In the bustling urbanism we find in Las Vegas today, the notion of architecture is a complex scenario. It seems that Las Vegas has assumed the role of some sort of back lot at a Hollywood production. With the business of fantasy in mind, buildings are created to entice, amaze, and lure. We see commercialism at its best here in the desert. Brightly lit signs and brightly-lit facades flank a five-mile stretch of road with a shadowed backdrop of architectural form floating in the distance. It’s a sense of hierarchy. Signs in the front, architecture in the back, and spectacle in between. A lot of spectacle. It is a functioning commercial machine made up of many individual parts, but all based upon the whole. It is an altered sense of place and time engulfed in the theory of imagery. Symbol dominates space in Las Vegas. Whether it be a glistening neon sign or a complex replica of ancient Rome, it is symbolism. Perhaps Las Vegas is stuck in a spectacle paradigm. One cannot argue the fact that the devices used are effective. Vegas is thriving and has been for quite some time now. In my thesis exploration, I intend to justify the point that architectural form can generate valuable spatial relationships within this symbol-oriented environment of Las Vegas. The notion that these luring devices are so successful is based on their appeal to the individual. It in a sense is the ultimate desire to find ek-stasis in the world around us. I intend to design a project that will interact, and mesh with the Las Vegas aesthetic but focus on the importance architecture can play in both perception and the senses. It is here in the built form where these senses are stimulated and possessed within the architecture itself.
Contents:

Page 1. Project Background - Design Premise - Project Type
Page 2. Project Background - Concept and Description
Page 3. Project Background - The Day/Night Advantage
Page 4. Site Description - Physical, Cultural
Page 5. Site Description - Photographs
Page 6. Programmatic Issues and Organizational Data
Page 7. Conceptual Design - Concept
Page 8. Conceptual Design - Process
Page 9. Conceptual Design
Page 10. Design Solution
Page 11. Design Solution
Page 12. Design Solution - Floor Plans
Page 13. Design Solution - Images
Page 14. Design Solution - Images
Page 15. Design Solution - Images
Page 16. Design Solution - Images
Page 17. Design Solution - Aerial Images
Page 18. Design Solution - Information Kiosk
Page 19. Design Solution - Gallery
Page 20. Design Solution - Exterior Details
Page 21. Design Solution - Exterior Details
Page 22. Design Solution - Exterior Details
Page 23. Reflections and Conclusions
Page 24. Bibliography
Design Premise:

Las Vegas is based on fantasy and the architecture contained within exemplifies this notion. Robert Venturi's theory that "the sign is more important than the architecture," although adapted through time, still appears to be the driving force in the city's commercial design concept. It is the idea that spectacle draws a crowd, and the bigger the crowd the better. Most obvious then is the outcome: bigger spectacle. This is the course the Las Vegas Strip has taken over the recent decades with the shift from the automobile scale to the pedestrian scale. The architecture of this parody stated environment is masked among appropriately scaled visual diversions, which tend to create a human scaled comfort zone in the midst of the Nevada desert. The question: Can the Las Vegas aesthetic be introduced to a new archetype and continue to thrive? This new style thrives on the emphasis of architectural form as an alternative to the imitated fantasy forms currently shaping the Las Vegas aesthetic. The design incorporates the same ideals in which the current strip structure is based upon, but translates them into an architectonic order which is then interpolated into a built form. It is an investigation not only of project type, but of the senses and how spaces are perceived. It is an examination of how views can be controlled and manipulated within a confined space, and also within the context of urban proportions. It is a study dealing with the concept of the functional characteristics of a window and how it serves as a two-way porthole to the interior and the exterior alike. Located in such a symbol based environment, one must take the opportunity to exploit the surroundings for what they are. The final solution incorporates the use of technologically enhanced media to produce the distortion of reality and the interaction between the inside and out.

Project Type:

The initial concept for project type was established out of need. The structure of the Las Vegas Visitor Chamber is an underdeveloped one. Although the city turns over millions of visitors a year, there is no central location for this function currently existing on the strip. The duty is somewhat panned off on several makeshift tent-like structures seemingly located at random in a few gaps along the roadway. The goal of the new visitor center is to pull these functions together and act as a centralized hub of activity for the thriving strip. It is a central information core which is designed to mesh with the existing collection of functions forming the Las Vegas aesthetic. The role of the visitor center functions as a key component to the overall commercial machine. It should be made clear that this facility is not intended to replace those satellite facilities currently existing, but it is intended to be an organizational piece in the overall scheme.
Project concept and description:

Ek-stasis: A standing out from the points in space one's body occupies. To stand out into the surrounding world and to be caught up and possessed by it.

Concept:
The concept behind the thesis is to explore the depths of human senses and perception. In such an eclectic environment like Las Vegas, light, sound, and visual extravaganzas overwhelm the human senses. These devices are used to lure the individual into different facilities located there. It is a culture based on psychology. The spectacle appeals to the human desire to find ek-stasis. It is at this point where the integration between building and perception occurs. The architecture is used as a vehicle to translate these ideas into reality where it can be experienced. People need to be part of the psychic environment, it requires participation. Perhaps even a manipulation of it. It is an animate environment, not a static one. Vegas shape and manipulates. Nothing is left to individually perceive. This is the criteria the new Las Vegas Visitor Center is based on. It is an everchanging mix of kinetic images. Perception is altered through a distortion of the visual stimuli. The building itself becomes an elaborate collage of Las Vegas images.

Description:
The project is a visitor center for the Las Vegas area. This is a place where visitors from all around can receive information about Las Vegas, see short films on the history and culture of the area, experience gallery space composed of Las Vegas themed exhibits pertaining to the area, and gain an understanding of what events are taking place up and down the “strip.” The facility will also house a reception area for community events. As mentioned before, the center will function as the hub for pedestrian circulation in and around the “strip.” It is important for this sort of facility to be located in the center of the activity in Las Vegas to stimulate positive interaction on the primary pedestrian and vehicular scale.
The day/night advantage:

The Las Vegas Strip is an everchanging kinetic organism. It almost seems that it has a life all of its own. It fluctuates from day to night and transforms itself in an adaptative way to react with its surroundings. The populist style architecture gives way to a sea of neon light as the hours mature with the day and the sun fades into the Nevada desert. It is a type of metamorphosis that occurs each night. The casino doors open to reveal their interior functions, and the pedestrian crowd alike partakes in a transformation of its own. This is a phenomenon that occurs along the entire strip. It seems to be a base for design characteristics within all facilities located there. The concept of a two-faced building (occurring on the same facade) is an interesting one. The building actually transforms itself as the day progresses on.

The design solution incorporates the use of a new type of technology to generate these effects. By using a system of digital micromirror display (DMD) devices, the East facade of the facility becomes a kinetic screen which pierces the building and comes alive at night. It is a system which allows for visual penetration during the daytime hours, but also acts as an information screen during the evening and nighttime hours. It, in a sense is a reversal of the current Las Vegas condition. In this final solution the screen plays a key role in the overall design concept dealing with the imagery of the city. At any given point, the screen is to be flooded with abstract representations of Las Vegas.
Site Description:

Physical:
The site selected is in the heart of Las Vegas Boulevard (The Strip), Las Vegas, Nevada. The location is on the northwest corner of South Las Vegas Boulevard and Harmon Avenue. This location is a focal point of the city and contains the aesthetic precedence associated with the populist or fantasy style of design and therefore serves to be a key area for future development in the area. The site lies in the midst of two above ground monorail systems and it contains prominent views both north and south along the strip. Harmon Avenue runs East to West and terminates in the middle of the University of Nevada Las Vegas campus. The site is in clear view of Interstate 15 to the West and is adjacent to new resort construction on the strip. Overall, the site is centrally located to the amenities the strip offers its visitors, and can easily be envisioned as a future hub for pedestrian dispercement and gathering.

Cultural:
Considering the basis founding the Las Vegas culture, gaming and entertainment, the Strip and its components serve as the facade of the city. Located in the heart of a desert, the natural history of the gambling town is expressed through a variety of casinos and mega hotel structures which strategically flank Las Vegas Boulevard and form a “main street” effect for the city. It is with this context in mind in which my thesis conforms and meshes the physical characteristics of the existing aesthetic with that of new design.
Program:

Tourist Information Space: 3,500 sq. ft.
  Kiosk space: 3,000 sq. ft. (excludes entry lobby)
  Information counter: 500 sq. ft. (includes office space)

Presentation Space: 12,000 sq. ft.
  Theater: 3,000 sq. ft.
  Gallery: 4,000 sq. ft.
  Gallery2: 3,000 sq. ft.
  Gallery3: 2,000 sq. ft.

Commercial Space: 4,500 sq. ft.
  Lease space: 2,000 sq. ft.
  Lease Space2: 2,000 sq. ft.
  Café Space: 500 sq. ft.

Reception Space: 1,500 sq. ft.
  Food service area: 500 sq. ft.
  Assembly: 1,000 sq. ft.

Restrooms: 800 sq. ft.

Office Space: 200 sq. ft.

Service Area: 2,000 sq. ft.
  Storage: 1,000 sq. ft.
  Service area: 600 sq. ft.
  Loading Dock: 400 sq. ft.

Circulation: 3,185 sq. ft.

Mechanical: 2,655 sq. ft.

Miscellaneous: 531 sq. ft.

Total Building Area: 30,872 sq. ft.

Organizational Criteria:

Information Zone: This zone is the foundation piece of the facility and consists primarily of the visitor information counter and the information kiosks. This is the focal point of activities and again should be considered as the “hub” of the visitor center. It is the point of individual gathering and dispersing.

Presentation Area: The presentation area is comprised of the multiple gallery spaces and the theater. This zone is intended to be a visually oriented area where visitors can see displays and film based on the culture and activities available in the area.

Retail Zone: The retail space is incorporated as support to the overall function of the facility. These spaces lend themselves to the overall purpose of the visitor center. These functions include: Las Vegas gift shop, a ticket brokerage firm, and a small café space servicing the building.
Conceptual design:

Concept:
The original design intent focused on a series of criteria set forth by independent research. It became apparent that there were a few specific issues that had to be examined and developed. The first is the idea of pedestrian circulation. This was not an exploration into the facility itself, but with the circulation of the site and its connection to the overall strip. It is an extremely linear pattern which carries the passersby's across the east end of the site but not to it so much. Secondly, after looking at other parts of the strip, I feel it was necessary to address the corner it sat on. It seems prominent to situate yourself or make a gesture towards the intersection. This is a device used by other members of the strip, and it is very successful from a visual connection standpoint. The third issue I conceptually tried to tackle was the interaction of building form and media. I knew this was needing to be a bold statement so my first few models incorporated this notion into the strip-side facade pieces. You can see in the images located on this page how some of these possibilities are accomplished. They all deal with a strong anchor point positioned at the corner and use verticality to represent its hierarchy. In these early examples, the adjacent strip facade is somewhat broken down to take on a pattern similar to what the existing buildings on the site establish. The incorporation of media begins to imitate the projected spaces on the east facade and alike the corner element, are also stretched vertically to become apparent from farther distances both up and down the strip, and from the western interstate corridor.
Conceptual Design:

Process:
In the process of designing the new visitor center, the concept remained the same, but the techniques of delivering the final product changed. I discovered that my plan was a little too complex and unorganized, and my thinking was not bold enough yet. The largest development occurred in the technology screening. Instead of segmenting the screen in front of the building, I decided to let the building segment the screen. Afterall, the images are the most important piece of the aesthetic quality contained in the building. The images presented on the screens are those to be found on the strip. Another discovery I made in my thinking was that I thought of the images too literally. I feel that they need to be manipulated, inverted, pulled and stretched, or just plain distorted. This gives the proper effect needed to produce the dilution of reality which serves as key in the overall scheme of things. The image below is an earlier representation of how images can be placed directly into the facade pieces. It is an experimentation of how the images can become the actual facade itself. This tool is helpful in bringing people into the facility by accenting pieces of the building. This creates a fantasy spectacle scenario which deals with illusion and excitement through the production of digital mosaic images.
Conceptual Design:

The top two images are cartoon rendered still shots taken in the middle of the design process. They begin to demonstrate how the individual components come together and form the larger whole. They are renderings of the west side of the building. The upper one shows the main entry into the atrium from the parking area. The middle is a component shot of all the massing elements that make up the facility.

This lower image is a more detailed example of the intersection side of the information area. This shows how the digital plane (yellow) intersects the volume and begins to create zones within the whole. An upper viewport is carved from the facade on floors two and three to create observation areas through the digital media.
Design Solution:

Solution:
The final design solution serves as a compilation of all previously mentioned issues pertaining to site, and aesthetic quality of space. I use the remainder of this book as a vehicle for describing the outcome of the explorations I encountered through the process of design. The final output which is displayed is representative of the Las Vegas aesthetic and ultimately demonstrates the power and effect that technology can have on perception. I will briefly discuss aspects of my project that are displayed in the corresponding images. This will serve as a basis for my conclusion which I feel incorporates the overall volume of issues and decisions made throughout the entire design process.

One issue I focused on throughout the project was the interaction between the inside and outside environments. As I mentioned earlier, the site is heavily influenced by its surroundings. This makes the interaction even more so important. The advantage of revealing the contents of the building as shown in the image to the right, provides as a curiosity stimulation device for the functioning building. The image below is a detail of the atrium structure system. A common theme running through the facility is the idea of exposed structure.
Design Solution:

This is a four-part segment of clips rotating from the north end of the site to the east facade of the building. It demonstrates the relationship to the strip and the pedestrian circulation paths. This segment also illustrates how the retail areas of the facility push their way out on the overpowering media screen.
Floor Plans:

First floor

Second floor

Third floor
Design Solution:

This image demonstrates how a forced perspective can control view. A slanted grid system allows for the three floor plates to take on such an angle, and provide for a view into the facility. Cutting across the area is a ramp system that spirals off of the information volume and spins up to the second floor theater area. This continuation creates a natural form for the building, and provides for good circulation alike.
Exterior panels:
These images demonstrate the evening exterior use of the DMD technology. The media produced is a collage of Las Vegas images which are viewable along the strip and from within the facility. The images used range anywhere from the hotels on the strip, to wedding chapels, to a variety of restaurants servicing the area. This not only delivers a kinetic feel for the facade, but also provides the day/night feel which was discussed earlier. These panels are intended to be everchanging and are designed to have the ability to create both large and small images on the screens. This enables a wide variety of possibilities for the aesthetic aspect of the design.
Exterior panels:
These two images show how the screen technology can be semi transparent while in operation. The initial concept is to provide a distortion of reality while viewing the contents of the building from the outside, and a distortion of the exterior from within. As the images change, the views change with them. The screen is disrupted on the north side to frame a specific image to the pedestrians coming from that direction. It functions like that of a typical movie screen.
Gallery Perspective:
The gallery spaces are to be filled with different items representing the Las Vegas culture. In the upper image, a view is framed looking from the first floor gallery space back into the atrium area. One can see the reflections of the DMD screens on the drum shaped volume of the information core. The lower image is a 360 degree shot of the gallery with its exhibition panels placed around the floor area.
Exterior Details:

The large image is a detail shot of the suspended glass panel system housing the DMD technology. The individual panels rest on a series of vertical outriggers which float the panels in mid-air. This is a perspective looking north on the south side of the information area. The truss system works as a tension system, using tiebacks into the floor slabs as lateral support. This provides for an lighter feel, and more visual surface area on the panels.
Exterior Details:

This is the entry zone into the information area. This particular entrance is located at the most prominent corner of the site. The cylindrical volume is pierced by the media screen and creates a confined vertical space entangled with structure. There is a sense of procession into the elevated information space, and the visitor is bombarded with imagery as soon as he/she passes through the building mass. The intended goal of the exposed structure is to minimize the human scale and to create a sea of shadow patterns on the ground surface.
The image displayed on this page is a detail of the west atrium entrance. It elaborates on the idea of expressed structural stability. The piece works very symmetrically and is heavy in nature. It is designed to provide a sense of solidity for the facility. I feel it is important for the building to stand out as being a permanent fixture to the strip amongst a very instable architectural background.
Reflections and Conclusion:

I am using this page to conclude my research and release my final thoughts about the project. Going into the semester I had a certain idea of what my final output would be. As I reflect now, I realize that my research has developed way beyond that stage. Las Vegas is a compilation of anything and everything. I thought in the beginning that no matter what I produced, it would have no problem fitting into the context of the city. I know now that although it sounds good in theory, that it’s not necessarily true. I found that in such an eclectic area such as Las Vegas, strict design standards are upheld. The city is based on a series of criteria with one ultimate goal in mind. It is the business of entertainment. With this, all the stops are thrown out. Everyone is a competitor, and with this stiff competition comes outrageous extravaganzas. At a time, it seemed to me that this was all done in an arbitrary manner without guidelines. Now, I find that there is a science to the Las Vegas design concept.

When dealing with the idea of perception, one has to be careful. After all, we all perceive the world in a different way. Perception is the given aesthetics of our environment. It is without meaning. We, as humans, experience architecture by body, head or eye movement. Perception is the organization of stimuli of the outer world into a structured image. So what happens when our outer world becomes flooded with information. This is what the Las Vegas Strip revolves around. In a sense, it is simply an attraction device. By incorporating kinetic motion into imagery, our perceivable associations become kinetic alike. It is an ever changing view into space. It is a filter or sorts. A virtual kaleidoscope distorting our realities. My design takes this notion and develops it into a much needed facility for the Strip. It is designed to be the link between two nodes and the missing element to a thriving tourist industry. The new Las Vegas Visitor Center is the added focal point to “the commercial strip” who’s basking in its excess, and striving for your attention.
Bibliography:


Izenour, Steven and David A. Dashiell III. "Relearning Las Vegas." Architecture 79, no. 10 (October 1990): 46-51.


