



Monumental Presence

MONUMENTAL PRESENCE

IN ARCHITECTURE

An **IMAX** Theater
For
Salt Lake City, Utah

By

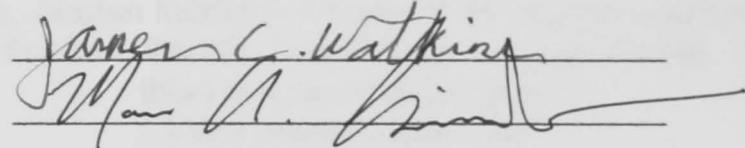
Neil Rosado

A Thesis in Architecture

Submitted to the Architecture Faculty
of the College of Architecture,
Texas Tech University in Partial Fulfillment
of the Bachelor of Architecture Degree



Chairman of the Committee



Thesis Programming Instructor (ARCH4395)
Professor Martin
Thesis Design Instructor (ARCH 4692)
Professor Mead



Accepted by the Dean

Fall 1998

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Acknowledgement

I would like to thank my Mother and Father, for their countless support during the extremely difficult times, their praise during the good times, and for instilling the belief that I can truly do anything if I put my mind to it.

Thank You

To my brother and sister, for each taking an "at bat" in seeing that I was doing the right thing, while helping me keep a smile on my face.

Gracias

To my best-friend Ron Collins, the voice of reason, humor, insight and insanity. If he had never moved to Salt Lake City, I would have never chosen this site.

Thanks Jerk

To the piece that fits, dear friend, editor and chief, and fiancé, Megan McKight, if it wasn't for you I would have never finished, literally, I would have run out of time. For this I can never repay you.

I Will Always Love You

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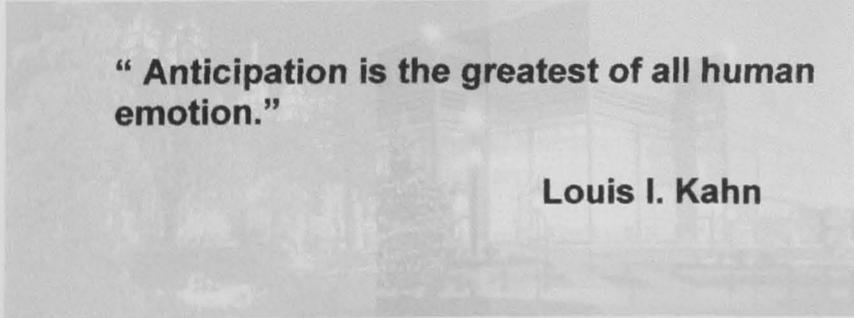
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Dean, College of Architecture

:Date



“ Anticipation is the greatest of all human emotion.”

Louis I. Kahn

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Stonehenge

Scotland

"... a monument might be that its design evokes a collective feeling in those who experience it."

**Eleni Constantine
Progressive
Architecture 5/79**

THESIS STATEMENT:

Monumental (presence in) Architecture is derived from and is an expression of the emotional effects on ones psyche.

SUMMARY:

Webster's Dictionary defines monumental as an object in memory of a person or act. Memorable is defined as worth remembering. Ones memory act upon events, sometimes traumatic, and the senses of sight, smell, taste, touch, and hearing. Emotions are the result of the senses. Therefore, I am dealing with monumentality in architecture; not the monstrous types of build rather the emotional effects on the participants of the facility. I am not concerned if someone remembers the details in the walls but how they remember how they feel when they are in my facility. However, the details can remind the users of the senses they have just experienced.

CONTEXTUAL STATEMENT:

Salt Lake City is the capital city of Utah, located in the northern part of the state, near the Great Salt Lake. Salt Lake City is nestled in the basin of Ancient Lake Bonneville near the mountains of the Wasatch Range. The city is the trade center for a wide region and also has a variety of manufacturing industries. The international headquarters of the Church of Jesus Christ of Latter-day Saints is located in the city. Perhaps the most fascinating aspect of its history is the incredible evolution of this community. What started, as the Mormon quest for their Holy Grail has become one of the nations leaders in computer software.

FACILITY STATEMENT:

The focus of this project will be an IMAX Theater with a historic museum depicting the vast evolution of Salt Lake City. This IMAX facility will create a stir of emotions; the 3-D and or Dome Theater will excite the senses of sight and sound. The café / restaurant will satisfy ones sense of smell and taste. Lastly, the historic museum will tie together all of the senses including touch, while educating each guest on this monumental evolution taking place.



CN IMAX Theater

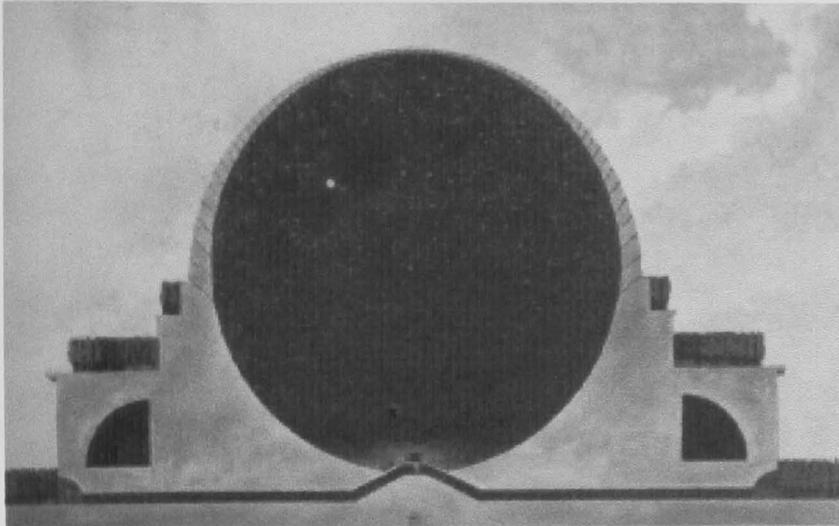
Vancouver, Canada



" The truth is more important
than the facts."

Frank Lloyd Wright





Newton Cenotaph

THESIS STATEMENT:

Monumental (presence in) Architecture is derived from and is an expression of the emotional effects on ones psyche.

SUMMARY:

Architecture is far more than mere buildings: architecture is the creation of space. Architecture is the all-inclusive art; as with any of the arts, it has the ability to rouse varying emotional responses from the viewer. The creation of architecture has the ability to submerge the by surrounding their experience in the three-dimensional realm and space as they travel through it.

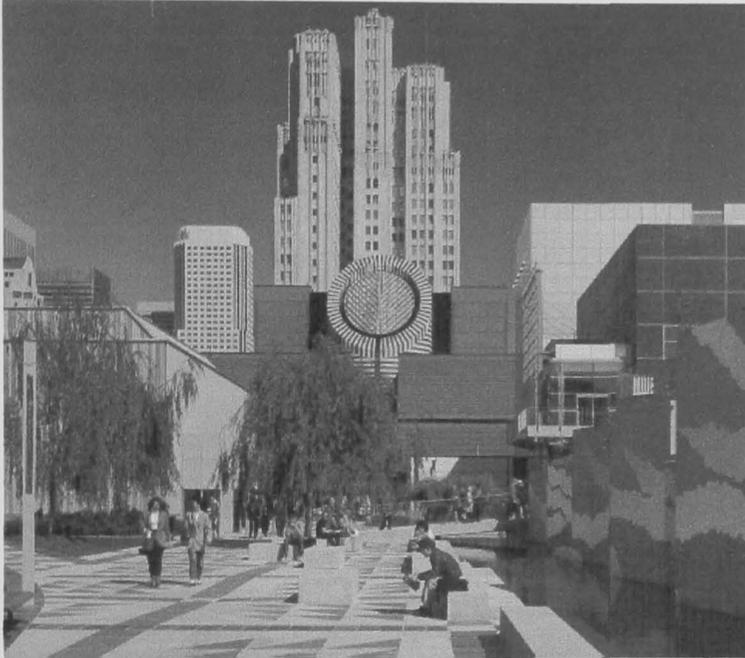
Monumentality, simply put, means selecting as significant, a particular set of deaths or losses and assigning to them a value or purpose, within a narrative framework, as sacrifices on behalf of shared collective values. The members of a society become indebted to those who have been lost¹. This mourning allows the institutions to transform the events of life into a form of constancy and to pass these values to the next generation. Mourning is only one of the monumental functions of architecture, which includes all of the emotions. The monumental function of architecture is understood as the collective version of the psychology of identification. Identification is defining the formation of the superego, in an individual, through the internalization of ego ideals. Monumentality is responsible for maintaining a sense of national identity from one generation to the next. Typically, a monument memorializes a person or an event². Broadly speaking, monumental architecture is the work of architecture symbolizing the aspirations and achievements of our society.

“ Emotion has taught mankind to reason.”

Marquis de Vauvenargues

¹ Kuh, Katherine, Must Monuments be so Monumental? 1962.

² Campbell, Douglas Gourky, Twentieth Century Concepts of Monuments, Ohio University 1979.



San Francisco Museum of Art San Francisco, CA

Thomas Creighton wrote in *Progressive Architecture*, December 1948, "The monuments of our time, we can hope, will be such buildings as hospitals and houses and schools, for the use of all our people-not palaces, and temples and triumphal arches for emperors or aristocrats or fascist gangs." Looking back however, hospitals and houses and schools did not evolve into the new monuments. Regardless, monumentality has evolved. The desire for monuments, a representative building that expresses the combined aspirations of a particular society; has not gone away. Instead, museums, theaters, cultural and civic centers were to inherit the new form of monuments.

Monumental architecture has been defined as an expression of power. This power exhibits itself in the ensemble of building materials and all the resources of art. Monumental architecture is a necessity³. The challenge lies in the generation of forms and space that stirs ones emotions. This type of architecture can touch us to the very core of our being, putting us in touch with the highest aspirations of humankind and our relationship to the natural world. Humanity needs its roots, secure places within the mind. Places perhaps largely imaginary, but fixed by things that designers can create. To think that monumental architecture would have to be big or massive is the first step toward failure. Monumental architecture must focus on the essential, the particular, and the pure potential experience⁴.

Monumental architecture is no longer about size or the expression of power, it is now simply about purity in form, and the presence the architecture imposes on the site, region, and participant, the emotional effect on ones psyche, and the lasting impression of the architecture. I am not concerned with whether or not if the participant remembers the details in the walls, but rather they remember how they felt when they are there.

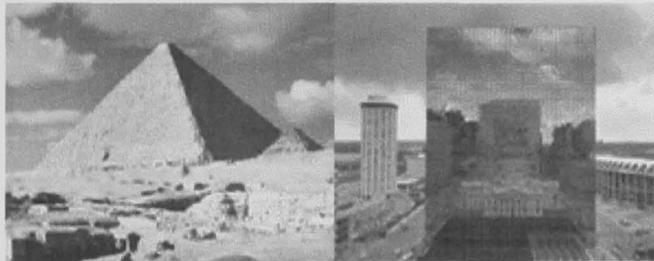
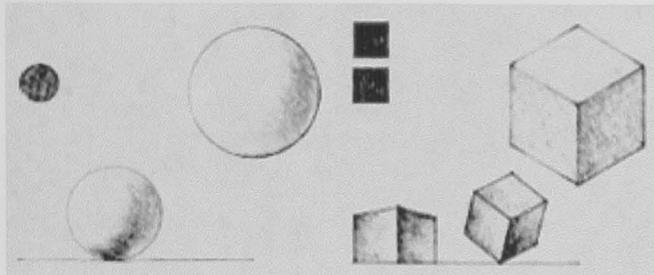
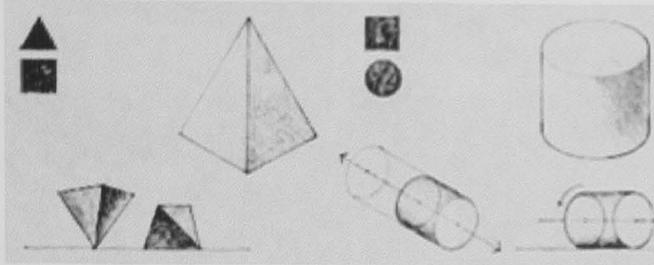
"The monuments of the nation are all protests against nothingness after death; so are statues and inscriptions; so is history."

General Lew Wallace

³ Creighton, Thomas, *Once Again the Question of Monumentality*. 1962

⁴ Kuh, Katherine, *Must Monuments be so Monumental?* 1962.

Design Responses



Issue

Forms of Monumentality

Therefore

Architecturally, monumental presence is expressed in its purity of geometric forms and is experienced in the emotional involvement of the participants.

Response

In response to this issue, it has been determined that five geometric forms have the most substantial effects on the viewers; the column, the arch, the cube, the pyramid, and the sphere.

The column is a high, attenuated visual statement, not so massive in concept yet still of sound structure if the proportions are handled correctly. A quality of freedom, is characteristic of the free standing column; it is unbounded in its vertical dimensions yet, tends to draw other objects around it. A reference, a beacon. Unlimited viewing surface, with no edges exposed.

The arch is a very strong relationship of solids and voids, structurally capable of supporting great masses. A pure, masterful, victorious visual statement. It has a protective quality for any object underneath, stability.

A cube is very monumental in a visual and structural sense. It is permanent, strong, and simple. It offers strong



I.M. Pei's Pyramid at the Louve Paris, France

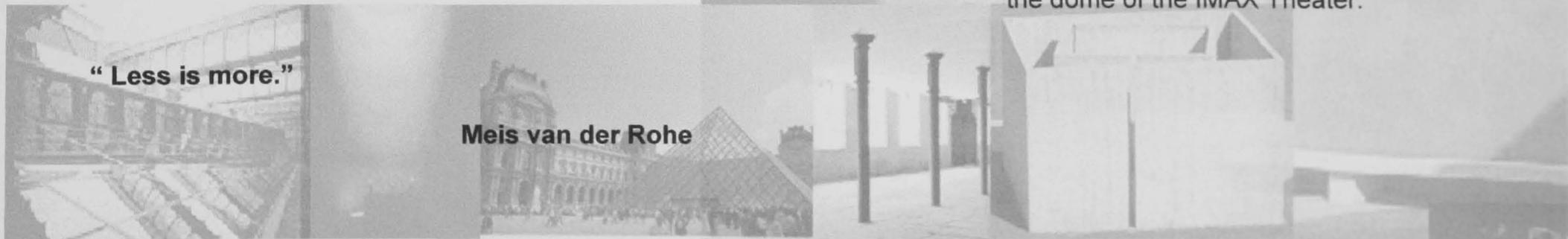
resistance to a change in its form. The cube has a maximum number of effective, useable surfaces.

The pyramid form is a symbol of everlasting monumentality. Immortality. A good, historical vestige of perpetuity. Great structural strength is manifest in the triangular shapes. A strong, visual memorial to its creator. Very horizontal, in massing, yet still monumental. It has a subdued, suppressed theme, a reverence. It also has an eternal quality, an unstirring stillness, a tranquil form.

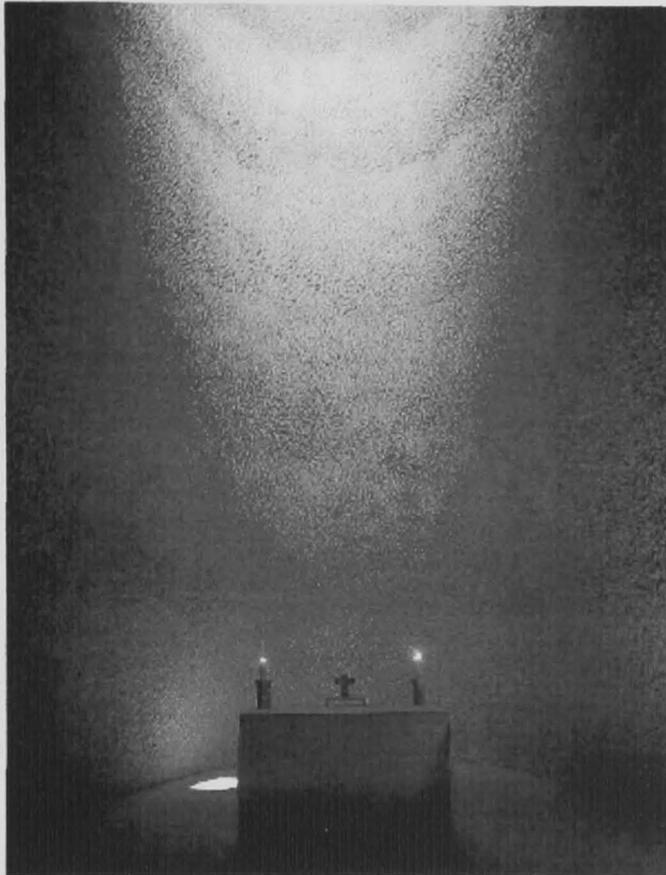
The sphere is very similar in monumental meaning, to the pyramid. The sphere is symbolic in nature and with nature in its purity: it is the sun, the moon, and the planets.

Precedence

Monumental forms have played key roles in architectural history: the pyramids of Giza, the columns of the Acropolis, the arches of the Renaissance, the cubic skyscrapers of New York City, and at a smaller scale, the dome of the IMAX Theater.



Monumental Presence: An IMAX Facility for Salt Lake City, Utah 7



Notre Dame de Haut Ronchamp, France

Issue

Experiential Presence

Therefore

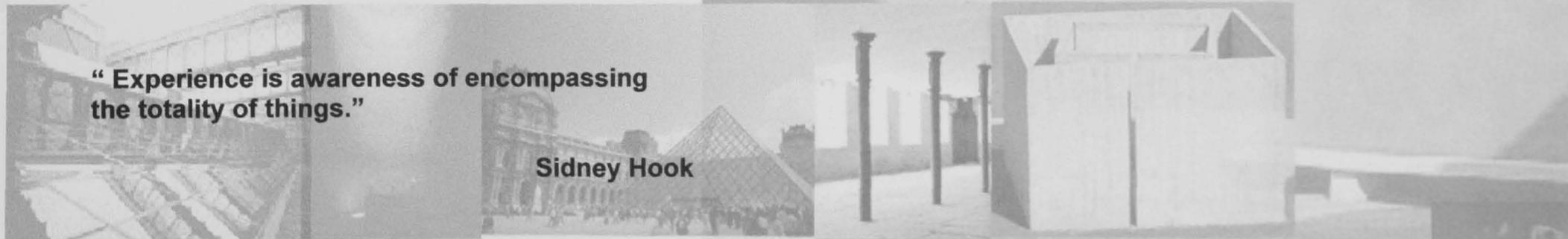
In monumental presence, the actual experiential presence is of primary concern. Hence, orientation, placement, and passage through spaces all play key roles in the creation of monumental architecture.

Response

In response to this issue, a great deal of thought and care must be placed in the participant's experience as they pass from place to place and through each space. Symbolism, imagery, and geometry will have the task of solving this issue. Monumental presence must have a clear purpose.

Precedence

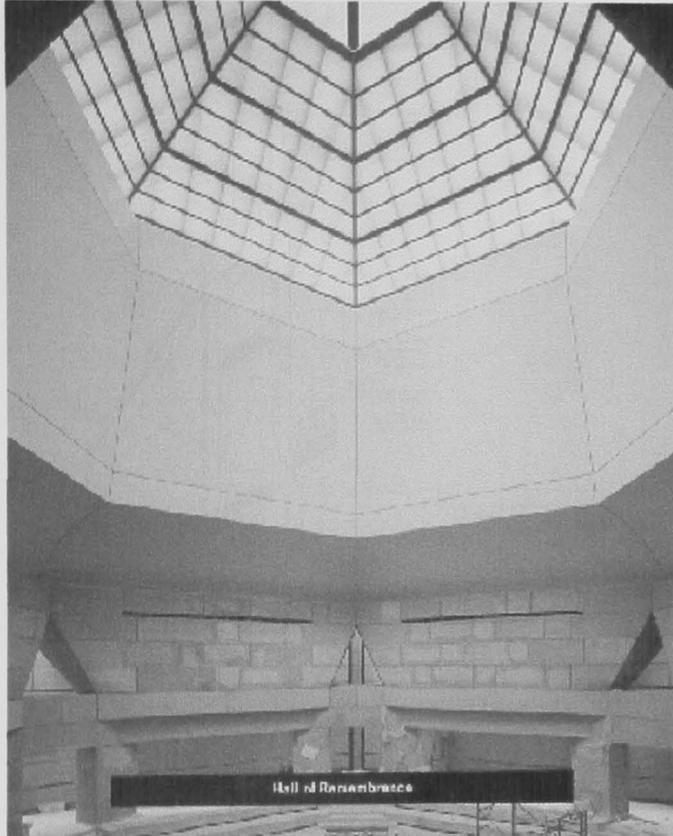
Within this aspect of experiential presence is shear emotional excitement. The Holocaust Museum by James Ingo Freed of the firm Pei, Cobb, Freed and partners, is the best example of this experiential roller coaster.



“ Experience is awareness of encompassing the totality of things.”

Sidney Hook

Case Studies



Holocaust Museum

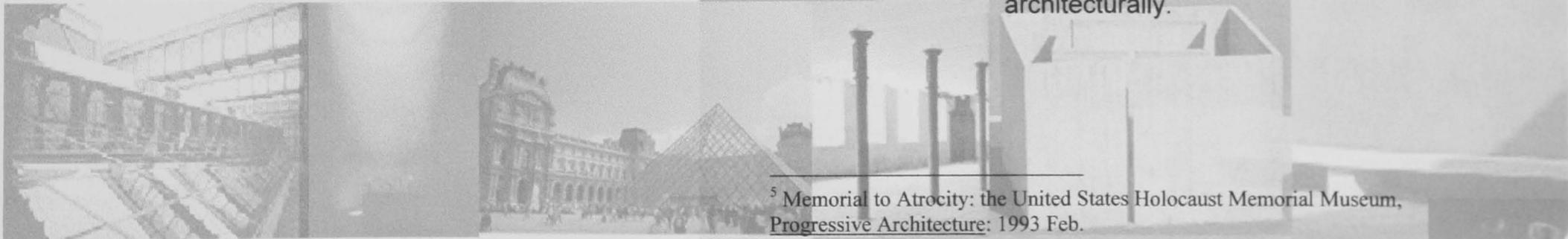
Washington D.C.

Holocaust Museum
Washington, D.C.
Architect: James Ingo Freed

The Holocaust Museum was meant to be far more than a place of remembrance. It was meant to allow for study and learning, making the architect's job even more complex. There were other hurdles in the museum's construction. There was the city's always difficult Fine Arts Commission, authorized by the city to maintain a style it deemed fit. The design had to be altered a number of times to suit the Commission. On the other hand, the clients were anything but solid in their philosophical aspirations for the building; some of the clients were intent that the museum should force an active memory, while others wanted a more positive, heroic, and universally understood environment. This discrepancy created an atmosphere of contradiction between parties, even within this client group, further complicating Freed's work⁵.

Therefore

This IMAX facility must fulfill all aspects of the program completely. However, in doing so, the facility should not be limited by the program, rather take off from that base to allow the facility to satisfy the participant emotionally and architecturally.



⁵ Memorial to Atrocity: the United States Holocaust Memorial Museum, *Progressive Architecture*: 1993 Feb.

" What is the use of a house
if you haven't got a tolerable
planet to put it on?"

Henry David Thoreau



Brief History



Salt Lake City is the capital city of Utah, located in the northern part of the state near the Great Salt Lake. Salt Lake City is nestled in the basin of Ancient Lake Bonneville near the mountains of the Wasatch Range. The city is the trade center for a wide region and also has a variety of manufacturing industries. The international headquarters of the Church of Jesus Christ of Latter-day Saints is located in the city. Perhaps the most fascinating aspect of its history is the incredible evolution of this community. What started, as the Mormon quest for their "Holy Grail" has become one of the nation's leaders in computer software⁶.

The settlement of Salt Lake City was not typical in many ways of the westward movement of settlers and pioneers of the United States. The people who founded the city in 1847 were Mormons, members of the Church of Jesus Christ of Latter-day Saints. They did not come as individuals acting on their own, but as a well-organized, centrally directed group; and they came for a religious purpose, to establish a religious utopia in the wilderness, which they called the Kingdom of God on Earth⁷. Like the Puritan founders of Massachusetts more than 200 years earlier, Mormons considered themselves on a mission from God, having been sent into the wilderness to establish a model society.

In many ways the history of Salt Lake is the story of that effort: its initial success; its movement away from the original ideas in the face of intense political, economic, and social pressure from the outside; and its increasing, but never complete, assimilation into the mainstream of American life⁸. Its history has been the story of many peoples and of unsteady progress, and it was formed from a process of conflict—a conflict of ideas and values, of

"This could be such a beautiful world."

Rosalind Welcher

⁶ Salt Lake City, Microsoft Encarta 97, 1993-1996

⁷ The City of the Saints, Burton, Richard Francis, Sir, Random House, New York City, New York, 1963.

⁸ Salt Lake City: uncovered, Adare, Sierra, Plano, TX, Seaside Press 1997.

economic and political systems, of peoples with different cultural backgrounds, needs, and ambitions.

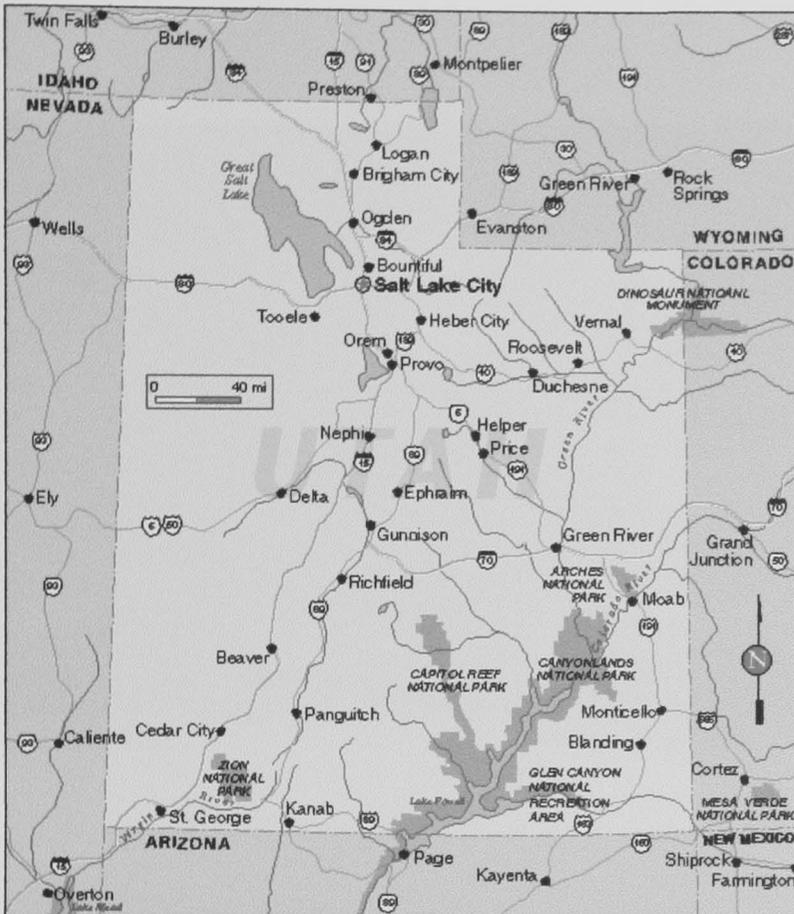
For about a generation after its founding, Salt Lake City was very much the kind of society its founders intended. A grand experiment in centralized planning and cooperative imagination, it was a relatively self-sufficient, egalitarian, and homogenous society based mainly on irrigation agriculture and a village industry. Religion infused almost every impulse, making it difficult to draw a line between religious and secular activities⁹. A counterculture that differed in fundamental ways from its contemporary American society, it was close-knit, cohesive, and unified, a closely woven fabric with only a few broken threads. The hand of the Mormon Church was ever present and ever active.

The extent of early Mormon pioneer unity can be, and often is, overstated. Even so, for the first few years of settlement, it was Salt Lake's most striking feature. Gradually at first, and then more rapidly, the city began to change¹⁰. The completion of the transcontinental railroad in 1869 and the subsequent spread of a network of rails throughout the territory ended the area's geographic isolation. Its economy became more diversified and integrated into the national picture. Mining and smelting became leading industries. A business district, for which there was no provision in the original city plan, began to emerge in Salt Lake City¹¹. A working-class ghetto took shape in the area near and west of the railroad tracks. The City's Urban services developed in much the same time and manner as in other cities in the United States that by the turn of the twentieth century, Salt Lake was Essentially a Modern

⁹ The City of the Saints, Burton, Richard Francis, Sir, Random House, New York City, New York. 1963.

¹⁰ <http://www.visitsaltlake.com>

¹¹ Salt Lake City: Past and Present, Fohlin, Ernest, Victor, Salt Lake City, UT E.V. Fohlin 1908.



“ Our lifetime may be the last that will be lived out in a technological society.”

Isaac Asimov



State Capitol

Salt Lake City, UT

city. An electric streetcar system served 10,000 people a day; Main Street was a maze of wires and poles. There were full-time police and fire departments, four daily newspapers, ten cigar factories, and a well-established red-light district all within the central business district. The population became increasingly diverse. In 1870 more than 90 percent of Salt Lake's 12,000 residents were Mormons¹². In the next twenty years the non-Mormon population grew two to three times as rapidly as did the Mormon population. By 1890, half of the city's 45,000 residents were non-Mormons; and there was also increasing variety among the Non-Mormon, as a portion of the flood of twenty million who came to the United States in the late nineteenth and early twentieth centuries found its way to Utah.

As Salt Lake changed, and in particular, as the population became increasingly diverse, conflict developed between Mormons and non-Mormons¹³. During its second generation, this diversity was the city's most striking feature, just as earlier the degree of unity was most conspicuous. Salt Lake became a battleground between those who were part of the new and embraced it, and those who were part of the old and sought to hold on to that. Local politics featured neither of the national political parties and few national issues. Instead, there were local parties--the Mormon Church's People's party, and an anti-Mormon Liberal party--and during elections people essentially voted for or against the Mormon Church¹⁴. Separate Mormon and Gentile (non-Mormon) residential neighborhoods developed. While many Mormons engaged in agricultural pursuits, few Gentiles owned farms. Two school systems operated: a predominantly Mormon public one and a mainly non-Mormon

“ We do pretty much whatever we want to. Why can't we live in good cities?”

Philip Johnson

¹² Salt Lake City, Microsoft Encarta 97, 1993-1996

¹³ Salt Lake City: uncovered, Adare, Sierra, Plano, TX, Seaside Press 1997.

¹⁴ Salt Lake City: Past and Present, Fohlin, Ernest, Victor, Salt Lake City, UT E.V. Fohlin 1908.



Hansen Building

Salt Lake City, UT

private one¹⁵. Fraternal and commercial organizations did not cross religious lines. Sometimes Mormons and non-Mormons even celebrated national holidays, like the Fourth of July, separately.

Conflict began to decrease after 1890 when, as a result of intense pressure from the federal government, particularly in the form of the Edmunds Act of 1882 and the Edmunds-Tucker Act of 1887, Mormon leaders decided to begin a process of accommodation to the larger society and endeavored to conform to national economic, political, and social norms. In 1890, Mormon Church President Wilford Woodruff issued the Manifesto, which proclaimed an end to the further performance of plural marriages. A year later, the church dissolved its People's party and divided the Mormon people between the Democratic and Republican parties. Following that, non-Mormons disbanded their Liberal party¹⁶. During the next several years, the church abandoned its efforts to establish a self-sufficient, communitarian economy. It sold most church-owned businesses to private individuals and operated those it kept as income-producing ventures, rather than as shared community enterprises.

These actions simply accelerated developments of the previous twenty years, and the next two or three decades were a watershed in Salt Lake's history¹⁷. The balance further shifted between Mormons and Non-Mormons during those years. By the 1920's, according to Dale Morgan, the city no longer offered the alternative to Babylon it once had, and the modern city had essentially emerged. This process has continued to the present with Salt Lake City increasingly reflecting national patterns.

**" Life is short, art long, opportunity fleeting,
experience treacherous, judgment difficult."**

Hippocrates

¹⁵ The City of the Saints, Burton, Richard Francis, Sir, Random House, New York City, New York. 1963.

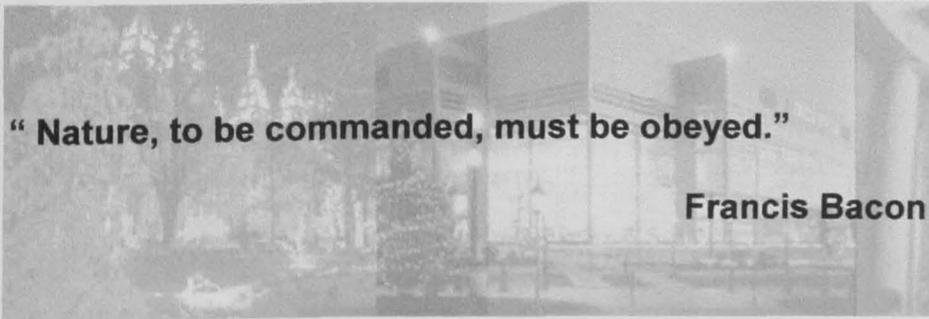
¹⁶ Salt Lake City: uncovered, Adare, Sierra, Plano, TX, Seaside Press 1997.

¹⁷ I.B.I.D.



Red Butte Gardens

Salt Lake City, UT



“ Nature, to be commanded, must be obeyed.”

Francis Bacon

Since Utah became urbanized at about the same rate as the United States as a whole, Salt Lake faced the problems of urbanization and industrialization at the same time they were surfacing elsewhere, and it responded in similar ways. During the Progressive Era for example, it established a regulated vice district on the west side, undertook a city beautification program, adopted the commission form of government in 1911, and that same year elected a socialist, Henry Lawrence, as city commissioner¹⁸. The city languished through the 1920s as the depressed conditions of mining and agriculture affected its prosperity. The Great Depression of the 1930s hit harder in Utah than it did in the nation as a whole. Salt Lake correspondingly suffered, making clear its close relationship with the world around it, and its vulnerability to the fluctuations of the national economy; New Deal programs were correspondingly important in both city and state¹⁹. World War II brought local prosperity as war industries proliferated along the Wasatch Front. In the post-war period, defense industries remained important, and by the early 1960s Utah had the most defense-oriented economy in the nation. It has remained in the top ten ever since²⁰. During the 1950s a number of important capital improvement projects were undertaken, including a new airport terminal, improved parks and recreational facilities, upgraded storm sewers, and construction of the city's first water-treatment plants. As a move to the suburbs began, the city's population grew slowly, increasing by only four percent through the 1950s. Racial discrimination was still one of Salt Lake's most serious problems. The real power in the city lay with a group of three men (though it is difficult to get specific information detailing their activities): David O. McKay, president of the Mormon church; Gus Backman, executive

¹⁸ Salt Lake City, Microsoft Encarta 97, 1993-1996

¹⁹ I.B.I.D.

²⁰ Salt Lake City: uncovered, Adare, Sierra, Plano, TX, Seaside Press 1997.



Delta Center Arena

Salt Lake City, UT

secretary of the Salt Lake City Chamber of Commerce; and John Fitzpatrick (and after his death in 1960, his successor, John H. Gallivan), publisher of the Salt Lake Tribune--representing, respectively, the city's Mormon, inactive Mormon, and non-Mormon communities. The triumvirate continued to function through the 1960s.

Features of the period since 1960 include further enhancement of the city as the communications, and industrial center of the Intermountain West; a declining population within the actual city boundaries (down fourteen percent between 1960 and 1980); the movement of both people and businesses to the suburbs as the valley population continues to increase; some decaying residential neighborhoods and a deteriorating downtown business district and the effort to deal with those conditions; the development of a post-industrial economy; and the rise to national prominence the Utah Jazz professional basketball team and of such cultural organizations as the Utah Symphony and the Ballet West. The city's population in 1990 was 159,936²¹.

Yet, through all of this, Salt Lake has never become a typical American city; it remains unique. The Mormon Church is a dominant force, Mormonism is still its most conspicuous feature, and deep division between Mormons and non-Mormons continues, particularly on the social and cultural levels²². There is still much to Nels Anderson's observation in 1927 that Salt Lake is a "a city of two selves," a city with a "double personality." As Dale Morgan observed more than forty years ago, Salt Lake is "a strange town," a place "with an abstinent character all its own." That continues to be true.

" The most important fact about Spaceship Earth: an instruction book didn't come with it."

Buckminster Fuller

²¹ <http://www.visitsaltlake.com>

²² I.B.I.D.

Design Responses

Design Responses to the Natural Context

Issue

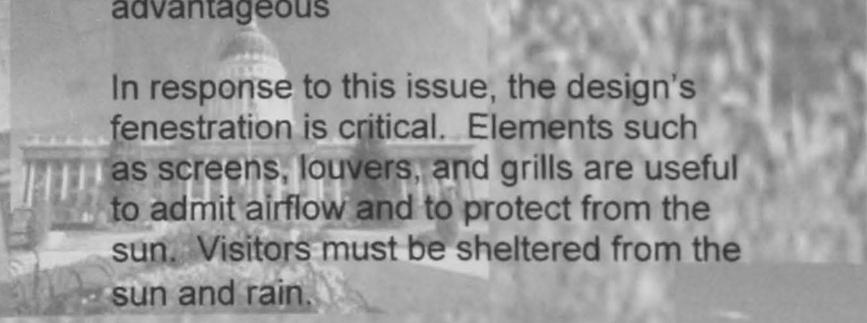
Salt Lake City has a cool- dry climate moderated by oceanic winds which are generally westerly, collecting little moisture. Salt Lake has four distinct seasons. Summer is pleasantly warm with low humidity. Autumn is a spectacular season with vibrant colored foliage and moderate weather. Spring is mild enough to golf in the valley and ski in the mountains. Winter daytime temperatures in the valley are usually above freezing and light dry powder snowfalls in the mountains. Like temperature, precipitation varies tremendously, depending on your location the valley or the mountains.

Therefore

In response to this issue, the design should primarily consider the utilization of the wind's effects

In response to this issue, the sun's orientation is crucial to the design, where overheated conditions prevail practically all year long. Exposure with minimum solar heat intake is advantageous

In response to this issue, the design's fenestration is critical. Elements such as screens, louvers, and grills are useful to admit airflow and to protect from the sun. Visitors must be sheltered from the sun and rain.



Precedence

Salt Lake City has had several new buildings built which address the climatic conditions rather well. A few of these buildings are very successful in climatic design. One of these buildings is the Salt Palace Civic and Visitors Center.



Issue

Salt Lake county has a wide variety of landscaping; from the beautiful mountain ranges to the green of the valley. There is a nice mix of vegetation in the valley: there are Aspen trees, Dwarfed Aspens, Oak Maple and Mixed Shrubs.

Therefore

In response to this issue, the design should take advantage of the environmental views. Zoning certain spaces toward the better views of the surroundings can do this.

In response to this issue, the design should use materials that relate to the natural environment for this region. This will create a connection between the existing surroundings and the new structure.

Precedence

The architecture must have a respect for the region. The architecture of Louis I. Kahn is very successful at this issue especially the Salk Institute in California.



Design Response to the Built Context

Issue The downtown of Salt Lake City is filled with a tremendous variety of architecture.

Therefore To satisfy this issue and due to the enormous amount of tourism, the building's design must be a marker and new alternative to the entertainment district.

In response to this issue, the IMAX Theater must go above and beyond the standard IMAX facility and become a point of interest, exploration, and enlightenment.

Precedence Currently, the Mormon Temple in Salt Lake City resembles Rockefeller Center in New York City, it is a point of interest and a gathering area for locals and tourist alike.



Issue

Salt Lake City's Zoning Ordinances are very specific. They are intended to protect the value for the site and beautify the land.

Therefore

In response to this issue, the design must pay particular respect to the Zoning Ordinances such as the Twenty foot minimum set back from the street for commercial building, and all new site work must incorporate new landscaping; amount varies per size of the site²³.

Precedence

All of the new construction going up in this area are required to abide by these regulation. Several building have amazing landscaping such as the State Capitol Building.



²³ Salt Lake County Commerical Plan Check Guide, January 2, 1997

Design Response to the Cultural Context

Issue Salt Lake City, has grown into a major hub of the west, however, this city has a split personality. These personalities are comprised of Mormon and Non-Mormon cultures.

Therefore To satisfy this issue, the design must convey these spirited cultures so it will become a place of interest for both communities as well as the tourists.

In response to this issue, this design must act as a springboard of development for the area, to mirror how the Salt Lake City culture has expanded and progressed.

Precedence The new architecture in Salt Lake has been successful in resolving the split personality of this culture, the Abravanel Theater has been a key place where the two cultures can intermix and invite tourism.



Design Response to the Psychological Context

Issue Salt Lake City is a psychological collection of images. All of these images effect the citizens of Salt Lake City and its tourist. The effect is vastly different from the physical, emotional, and mental effects.

Therefore In response to this issue, the design must convey a feeling of endless imagination and offer an opportunity to explore ones psyche. This can be accomplished within the enclosure, with all of the uses of architectonics, such as form, color, texture, structure and solidity.

To satisfy this issue, the design needs to use all aspects of lighting to its fullest. The play of light, shade, and shadow can have a direct relation to the imagery of one's creative self.

Precedence Perhaps the greatest example of this psychological effect on the participant is the Walt Disney parks across the world. Disney has a superb talent in bringing the child in all of us to life.

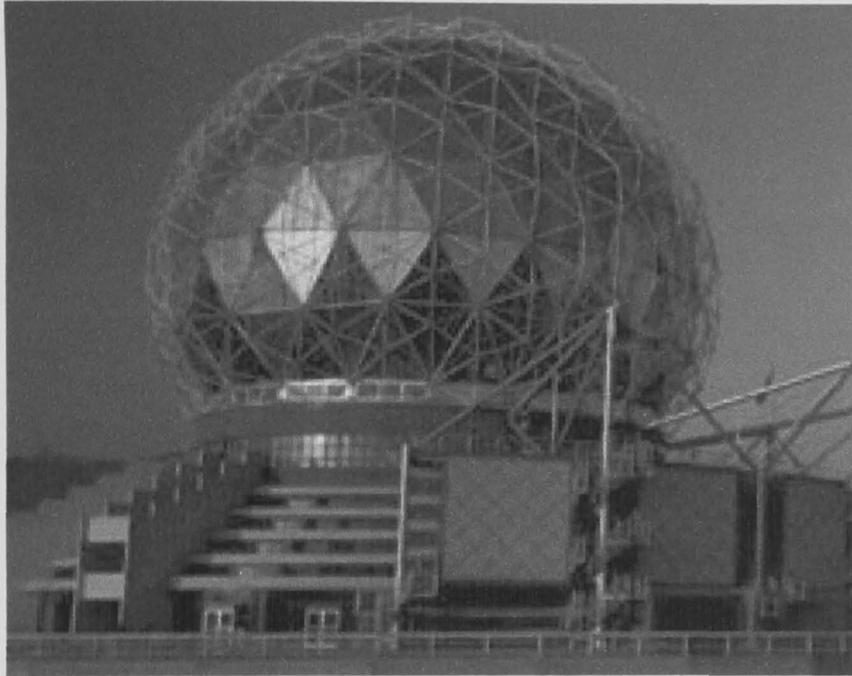


" We shape our buildings;
thereafter they shape us."

Winston Churchill



Epistemology



Alcan Omnimax Theater Vancouver, Canada

The focus of this project will be an IMAX Theater, which includes a restaurant and a historic museum, depicting the vast evolution of Salt Lake City. This IMAX facility will excite all of the emotions. The Dome Theater invites the full use of the senses of sight and sound. The restaurant will satisfy one's sense of smell and taste. Finally, the historic museum will tie all of the senses together including touch, while educating each guest on this monumental changes taking place.

Headquartered in Toronto, Canada, the IMAX Corporation, and is the pioneer and leader of the giant screen, large-format film and motion simulator entertainment industry. From its beginnings in the EXPO '67 in Montreal, Canada, and from the first multi-screen IMAX presentation at the EXPO '70 in Osaka, Japan, to the IMAX theaters, the IMAX Corporation has been at the forefront in entertainment and technology²⁴.

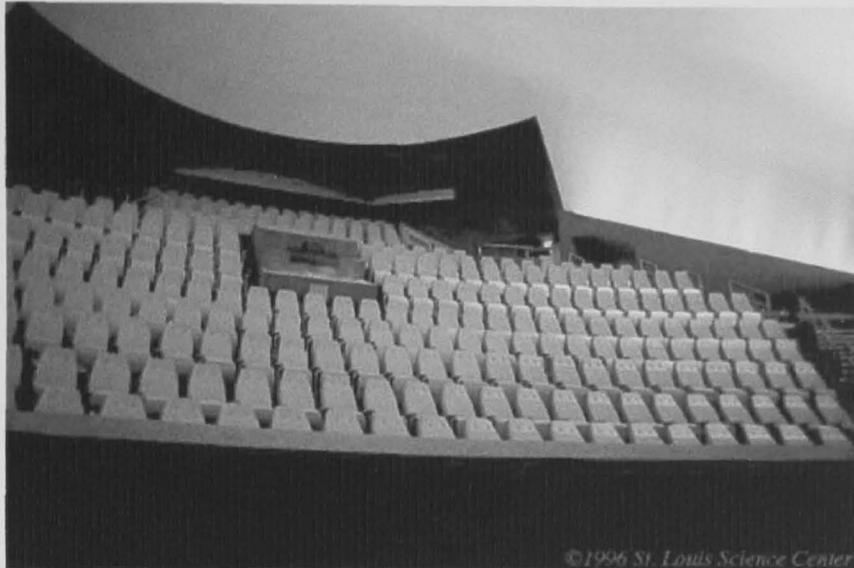
The giant screen technology was the first IMAX system invented. This technology was developed and has since been enhanced by the IMAX Corporation. It combines brilliant images, which fill a viewer's peripheral vision, superb sound, and a theater design which gives everyone the "best seat in the house". The IMAX Dome premiered at the Reuben H. Fleet Space Theater in San Diego in 1973. The Dome experience wraps the audience in images of unimaginable size and impact, providing an amazing sense of involvement²⁵. The giant dome screen, up to 99 feet in diameter, and high fidelity, sound encompass the audience, putting them at the center of the action. To preserve the maximum number of seats, the "rolling loop" projector is raised from the projection room below through the "doghouse" just large enough to accept it, while the film reels and operator remain below.

" All our knowledge has its origin in our perception."

Leonardo da Vinci

²⁴ <http://www.imax.com>

²⁵ <http://www.moviegoers.com/IMAX/facts.html>



Omnimax Theater

©1996 St. Louis Science Center
St. Louis, MO

Incredible, realistic, three-dimensional images are projected onto the giant IMAX screen with such realism that you can hear the audience gasp as they reach out to the almost touchable images. IMAX 3D technology premiered at EXPO '86 in Vancouver, Canada and an enhanced version was Unveiled at EXPO '90 in Osaka. Every step of the 3D process has been refined to come as close as possible to a real-life experience²⁶.

Sound is critical to the IMAX experience. The IMAX Corporation is a world leader in the design and manufacturing of ultra high-fidelity sound systems and high-tech audio-visual systems through its subsidiary, Sonic Associates Inc. of Alabama. IMAX custom-designed sound systems adhere to uncompromising demands for top performance and service. IMAX sound systems are synonymous with, excellence, reliability, and innovation. IMAX theaters are the longest established installed base of digital sound source in the motion picture industry²⁷. Theme parks, urban entertainment centers and other commercial ventures are increasing their demands everyday for innovative attractions. These will soon lead to IMAX sound technology used in such broader applications throughout the industry.

As the technology has evolved so has the IMAX facility. Since inception, the IMAX Corporation has been committed to promoting the educational value of the medium. This commitment to education is also evident within the IMAX facilities themselves. Many of these facilities have museums, science spectrums, and galleries.

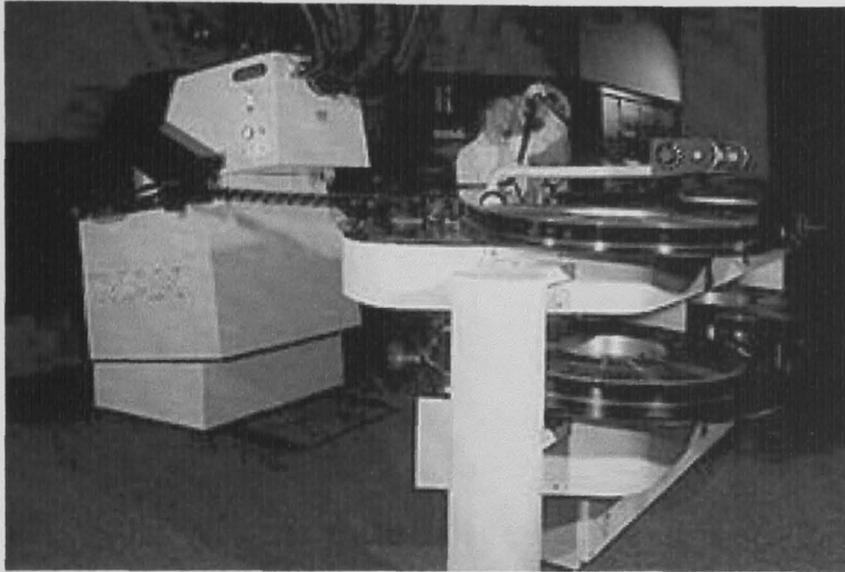
Over the past twenty years, American museums have experience a rise in attention from the general public. During this time, more museums have been designed and built than ever before. With the increase of museums,

“ Only work which is the product of inner compulsion can have spiritual meaning.”

Walter Gropius

²⁶ <http://www.imax.com>

²⁷ <http://www.moviegoers.com/IMAX/facts.html>



Rolling Loop Projector

comes the increase of design ideas. The goal of a museum has changed in recent years to become more of an educational institution, rather than large pretentious displays. Museums are no longer places primarily for contemplation of objects²⁸. They are now places for work, learning, studying, and socializing. Museums advertise and sell themselves by throwing regular parties and renting their halls for outside events.

The contemporary museums are becoming cultural complexes containing more than just exhibits. The new museums are places of learning and teaching. The museums include art schools, libraries, auditoriums, theaters, restaurants, and shops²⁹. With the various requirements of the modern day museums, many designers have the dilemma in deciding how much of the historical museum building type should be referenced for new designs. Many notable architects have referred to public museums as western society's "contemporary cathedrals."

In conclusion, the IMAX Facility is far more complex than one would imagine. An IMAX Facility has all the issues of a major entertainment facility as well as a major educational facility. This facility can be considered alive; it has a past, it reflects the ever changing cultures in its society, and grows with the advances in technology. An IMAX Facility has a distinct role in educating and entertaining its guest into the past and present, and assist with providing a window into the future.

" All great discoveries are made by men whose feelings run ahead of their thinking."

C. H. Parkhurst

²⁸ Matthews, Geoff. Museums and Art Galleries. Butterworth – Heineman Ltd., Halley Court, Jordan Hill, Oxford. 1991.

²⁹ Davis, Douglas. The Museum Transformed. Abbeville Press Pub. New York, NY, 1990.

Design Responses

IMAX Theater

Issue	Audience Flow (circulation)
Response	IMAX theaters have a steep seating rake, it is important that entrances, exits, and steps allow for safe and easy audience movement.
Therefore	It is best for the audience to enter at the front of the theater, moving upward along the aisles, and exit at higher levels at the rear of the theater. This provides the safest and most comfortable audience flow, reduces the danger of tripping or falling, and allows the audience to move in and out of their seats with ease and confidence ³⁰ .
Precedence	With years of innovations and development the IMAX Corporation has created the ideal model for the Dome theaters seen throughout the world.



³⁰ IMAX Systems Corporation. *Design Consideration for an Omnimax Theater*. Toronto, Ontario, Canada, 1987.

IMAX Theater

Issue

Audience Seating

Response

IMAX theaters use continental seating, modified by aisles at either side. The audience should enter at both sides, and move up into the center of the theater. The primary factor in the arrangement of seating is where the audience's eyes are, in relation to the dome screen, and this, in turn, requires careful positioning of the seat backs.

Therefore

Chairs in different rows have different back tilts. In addition, the seats should have backs high enough to provide a headrest, be comfortable and well spaced³¹.

Precedence

With years of innovations and development, the IMAX Corporation has created the ideal model for the Dome theaters seen throughout the world.



³¹ IMAX Systems Corporation. *Design Consideration for an Omnimax Theater*. Toronto, Ontario, Canada, 1987.

IMAX Theater

Issue

Air Conditioning

Response

In all climates it will be necessary to provide air conditioning for an IMAX theater for at least part of the year. Mechanical ventilation alone will inevitably produce desirable indoor temperatures.

Therefore

Air Conditioning is required in the projection room at all times, including non-operating periods, but may not have to run full time in the theater. However, the theater space should not be allowed to become excessively hot or humid since this can cause damaged to the screen and the loud speakers³².

Precedence

With years of innovations and development the IMAX Corporation has created and implemented the appropriate mechanical systems for the Dome theaters seen through out the world.



³² IMAX Systems Corporation. *Design Consideration for an Omnimax Theater*. Toronto, Ontario, Canada, 1987.

IMAX Theater

Issue

Noise Control

Response

The air conditioning system both generates noise and provides a route for noise to enter the theater. Air moving in ducts and through louvers must have a limited velocity and its noise can be greatly reduced by acoustic lining, sound attenuators, and bulkheads at partitions. Proper mounting and installation of pumps, fans, and other rotating or reciprocating machinery is essential. The noise and vibration of such machinery, if it becomes structure borne, can be objectionable at great distance.

Therefore

In first selecting the location of a theater, it should be recognized that the presence of structurally transmitted noise from highways, subways, railway lines, and the like, will almost certainly require special noise control measures³³.

Precedence

With years of innovations and development the IMAX Corporation has created and implemented the appropriate mechanical systems for the Dome theaters seen through out the world.



³³ IMAX Systems Corporation. *Design Consideration for an Omnimax Theater*. Toronto, Ontario, Canada, 1987.

Museum

Issue

Circulation

Response

There are three fundamental methods of approaching circulation with an exhibition space: the Suggested approach, Unstructured approach, and the Direct approach. The Suggested approach maintains a contextual continuity while allowing freedom of choice. The Unstructured approach allows visitors to move at their own pace and is very suitable for strongly object-oriented exhibits. The Direct approach is the most rigid and restricted, establishing a one-way traffic flow with minimal opportunities for exiting until reaching the end of the exhibit.

Therefore

With the memorabilia of past and present, Salt Lake City's Historical Museum lends itself to a very object oriented exhibit. Thus, an Unstructured approach to the design of the exhibit space seems most appropriate³⁴.

Precedence

In recent years, the unstructured approach has seen a rise in popularity in museum design. This trend has carried over into Salt Lake.



³⁴ De Chiara, Joseph & Callender, John. Time Savers Standards for Building Types, 3rd Edition. McGraw – Hill Inc. New York, NY 1990.

Museum

Issue

Display

Response

Providing displays are a key issue to the function of a museum. The displays are objects of information in a museum. The arrangement is key, all objects have a visual characteristic which effect the way they can be arranged.

Therefore

In response to this issue, the design of the exhibition space of the Historic Museum must be given some thought; the visual characteristics of the objects displayed must be considered³⁵.

Precedence

In recent years the museum experience has become a more interactive experience with a variety of displays to excite the viewer at every turn.



³⁵ De Chiara, Joseph & Callender, John. Time Savers Standards for Building Types, 3rd Edition. McGraw – Hill Inc. New York, NY 1990.

Restaurant

Issue Spatial Arrangement

Response The layout and design of areas within a restaurant facility are fundamental to its functioning capability.

Therefore Related areas in restaurants must be functional, working together in a sequence so that the customers receive the prompt service they expect. Circulation patterns within the restaurant should be conducive to positive traffic movement of the employees and guest³⁶.

Precedence There are several successful small restaurants across the world but perhaps the famous are the small eateries of Europe.



³⁶ Lawson, Fred. Restaurants, Clubs, and Bars: Planning, Design, and Investment. Boston: Architecture Press, 1987

Case Studies

Humphrey IMAX Dome Theater
Milwaukee, Wisconsin
Architect: Hammel, Green, Abrahamson



Humphrey IMAX Dome Theater

Milwaukee, WS

The Humphrey IMAX Dome Theater is a collaborative effort of the Milwaukee Public Museum and Discovery World Museum of Science, Economics and Technology. Construction on the theater began on November 1994 and was completed in October 1996. The Humphrey consists of two museums and a 275 seat IMAX dome theater. The theater's mission is to allow both museums to expand the educational programming currently available with the showing of films that feature diverse science and natural history topics, while increasing attendance and revenue. The Humphrey, is the ideal in IMAX facility design, it expresses the technology, but most importantly, it expresses its community's commitment to education³⁷.

Therefore

In response to this issue, the IMAX Facility needs to address the thinking of the community and preserve the value of education; and in doing this create a lasting image for Salt Lake City.



³⁷ "Milwaukee Public Museum," IMAX Dome.
<http://www.mpm.edu/imax/imax.html> (1/17/98)

Atheneum
Visitors' Center
New Harmony, Indiana
Architect: Richard Meier

The New Harmony tourist information center, the Atheneum, expresses the twentieth century, contains clues to the town's history, and plays a role in the town's past. Richard Meier was asked to design a building where visitors would become aware of the historic town, and to incorporate into that design modern materials and techniques to give the visitors a strong sense of excitement and anticipation when they arrive. Here, Meier expresses the logical principles on which the town was founded; utopian vision, spirited idealism, and scientific aspiration. All in a building which belongs in every way to its town. The building has a simple function, to familiarize the visitor with the town. This is accomplished by a guided tour of some elegant displays and a model of the town. After the tour, a short film is shown in the building's auditorium³⁸. The Atheneum is certainly the culmination between a town's historic past and the expression of an architect.

Therefore

In response to this case study, this IMAX Facility needs to be an architectural expression which bands across time while providing a window into the future.

³⁸ Stephens, Suzanne, "Emblematic Edifice", Progressive Architecture (February 1980)

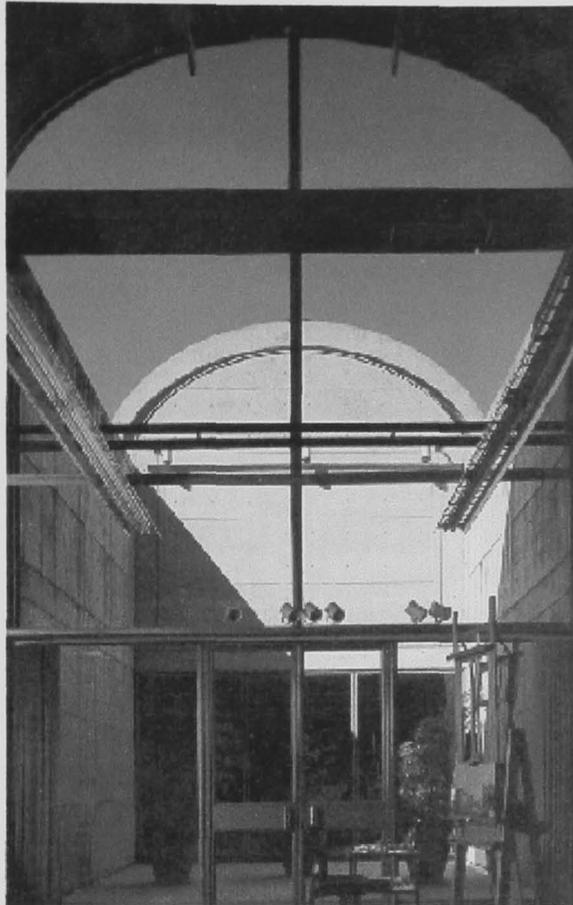


Atheneum

New Harmony, IN



Kimbell Art Museum
Fort Worth, Texas
Architect: Louis I. Kahn



Kimbell Art Museum Fort Worth, TX

The Kimbell Art Museum has become one of the modern ideals in museum design. The design itself is simple: it consists mainly of a repeated structure unit, an enormous barrel-vaulted bay 20 by 100 feet, laid out in six parallel rows, each row three units deep end to end. Each of the 100 foot long vaulting units are supported only at the corners by two foot square piers eliminating the support walls and thereby freeing the interior space. Throughout the museum there is a masterfully crisp, minimalist detailing of every joint, edge, and transition, which only an architect steeped in the classical tradition, could have created. The Kimbell Art Museum is one of the few contemporary structures in the world of its stature to hold its own against the great historical lineup of the centuries³⁹. Perhaps, the greatest attribute of the museum is the gain of energy and seemingly rise in your quality of life the which museum feeds you.

Therefore

In response to the case study, this IMAX Facility should be a building that can cross times and generations structurally and experientially.

³⁹ Art Museums of Louis I. Kahn, Patricia Cummings Loud., Duke University Press, Durham and London, 1989.

Activity Analysis

This IMAX Facility is a place of public interaction with technological entertainment for all ages. It should be functional for all guests to access a wealth of information, which the visitors seek. A visit to an IMAX Facility should be a memorable and monumental experience.

List of Activities:

Primary Activities

- Arriving
- Parking
- Accessing
- Administrating
- Gathering
- Informing
- Viewing Presentations
- Waiting
- Shopping
- Eating / Drinking
- Departing
- Maintaining

Secondary Activities

- Standing
- Walking
- Talking
- Listening
- Discussing
- Observing
- Reading
- Sitting
- Relaxing
- Buying
- Selling
- Telephone Calling

“ Nothing is more terrible than activity without insight.”

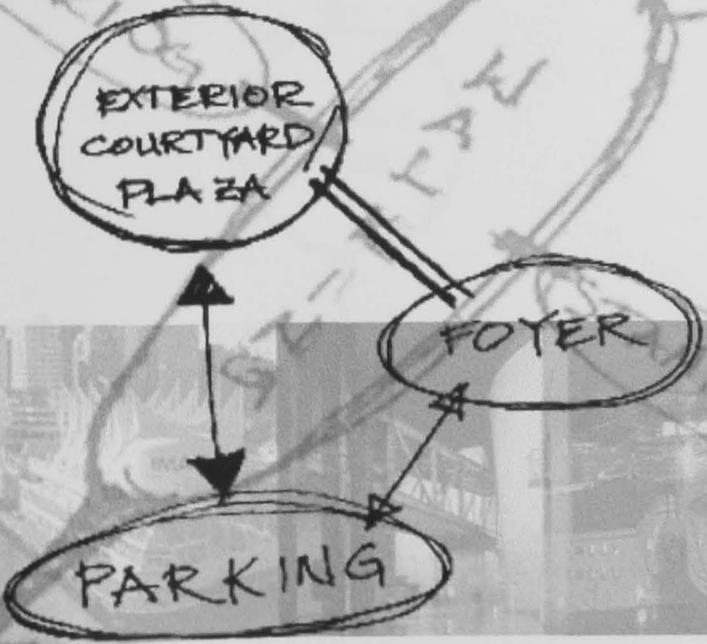
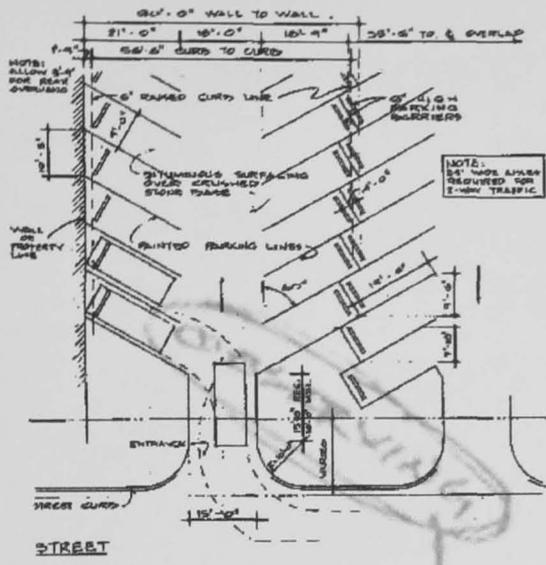
Thomas Carlyle

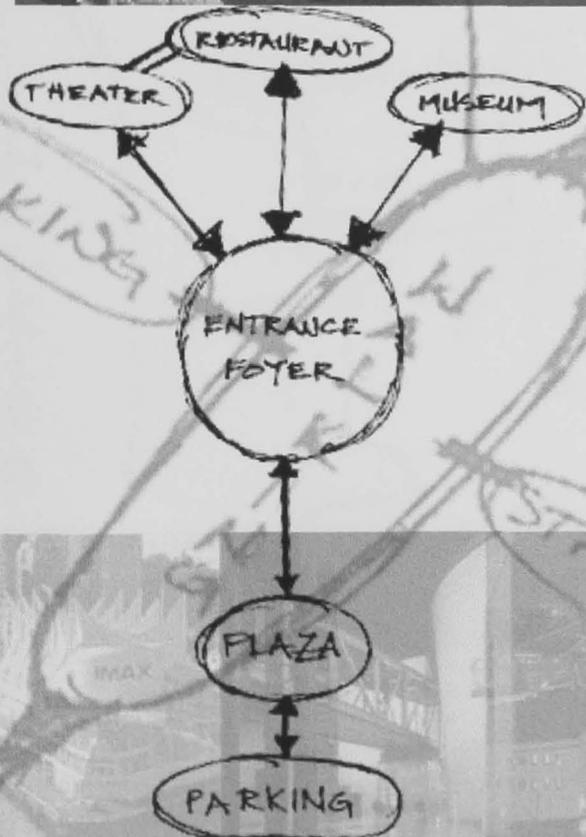


Activity Type	Arriving
Participant	Patrons and employees.
# of Participants	The Facility may have 3500 participants on peak days.
Issue	Here visitors receive their first impressions of the facility. The guest may feel lost and unguided upon their approach to the IMAX Facility.
Response	Every opportunity must be taken to build a dramatic approach to the facility. Easily read circulation patterns should be evident to avoid visitors from feeling lost. The path to the facility must be welcoming, so the visitor will be inspired to progress. During the approach, the facility is highlighted by the landscape, making the arrival more pleasing.
Related Activities	Observing, standing, walking, and talking.
Related Spaces	Parking Area, Exterior Courtyard / Plaza, Entrance Foyer.



Activity Type	Parking
Participant	Visitors, and employees.
# of Participants	The Facility may have 3500 participants on peak days.
Issue	Guest of this facility will arrive by various forms of transportation. Employees will require reserved parking spaces. The maintenance staff may be asked to work during operating hours, although would normally work during non-operational hours.
Response	Enough parking spaces should be provided for various types of vehicles, with the adequate amount of reserved parking spaces for employees. Handicap parking must be near the main entrance for easy accessibility. The parking area needs to be close to the building, while maintaining easy traffic flow. The pedestrians in the parking area need to cross the traffic lanes as little as possible.
Related Activities	Observing, standing, walking, and talking.
Related Spaces	Parking Area, Exterior Courtyard / Plaza, Entrance Foyer.





Activity Type

Accessing

Participant

Visitors and Employees

of Participants

The Facility may have 3500 participants on peak days.

Issue

Here visitors will get their most memorable impression of the facility. The patrons may feel intimidated upon their arrival to this facility. The majority of guests will arrive by foot; others by various means of transportation.

Response

The IMAX Facility must have a dramatic approach with a special quality of physical, emotional, and cultural links to the facility. The entrance and or lobby should be inviting and adequate for a large crowd. The entrance should lead people to the information area and be accessible to the other portions of the facility. More specifically, it should provide specific information aids such as a well-lighted directory or "you-are-here" signs. A good circulation pattern should be provided to keep visitors from being confused and should be able to inform all visitors.

Related Activities:

Walking, talking, observing, and standing.

Related Spaces

Parking Area, Exterior Courtyard / Plaza, Entrance Foyer, Theater, Museum, and Restaurant.



Activity Type Administrating

Participant Employees

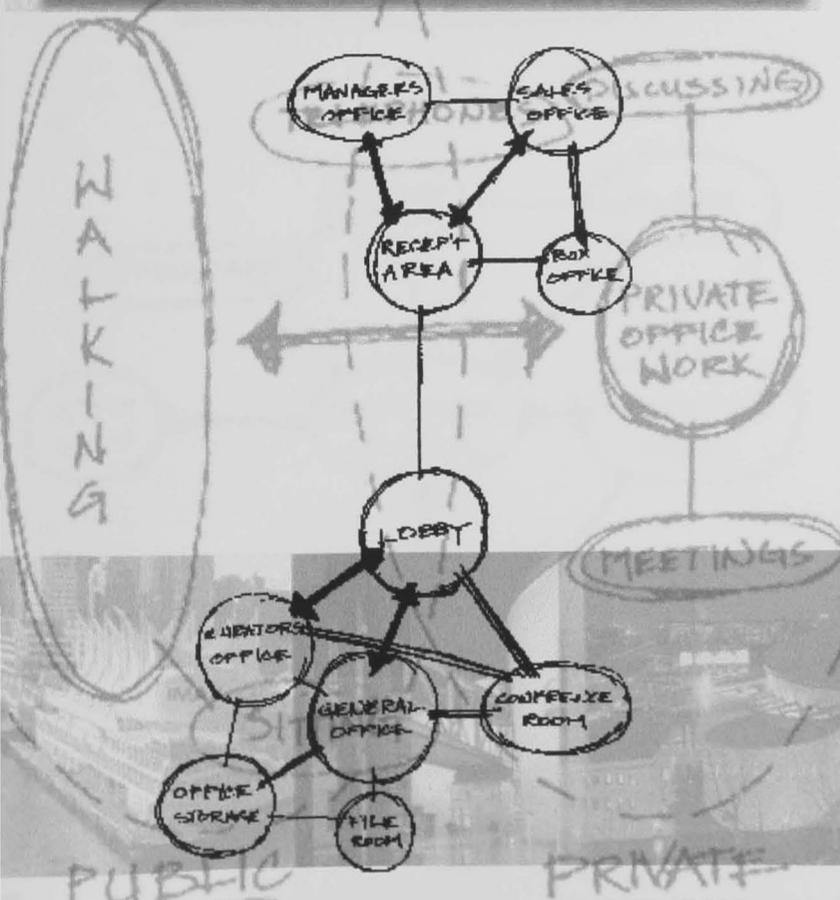
of Participants The Facility may 100 participants on peak days.

Issue This activity will need several degrees of privacy ranging from public, semi-public, and private. The manager of the facility will have direct contact with the public, but secretary areas should remain private.

Response The administrating area must have differentiating spaces with varying degrees of privacy. The manager must have easy access to the visitor areas.

Related Activities Talking, discussing, listening, telephone calling, walking, and sitting.

Related Spaces THEATER – Reception Area, Box Office, Sales Office, Managers Office.
 MUSEUM – Lobby / Reception, General Office, Curator's Office, Director's Office, Conference Room, Office Storage, Office File Room.





Activity Type Gathering

Participant Visitors and employees.

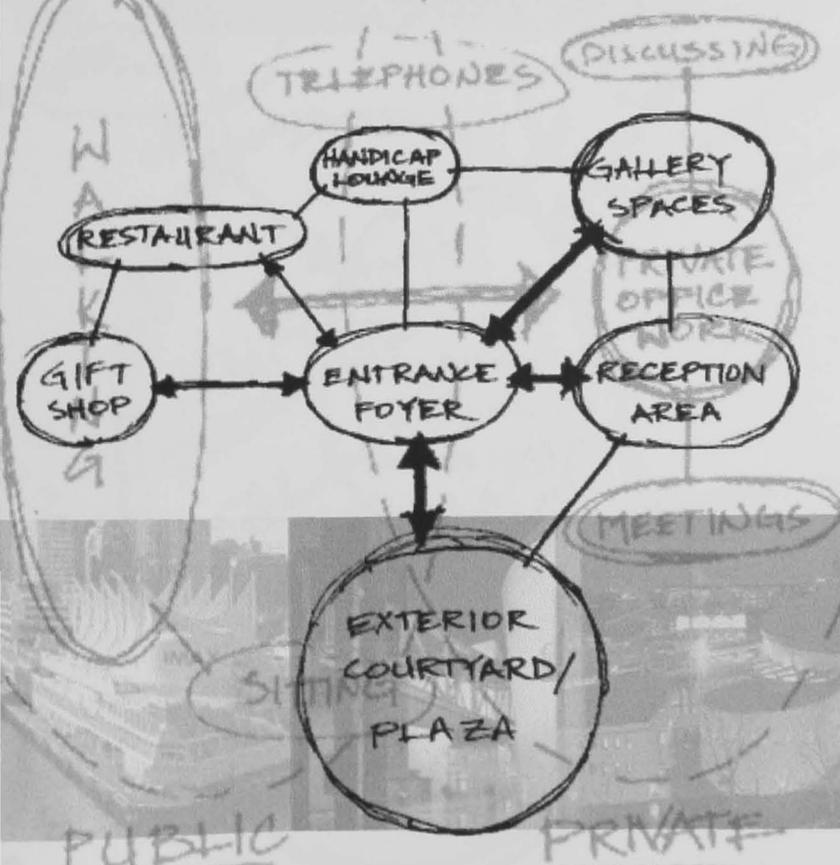
of Participants The Facility may have 3500 participants on peak days.

Issue Visitors will need to gather before entering the theater house. Here, the manager may welcome and brief the visitors prior to entering the theater. The employees' assistance is important for the enjoyment and safety of the visitors.

Response This activity requires a place to sit or an area to stand while waiting. Sitting areas must be designed into this area to help organize visitors and to maximize the space. Placement of couches, benches, chairs, and other sitting areas must be carefully designed to be comfortable and successful. It also is an area where the tour guides can be available for any kind of help or guidance to the visitors.

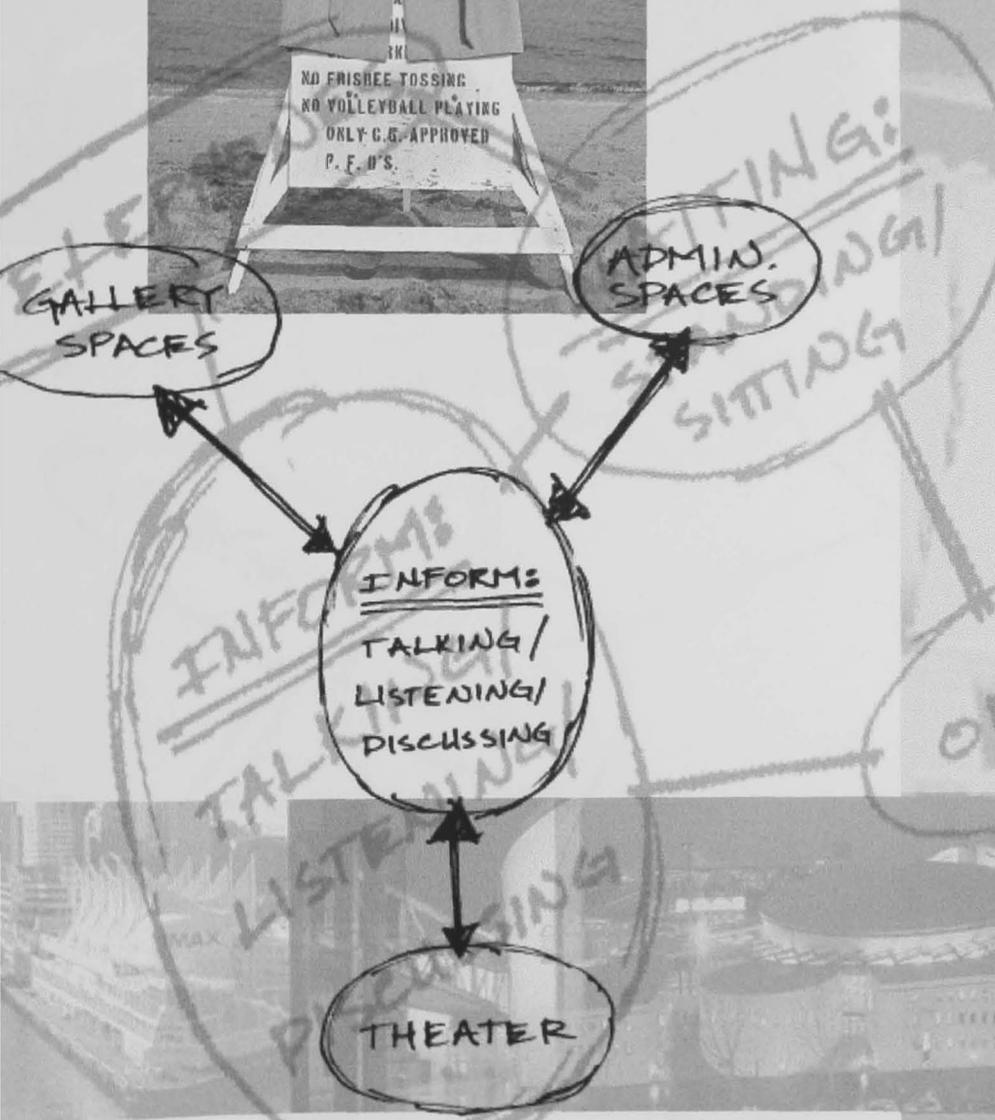
Related Activities Talking, waiting, listening, sitting, and standing.

Related Spaces Exterior Courtyard / Plaza, Entrance Foyer, Reception Area, Handicap Lounge, Gallery Spaces, Gift Shop, and Restaurant.





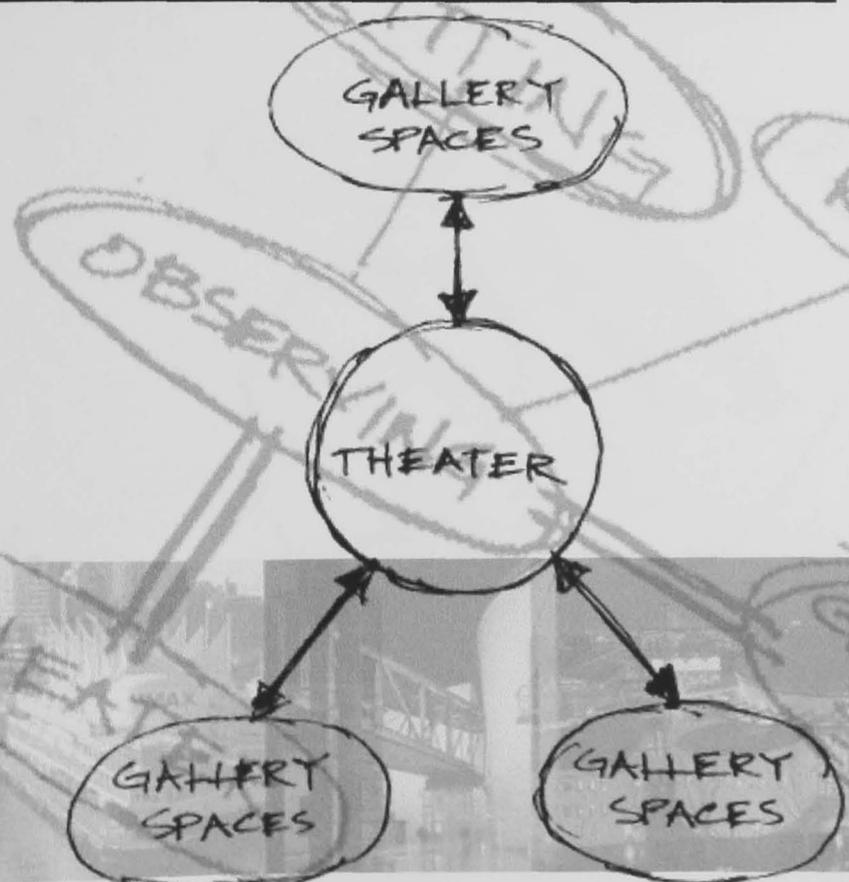
Activity Type	Informing
Participant	Visitors, administrative personnel.
# of Participants	The Facility may have 3500 participants on peak days.
Issue	Visitors expect to be enlightened by their experience at the IMAX Facility. The information will be available to the visitors by reading brochures, seeing exhibits, and watching the presentations.
Response	The informing process will occur throughout their experience at the IMAX Facility. Adequate space must be available to display exhibits, brochures, and other related information.
Related Activities	Talking, listening, telephone calling, standing, sitting, observing, and discussing.
Related Spaces	Theater, Gallery Spaces, and administrative Spaces.





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Activity Type	Viewing Presentations
Participant	Visitors
# of Participants	The Facility may have 3000 participants on peak days.
Issues	Here the guest will be viewing the educational and entertaining information offered by the IMAX Facility. The information presented will be brought to the guest in a wide variety of displays and models, but primarily through visual presentations in the theater.
Response	The IMAX Facility must provide various areas for the multiple types of educational information to be displayed for the visitor. Each area should be individualistic to meet the specific requirement of each presentation technique.
Related Activities	Sitting, learning, observing, listening, and relaxing.
Related Space	Theater House, and Gallery Spaces.





Activity Type Waiting

Participant Visitors

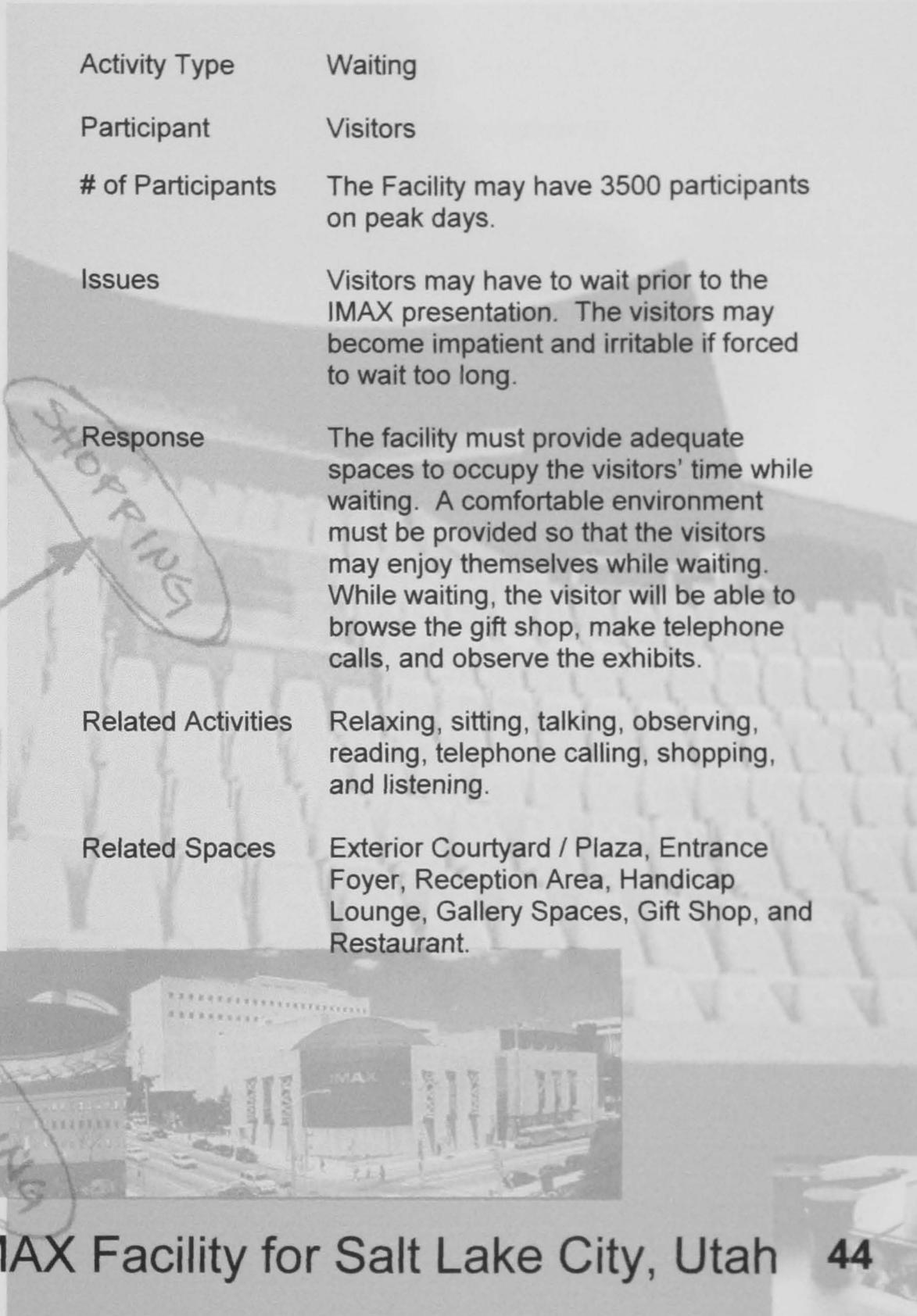
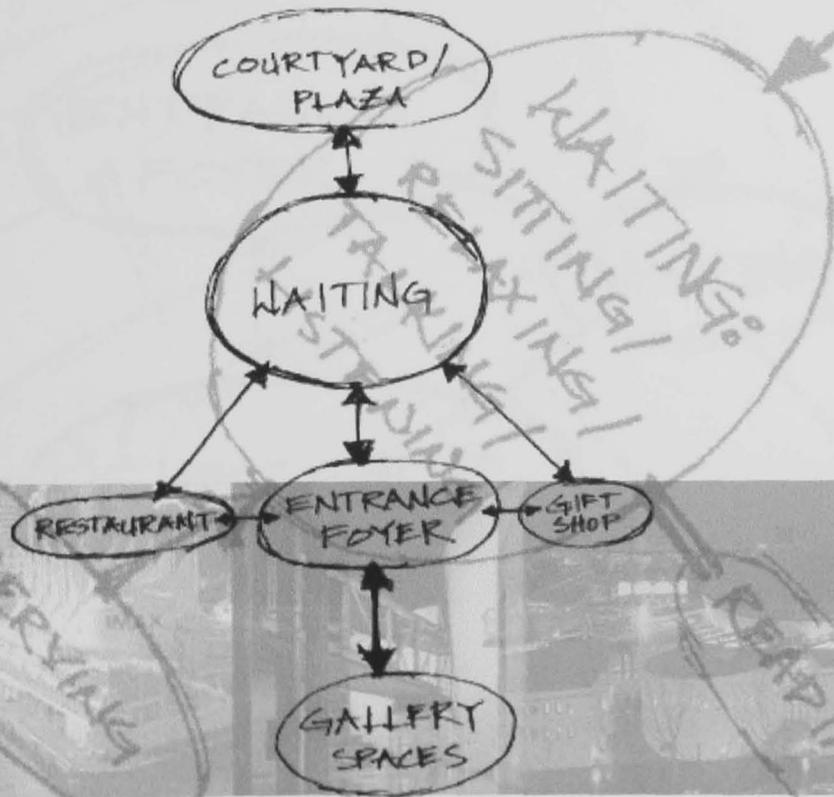
of Participants The Facility may have 3500 participants on peak days.

Issues Visitors may have to wait prior to the IMAX presentation. The visitors may become impatient and irritable if forced to wait too long.

Response The facility must provide adequate spaces to occupy the visitors' time while waiting. A comfortable environment must be provided so that the visitors may enjoy themselves while waiting. While waiting, the visitor will be able to browse the gift shop, make telephone calls, and observe the exhibits.

Related Activities Relaxing, sitting, talking, observing, reading, telephone calling, shopping, and listening.

Related Spaces Exterior Courtyard / Plaza, Entrance Foyer, Reception Area, Handicap Lounge, Gallery Spaces, Gift Shop, and Restaurant.





Activity Type	Shopping
Participant	Visitors and employees.
# of Participants	The Facility may have 1750 participants on peak days.
Issues	This activity requires an area where guests can purchase books, crafts, or souvenirs. The visitor may come in a large group or as an individual, with a broad range of ages.
Response	The architecture and the atmosphere must be pleasing and inviting to ensure that visitors will feel comfortable while looking at the items displayed. This area must be accessible to other public activity areas. Security needs to be provided in this particular area by the architectural design and the arrangement of the displays.
Related Activities	Buying, selling, observing, walking, standing, talking, and discussing.
Related Spaces	Gift Shop.





Activity Type Eating/Drinking

Participant Visitors and employees.

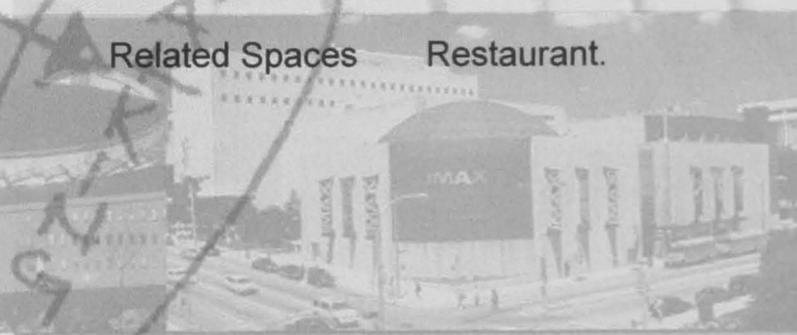
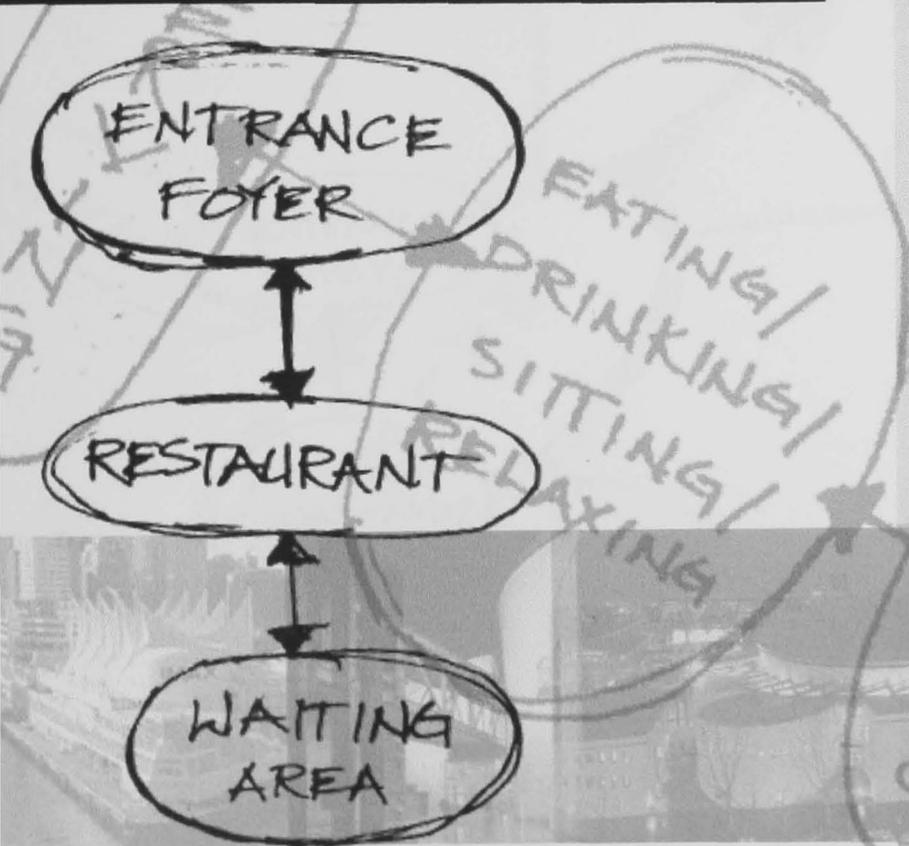
of Participants The Facility may have 300 participants on peak days.

Issues This area would be open for the general public, as an individual or a group area. The users may be drinking and eating while visiting with other people in the area. Most users would meet in this area during their lunch break.

Response The furniture arrangement must be comfortable and flexible to give a pleasing environment. It could be a combination of outdoor and indoor eating areas. The eating area should be situated in proximity with the food purchasing area and provide an easy flow of traffic. The architecture must be designed to isolate the noise from the vending machines and cooking equipment.

Related Activities Sitting, talking, listening, relaxing, and observing.

Related Spaces Restaurant.

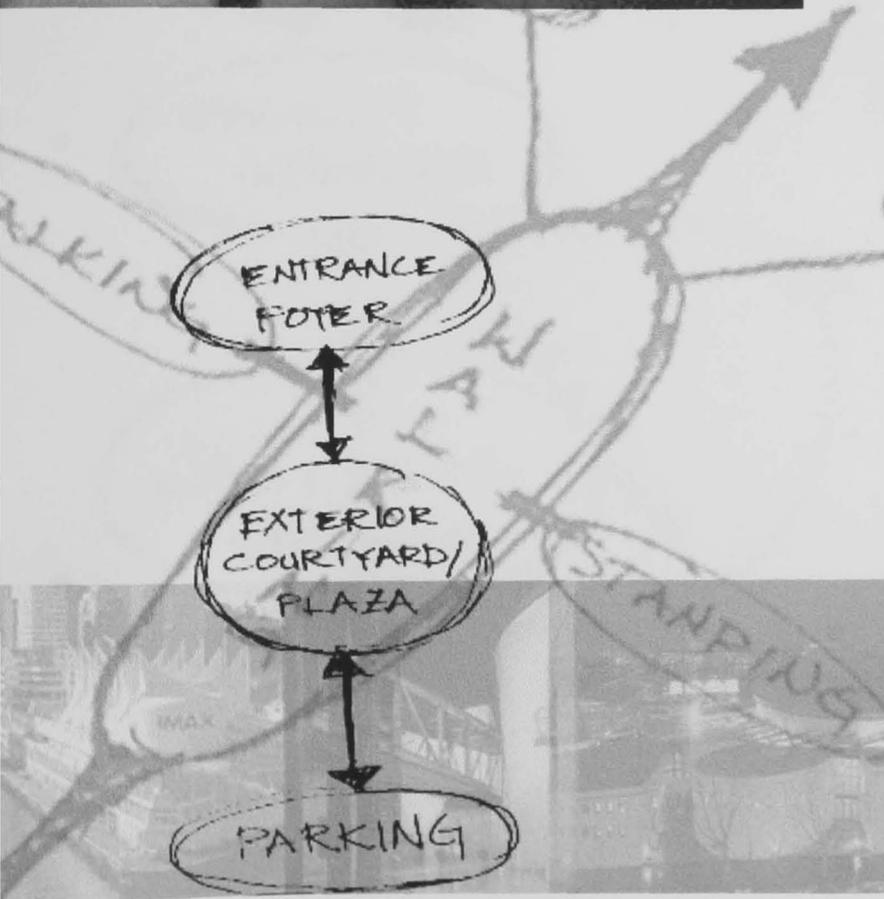




Activity Type	Departing
Participant	Visitors and employees.
# of Participants	The Facility may have 3500 participants on peak days.
Issues	The visitors will be leaving the facility and completing their visit.
Response	This area will be a main assembling space. This will be a last opportunity for visitors to receive brochures and other information from the tour guide. This will be the final area that the visitors are in before their departure; therefore it needs to make a positive lasting and impression.

Related Activities Standing, walking, talking, discussing, reading, and observing.

Related Spaces Parking Area, Exterior Courtyard / Plaza, Entrance Foyer.





FACILITY STORAGE

JANITORIAL STORAGE

MECHANICAL STORAGE

LIGHT MAINTENANCE

CLEANING



Activity Type	Maintaining
Participant	Maintaining staff.
# of Participants	The Facility may have 25 participants on peak days.
Issues	The maintaining activity would take place during non-operational hours of the facility, unless needed for emergency situations.
Response	The facility needs to be closed during these hours to ensure better security and safety. An area in the janitor's closet must be designated for the storage of maintaining equipment.
Related Activities	Maintaining, cleaning, repairing.
Related Spaces	Mechanical, Storage and Janitorial Closets.

Code Requirements

General Code Information

Occupancy Group	.	.	.	A – 2.1*
Type of Construction	.	.	.	II – FR
Fire Sprinklers:	.	.	.	Yes**
Stories	.	.	.	N / A***
Height	.	.	.	N / A***
Floor Area	.	.	.	N / A***

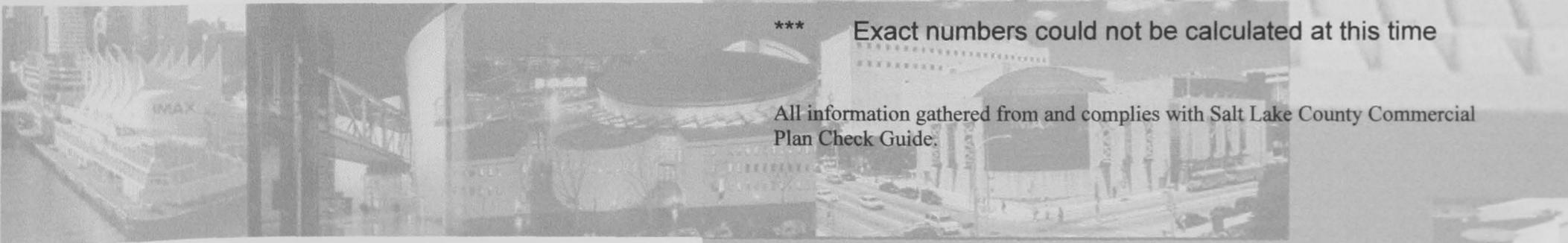
Project shall comply with the 1997 UBC, 1994 UMC, 1996 NEC, and the 1991 UPC, NFPA Life Safety, ADA.

* When a building has more than one occupancy the area shall be such that the sum of the ratios of the actual area divided by the allowable area for each occupancy shall not exceed one.

** Where one hour fire-resistive construction is required, an approved automatic fire sprinkler system, when not, other wise required, may be substituted for the one hour construction. However, the fire sprinkler system shall not waive or reduce fire-resistive requirements for: occupancy separations, exterior walls, shafts enclosures, corridor protection, stair enclosures, exit passageways, type of construction separation, and enclosures for boilers and heating plants.

*** Exact numbers could not be calculated at this time

All information gathered from and complies with Salt Lake County Commercial Plan Check Guide.



List of Equipment

Theater

"Rolling Loop" Projector

Housed in the doghouse below the theater seating.

Digital Sound System

Seven high-fidelity Speaker Units located behind the dome screen.

Museum

Artificial Lighting Fixtures

Includes all appropriate light housing

Restaurant

Coffee Makers

Stove and Oven

Refrigerator

Cold Storage Freezer

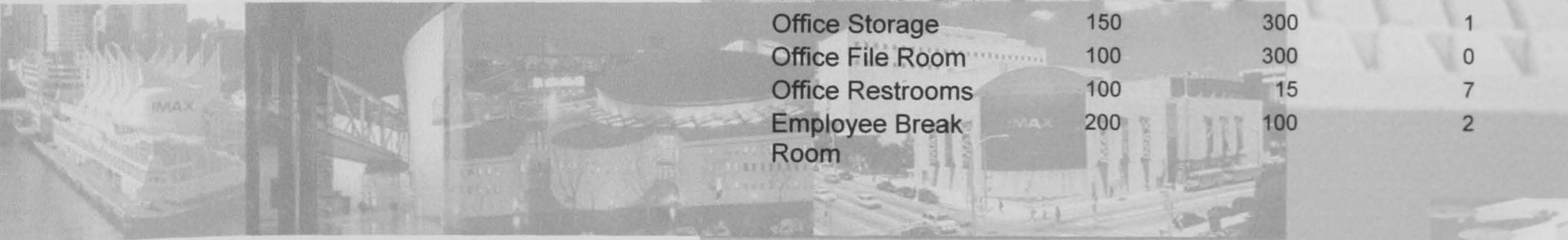
Cash Registers

NOTE: All of this equipment is to accommodate a small café.



Space Summary

Space	Square Ft.	Occ. Load	Occupancy
<u>IMAX Theater</u>	8160	7	1166
House			
Projection Room	900	300	3
Rear Projection Room	600	300	2
Box Office	225	100	2
Ticketing Office	100	100	1
Sales Office	225	100	2
Manager's Office	200	100	2
Storage	250	300	1
Usher's Room	150	100	2
Handicap Lounge	300	3	100
<u>Museum</u> Entry	75	15	5
Main Gallery	1500	15	100
Rotating Gallery	500	15	33
Exhibit Storage	500	300	2
Preparation Shop	250	100	3
Loading and Receiving	150	100	2
General Office	250	100	3
Curator's Office	150	100	2
Director's Office	100	100	1
Conference Room	300	15	20
Office Storage	150	300	1
Office File Room	100	300	0
Office Restrooms	100	15	7
Employee Break Room	200	100	2



Additional References

Restaurant Foyer	100	15	7
Dining Area	500	15	33
Food Preparation	250	100	3
Storage	150	300	1
Shipping and Receiving	150	100	2
Restaurant Administrative	200	100	2
Entrance Hall	1000	15	67
Total	17785		
Circulation	1778.5	100	18
Mechanical	1778.5	300	6
Total	21342 sq. ft.		1596
Total # of exits	9		



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Thesis Summary:

As I began to summarize my thesis, several topics came to mind. For example, what is the conceptual basis for my design, how did I address the major issues of my program, what is the hierarchy of space and/or systems in my design, what are the controlling factors, and what was the most compelling aspect of my design and thesis experience?

Conceptually, my project is simple; it is a basic point, line, and plane solution. More specifically, my project consists of three major points. The first two are physical and real, consisting of the IMAX theater house and the underground parking structure located across the street. The third point is perceptual, created for the varying converging lines of pedestrian traffic. These lines dominate the interior of the facility and eventually become spaces for gathering and egress. The programmed spaces thus become the planes of the facility. These planes become horizontal and vertical in nature.

In terms of the issues, I choose to address the issues that affected the design process the most. These issues being the theoretical issues of the forms of monumentality and experiential presence. Architecturally, monumental presence is expressed in its purity of geometric forms and is experienced in the emotional involvement of the participants. I addressed this formal issue by using and manipulating the cube, pyramid, sphere and column. The exterior is a prominent display of the manipulation of the cube. A cube is very monumental in visual and structural sense. It is permanent, strong, and simple. It offers strong resistance to a change in its form. The cube has a maximum number of effective, useable surfaces. In monumental presence, the actual experiential presence is of primary concern. Hence, orientation, placement, and passage through spaces all play key roles in the creation of monumental architecture. I addressed this issue by making this a key element of the entire design with the use of the point, line, and plane method.

In terms of the hierarchy of spaces and systems within my design, two aspects of my design begin to dominate. The first of which is the IMAX Theater house. This element begins to dominate the skyline of the facility. It signifies the core and centerpiece of my design, as well as becoming a beacon. The dominating system within the design is the circulation system. This system is also derived from the point, line, and plane solution and acts as the vehicle for pedestrians to interact with the facility and vice versa.

Several varying aspects of my design became controlling factors. The issue I believe became the most controlling would have to be the parking issue. The same parking lot that was programmed became a parking garage. This parking garage then became a parking garage with a plaza below. Then, this parking garage with a plaza became a plaza with a parking garage below it. So, the parking lot became an urban space, a parking plaza if you will. This parking plaza, which initially was a non-significant aspect of my design became piece which strengthened my overall design; I believe my project would not be as unified without it.

I feel the most compelling aspect of my design would have to be the way it expanded as it developed. As the semester went on, my project became more of an urban project, which needed to fill a certain amount of unexpected urban issues. This development was a pleasant surprise, it added a bit of excitement to a project which was losing its interest early in the year. Overall, I have enjoyed my thesis semester. I entered the semester with a few friends and a lot of acquaintances; I now feel as though I am leaving the Texas Tech University College of Architecture with a few acquaintances and class full of friends.

