

LARGE SPACES AND SMALL

LARGE SPACES AND SMALL PROVIDE VARIETY AND CHANGE IN THE OVERALL EXPERIENCE OF THE MUSEUM AS WELL AS DIFFERENT OPPORTUNITIES FOR EXHIBIT AND DISPLAY.

ISSUES:

Variety and change in spatial experiences are primary to combating museum fatigue -- the mental and the physical. A tediously uniform repetition or monochromatic character of the museum's paths, displays, and "rooms" contribute to fatigue, object satiation and directional disorientation. (Melton, 1931; Neal, 1976.) Providing pacing, a cadence, or an exhilarating break requires different techniques in spatial modulation. The same design strategies can create a variety of experiences -- intimacy, power, awe.

Large Spaces: Many new museums and children's museums rely heavily upon rotating exhibits and roadshows from other museums to enhance their own collections, renew interest, and to attract new visitors. The rotating exhibit spaces should be near the entry or, at least, easily accessible, highly visible, and flexible enough to accommodate the large and the small, the many and the few, whether objects, interactive exhibits, or people.

This implies a need for moveable partitions, an area not limited to standard ceiling height, an area for grouping people, a space that can change its ambience with the tone and subject of the particular exhibit. Who knows when a totem pole may come to town?

Fixed Spaces: The importance of the flexible area should not overshadow that of the more permanently designed spaces. After all, the object larger than room may be a permanent guest. An airplane wing, water tower, or ship's hull all require not only the extra height but also an appropriate spatial volume from which to view them.

Smaller Spaces: Although the amount of fixed display space depends upon the particular goals of the museum and its attitude toward collecting, the defined, smaller, more

permanent display or theme area can provide a texture, a framework, a substantial context for the museum experience that a hollow box -- no matter how elegant -- can not do alone.

There is never enough room for display or storage. Where do you put the too-good-to-refuse donation -- the submarine? or the thousand small objects collected by a generous donor? Storage for storage sake is hard to justify when square footage for exhibition space is limited. The solution lies in creative and selective placement.

In a small gem of a museum or even a strong, simple form, the addition of needed space can wreck havoc with the original image, at worst, alienating the public; at the least, difficult to achieve without architectural gymnastics which may defeat the pristine, original concept. There are solutions to the major addition.

QUALITIES AND CHARACTERISTICS:

Moving from a large space to a smaller one and the converse are opportunities for contrasting and complimentary experiences. For a smaller space is intimate and sheltering, potentially quieter, compressing, providing a focused, detailed view; an adjacent larger space provides a summation or overview, a sense of magnitude and release. Either can be a prelude to the other.

Enclosed pathways are intimate. They contain natural opportunities for focusing on detail and arousing expectations of what lies ahead. Larger, more open circulation paths provide long and broad views. Large spaces allow for grand promenades and magnificent rotunda.

Small spaces nested within larger ones directly contrast one another, reinforcing the smallness of the small one and the largeness of the large one.

The shape of large spaces can be determined by the required depth of view. Distant viewing will depend upon the configuration of the large object or the nature of the events occurring there. Even at the intimate scale, some space is required to prevent a sense of crowding and pressure.

APPROACHES FOR DESIGN:

1. THE BIG BOX:

The building with a universal space allows for objects that are as large as the building's height, width, and length. This strategy was deemed appropriate for the modern art museums that anticipate a high rate of rotating exhibits but can not project their demands.

The major drawback of this building type is the difficulty in zoning and gaining privacy for conflicting activities and providing pacing and framing. To counteract the lack of variety and change in an undifferentiated large exhibit area, nooks and crannies and specially designed spaces can be employed in the surrounding support areas -- the restaurants, outdoor retreats, theatres, and seminar rooms.

The advantage of permanent exhibit areas is the ability to anticipate and design in the right angles for viewing, variety in spatial experience, and as interesting and understandable circulation.

2. THE SMALL BOX:

Some times small can be enough, and little gems can be all that is needed. One-room museums, or one object/one theme museums such as the Shrine of the Book at the Israel Museum have enough energy and power to sustain interest. These places do not need large spaces, and benefit from being a small box.

However, most museums do find unanticipated and compelling need to expand.

At the small scale, using transition spaces for visible storage or framing a view of a totem pole which is actually outside are strong strategies for expanding the small box. The totem pole does not need to stand alone as an object banished due to its size. It can serve as visual retreat, an object in a series that begins on the inside, or as a contextual backdrop to an activity core.

3. USING ADJACENT OUTDOOR, FREE SPACE:

A special outdoor extension can solve the problem of the submarine. In the Museum of Science and Industry in Chicago, a tunnel -- an umbilical cord -- leads from the museum into the submarine. Experientially, one does not leave the museum. Instead of being an object to be housed or stored, the submarine is instead a prepackaged annex. It could have

been further exploited by providing a view of the outside or from the out-of-doors. The Museum of Transportation in Lucern houses its large airplanes and trains in the largest room the museum can afford -- the outdoor "room."

4. VARIETY AND CHANGE:

A size continuum -- the combination of variously sized spaces may range from many small and one large to few small, several medium and few large, depending upon the needs of a particular museum, yet following an orderly geometric relationship. This is best exemplified by the classical Beaux Artes museums such as Chicago's Museum of Science and Industry and New York's Museum of Natural History. (Huxtable, 1976).

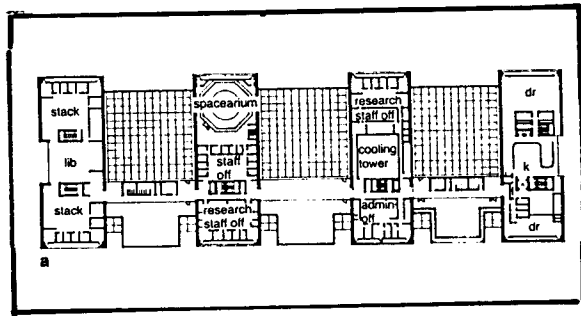
A variation on the continuum is the gradual, progressive size change with proportionately equal increments added to each succeeding bay or wing size. This can be based upon permanent collection that progresses in size physically or conceptually. The Portland Museum uses the proportions of a small gallery as its conceptual base, creating a geometric progression of larger sized spaces.

A more classical version is using modular or semi-modular construction techniques. A variety of bay sizes and volumes is realized by combining multiple modules into a common space. The potentially rigid and stagnate spaces can be avoided by combinations with other forms. Hollein combines modular systems to resolve the need for large flexible space with special, organic form in his Municipal Museum in Abteiberg, West Germany.

EXAMPLES:

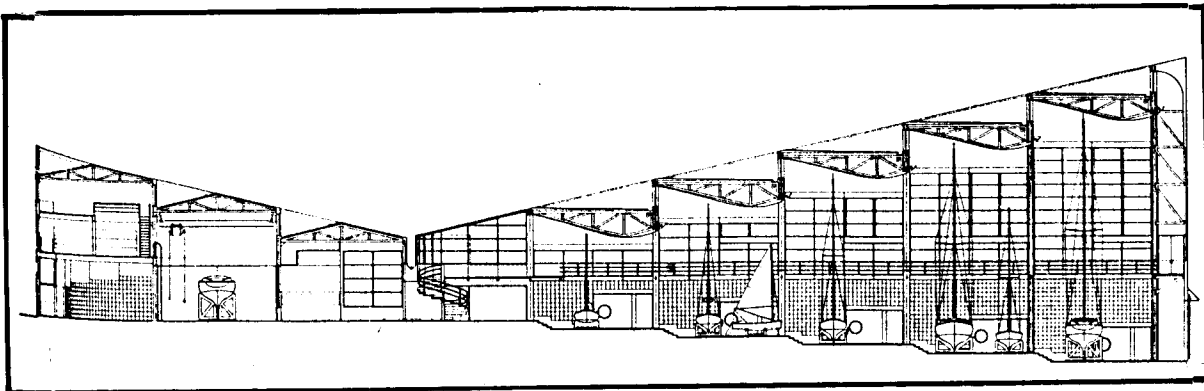
Air and Space Museum
Washington, D.C.
Hellmuth, Obata & Kassabaum 1976

The building's modular plan creates three galleries, two stories high. They are vertical spaces that house real, fullscale airplanes and rockets.



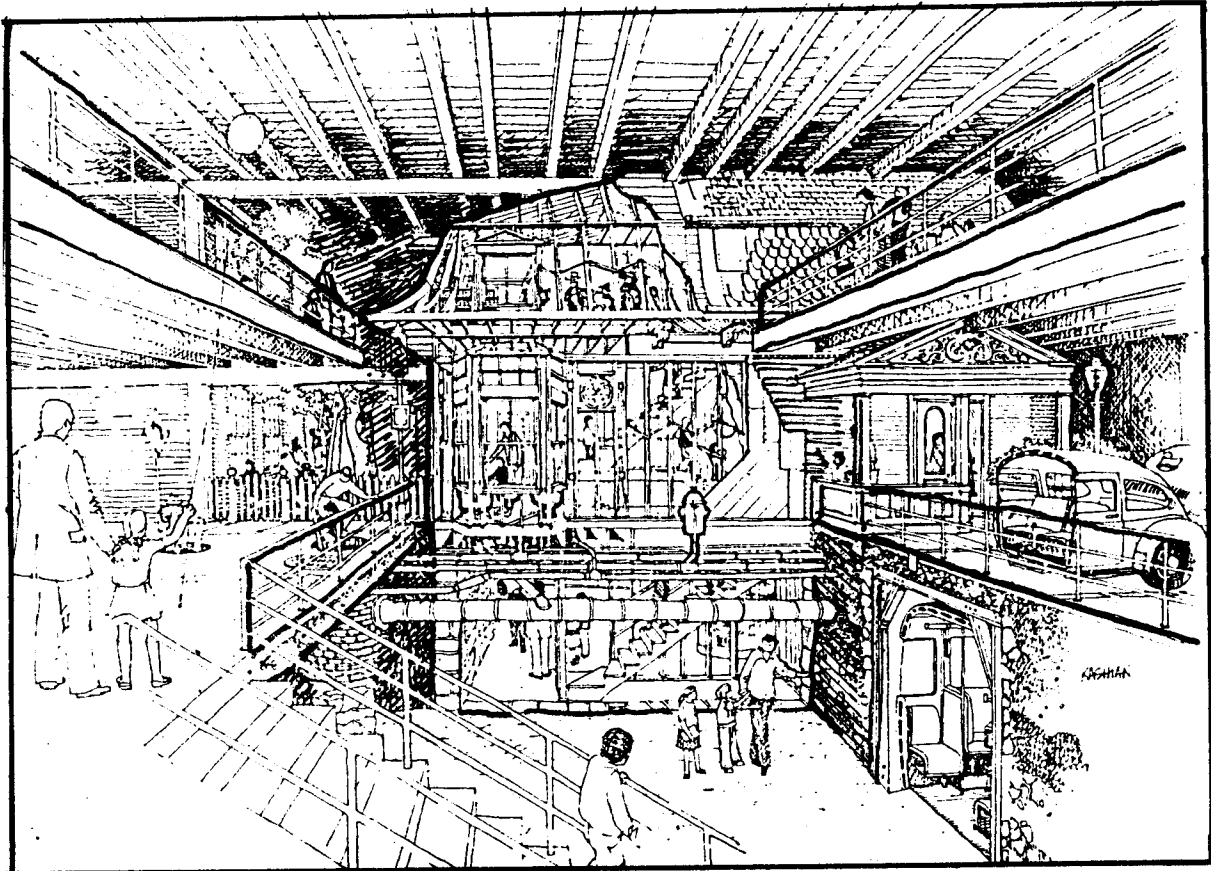
Herreshoff Yachting Museum
Bristol Rhode Island
E. C. Schwartz 1981

The progressive increase in height and length of each bay accommodates increasingly larger boats -- an example of designated, fixed displays within a continuum of spaces from small to large.



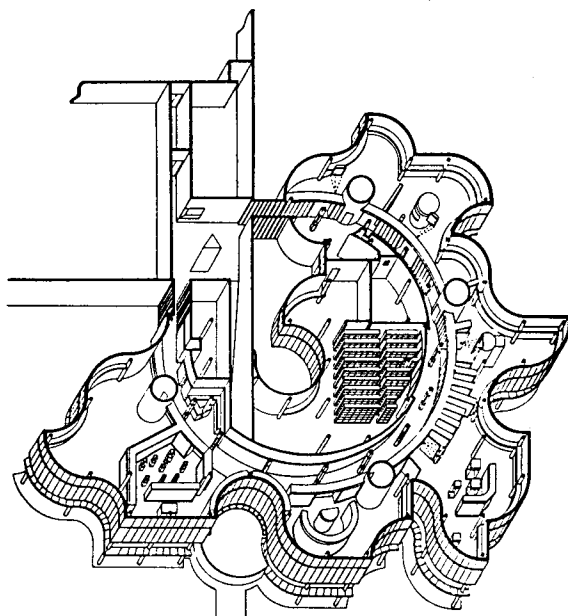
Boston Children's Museum
Dyer/Brown & Associates 1979

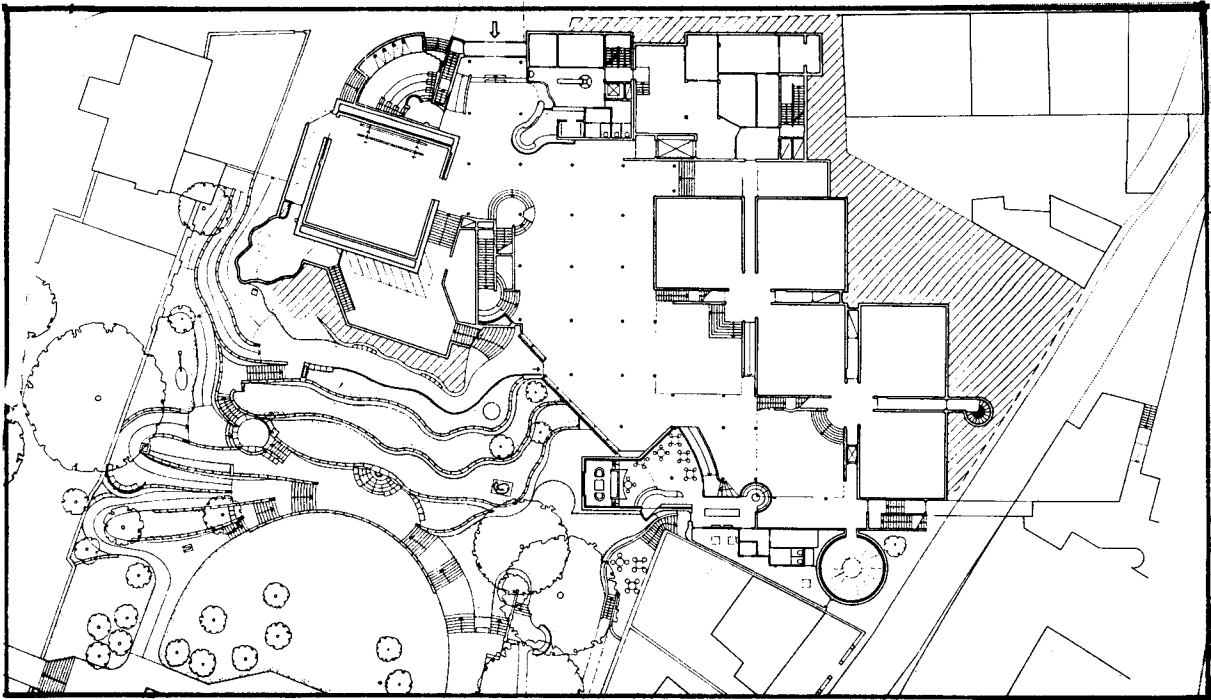
A multi-story vertical space accommodates a large "city-slice" exhibit of a full-sized Victorian house. In addition, the space provides sufficient horizontal distance to view the house from high and low, near and far.



Corning Museum
Corning New York
Gunnar Birkerts & Associates

The specialized museum of glass displays an extensive, permanent collection ranging from the ancient to the modern. The size and shape of each gallery was determined by the size of the collection of the particular period it housed.



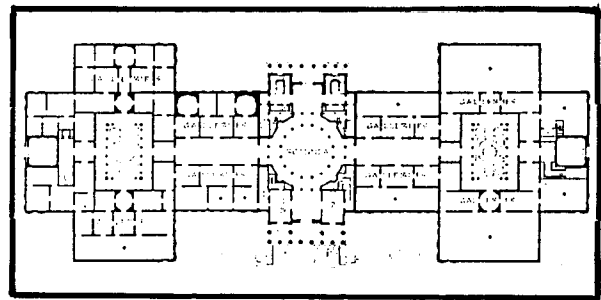


Municipal Museum
 Abteiberg-Monchengladbach,
 West Germany
 Hans Hollein 1973-1981

The temporary display space is made up of square, three-story galleries arranged around central service nodes. The large permanent display area is a rectangular box allowing for free patterns of movement. The smaller, special shapes of the restaurant and domed gallery invite, divert, and provide a retreat.

National Gallery of Art
 Washington, D.C.
 John Russell Pope 1941

Although the classical plan follows a formal hierarchy of space based upon a geometric series, the sequence of the entry and the rich yet controlled variety of spatial experiences -- the magnificent, imposing rotunda, intersecting high corridors -- offer a variety of exhibit opportunities as well as experiential ones.



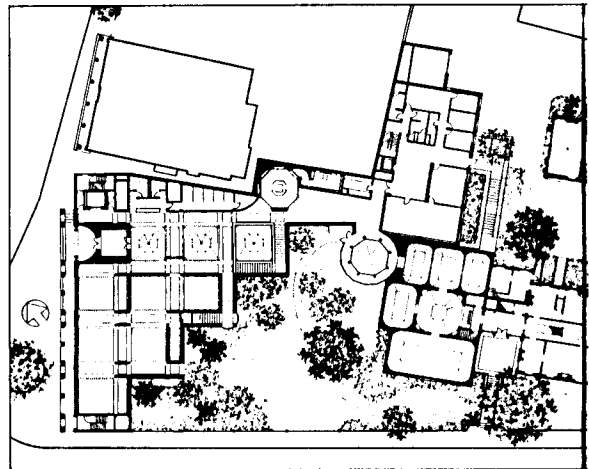
Center for Visual Arts
Norwich England
Foster Associates 1977

The museum is a large, undifferentiated box. The thirty foot high space can accommodate the full spectrum of displays, from cozy work stations to two-story objects.



Charles Shipman Payson Building
Portland Museum of Art Maine
Henry N. Cobb of
I.M. Pei & Assoc.

The Portland Museum uses the proportions of a small gallery as its conceptual base, creating a geometric progression of larger sized modules--progressing from one to two wide and two high, three wide and three high, and ending with four wide and four high modules.



RELATED PRINCIPLES:

- * OUTDOOR EXTENSION
- * ENTRY TRANSITION
- * RETREAT