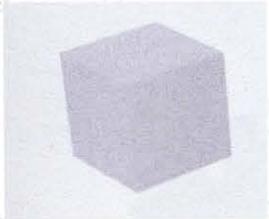
Prototypical motel layout with entries marked. There is a central corridor that divides rooms which are reflected and staggered to create privacy across the hall.

Introduction  
Theory  
Facility  
Context

*Design Response*

Conclusion

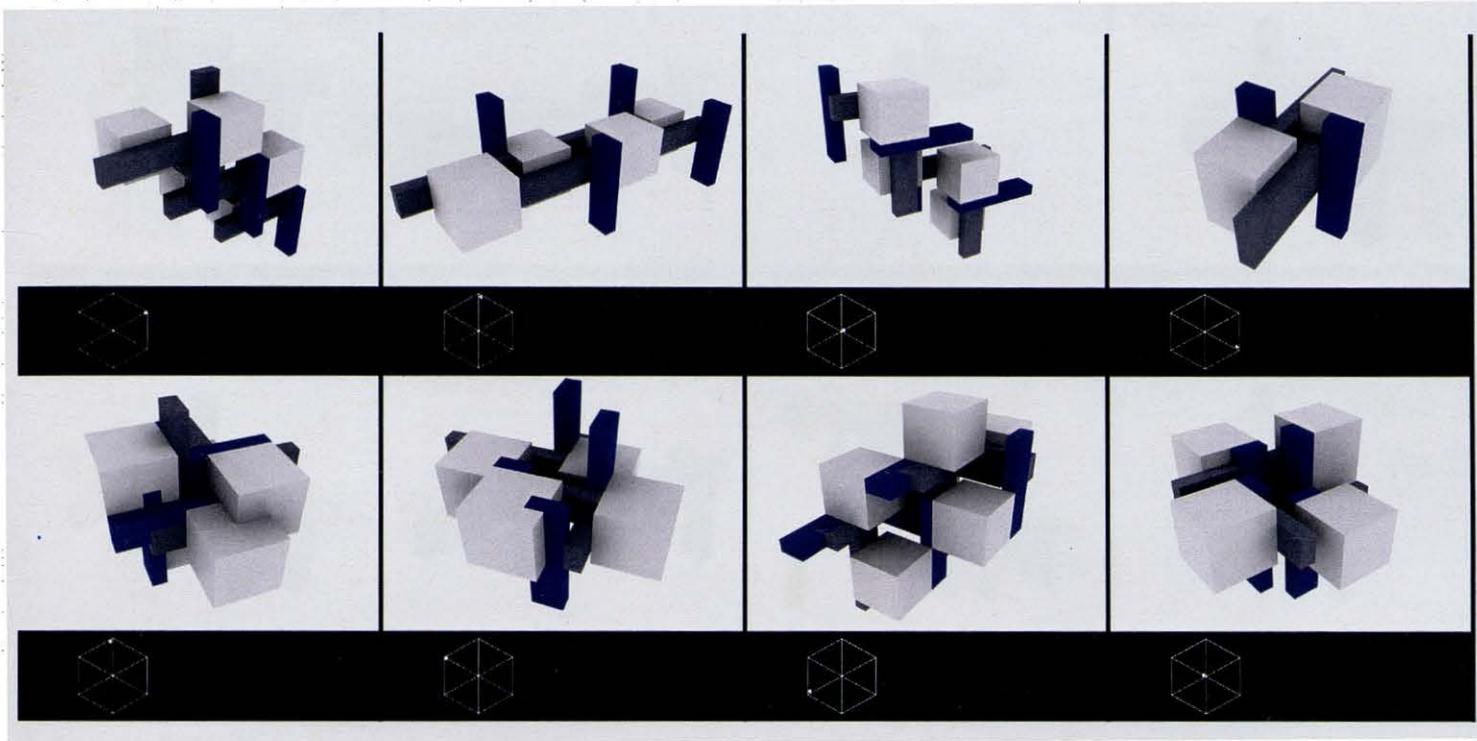
*Analysis*



**Spatial relationships** - are established as a reaction from the motel room derivation studies. The cube is representative of the rooms, the grey bar is one form of access and the blue bar is another potential form of access. The pieces are proportionate to each other and representative of actual elements, but in no way are they the actual pieces of the design. Derivations are done to explore all of the potential design responses. Once all are derived, they will be categorized and analyzed for the best application of each. At this point there is only consideration for spatial relationships. The next few pages show the twenty-four derivations that were used and analyzed for the design of the motel layout.

**Introduction**  
**Theory**  
**Facility**  
**Context**  
***Design Response***  
**Conclusion**

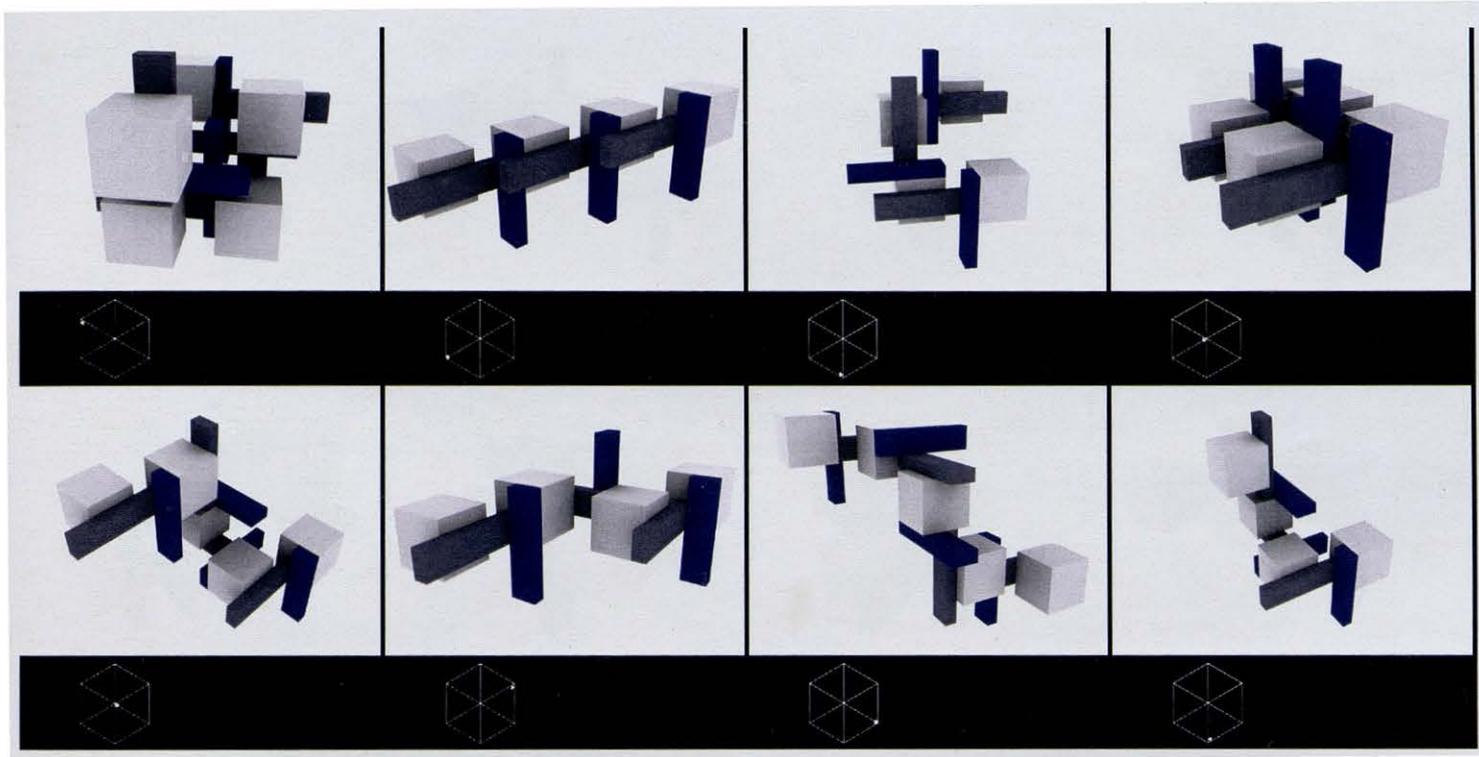
***Spatial Relationships***



Introduction  
Theory  
Facility  
Context

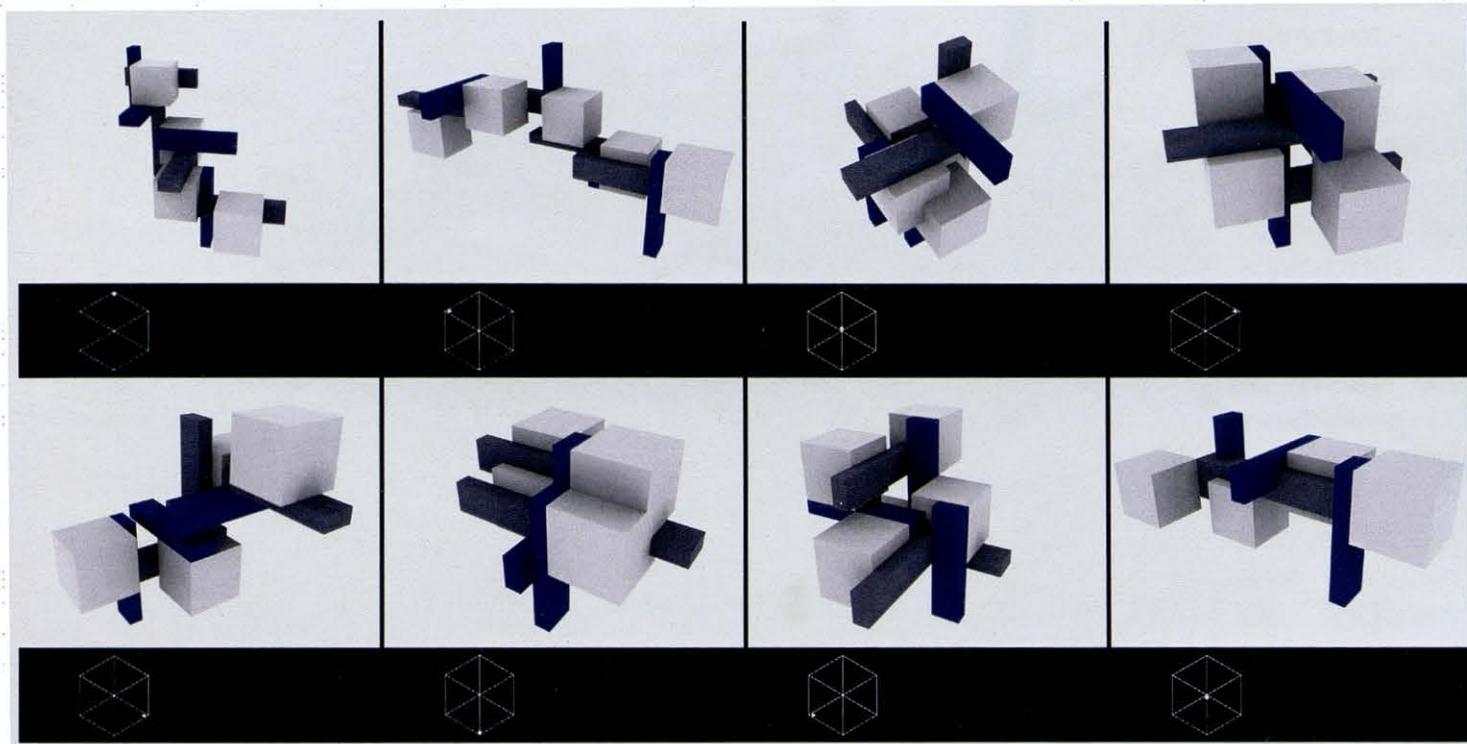
*Design Response*  
Conclusion

*Spatial Relationships*



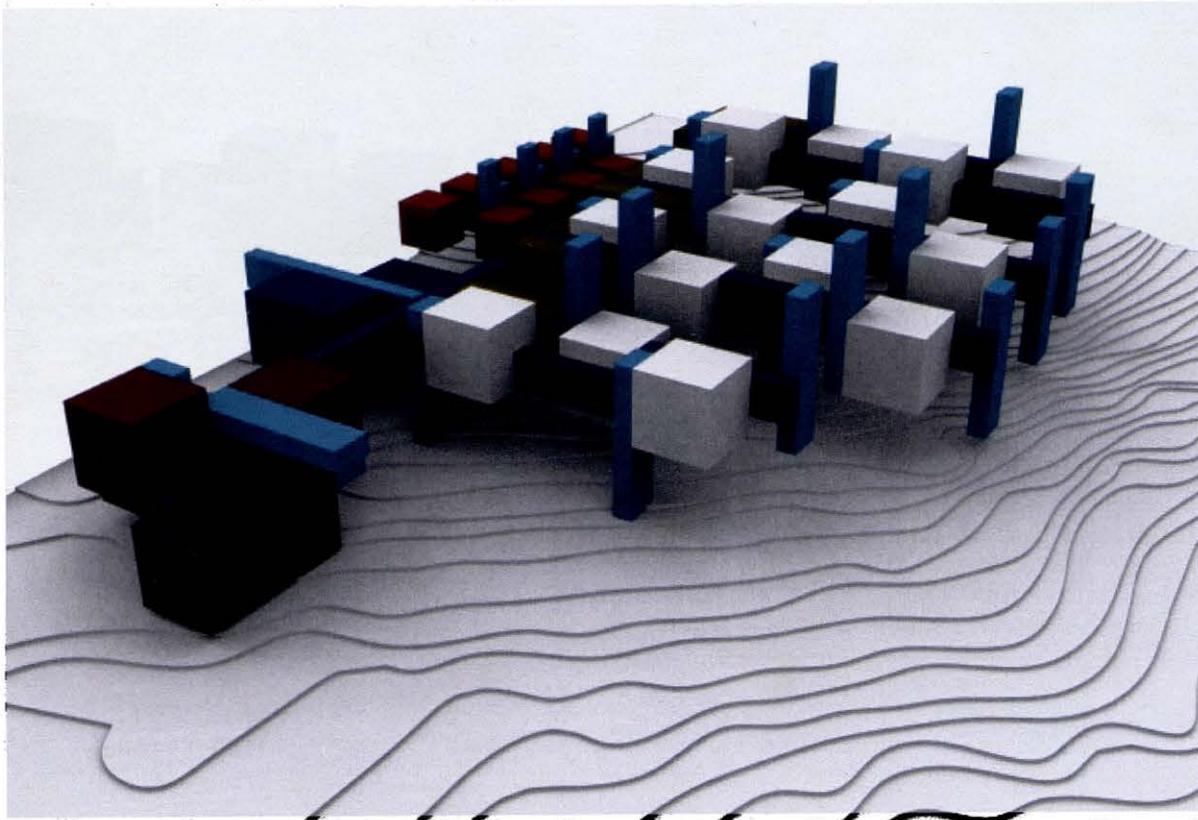
Introduction  
Theory  
Facility  
Context  
***Design Response***  
Conclusion

***Spatial Relationships***



Introduction  
Theory  
Facility  
Context  
*Design Response*  
Conclusion

*Spatial Relationships*

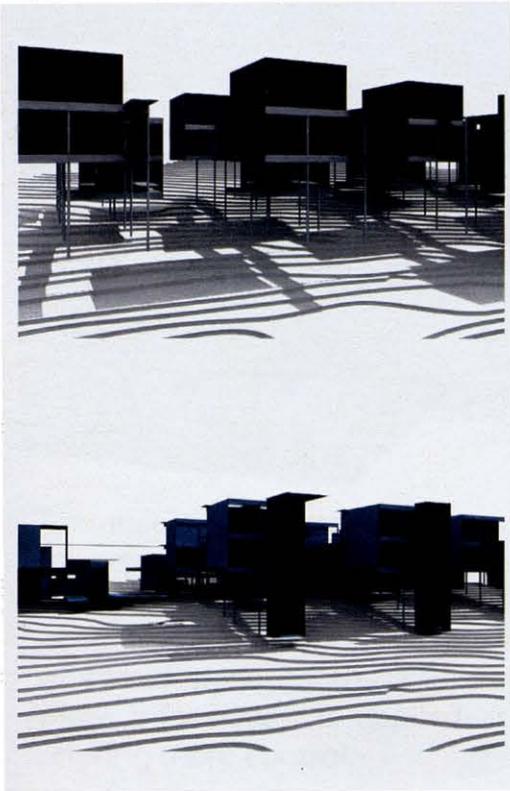


After selecting grammars appropriate to each facility type, an overall layout was configured by adjacencies requirements and connected to create an interlocking structure that facilitates movement to and through the different parts of the building.

**Introduction**  
**Theory**  
**Facility**  
**Context**

***Design Response***  
**Conclusion**

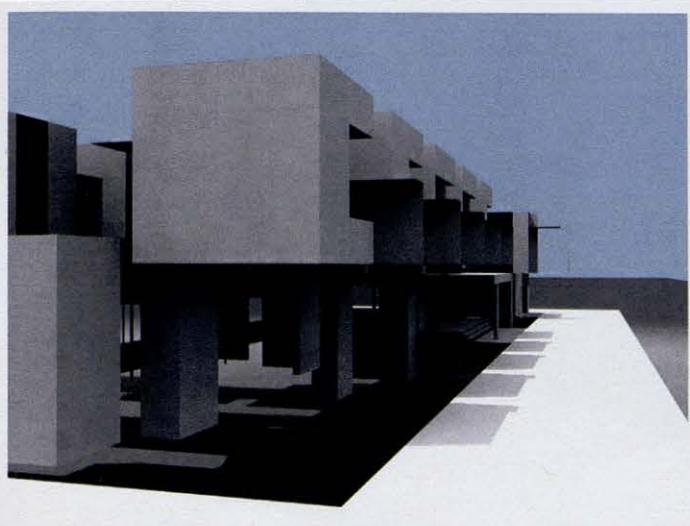
***Design***



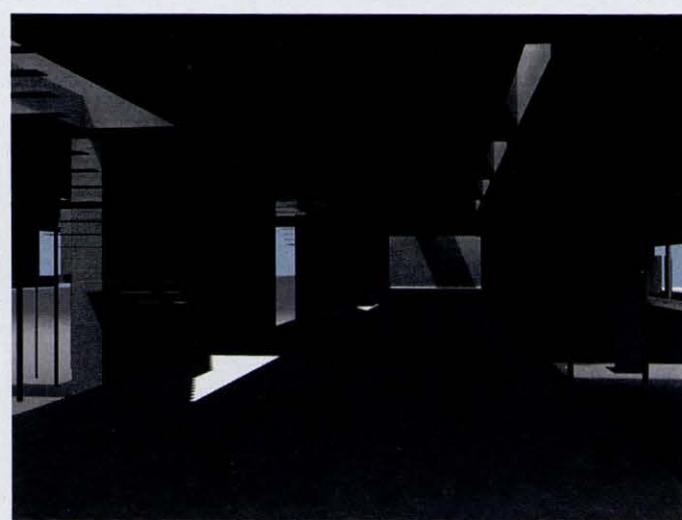
After the initial layout, the process becomes refined and elements that were once blocks and placeholders have begun to take shape. The process entails moving from solids to planes, then from planes to thickness and representation.

Introduction  
Theory  
Facility  
Context  
*Design Response*  
Conclusion

*Design*



Entrance to the site. To enter, the vehicle passes the administration area on the left, then turns underneath to park. This shows initial massing and the movement to planes in the design. As the project progresses, more information is applied at increments offering more control.



View of beneath the administration area. It is used for parking to offer quick access for check-in or for going directly to the room. The motel is divided by this area, allowing the administration and other public areas to function away from the units, which require a higher degree of privacy and order.

Introduction  
Theory  
Facility  
Context

***Design Response***  
Conclusion

***Design***



View between administration area and living area. Once the vehicle is parked, users can access the stairs and come to this area which divides the public areas from the private.

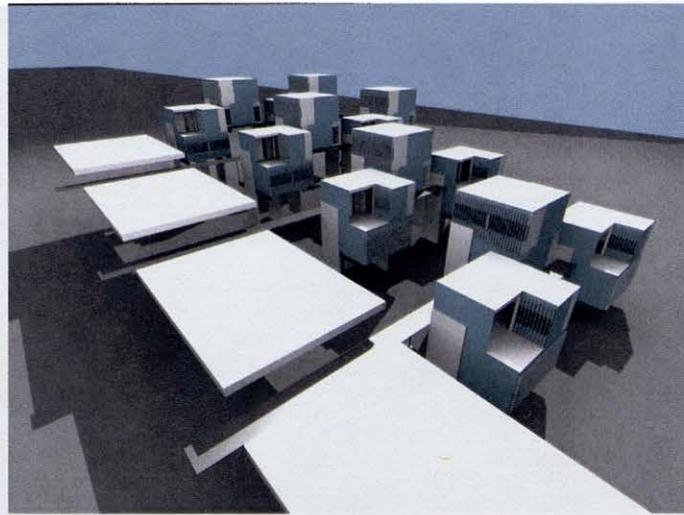


View from Lobby toward administration area and living area. The lobby is centrally located and allows for easy cognition and understanding of the site as a whole.

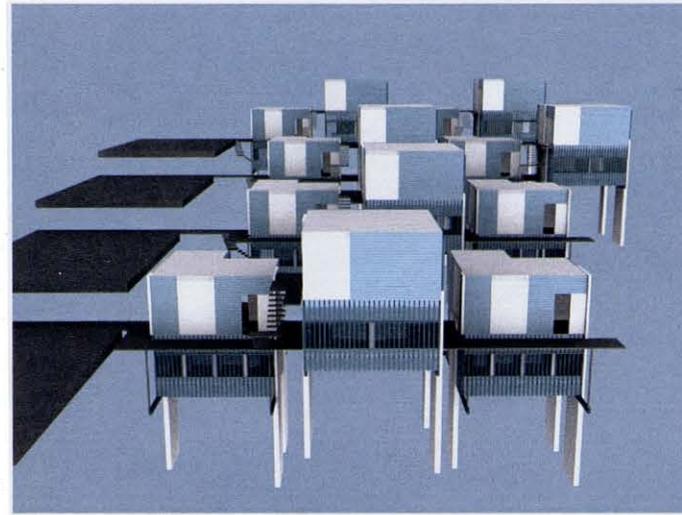
Introduction  
Theory  
Facility  
Context  
*Design Response*  
Conclusion

*Design*

**Refine** – This part of the process deals with the refining of elements. Because of the size of the program, the motel elements will be the main point of emphasis. This level of detail is achieved by focusing solely on the units and disregarding the other aspects of



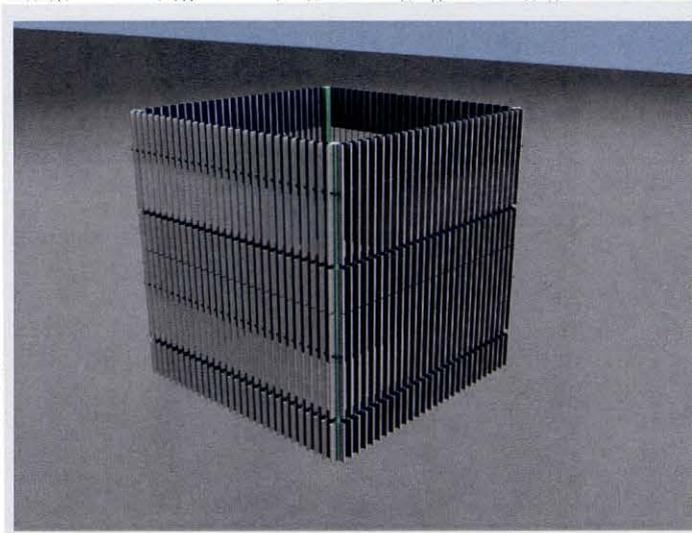
the program for simplicity sake. The layout of the rooms is a staggered meandering arm that protrudes in a linear direction. This is repeated to create four regions oriented for views and vistas. Blue and white areas on the cubes are initial material studies.



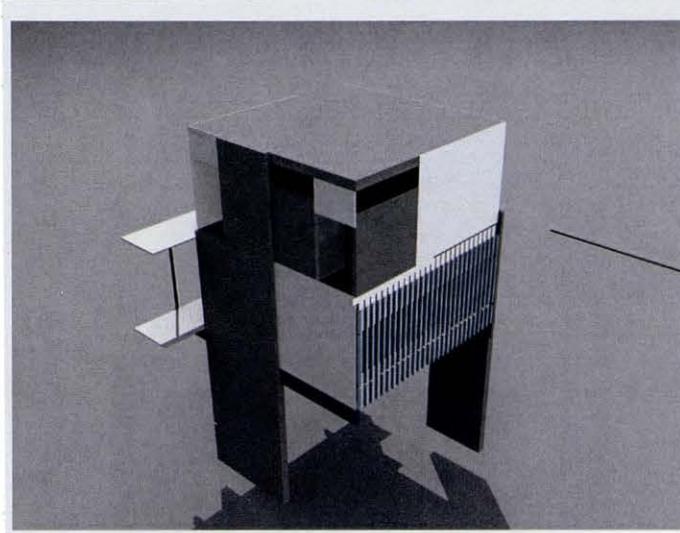
**Introduction**  
**Theory**  
**Facility**  
**Context**  
***Design Response***  
**Conclusion**

***Refine***

**Cladding** - The concept is very simple and was derived from a hunter's perspective. The point of the vertical slats is to provide a degree of privacy that allows the user to look out, but blocks others from viewing directly in.



**Supports** - Support walls were explored to reconcile the great difference in height from the ground. The other is infill that will be further refined once the building can be supported.



**Introduction**  
**Theory**  
**Facility**  
**Context**  
***Design Response***  
**Conclusion**

***Refine***

One cube has three units and the other has four. Once each is configured individually, it is reintroduced in correspondence with the other. Openings such as doorways and windows are punched to allow access, light and views.

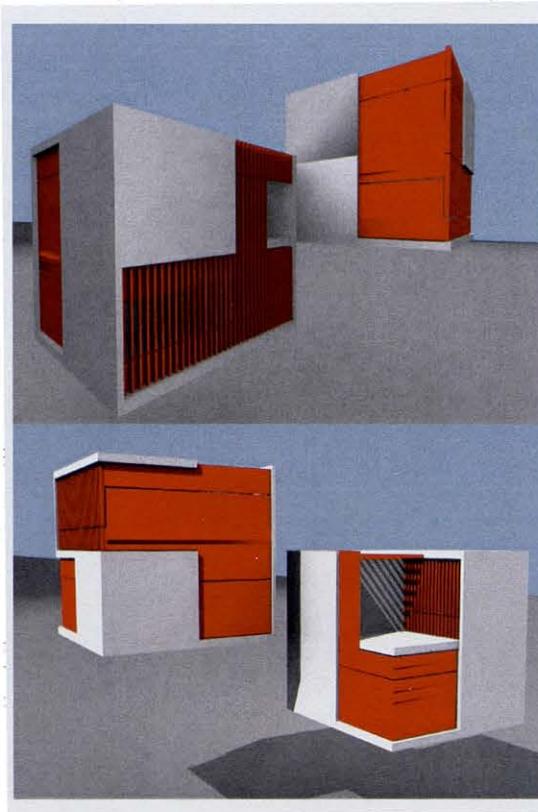
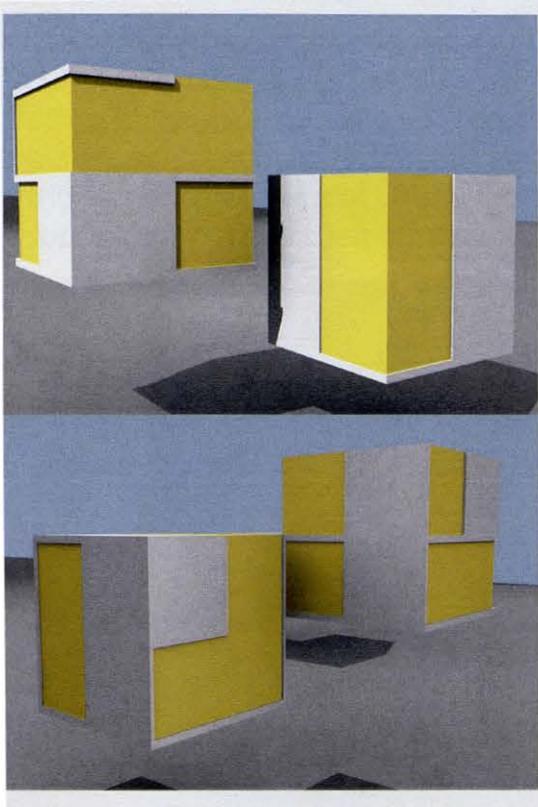


This is a view of the walkway that is shared by both cubes. Issues of privacy and entrance were key at this stage. The cube is maintained because of its stark and perfect shape, each one consists of two levels.



**Introduction**  
**Theory**  
**Facility**  
**Context**  
***Design Response***  
**Conclusion**

***Refine***



The two cubes on the left are explorations of the concept of wrapping which is done by the support structure in white.

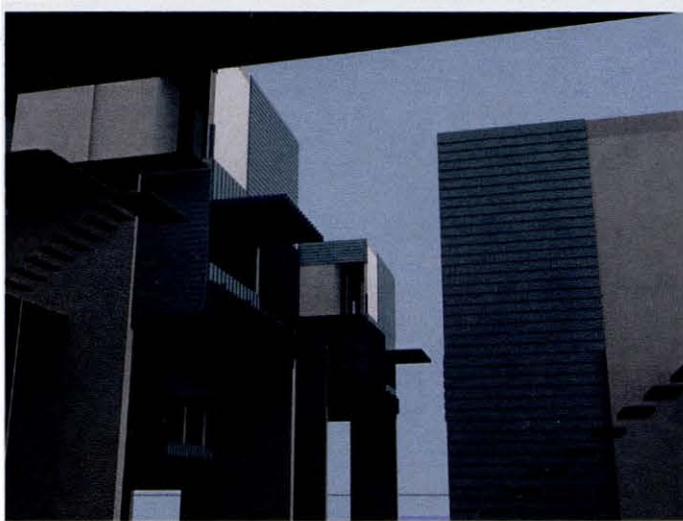
The two cubes on the right are infill of the areas that do not have to be supportive. In this case there are the vertical slats and horizontal wood siding, which also explore the idea of wrapping.

**Introduction  
Theory  
Facility  
Context**

***Design Response***  
**Conclusion**

***Refine***

View from under parking area. Once the cubes are configured with regard to each other, they are inserted back into the master plan for continued refinements. At this point the stairs are present but the structural supports aspects are left for later.



View from river. This is a view of the rooms with some slats open and others closed. This study was used to determine the views that each room was offered. Some units could view east to the hills while others looked north to the river.



**Introduction**  
**Theory**  
**Facility**  
**Context**

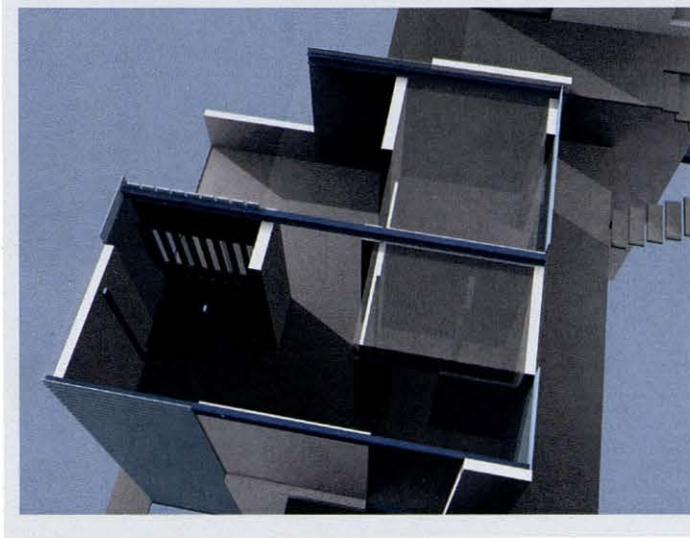
***Design Response***  
**Conclusion**

***Refine***

Overhead view of adjacent units. This shows unit one reflected along its longitudinal axis. Although each room maintains the same orientation as the other, except reflected, the walls are different to address different views and degrees of privacy.



Overhead view of unit two. This unit is oriented to take advantage of the views. The circulation goes from public at the entrance to growing degrees of privacy as one progresses through to the bedroom.



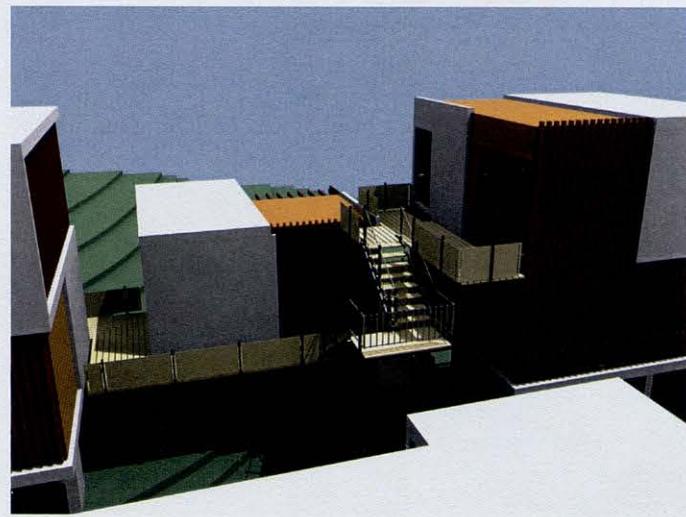
**Introduction**  
**Theory**  
**Facility**  
**Context**

***Design Response***  
**Conclusion**

***Final***



View toward units.



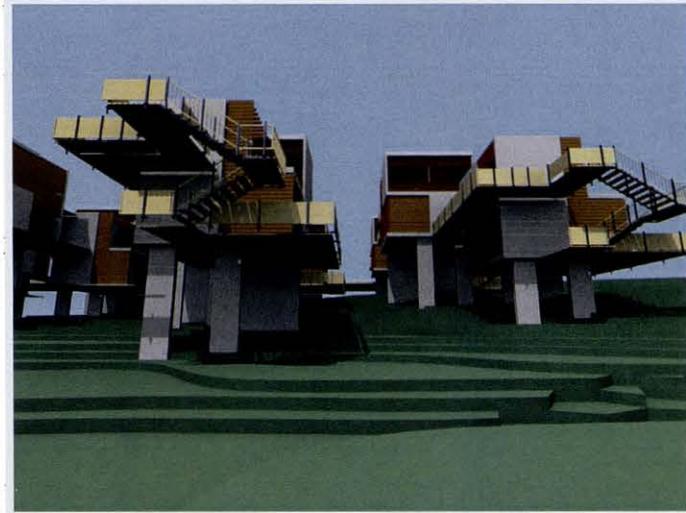
View from top of units down.

Introduction  
Theory  
Facility  
Context  
***Design Response***  
Conclusion

***Final***



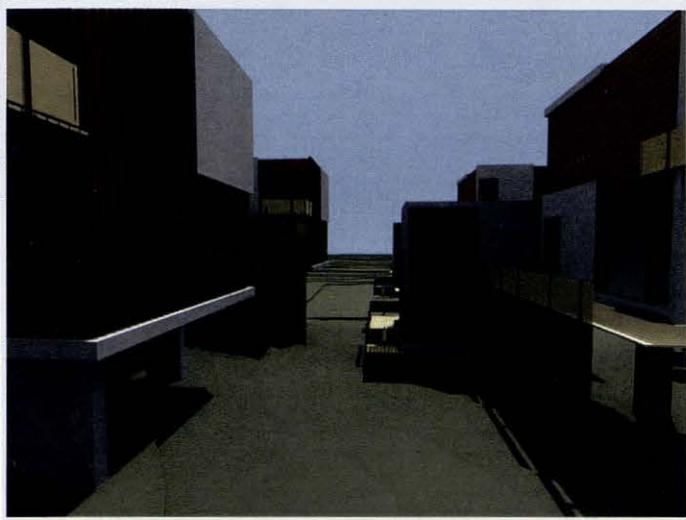
View of units from walkway.



View of units from the river.

Introduction  
Theory  
Facility  
Context  
***Design Response***  
Conclusion

***Final***



View between arms.



View of units from below.

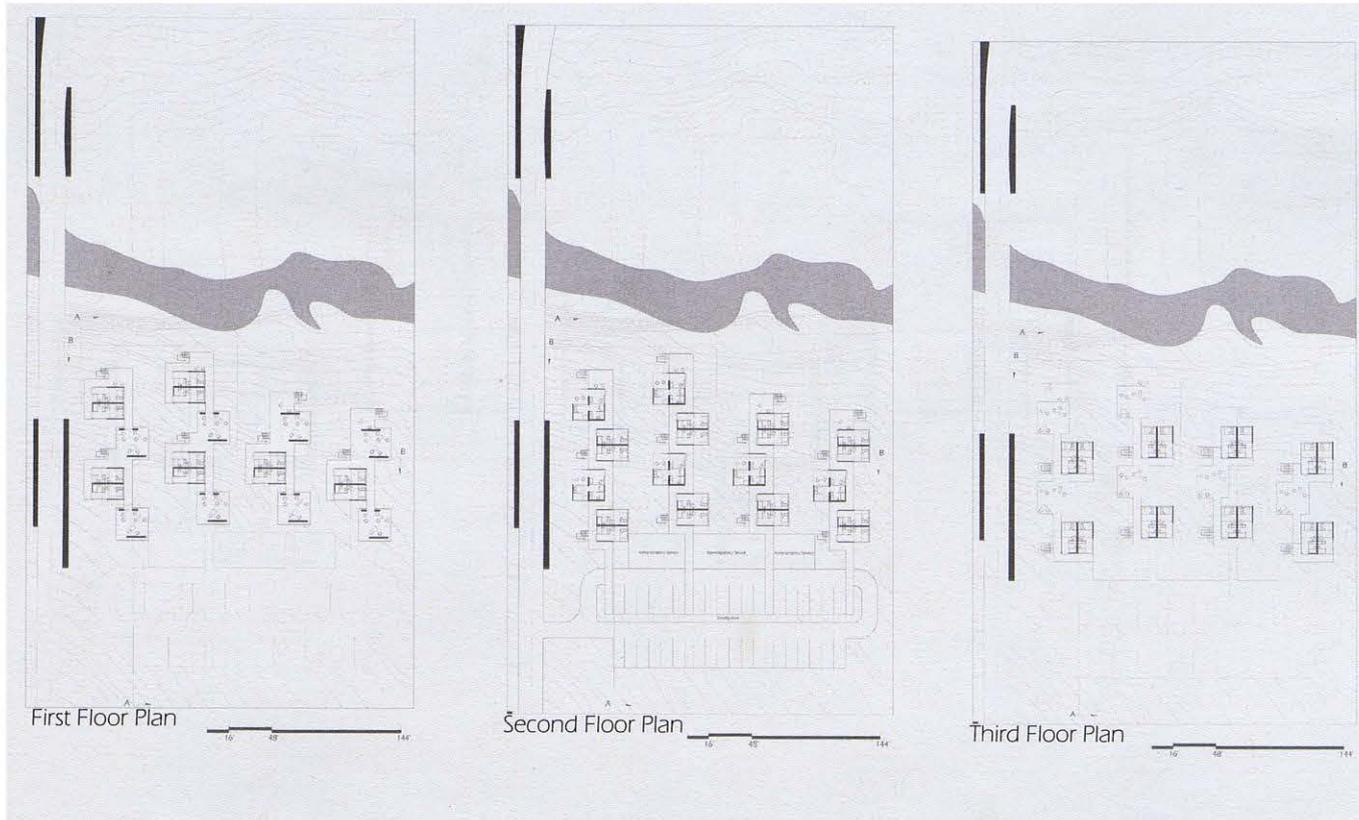
Introduction  
Theory  
Facility  
Context

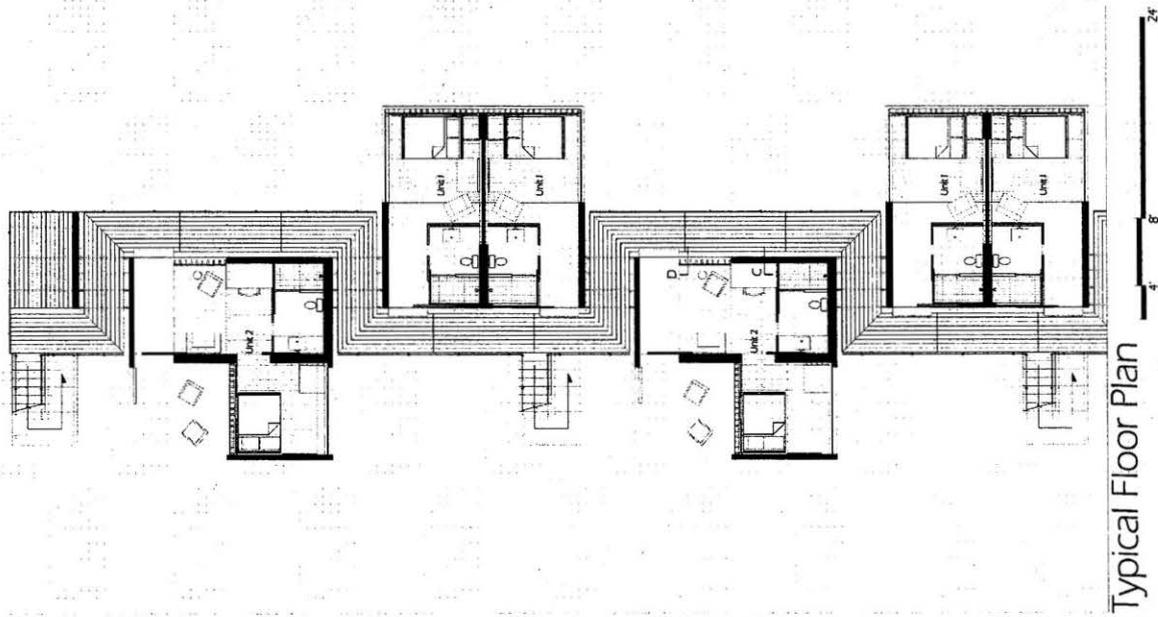
***Design Response***  
Conclusion

***Final***

Introduction  
Theory  
Facility  
Context  
***Design Response***  
Conclusion

***Final***





Introduction  
Theory  
Facility  
Context  
*Design Response*  
Conclusion

*Final*

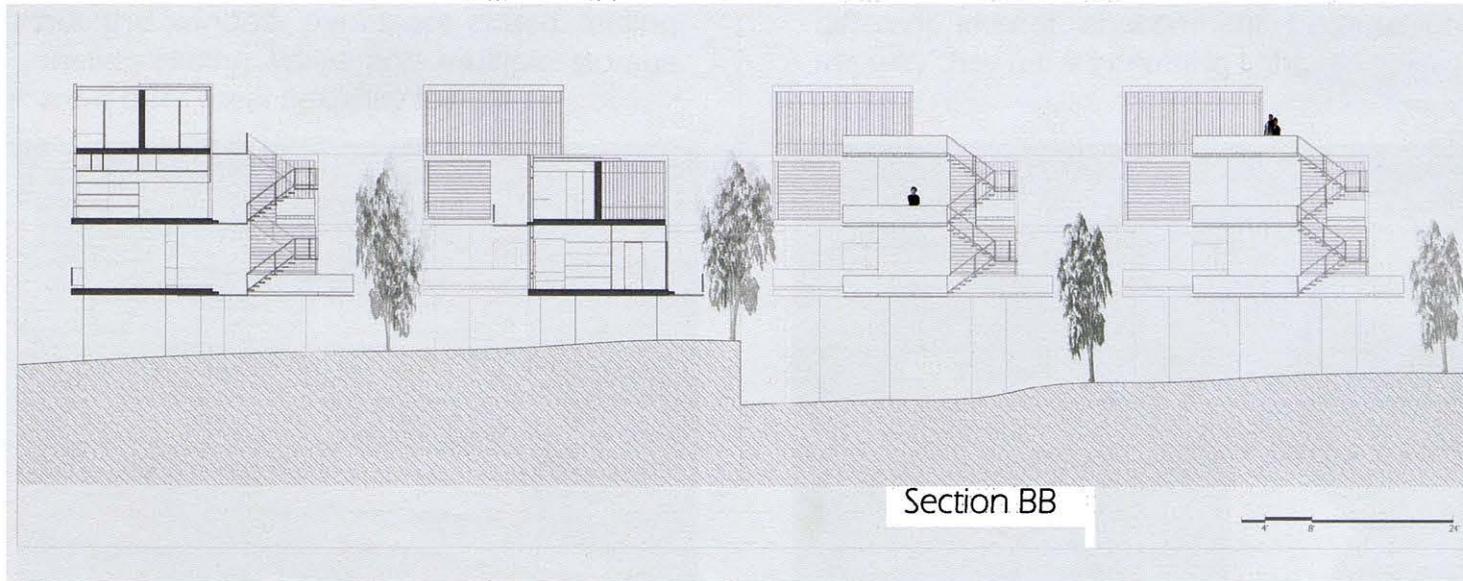


Introduction  
Theory  
Facility  
Context  
***Design Response***  
Conclusion

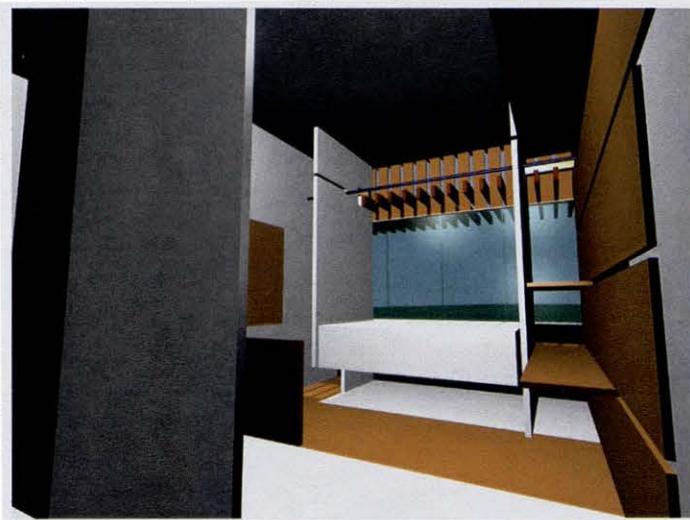
***Final***

Introduction  
Theory  
Facility  
Context  
***Design Response***  
Conclusion

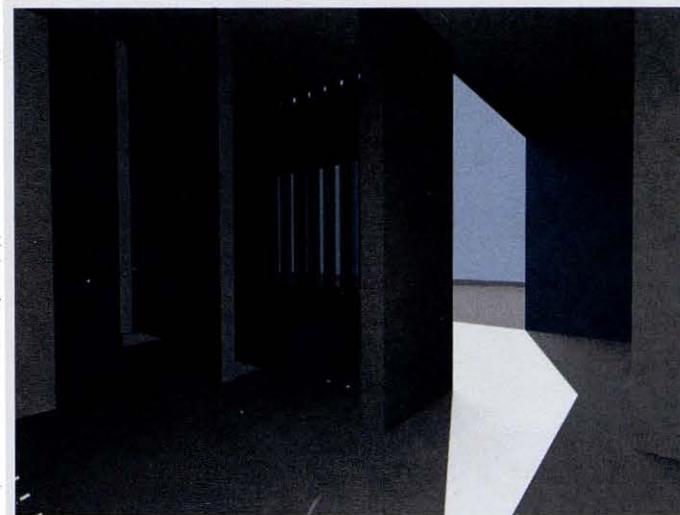
***Final***



Perspective of Unit I. This is the entrance to the room facing the bed that sits at the foot of the window. The vertical slats are open but the window panes are closed. Sliding shelves sliding walls, and multiple storage areas offer great flexibility for users.



Perspective of Unit II. This is a view of the sleeping area with the slats closed. Not only do the slats offer privacy, they also offer a different interior environment because of the way they refract entering light.

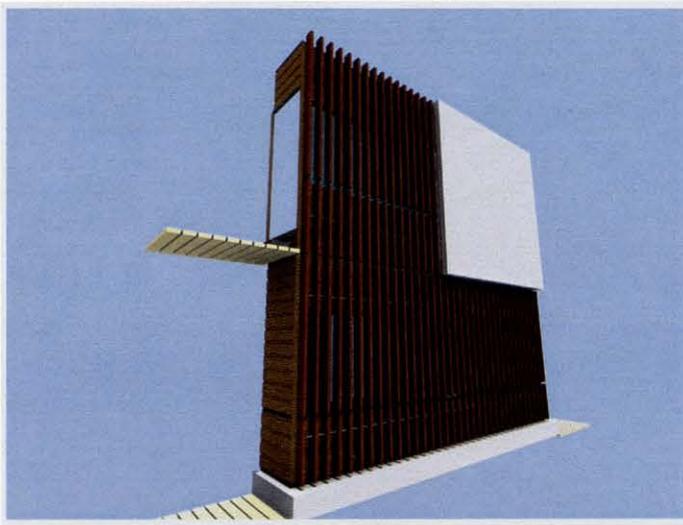


**Introduction**  
**Theory**  
**Facility**  
**Context**

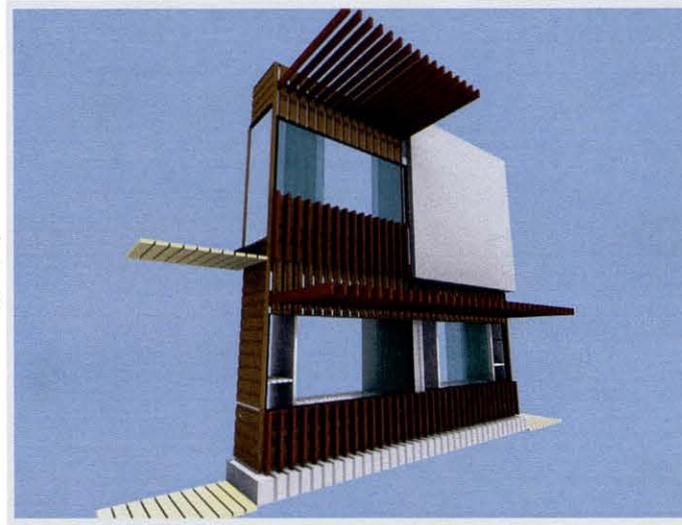
***Design Response***  
**Conclusion**

***Final***

Perspective of cube's façade. This is a view with all of the vertical slats closed. This allows for an added degree of privacy because the slats allow the users to view out while concealing the users from outside viewers looking in.



Perspective of cube's façade. This shows the potential arrangements of the panels. They can be open in one room or all, glass windows slide on tracks to open the room to the outside. There are a variety of ways to regulate the interior environment and views.



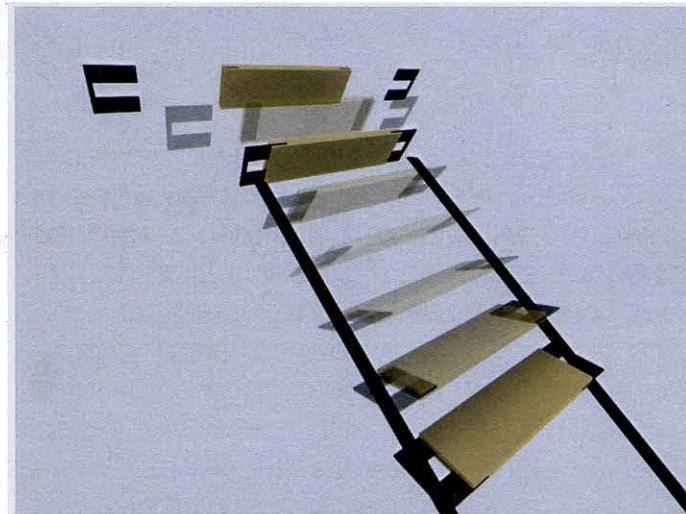
**Introduction**  
**Theory**  
**Facility**  
**Context**  
***Design Response***  
**Conclusion**

***Final***

View from walkway of stairs. The stairs and walkways played an integral role in bringing the project together. The visually dominating and heavy looking units were complimented by the walkways and stairs that remained very light, and actually attached to the units.

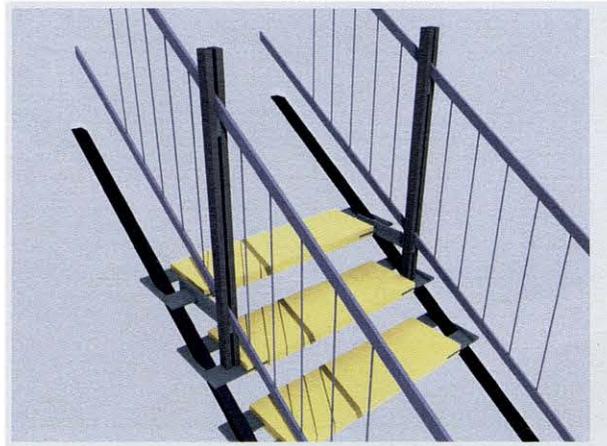
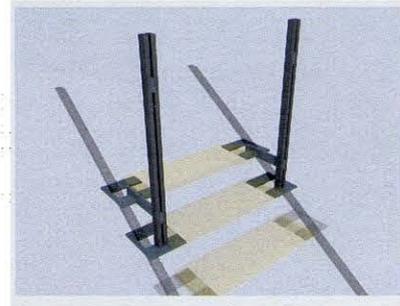
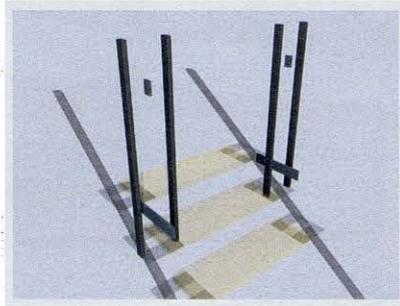
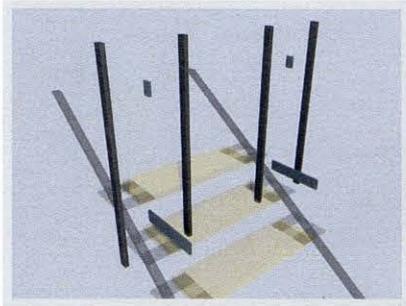


Stair construction. This is a visualization of how the stairs were connected. Metal plates attached to the wood risers and slid down the supports at equal increments until the stairs were perpendicular to the walkway at which point they were secured in place.



**Introduction**  
**Theory**  
**Facility**  
**Context**  
***Design Response***  
**Conclusion**

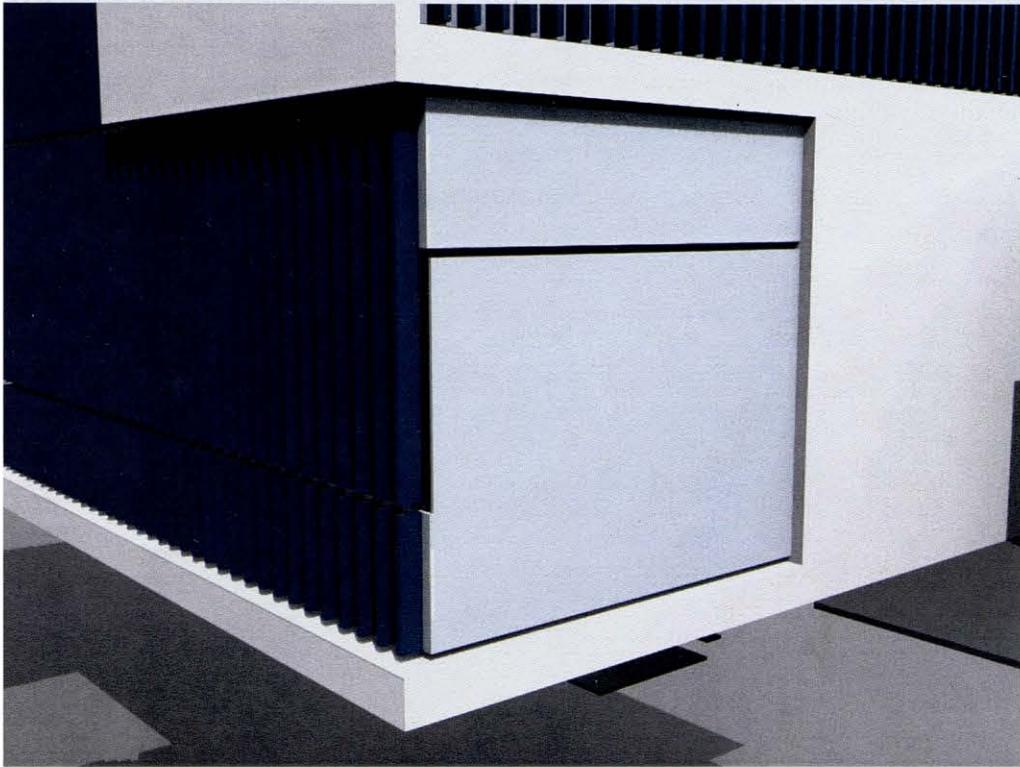
***Final***



From the upper left, the pictures offer a sequence of the hand rail construction. The concept is generally the same as the stairs with the rails clamping together for support. The supports for the hand railing are actually dependent on two steps: one, the vertical clamped plate and two, the stair below on which the support rests. The picture to the left shows the final result of the staircase construction.

Introduction  
Theory  
Facility  
Context  
***Design Response***  
Conclusion

***Final***

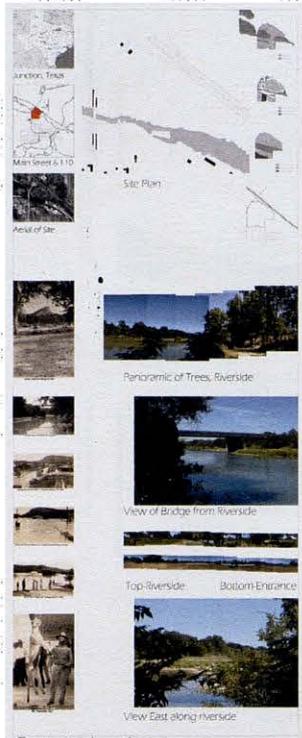


**Introduction**  
**Theory**  
**Facility**  
**Context**

**Design Response**  
***Conclusion***

***Context***

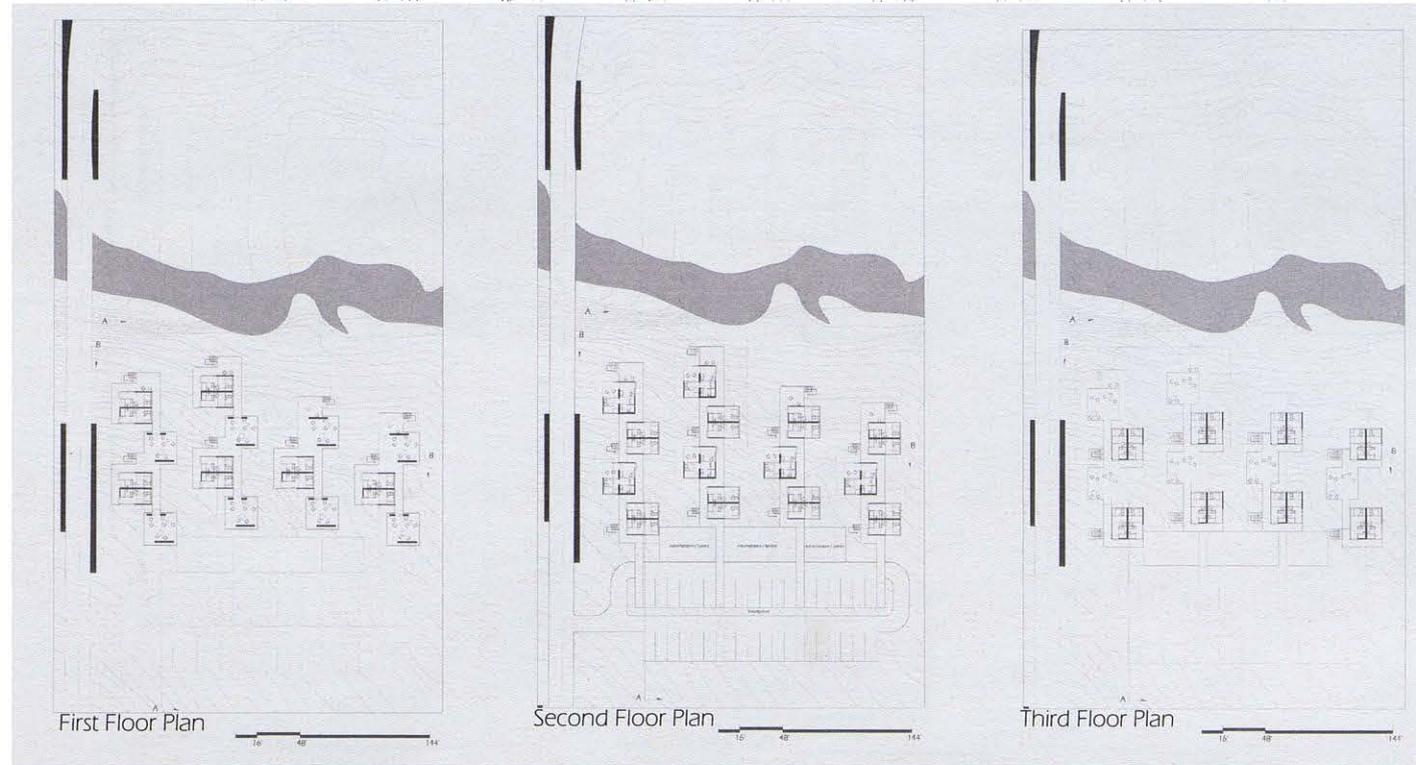
**Conclusion**



Context - Junction

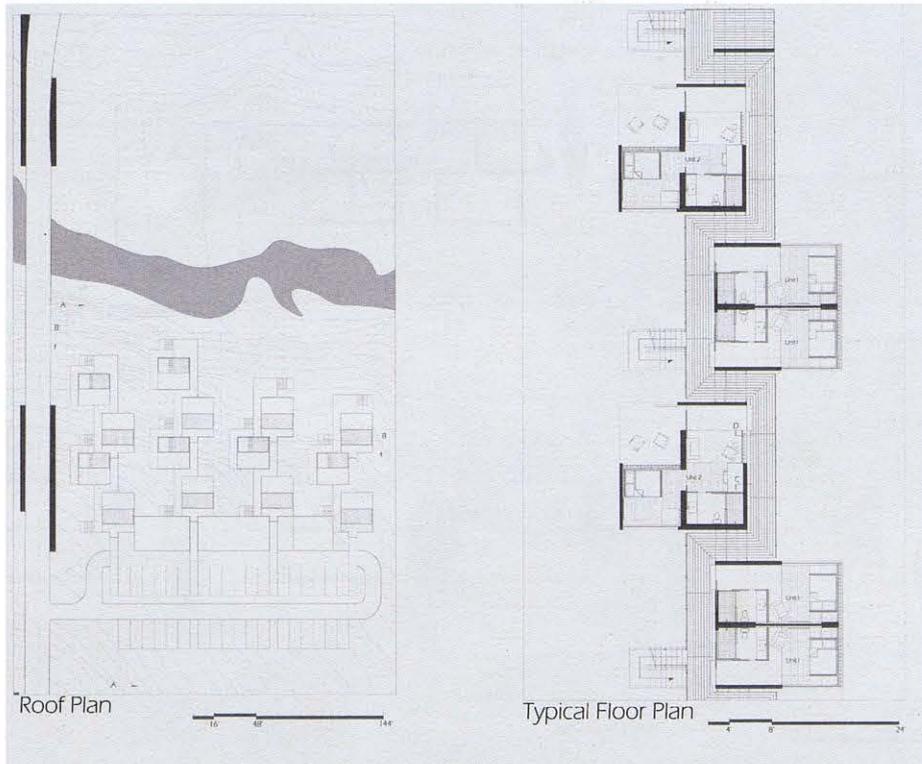
**Introduction**  
**Theory**  
**Facility**  
**Context**  
**Design Response**  
***Conclusion***

***Presentation***  
***Boards***



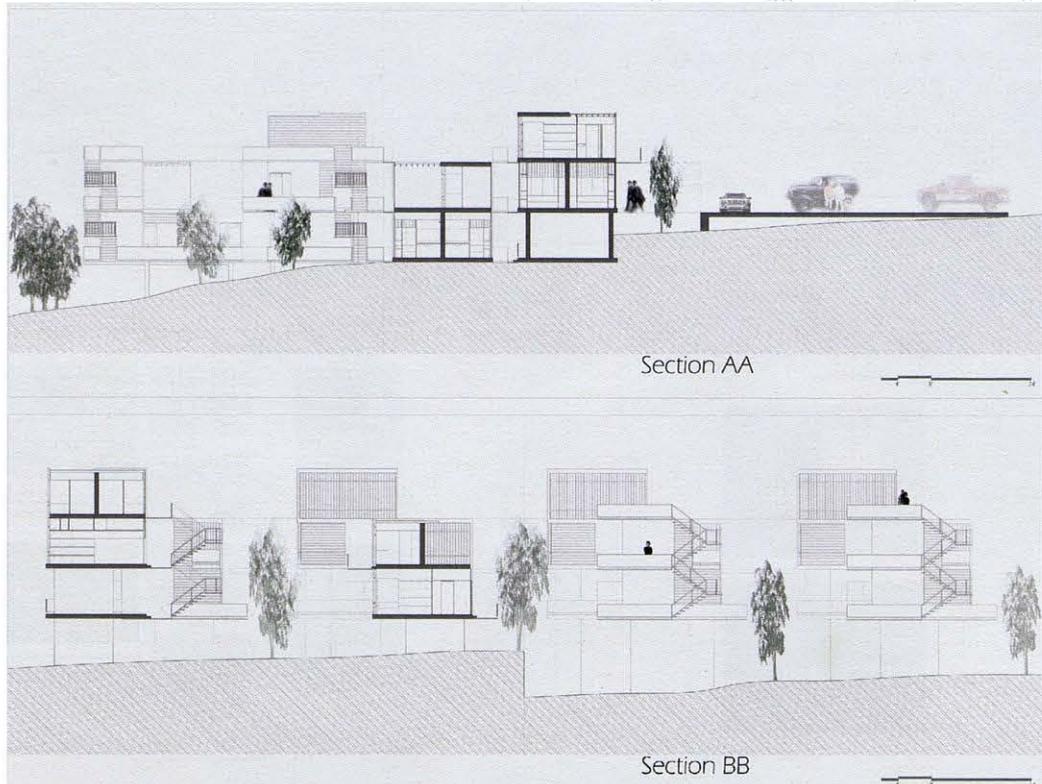
**Introduction**  
**Theory**  
**Facility**  
**Context**  
**Design Response**  
***Conclusion***

***Presentation Boards***



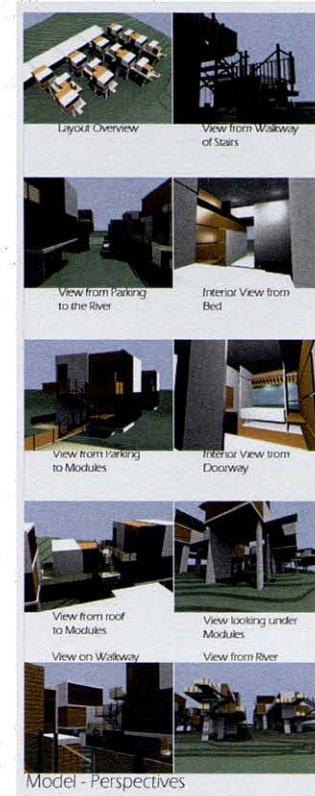
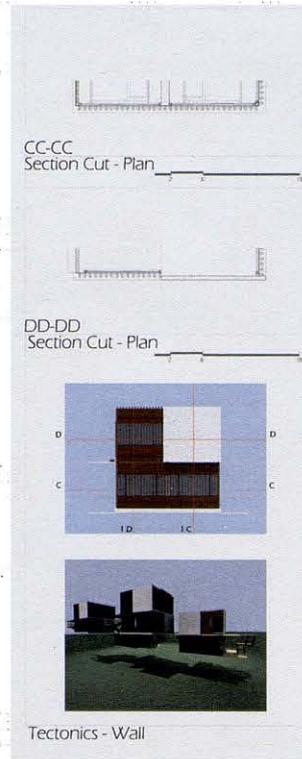
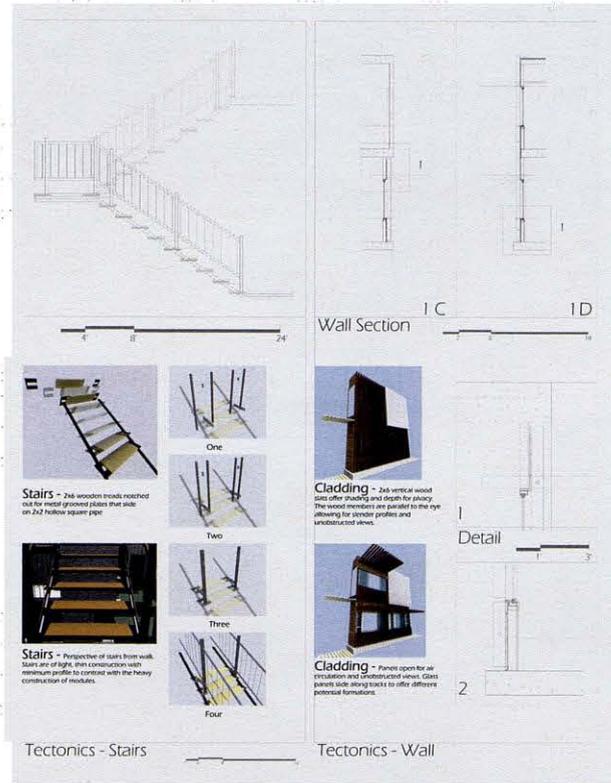
**Introduction**  
**Theory**  
**Facility**  
**Context**  
**Design Response**  
***Conclusion***

***Presentation  
Boards***



**Introduction**  
**Theory**  
**Facility**  
**Context**  
**Design Response**  
**Conclusion**

***Presentation  
Boards***



Introduction  
Theory  
Facility  
Context  
Design Response  
**Conclusion**

**Presentation Boards**