THE MUSEUM OF AMERICAN IMMIGRANTS

by

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(ABSTRACT)

The work involves an architectural design for a facility located on The Mall in Washington, District of Columbia. The Museum Of American Immigrants is a proposed facility for housing the exhibits regarding immigration sequences and their development that make up the United States of America. The ethnographic nature of the work, its artifacts, their collection, exhibition, preservation, and mutations is seen as a means to nurture our better understanding of the on-going struggle with the experiment called America.

With reference to current theories of museum architecture, examples of other similar museum buildings, site constraints, and programming, the work strives towards the integration of architecture and purpose. The building is expected to provide layers of experience in both spatial and ethnic terms. The precise geometry defines the spaces and voids, while the way the exhibits are organized defines the building as a framework of displays.

The design method used in developing the building called The Museum Of American Immigrants has involved a personal understanding in working with the contemporary design vocabulary and programmatic concerns to create a learning environment for the visitors while making every effort to achieve contextual balance and harmony required by the surroundings.
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To my wife
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A museum for the immigrants and their descendants in America has a few intriguing reasons for being. A museum can be a powerful media to bring past events back to life to lay viewers especially when the impact needs to last long after they leave the building. The experiment we call America is literally the greatest phenomenon in recent human experiences. Despite the inherent obstacles, people of many backgrounds actually set aside their differences and work shoulder to shoulder in assuring freedom, prosperity and individual expression. This experiment forces each individual to shed his/her concerns of skin tones. Setting aside the differences means seeking mutual understanding. What better way to understand and appreciate a person than to discover their backgrounds, their aspirations, their perception of themselves within the larger picture. From the dawn of civilization on this land to the on-going influx of immigration today, the process persists. The collected informations mounts. The struggle for mutual understanding haunts.

The thrust of the work is to integrate the architecture and purpose of the building. Major building elements shall depict the typical processes of immigration, which involves major events experienced by a newcomer to this land as outlined in the following:

The Place Of Origin .......... Reason for leaving the home lands
The Journey ................ Bitter sweet tales of actual migration
The Adjustment ............ Struggle of adopting a new homeland
The Achievements .......... Highlights and milestones of life in America
Today And Tomorrow ........ The current affairs and future possibilities regarding the ethnic harmony in America.

Like the face of a clock, the building provides a constant enumeration for the passing moments. Waves of immigration to America occupies the various floors according to chronological sequence. And the time element shifts the sequence of exhibits to lower and lower floor levels. The constant compilation of latest exhibits on the uppermost layer brings real-time aspect to the use of the building. Like the distortion in three-dimensional vision, the more distant the time, the more condensed the materials become as they are shifted downward.
The late Dizzy Gillespie recently remarked: "Everybody in Jazz is a thief". Similarly, in architecture each person influences others to a certain degree in comprehension and spirit, if not in form and execution. The following are ideas and actual structures of recent time and those which have gracefully endured the test of time. They serve as philosophical background for the work. It is unthinkable to recompose the following writings since the power of nuances come from their own juxtapositions.

The concept of place unites modern architecture with the past. "Both above and below the surface of this century there is a new demand for continuity. It has again become apparent that human life is not limited to the period of a single life span." When we see architecture from this point of view, we gain understanding and a direction for our work. This direction is not dictated by politics or science, but is existentially rooted in our everyday lifeworld. Its aim is to free us from abstractions and alienation, and bring us back to things.

"Education Through Art" is therefore more needed than ever before, and the work of art which above all ought to serve as the basis for our education, is the place which gives us our identity. Only when understanding our place, we may be able to participate creatively and contribute to its history.

Christian Norberg-Schulz, *Genius Loci*

Contemporary architecture, disillusioned with rational utopias, now strives to go beyond positivistic prejudices to find a new metaphysical justification in the human world; its point of departure is once again the sphere of perception, the ultimate origin of existential meaning.

The reconciliatory mission of architect is poetic. This is necessarily an individual task, encompassing personal expression and reference to the totality. There is no meaningful logic without acknowledging the intersubjective world, best revealed in dreams and myths.

The ever present enigma of human condition is only denied by the foolish. And it is this mystery that architecture must address. Part of our human condition is the inevitable yearning to capture reality through metaphores. Such is true knowledge, ambiguous yet ultimately more relevant than scientific truth. And architecture, no matter how much it resists the idea, cannot renounce its origin in intuition.

Alberto Perez-Gomez, *Architecture And The Crisis Of Modern Science*
The temple of Ishtar-Kitium, Ishchali, 1800 BC

Valley-temple of Chephren, El Gizeh
Queen Hatshepsut's Temple, Deir el-Bahri, 1500 BC


National Gallery of Art, East Wing, Washington, DC, 1978
3.1 - A place for contemplation

The place shall offer quiet zones for inward-focusing activities such as viewing in exhibition spaces, reading in the library and discussions or lectures in auditoriums.

German Museum of Architecture, Frankfurt, 1984

Yale Center for British Arts and Studies, New Haven, Connecticut, 1977
3.2 - Lighting

Natural lighting during the day is commonly used for viewing purposes. Sunlight provides the best spectrum for true colors and is cost effective. The investment to provide for safe use of sunlight must include filtering methods to reduce their harmful effects on pigments and materials.

Artificial lighting mainly serve as task lighting for specific activities and general lighting for ambience. Artificial lighting helps define the design intent. Moreover, if it is used properly, artificial lighting can provide a sense of order and security necessary for the facility.
German Museum of Architecture, Frankfurt, 1984

National Gallery of Art, East Wing, Washington, D.C., 1978

Tate Gallery Extension (Clore Gallery), London, 1986
3.3 - Circulation

The backbone of any museum is the circulation system. It serves to assist the visitor in moving from one part of the facility to the next in an orderly fashion.
3.4 - Central space

Central space is seen as an organizing node. It generally integrate the collection of spaces by providing directional order and visual access. In order to emphasize its centrality, a central space is usually several storys in height.
3.5 - Floor Level Changes

These changes are very useful in giving order to large spaces and they help to define the visitor's movement within such spaces.
Museum of the Nineteenth Century in the Gare d'Orsay, Paris, 1986
3.6 - Visual Release

An interesting feature of these museums is the panoramic window wall. There is a typical conscious effort to introduce the perception of outside environment within the interior spaces.
3.7 - Climatic Control

A common requirement is the tempering of the indoor climate. Both the objects of observation and the observers both require such intervention for obvious reasons. Passive and active methods are shown here.
The idea for an ethnographic museum of a nation such as the United States deserves a location of similar calibre. The only remaining site at the ground of the nation's Capitol at the moment is compelling since the Capitol building itself is a fully functioning Shrine of Democracy, a place where the cries of the nation find their ultimate expression. The site also poses challenges, since it is located across The Mall from The National Gallery Of Art's East Wing, a building of renown character, integrity, and a brainchild of a first generation immigrant architect I.M. Pei.

The following are major contextual aspects of the site critical to the work.

4.1 - Formality

The Mall is an expression of formal French garden. There is a strong tendency in regimenting the landscape for a grand visual impact. Relative conformance to the original design intent is very much expected.
4.2 - Monumentality

Each of the surrounding buildings was designed to be a monument. Timelessness is evident in their choice of material. With the Greco-Roman facade as the ruling theme of the area, the neo-classic Capitol was intended as an everlasting shrine.
4.3 - Symmetry

The Mall follows a definite axis and is bounded by rows of trees along each of its sides. The designs of buildings that face one another across the Mall reciprocate. This indicates a definite awareness for a balanced juxtaposition of objects on opposite sides of the Mall. Though perfect physical symmetry is not attained, perceptional symmetry is definitely a main idea in the Mall.
4.4 - Geometry

A basic north-south and east-west grid intersected by occasional diagonal axes. The diagonal boundary of the site comes from the direction of the Capitol and creates a trapezoidal site plan.
4.5 - Solar Path

The site is on the south side of the Mall. The diffused northern light desirable for natural lighting comes from the direction of the Mall. Blocking the direct solar radiation from the south side is a prime factor in controlling the interior light quality.

1. Sunrise
2. Mid-day sun
3. Sunset
4. Glare source
5. Glare source
6. Northern light
7. Glare block
8. Glare block
9. Fenestration side

The National Air and Space Museum and East Wing National Gallery buildings respond to the sun path in similar manner. Their primary glare blocks are located on the south and west sides.
4.6 - Traffic Pattern

Major vehicular traffic occurs on the east and south sides. The adjacent diagonal street represent a minor flow which is ideal for delivery access. The pedestrian traffic is mainly concentrated on the west (the side of the Air and Space Museum) and the north (the side of the Mall), both of which are suited for pedestrian entrances.

1 Building core connected with the Mall
2 Diagonal building element as a buffer.
3 Building entrance.
4 Entrance to the East Wing National Gallery building.
5 Major vehicular traffic.
6 Major pedestrian traffic

The building shall be oriented towards the pedestrian sides. The diagonal building element shall serve as buffer from traffic and direct solar radiation.
In this work the functional program and spatial proportion would strictly observe the capacity of the site that is a constant. Aside from space economy, floor levels below ground shall create the critical accommodation for various functional requirements. The following is a set of proposed requirements typical of an up-to-date contemporary museum.

Central Space

A primary circulation node, a place of introductory and general directory which in most cases also serve as a place of rest and even exhibition. For visual release, the indoor central space shall be reciprocated with an adjoining outdoor court that may incorporate water feature.

Circulation

The extensive circulation system for the facility is expected to include escalators, elevators, stairs, corridors, pedestrian and vehicles entrances and required emergency exits. Visual release at certain junctures is desired.

Exhibits

The permanent & circulating materials usually require vertical and horizontal set-ups involving 2-D & 3-D forms. Oversized materials shall be accommodated in larger indoor spaces or outdoors with weather protection provided for materials that are moisture sensitive. The light and sensitive nature of certain critical materials shall require special set up and lighting within light controlled spaces.

Audio-Visual

A main auditorium shall occupy a distinctive part of the facility. Secondary auditoriums and classrooms shall be within a special quiet zone conducive to such purposes. Visual release is not critical.

Library

Another function within the quiet zone is the library with up-to-date circulation, stack and reading areas. Visual release is not critical.

Refreshments and Gifts

Restroom must be located on every floor within a specific locale of the facility and they be handicap accessible. Cafe and shops will occupy a specialized zone easily accessible from the central space. Visual release from the cafe is desirable.

Support Rooms

Storage rooms in a museum are of paramount importance. A major portion of below-ground floor levels is dedicated to exhibit material storage and handling which shall adjoin the shipping and receiving area which exit out to a loading dock. Auxiliary storage related to specific functions such as the central space, exhibit, audio-visual, restrooms, cafe/kitchen, shop, and administrative areas shall be designed accordingly. The kitchen and trash room shall have easy access to the loading dock.

Administrative

Other than storage areas, this core shall incorporate offices, conference room, work room, break room, and a small kitchen.
6 - DESIGN APPROACH

Entry Sequence

The entrance through formal entryway on ground level leads visitors onto a platform from which they will find themselves transported via the escalator down to the central space level which is two stories below street level. The initial escalator ride provides a moving point of view to the visitors to experience the entirety of the hub space for the first time. On the central space level, visitor will find informations that help them determine their routes to the exhibit spaces on all levels. The grand escalators and elevators are provided for the ascends.

1. Entry point
2. Escalators
3. Central space
4. Grand escalators
5. Elevator, typical.

Exhibit Sequence

The exhibits are arranged according to a typical immigration process. The process involves stages as described in the following:

1. The Origin
2. The Journey
3. The Adjustment
4. The Achievement
5. Today and Tomorrow

Each one of the stages shall occupy a single vertical building mass. The building masses are further organized in a linear fashion to reflect the linearity of the immigration process. The administrative portion of the building shall occupy a separate vertical building mass which, due to its location, symbolically oversee the entire stretch of exhibit portion of the building.
Organization

The following are four major factors which help formulate the organization of the design:

1. Indoor portions of the central space
2. Outdoor portions of the central space
3. Interior spaces
4. The site

The central space acts as a primary hub of the building, towards which most interior spaces in the building relate in definite manners. The indoor/outdoor character of the central space recognizes the importance of connecting the activities in building hub with the those that are on the Mall. The site literally forces a building to take on a certain general outline which in turn influences the make up of the interior spaces.

Circulation

The horizontal runs meet the vertical runs at all points throughout the building that allow visitor to enter and leave the spot with great flexibility. The abundant accesses which border the central space also provides visitor with constant visual aid for navigating inside the building. Entrances are also directed towards the floor level of central space so that newcomer is immediately given visual introduction to the overall circulation system. The circulation of the building being visible from the central space becomes a three dimensional map for the user, visitor or otherwise.
Basic Cross-Section

The building shall provide the visitor with varied spatial experiences as can be rudimentarily subdivided as the following:

1. Above ground open side
2. Above ground enclosed side
3. Below ground open side
4. Below ground enclosed side
5. Pedestrian at open side
6. Vehicular outside enclosure

The below ground spaces is necessary for space economy and also for a fresh approach to spatial system. The open side of the building blends functions of the building with those of the Mall. The enclosed side of the building provides the inward focusing facilities and also acts as a barrier along the vehicular side of the site.

Developed Cross-Section

The following is a further definition of elements from the preceding subdivision:

1. Below ground facility
2. Above ground facility
3. Indoor central space
4. Outdoor central space
5. Glare shield
6. Northern light
7. Central space

The glare shield emulates a solid element that opens itself towards the central space. The enclosed spaces take on certain specialization and together they commonly form the border of the central space. The central space becomes an outdoor central space as it progresses towards the Mall.
Building Geometry

The site reflects the city road lay-out which is an expression of mixed geometry that stems from the logic of grid simplicity and diagonal axis visual connectedness. For the reason of spatial economy the building utilizes the maximum outline for its border. This molds the building into a simple perimeter geometry which has the capacity of providing abundant opportunities for design elaboration while still staying within a focused design vocabulary.

Building Primary Circulation

The site imposes certain linearities which give rise to the following design elements:

1. Perimeter geometry
2. Primary entrance
3. Secondary entrance
4. Central space
5. Backbone circulation

The horizontal backbone circulation of the building conforms with the primary building geometry. The backbone circulation starts to help definite certain borders for the central space. The primary entrance to the building is a formal portal which requires a formal facade. Whereas the secondary entrance shall meander towards the central space.
Preliminary Massing Model Studies
Finish Material and Structural System

In image, the building resembles a collection of oversized masonry blocks interconnected by a network of bridge-corridor, space-frame and framed glass enclosure. Steel post and beam method as the primary load carrier is chosen for its economy, expediency, flexibility, lateral stability and ease of construction. A high degree of control in achieving the desired effects and longevity in both exterior and interior surfaces requires the employment of various cladding systems. These systems, modular in nature, provide the most flexibility for access of building utility which is paramount in such a contemporary structure. On the systemic drawings below, the vertical load points as darkened dots are interconnected by the horizontal members that span and cantilever the distances in order to achieve the desired overall configuration.
Seventh Floor Plan - Scale 1"=60'-0"  0.....10.....20.....50.............100 ft
Fifth Floor Plan - Scale 1'=60'-0"  0......20......50..............100 ft


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