SMITHSONIAN INSTITUTION NATIONAL MUSEUM OF NATURAL HISTORY

MAP PROJECT

Part II - Summary Report of Map Research

Office of Policy and Analysis
Smithsonian Institution
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GOALS OF THE RESEARCH

- To provide information and ideas in support of improved wayfinding in NMNH, including:

  - Printed maps

  - Digital device maps

  - Content for digital displays

 - Brochure-map guides

MAP RESEARCH METHOD

- OP&A team collected and analyzed existing museum maps (29 maps from US and Britain) and identified 10 key variables that were then used to evaluate the maps

- OP&A Team conducted Wayfinding Seminars to review literature on wayfinding and noted key principles relevant to NMNH

- Group exercise in map comparison using the 10 key variables

KEY VARIABLES OF MUSEUM MAPS

1. Landmarks
2. Perspective
3. Size
4. Symbols
5. Color
6. Legend

7. Highlights
8. Text labels
9. Pathways
10. Clarity

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1. LANDMARKS

Landmarks can be drawn or denoted by icons in order to orient visitors. How well does this map utilize landmarks as orientation and navigational aids?
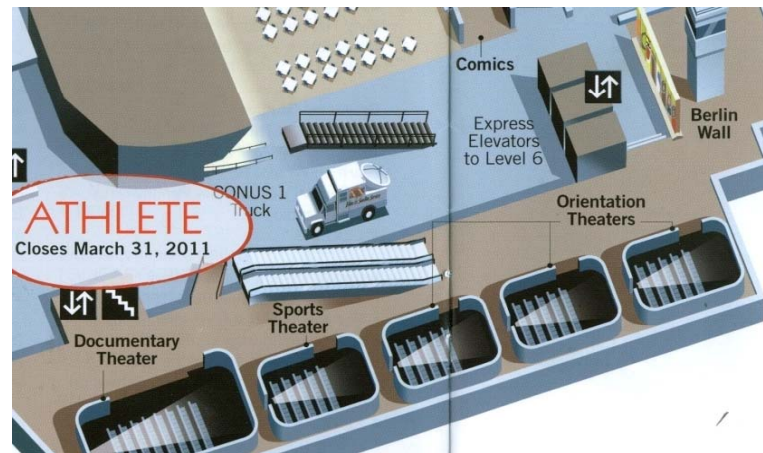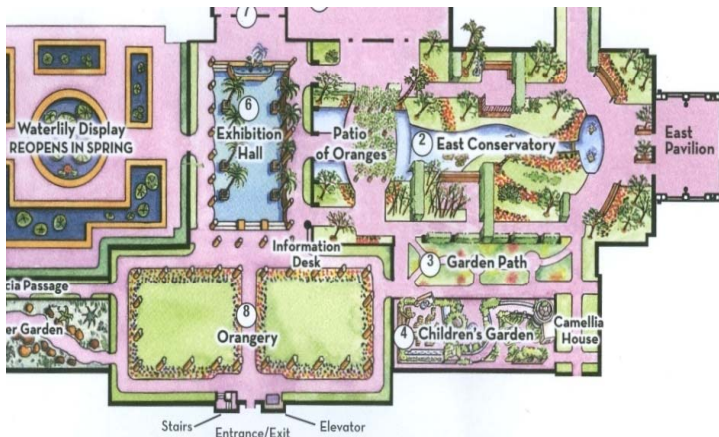
2. PERSPECTIVE

Museum maps can have either an isometric or "top down" perspective – preference between the two is subjective. How well does the perspective of the map help visitors orient themselves and navigate the space?
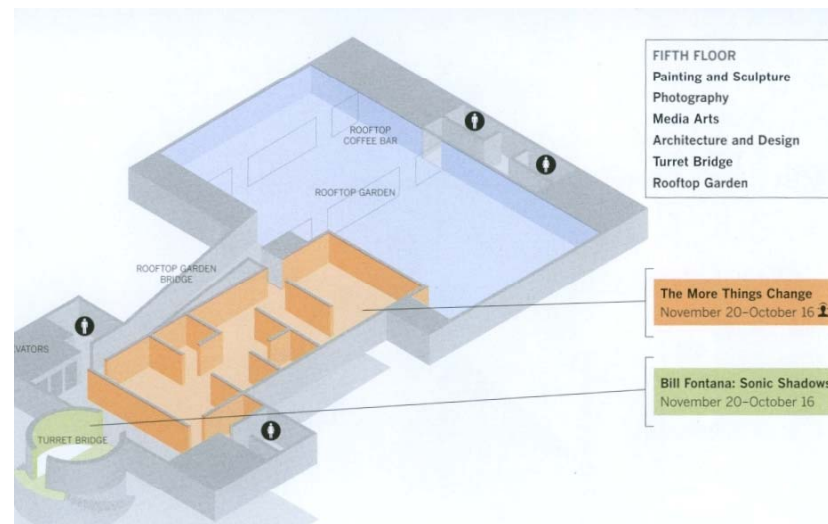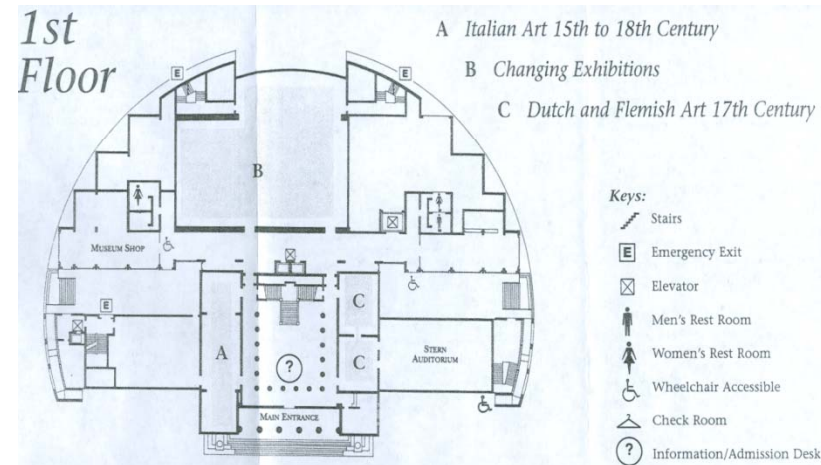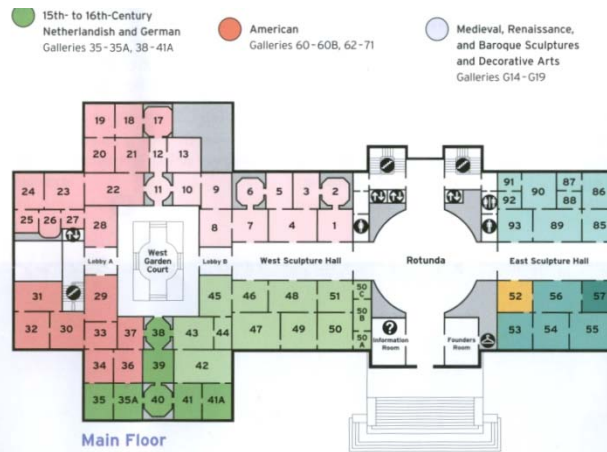
3. SIZE

There are trade-offs between the size of the map image and the size of the paper on which it is placed. Does this map offer a good balance between portability and legibility?

4. SYMBOLS

How visible, understandable, and useful are the symbols used for restrooms, elevators, escalators, parking, etc.? Are they standard forms?

5. Color

Is color-coding successfully used in order to promote clarity in identifying and navigating the regions depicted in the map? Does color enhance understanding of exhibition themes/content? Will the map still work for those who are color-blind?
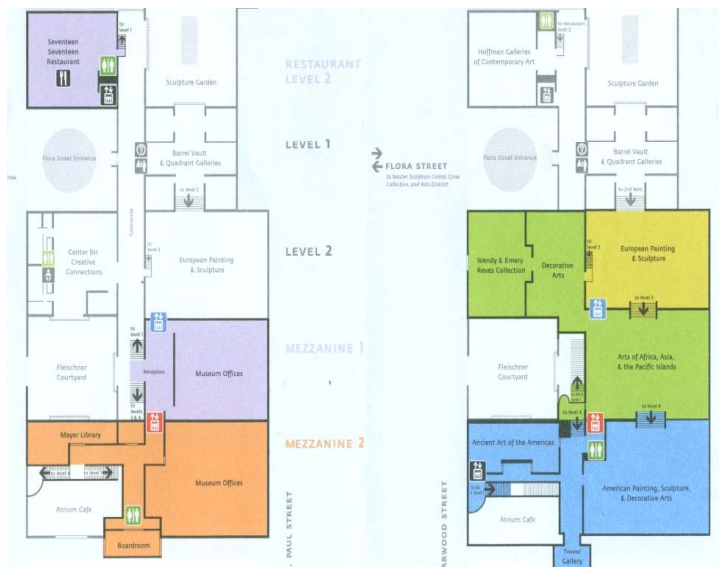
6. Legend

Is a legend used to label the regions or items depicted on the map? Does the legend support or interfere with ease of use? Is it necessary?

7. HIGHLIGHTS

Does the map list museum highlights or specific items and their locations? If so, is it obvious what and where they are? Would they be easy to find?

One Life

Lobby

Education Center

American Experience

Portraiture Now

F Street
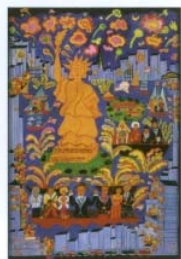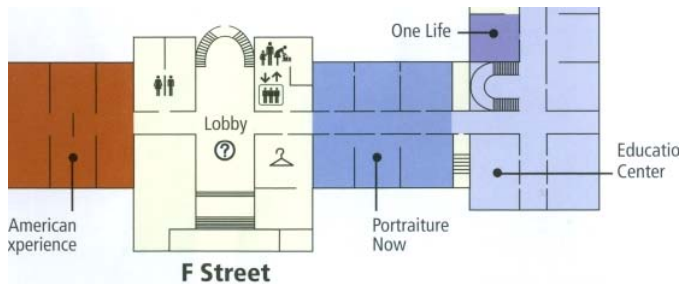
Folk Art

American Origins

American Origins

Our Peoples Exhibition

Allies in War, Partners in Peace, by Edward Hlavka, 2004. St. George, Utah. Bronze. Gift of the Oneida Indian Nation of New York.

The role of guns in Native American history is one of the subjects explored in the *Our Peoples* exhibition.

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8. TEXT LABELS
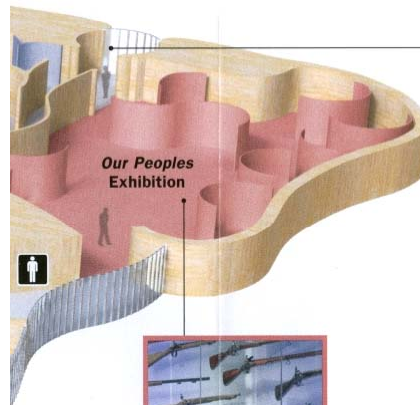
Are areas within the museum labeled with text where appropriate? Is the text legible? Does it enhance visitor understanding of what is located within that space?

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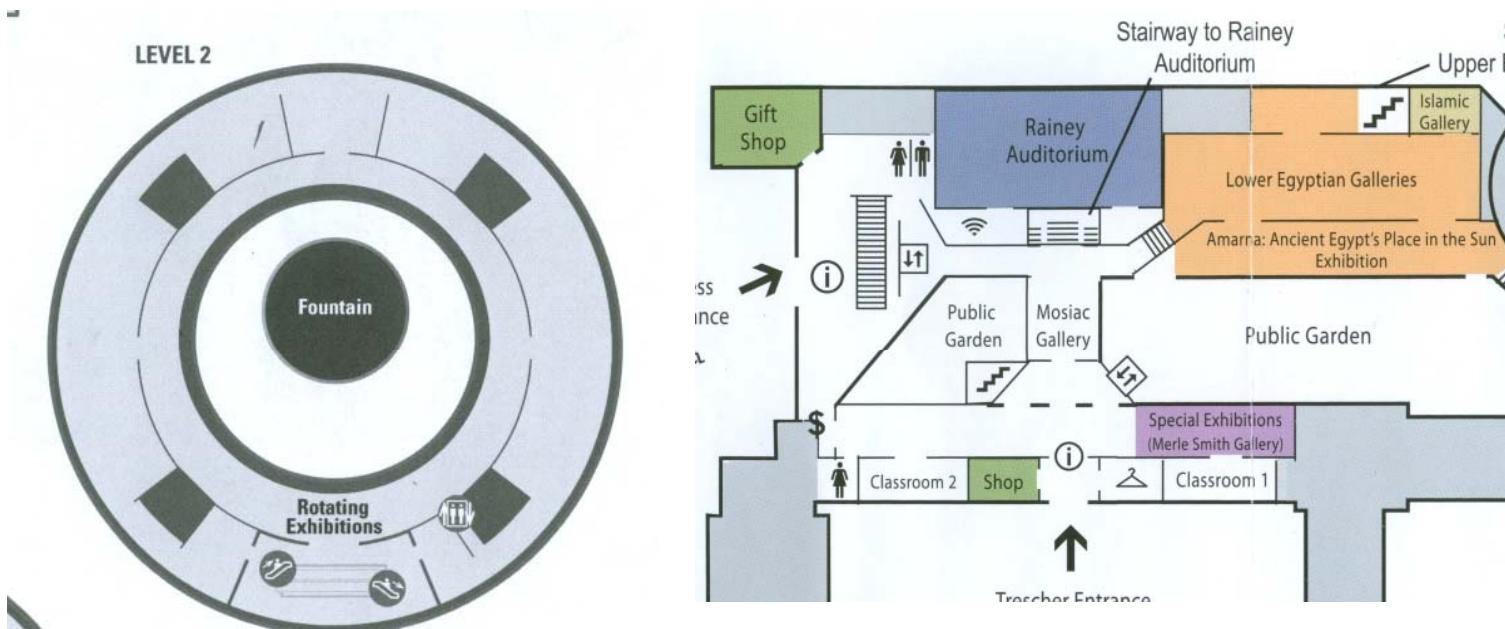
9. PATHWAYS

Are pathways through the museum easily locatable and easy to follow? Are interior doors and entryways well marked?

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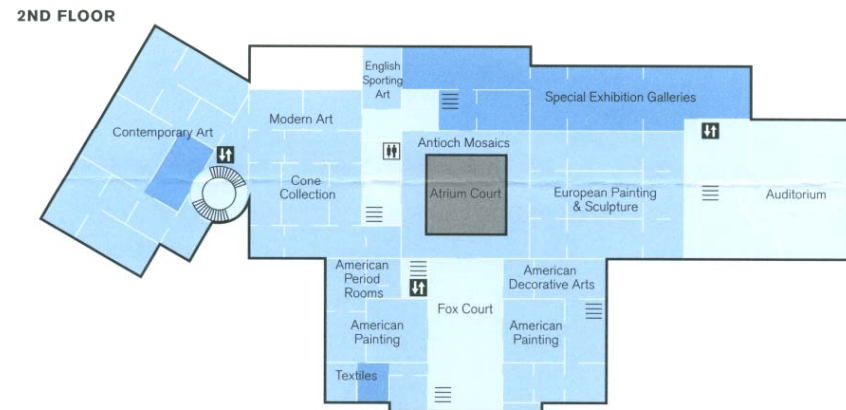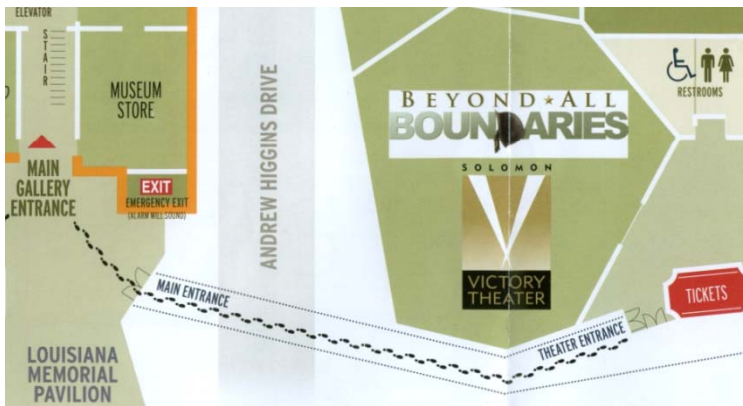
10. CLARITY

This is a summary variable. In light of all the choices made among the other nine variables, is the map clear and informative? Or is it cluttered and difficult to read?
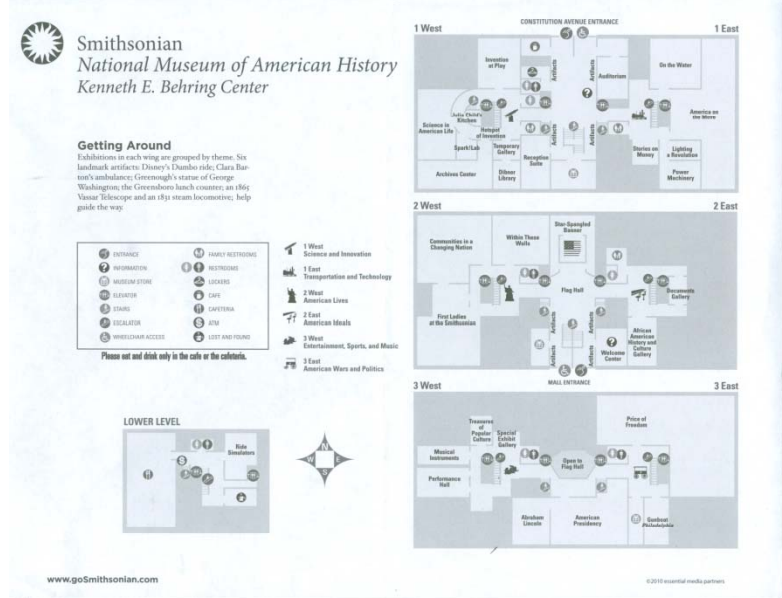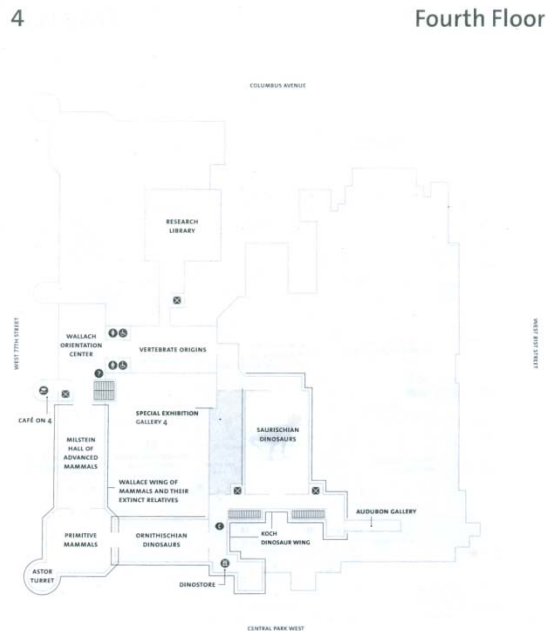
PRINCIPLES FROM THE WAYFINDING LITERATURE

- Orientation
- Navigation
- Maps
- Wayfinding

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ORIENTATION

- Maps should be able to be oriented by visitors to their liking (e.g., to the space, cardinal directions, etc.)

- Use landmarks to provide orientation clues

- Some people need to know where they are at all times; others don't mind being lost

- Create an identity at each location (different in visual character from all the others)

NAVIGATION

- Visitors will follow the route most traveled (drawn by movement of others)

- Visitors are drawn to light, large objects, doorways, and other people

- Women are more likely to navigate by near landmarks; Men are generally better at spatial rotation (required by plan-view)

- Don't give the visitor too many choices

- Provide signs at decision points

MAPS

- Do not use extensive legends on maps

- Maps should show only **necessary** info

- Color-code the map to the environment

- Do not combine the map with listings

- Color-code the map by topic

- Use variation to get attention – signs and map colors that catch the eye

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WAYFINDING

- Different wayfinding tasks require different wayfinding aids

- Wayfinding devices should be an overall system – matching in color, symbols, fonts, icons, etc.

- Create well-structured paths

- Use the same signs for the same context

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NEXT STEP

Drawing on this research the NMNH team will create prototype map designs and prototype brochure/tour designs that will be tested by joint OP&A-NMNH teams in four sessions during Fall 2011.

THANKS

The OP&A study team expresses its deep appreciation to Samir Bitar and the members of the NMNH study team for their cooperation and assistance in conducting this research.

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