Science Museum
Exhibits
Typologies and Design Case Studies
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Today’s Agenda

- Exhibition Types
- Exhibit Types
- Exhibit Design Case Studies

1. Form
2. Pedagogical Approach
3. Themes, Narratives, Metaphors
Design Space of Exhibitions

1. Form
2. Pedagogical Approach
3. Themes, Narratives, Metaphors
exhibition: 1.0 Form

1.1 Access
   1.1.1 open side(s)
   1.1.2 controlled portals

1.2 Flow
   1.2.1 open plan (random exhibit access)
   1.2.2 sequential experience
exhibition: 2.0 Pedagogical Approach

2.1 information presentation
2.2 immersion
2.3 constructivism
2.4 by-product (of play)
exhibition: 3.0 Themes, Narrative, Metaphor

3.1 Content only
   3.1.1 unordered
   3.1.2 ordered

3.2 Theme
   3.2.1 content-dependent
   3.2.2 content-independent

3.3 Narrative ("scripted")
   3.3.1 “known” (usually in other media)
   3.3.2 local to exhibition

3.4 Metaphor
## Some Exhibit Venues

<table>
<thead>
<tr>
<th>MUSEUMS</th>
<th>form</th>
<th>pedagogy</th>
<th>theme</th>
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<tbody>
<tr>
<td>Coyote Point</td>
<td>Ecology</td>
<td>1.1.2</td>
<td>1.2.2</td>
</tr>
<tr>
<td>Exploratorium</td>
<td>Physics</td>
<td>1.1.2</td>
<td>1.2.1</td>
</tr>
<tr>
<td>Lawrence Hall of Science</td>
<td>Physics</td>
<td>1.1.2</td>
<td>1.2.1</td>
</tr>
<tr>
<td>Tech Museum</td>
<td>Innovation</td>
<td>1.1.2</td>
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<table>
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<tr>
<th>EXHIBITIONS</th>
<th>form</th>
<th>pedagogy</th>
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<tr>
<td>Hi, It's Me</td>
<td>Telecom Innovations</td>
<td>1.1.1</td>
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<td>Nanotechnology</td>
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<tr>
<td>XFR</td>
<td>Reading Technology</td>
<td>1.1.1</td>
<td>1.2.1</td>
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</table>
Coyle Point Museum

In the beginning God created the heaven and the earth:
Genesis 1:1

"I began this morning to feel something truly the beginning of
the knowledge that other creatures and I are here together."
- Paisley Berry

"Air, fire, water, and Earth is our dancing place now."
- Gary Snyder

"In the center of the world you have found me and observed
the goodness and the beauty and the strangeness of the
growing earth, the only mother..."
- Rumi
Exploratorium
La\ wrence Hall of Science
Tech Museum of Innovation
Hi, It’s Me!
Nanotechnology
XFR: eXperiments in the Future of Reading
Today’s Agenda

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1. Form
2. Pedagogical Approach
3. Themes, Narratives, Metaphors
Design Space of Exhibits

1. Form
2. Pedagogical Approach
3. Themes, Narratives, Metaphors
1.1 Form:

1.1.1 Stand alone object

1.1.1.1 Table (including workbenches)

1.1.1.2 Table-top object

1.1.1.3 Floor-standing (no horizontal surface)
exhibit: 1.1 Form:

- 1.1.1 stand alone object
  - 1.1.1.1 table (including workbenches)
  - 1.1.1.2 table-top object
  - 1.1.1.3 floor-standing (no horizontal surface)
- 1.1.2 partition or wall
- 1.1.3 enclosure

1.1.1.2 table-top object
1.1 Form: Environment

1.1.1 stand alone object

1.1.1.1 table (including workbenches)

1.1.1.2 table-top object

1.1.1.3 floor-standing (no horizontal surfc.)

1.1.1.3 floor-standing
1.1 Form:

1.1.2 partition or wall
1.1 Form:

1.1.1 Stand-alone object
1.1.1.1 Table (including workbenches)
1.1.1.2 Table-top object
1.1.1.3 Floor-standing (no horizontal surface)

1.1.2 Partition or wall

1.1.3 Enclosure

1.1.3.3 Enclosure
exhibit: **1.2 Form: number of users**

1.2.1 one user

1.2.2 multiple users
exhibit: 1.3 Form: user position

1.3.1 stand
1.3.2 sit
1.3.3 walk
exhibit: 1.4 Form: Sided

1.4.1 one sided

1.4.2 two or more useful sides
exhibit: 1.5 Form: Finish

1.5.1 “honest” material

1.5.2 “skinned” panel
1.5.1 “honest” material
2.1 Information presentation

2.2 Immersion

2.3 Constructivism

2.4 by-product (of play)
2.2 immersion
2.3 constructivism
2.4 by-product (of play)
exhibit: 3.1 Theme, Narrative, Metaphor: None

3.1.1 generic (e.g. kiosk)
3.1.2 mechanism reveals workings
3.1.3 embedded in environment
exhibit: 3.1 Theme, Narrative, Metaphor: None

3.1.1 generic (e.g. kiosk)
exhibit: 3.1 Theme, Narrative, Metaphor: None
exhibit: 3.1 Theme, Narrative, Metaphor: None
3.2 Theme, Narrative, Metaphor: Message

3.2.1 form and appearance part of larger message independent of exhibition

3.2.2 required element; necessary to make sense of overall exhibition message

3.2.3 uses overall message of exhibition to make ancillary point
3.3 Theme, Narrative, Metaphor: Scripted

3.3.1 Experience of exhibit is not scripted

3.3.2 Experience of exhibit is individually scripted

3.3.3 Experience of exhibit is part of exhibition script
Today’s Agenda

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1. Form
2. Pedagogical Approach
3. Themes, Narratives, Metaphors
case study: ReadingEyeDog

1.1.1.3 floor standing
1.2.1 one user
1.3.1 stand
1.4.2 two or more useful sides
1.5.1 “honest” material expression
2.1 information presentation
3.1.2 reveals workings
3.2.2 adds to overall message of exhibition
3.3.2 scripted
case study: ReadingEyeDog
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case study: **ReadingEyeDog**

- Concept: Mark Chow
- Design: Banny Bannerjee
- Construction: Mark Chow, Steve Harrison, Scott Minneman, Anne Balsamo
- Software Integration: Mark Chow, Jonathon Cohen, Matt Gorbet
- Materials: 8020, aluminum, plywood, naugahyde, LCD screens, steel sheet, PC, firewire cameras
case study: Speeder Reader

1.1.1.3 floor standing
1.2.1 one user
1.3.2 sit
1.4.1 one useful side
1.5.1 “honest” material expression
2.4 by-product of play (also 2.7 immersion for RSVP technology)
3.1.3 embedded technology does not expose processes
3.2.2 adds to overall message of exhibition
3.3.1 not scripted
case study: Speeder Reader
case study: Speeder Reader
case study: Speeder Reader
case study: Speeder Reader

- Concept: Maribeth Back
- Design: Steve Harrison
- Software implementation: Maribeth Back
- Plastic Etching: Scott Minneman
- Construction: Steve Harrison, Maribeth Back
- Materials: 8020, plywood, Formica, plexiglass, twinwall acrylic sheeting, PC, monitor, Happ steering wheel and other arcade-grade interface controls, perforated stainless steel