Site Considerations

From Parking

Major

Pedestrian

Drop off

Bus

Pedestrian

Services

Regatta, from Activities

From Other Activities
BUILDING TYPE STUDY
The building type study provides a wide range of information which aid in organizing and scaling building functions. There have been no historical examples of Children's Museums to provide background data, so I relied more heavily on recent treatments of similar problems. With myself as client for this project, I needed to become aware of the purpose behind this type of facility and its role within the community. Not being familiar with children's museums, the building type study gave me an understanding of certain scale relationships, the physical size of spaces, ordering systems for individual rooms within the volume, and ideas for exhibit topics. In general, any study of recent examples yield a certain familiarity with the feelings of other architects towards the problem and how they solved critical issues: site conditions, degrees of urban scale, etc. The study can be seen then as a pool of information and ideas which can be drawn and assimilated with the specific needs of the site, neighborhood and users, to provide an accurate analysis of the problem and serve as the foundation for design decisions.
chicago kid's museum

TABLE OF CONTENTS:

Reason for the study; how does it benefit me?

Boston Children's Museum--- Analysis of concept with sketches and photos

Jacksonville Children's Museum--- Analysis of concept with plans, sections, and sketches

Indianapolis Children's Museum--- Analysis of concept with plans and sketches

Brooklyn Children's Museum--- Analysis of concept with sketches and photos

The Children's Museum of Inquiry and Discovery--- Ideas for exhibit topics along with descriptions

Museum of Black History and Culture--- Program analysis with concept sketches
This design, by Cambridge Seven, more actively explores the idea of scale variation between adult spaces and those occupied by children. It is a series of split levels to provide exciting movement through the space as well as creating maximum visual orientation throughout the exhibit areas. This example best reflects the activity of the users. The exhibits are located on three full levels and a series of split levels (as seen in section). The entrance opens to a lobby, which is open to the ceiling and then to a vertical circulation core. Circulation through the building is actually through the displays. This gives a more active feeling to the space, although it does hamper ones ability to follow any exhibit sequence.

architects: Cambridge Seven
size: 30,000 sq ft
BOSTON CHILDREN'S MUSEUM

* Exhibition spaces varied in section to provide views + orientation

EXHIBITION

AUDITORIUM

VERTICAL

ENTRANCE

OPEN CIRCULATION

SERVICE FACILITIES
This example has all exhibit space within the central volume, while more structured areas of classrooms and service facilities are additions to the central space (i.e. Charles Moore's 'saddlebag' idea in *The Place of Houses*). All exhibit areas overlook the main lobby and circulation core. The changing exhibits were placed in the upper exhibition level, while lower levels house permanent displays. The rooftop was also utilized as a garden area with adjoining aviary, picnic and vending and bear & deer exhibit areas.

architect: William Morgan
size: 29,810 sq ft
The main stairs, originally designed to float freely from stairwell walls (below), were modified because of fire codes which required closed spaces; the result is a dark and less dramatic area.
JACKSONVILLE CHILDREN'S MUSEUM

EXHIBITION SPACES

PLANETARIUM

LIBRARY STAFF

OPEN CORE

VERTICAL CIRCULATION

SERVICES PRIVATE FUNCTIONS

ENTRANCE (First floor)

OFFICE

SERVES AS LINK FOR FUTURE EXPANSION

LIGHT

EXHIBITION

LOBST/ENTRANCE

OPEN CORE
This museum has a central circulation space with areas on the ground floor for changing exhibits. The major exhibit areas are located in the corners of the building volume. They are not totally visible but do have a visible access. There appears to be no flow of movement designed to assure the visitor of seeing all of the exhibits. The circulation pattern allows too much space for non-exhibition oriented circulation, and this excess on all levels destroys visibility to displays on other levels. The changing or traveling displays are located at various levels making assembly seem difficult. The private functions are located on levels one and three.

architect: Wright, Porteus & Lowe
size: 200,000 sq ft
1 Story of Our Earth, Emergence of Man, Ancient Egypt, Africa (not complete)
2 People of the Americas (not complete)
3 Administration
4 Elevators
LEVEL FOUR

1 Americana
2 Elevators
3 Rest Rooms
LEVEL FIVE

1. Carousel, Toy Trains
2. Physical Science (not complete)
3. Elevators
Indianapolis Children's Museum:

- Vertical circulation
- Level 1 plan
- Open core
- Entrance
- Exhibition floors—alternate north/south
- Services
- Private functions on Level One
The basic concept is that of a volume with exhibits and activities scattered within. The service and private functions become the separation between different exhibit spaces. The level changes within give plenty of opportunities for the kids to explore. The building is two stories below ground in Brower Park and utilizes the roof as an outdoor performance area. The main entrance is off of the southeast corner of the building and ramps down through the building, dividing the upper floor visually into two areas. The building is, in the style of Hardy, Holzman, and Pfeiffer, a building which almost demands participation. Its design reflects the activity of the user on a less regulated pattern than in Boston.

architects: Hardy, Holzman, & Pfeiffer
size: 70,000 sq ft
The Brooklyn Children's Museum, designed by Hardy Holzman Pfeiffer Associates, will encourage exploration and interplay between seeing and doing, and will even provide "take home collections" for young museum-goers. The museum was conceived as an underground building covered by a community park.
Proposed Programs and Exhibits
The Midway/Arcade

The Midway/Arcade is what it sounds like: a welter of experiences and varied scale offerings, sometimes utilizing small partitions or kiosks to divide the large open space into small personal ones. There is an opportunity for visitors to roam and sample, and it would not be unusual to see children stopping for brief periods at many of the smaller exhibits. There might be two dozen of these mini-experiences, with ideas like Skin Pigmentation; Aquarium; Block Printing; Zoetropes; Take-Apart-Flowers; Feel Boxes; Distortion Mirrors; Soap Bubbles, Kite Making, Puzzles or Mazes.

Within the Midway/Arcade, but situated in such a way as to limit the amount of through traffic, there would be several large scale experiences offering an opportunity for more sustained activity and involvement. These would be thematic exhibits and programs, and it is expected that visitors might spend ten to twenty minutes within one of these areas. These exhibits would invite investigation and exploration of a single theme, and might be set up as workshop spaces or include individual activity alcoves.

On the following pages, several of these exhibits are described.
Proposed Exhibit
What Is The Shape Of Sound?

Through a hands-on exploration of a series of oversize and familiar musical instruments, certain ideas about the form and function of these objects can be played with and revealed. This is not an exhibit about artifacts, but of the process of making music.

Throughout the exhibit, children will be able to compare the results of making sounds with big and little devices.

What is the effect of size, mass, tension in a string instrument?

Does a diving board have anything to do with an African finger piano? Is a trampoline a drum?
What Is The Shape Of Sound Exhibit (continued)

A collection of instruments from various cultures will be selected to demonstrate the commonalities of certain sound producing devices, and invite visitors to listen for the differences between the sounds produced by them.

The exhibit will be attended by program staff and volunteers, and it is hoped that some of these may have musical skills or interests.

School groups and workshops would be scheduled for the purpose of exploring the music-making potential of common objects, and children might make their own instruments to take home from their visit.
Proposed Exhibit
Where Am I?

This exhibit takes an oft-asked question and invites visitors to learn something about maps as abstractions of reality. A wide range of devices, models and images will help children find themselves in this building.

Where are we in the universe?
How far from this place to there?
Where does my grandpa live?

Aerial views of the District will allow children to find their house, school, shopping center, and maybe a traffic jam.

What does the scale of a map mean? In this simple workshop, children will have a chance to collaboratively make a huge blow up of a small image, with each child enlarging one simple section.

A series of treasure hunts will take children to the edges of this exhibit, and beyond. Hopefully there might be follow-up activities for the child to take home, or back to school.
Proposed Exhibit
Mini-Theatre and Program Space

Essentially, this is a quiet and very intimate amphitheatre. It is upholstered with carpeted tiers in an intimate sit-around. "Do any of you children know what a Yoruba ibedgi is? Let me tell you a story."

Weekend and school vacations might allow the space to be scheduled for performances of mimes, magicians, animal programs, or puppets. Visitors might put on their own productions.

Various crafts people would be provided with an informal setting in which to both demonstrate their talents and invite the audience to try their hand.

Properly designed, the space would be programmed to operate as an automated multi-screen rear-projection theatre revealing new worlds of bird beaks, religious ceremonies, growing plants, or sign language for deaf people.

The projectors allow for instant exhibits of what's new, or an easily changed billboard of events and activities for children to do all around Washington this month.
Although this is not a Children's Museum, the program analysis was very helpful in presenting a wide variety of ideas for structuring and organizing spaces. It explained and diagramed several systems with respect to circulation, space, story, and structure.
A. VISITORS

1) Entry - Peak Type
Load should contain
Rest Area (seating)
Admission control
(ticket sale)
Information/
Orientation Display
Lost & Found
(incl. children)

2) Exhibition

The public exhibition area has a number of basic characteristics which need be considered in the programming and design of such a facility. These areas are grouped in the following categories:

a. Story -- what is the information that you want to communicate, and what structure can it take.

b. Circulation -- what way do you want the people to move through the information/story.

c. Space -- what are the various spacial needs and their characteristics.

d. Structure -- what are the methods of enclosing this space and the methods of providing services to the exhibits (power, water, etc.).

a. Story. There are a variety of ways to structure information. The following diagrams illustrate the basic alternatives. These are not to be seen as physical designs but only as structure. Illustrations of selected characteristics are provided in the concept section.

One of the most important characteristics relating to the telling of a story is time. There appear to be many theories relating the total time of exposure to exhibits and their information transmission. The span of attention is critical when attempting to get a particular point across.

There appears to be no way as yet which can accurately predict this attention and comprehension. There are, however, a few "rules-of-thumb" which for lack of better information we have used in this report.

A maximum of 3 hours total stay time is average for a loosely structured museum made up of a series of small to medium size exhibits. After an average of 2 hours, the attention span drops considerably. Therefore, we have used a 2-hour average figure to develop most of the programs. We also feel that this figure considers that this facility will be competing for time with a number of other attractions in the area.

A second figure we will use is that of a 20-30 minute maximum single event. This does not include entry and exit time, which would vary some depending on whether the group remained standing or was seated.
8.3 (Cont.)

1) Story only/Main Theme

This is a highly structured system where all information given is necessary to deliver the full impact of the story. You must see all the information to understand. Once through the facility, you will have seen it all; and it would not be necessary to return unless the exhibit changes.

2) Stories/series -- general relationship

Within a general theme, this structure provides a number of individual and self-contained stories. Each can stand on its own, and a visitor need not see everyone to receive a completed picture.

3) General Information/Unstructured

This is similar to 2; however, each piece of information stands on its own, whereas in 2, it is a series of grouped pieces. Here a visitor can enter and leave at any point. He can spend as much or as little time, and the comprehensiveness of the information varies very little.

4) Combination

Combining some of the above into a structure which has a main story, a "must" to see, is enriched by supplementary information by either the "general" or "series" method. This latter information would fall into a "nice to see" category and would allow those who "can come back" an enticement to, in fact, return, but not frustrate the one-time visitor by making him feel that he has missed the point of the information.
8.3 (Cont.)

b. Circulation. The two basic methods of circulation in exhibit facilities are DIRECTED and NON-DIRECTED. The development of these are illustrated below. The additional dimension here is whether or not the circulation is perceived by the visitor; and if it is, in what way. A number of facilities have developed a system which appears unstructured, informal or casual and NON-DIRECTED, yet was very DIRECTED. When analyzed, the system very carefully took the visitor from one piece of information to another. The alternatives to this are truly the NON-DIRECTED system or the obviously DIRECTED, an extreme example being one where you ride a vehicle through the information, where even your time of exposure is controlled. The following illustrates the basic methods and indicates some of their characteristics.

DIRECTED

The DIRECTED system assures that the visitor "sees everything", and a very structured and comprehensive story can be told.

DIRECTED/WITH ALTERNATIVES

Here a lesser degree of control is maintained over the STORY by offering the visitor a choice of what order he is exposed to the information. It should be noted that the figure "8" pattern can be developed to see everything without repetition, while the figure "O" cannot. A story can be told with this system; however, continuity must be maintained between each alternative.
8.3 (Cont.)

NON-DIRECTED

This system has the minimum control and is used in those cases where there may or may not be a "theme". There is not a "story" to be told, due to the difficulty in maintaining continuity. A disadvantage to this system is that the visitor does not have a way of knowing whether or not he has seen everything.

COMBINATION

This diagram illustrates the combination of a DIRECTED and NON-DIRECTED system.

c. Space. The exhibit space can be looked at in a number of ways, all of which assist the designer to determine the combination of features which will best deliver the information.

First of these is SPACIAL DISPOSITION. The exhibit or information has environmental needs which very often do not match those of the visitor; i.e., special documents may require temperature and humidity control far beyond that which is necessary for the visitor.

. The exhibit is in your space.
The exhibit is in its space; you are in yours.

You are in its space.

The next series of items deal with the way a visitor uses the space. This information is supplemented by some basic data which may be used to design for the selected uses.

Moving/Paths or Linkages

As the visitor moves from one point to another, he may or not be exposed to information.

WITH INFORMATION
8.3 (Cont.)

WITHOUT INFORMATION

. Stopping
   Once at a "place", he may have the following characteristics
   Groups, large, over 10

WITH A SINGLE FOCUS

WITH A MULTI-FOCUS
bus drop-off sculpture at. exhibit
admin.

parking support exhibit
exhibit area

exhibit area
exhibit area
exhibit area

EXCELLENT PROJECT SELECTION FROM PLANNING \iff \text{ DETAIL DEVELOPMENT POTENTIAL.}

MORE ATTENTION TO EXISTING PARK IMPOT - SOME AREAS IS HANDLED:
- VERTICAL CIRCULATION NEEDS MORE ATTENTION - Ramps
- SENSE OF "ENTRY" \\
SEPARATE BUILDINGS - HOW ABOUT PORTIONS OF
(SEE BACK - A SINGLE BUILDING - HOLLOWED OUT - CARVED / POSSIBLY STRUCTURE CONTINUES - FORMS INDOOR/OUTDOOR SPACES,
MOBILE EXHIBIT COMPONENT - GOOD
- HOLLOW/ST (GARIBALDI) - NOT HANDLED WITH ENOUGH SENSITIVITY
- CONTINUITY OF OUTDOOR SPACE - EXCELLENT

SKETCHES HAVE "NICE" QUALITY - VERY PLAN
- ORIENTED - MORE SECTIONS / "SPIRIT" PERSPECTIVE ETC. - SKETCHES LOOSE READIBILITY BECAUSE OF LACK OF USE OF COLOR, ETC.

- ON NERIAL PHOTO - SHOW YOUR SITE IN ZIP-PRINT
COLOR OF SOME OTHER DESCRIPTION
AGREE ON NERIAL EXPLANATION BEING TOO FACT
Chris. S. Brock
First Quarter.

- Overall you talked about so many things the listener was lost and
  in this case it was a client who worked with you. What would happen
  to an uninstructed client n lawyer?
- you must boil down your complex, intimate knowledge to fundamentals
  from the most obvious one's for better communication w/ listener.

- Overall arcane patterns "talking" about but now have been shown.
- "things" or components (i.e. back-door need to be indicated
- unclear "sculpture-play" area needed. Large feeling of going up to what?
  Are you going to relate to the Master plan you just received?
  How does this sample relate to the main? You never showed it.

- Indicate elevations (grade, content #, etc.) on all documents
- on sections also show the existing grade condition.
- Label streets and drivis.
In summary, the project packet was presented in a manner that seems to be a concept or the project's overall design. There is a lack of clarity in the explanation of the various components and their relationships. The project appears to be divided into sections, but the connections between these sections are not clearly defined.

- lost sight of original site objectives

- Needs B/D development & study
  - attempt to deal with indoor/outdoor relationships and other experiential qualities
    - lack of hierarchy
    - barriers to circulation
    - consideration of functions of the building

- insufficient background or planning assumption
  - pursuing development
    - lack of concept diagrams which explain organization
BRUCK

STAN ADAMS

I'm not quite sure what I meant. The thesis students have requested more information on their project. Could you please clarify what you have

in mind? I believe the conceptual designs are well presented. However, some of the details need to be worked on. I would like to see more detailed quizzes in each category of problem.

- COULD BE CLEARER

BUILDING FORM!

- NOT A VERY ENERGY CONSCIOUS

WHICH DOOR, WHERE.

- THESE DRAWINGS ARE EXCELLENT AS AN DEVELOPMENTAL DESIGN TOOL BUT NEED TO BE CLEANED UP OR CODED FOR PRESENTATION!

SECTIONS GOOD BUT COULD BE LARGER
COMMENTS:
1. Soils info - what is it? any problems?
2. Graphics are quite good!!!
3. Use of proper scales - 25' and 250' are no good - there is no acceptable way to read human or engineers scale. 19 20, 20, 40, 50 and 60 or multiple of 10 i.e. 100, 200, 300, 400, 500 ft. to the inch.
4. 100 scale map looks smaller than 250''?
5. Parking needs - how much needed? where to locate?
6. Are you losing vegetation in SK-1? put the exist veg on top map. changing grade significantly
PRELIMINARY DESIGN