Urban Sound Garden at Rincon Park

Joyce Ma

June 2005

THIS IS NOT A DEFINITIVE FINAL REPORT

FORMATIVE evaluation studies like this one often:

- are conducted quickly, which may mean
  - small sample sizes
  - expedited analyses
  - brief reports

- look at an earlier version of the exhibit/program, which may mean
  - a focus on problems and solutions, rather than successes
  - a change in form or title of the final exhibit/program
Outdoor Exploratorium: Formative Evaluation
Urban Sound Garden at Rincon Park

Joyce Ma
June 2005

PURPOSE
To determine
• if pedestrians heard any of the hidden sounds
• what they do and think when they hear the hidden sounds
• if people who heard the sounds thought the experience was interesting
• if pedestrians noticed other sounds as well. In particular, if people who heard the hidden sounds were more attuned to other sounds in their environment compared to people who did not hear the hidden sounds.

METHOD
• Two CD players and speakers were hidden in the grass along a gravel path (Figure 1) in Rincon Park. One played sounds of wolves howling one both days, while the other played sounds of a babbling brook/bubbling water the first day and sounds of rocks falling and metal scrapping the second day.
• An evaluator sat close to the speakers and waited for pedestrians to walk by the speakers. When they had moved out of hearing range, the evaluator stopped the pedestrian group and asked a series of questions. See Appendix A.
• We collected data on 2 days, Thursday, June 9 and Sunday, June 12.

DATA CORPUS
• We collected a total of 20 observations with interviews.
• Groups

<table>
<thead>
<tr>
<th>Group Type</th>
<th>Count (out of 20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual adults</td>
<td>7</td>
</tr>
<tr>
<td>Multigenerational group</td>
<td>2</td>
</tr>
<tr>
<td>Adult peer group</td>
<td>11</td>
</tr>
</tbody>
</table>
RESULTS

Did pedestrians hear the hidden sounds?

- 10/20 (50%) of the pedestrians heard one of the hidden sounds.
  - 10 out of the 10 pedestrians who heard the hidden sounds heard the howling.
  - One person also heard the bubbling sounds, and one person also heard the moving rocks, although he did not know what the sound was of.
- 9/20 (50%) did not hear either sound.
- 1/20 claimed that he heard an unusual sound but described hearing music, and we were not sure that he actually heard one of our hidden sounds.

What did they think when they heard the sounds?

- People tried to identify the source for the sounds (6 groups)
  
  Group 4: Must be like uh: turned around to see if there was a boat or something.
  Group 10: (1) Look where
  Group 12: (2) Where was it coming from? (1) I thought it was the wind hitting the structure.
  Group 16: Dog: well, like a dog, over there (pointing to ferry bldg.).
  Group 17: (both) What was that. (3) did you hear that?
  Group 20: I wondered where it came from.
• People thought the sounds were associated with the bow and arrow (2 groups)
  
  Group15: I thought (it was) associated with the bow and arrow or historic sign of exhibit.
  
  Group19: (1) I was trying to get the connection to the grass. (2) I was trying to understand the connection to the bow and arrow.

• Pedestrians wondered why the sounds were there (1 group)
  
  Group10: (2) purpose.

• People thought it was abnormal and mysterious (2 groups)
  
  Group7: That it's an abnormal sound. Every day I walk here; I never heard it before.
  
  Group18: Eerie, like reminded me of Homer's Odyssey and the Iliad--the cybils (sirens?)

• One group didn't know what to think (1 group)
  
  Group8: (1) don't know. (2) don't know.

How interesting did people find the experience?

<table>
<thead>
<tr>
<th>Interest Rating</th>
<th>Count (out of 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interesting</td>
<td>5</td>
</tr>
<tr>
<td>Somewhat Interesting</td>
<td>4</td>
</tr>
<tr>
<td>Neutral</td>
<td>1</td>
</tr>
<tr>
<td>Somewhat Not Interesting</td>
<td>0</td>
</tr>
<tr>
<td>Not Interesting</td>
<td>0</td>
</tr>
</tbody>
</table>

• What was interesting about the experience
  
  − The incongruity (3 groups)
    
    Group10: (2) I'd say the situation: it seemed out-of-place.
    
    Group18: Setting: unusual architecture: the sound of the bay. It's an icon that's out-of-place but makes sense.
    
    Group19: (2) Right in an area with this bow and arrow setting, it gives a feeling of being away from San Francisco: transported geographically somewhere else.
    
    (1) I agree.
  
  − The sounds themselves (2 groups)
    
    Group7: The sound, and the type of sound.
    
    Group8: the noise
- Trying to connect the sound to something in the environment (2 group)
  
  Group15: I was thinking there's a Native American tie-in with the bow and the wolf; a relationship between them.

  Group16: Something going wrong maybe like an animal in pain.

- The mystery (1 group)
  
  Group12: (1) The mystery of it, not knowing what it was or where it was coming from.
  
  (2) Being out in the open and not being able to determine where the sound was coming from.

- What was not interesting about the experience

  - The sounds were hard to identify (1 group)
    
    Group4: If I saw something or if I knew what it was it would have been interesting.

  - The sounds were too incongruous (1 group)
    
    Group10: (2) its being out of place. (1) Too different; it needs to fit the space better, then it would be good.

  - The sounds didn't have 'presence' (1 group)
    
    Group17: (3) not loud enough (1) Not engaging or fleeting (?).

What was the point of the exhibit or experience?

- It tells you something about this particular location, what was here or what might be here (8 groups)

  Group4: (2) About... keep away from that end. (1) Place is haunted, bad spirits

  Group8: (1) I thought it was a whale [around here].

  Group12: (2) Anything to do with Bay area ecological: grass, flowers, water.

  Group15: A tribute to Native Americans who lived in this area.

  Group16: I thought it was about the arrow; or maybe the grass that was here before we planted it; but I know this is all landfill.

  Group17: (3) Bow and arrow.

    (1) Marine life.

  Group18: It's a commemoration of the Indians that were in this area.

  Group19: (1) Sounds that might go with the scenery. (2) well, I assume the sounds don't have anything to do with the bow and arrow as a backdrop; a reminder of what this area was like before people.
• It’s about sounds and places, on an abstract level (1 group)
  Group10: (2) They’re trying to make a statement that certain sounds belong in certain places and when they’re unexpected they’ll elicit a reaction.

• It’s about nature and humans (1 group)
  Group7: This exhibit might be about natural resources; use of light, wind, and the effect on human life.

• It’s about sounds, with no further description (1 group)
  Group12: (1) Sound.

• It has no point (1 group)
  Group8: (2) don’t know.

What other sounds did people report hearing?
• People who did *not* hear the hidden sounds pointed out more types of naturally occurring sounds in the environment. ¹

<table>
<thead>
<tr>
<th>‘Natural’ sounds people heard</th>
<th>Count (out of 10 groups who heard the hidden sounds)</th>
<th>Count (out of 9 groups who did not hear the hidden sounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Their own and other people’s conversations</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Dogs, birds, and other animals</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Wind</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>The Bay</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>The Clock</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Walking on gravel</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of different ‘natural’ sounds people heard</th>
<th>Count (out of 10 groups who heard the hidden sounds)</th>
<th>Count (out of 9 groups who did not hear the hidden sounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

  Mean: 1   Mean: 2.1
  Median: 1  Median: 2

¹ A Mann-Whitney Test shows a significant difference between the two groups; U=14.0, p=.010 < .05
What sounds do people try to listen for by the Bay?

- We asked the people who did not hear the hidden sounds what they try to listen for when they are walking around the city. Visitors described listening for:
  - Visitor9: (1) Birds. (3) Runner on left.
  - Visitor11: He’s a birder, so birds.
  - Visitor13: (2) Birds (3) (to son): What about in the morning when we take our walks? We always listen for birds.
  - Visitor14: (1) Screeching tires?

- Visitors described listening for the following by the Bay:
  - Visitor2: (3) water. (1) the murmur of the water against the concrete wall as it laps up; it’s very calming. (2) I think the auditory sense is one of separation.
  - Visitor3: someone yelling, "Get out of the way," or something.
  - Visitor5: Probably the sounds of water.
  - Visitor13: (2) Maybe waves... (3) Usually we listen for sea lions.
  - Visitor14: (1) Lapping water is nice. (3) Sea lions maybe.

**SUMMARY**

- Half the pedestrians who walked through the sound path heard the hidden sounds.
- There is little indication that people became more attuned to sounds or reflected, on an abstract level, about the connection between sounds and place from this experience. In fact only one person thought about the relationship between sounds and place after hearing the hidden sounds.
- Instead, people who heard and thought about the sounds tried to connect the sounds to the immediate environment. That is, they tried to identify where the sounds might have come from and thought about how the sounds may be related to the place’s history; people looked for and wanted to identify a relationship between the sounds and the site. Capitalizing on this behavior depends on finding sounds that are intriguing enough to make people pause and reflect on possible connections between what they hear and the place they hear it. To help the brainstorming process for possible sounds, we include in this report sounds that visitors claim they try to listen for while at the Bay.
- Finally, people who did not hear the hidden sounds reported hearing, on average, twice as many naturally occurring sounds in the environment. This finding may be simply an artifact of the method used: The question asking visitors what other sounds they heard was the sixth question asked of visitors who heard the hidden sounds and only the second for visitors who did not hear the hidden sounds. Subject fatigue may have made the first group

---

2 We did not ask visitors who did hear the hidden sounds because we needed to keep the interview short.
give shorter, less detailed response. Yet, this result also raises the possibility that depending on the sounds used, the manufactured sounds can become the primary focus of people’s aural experience and detracted people’s attention from the other sounds in the environment. Therefore, the choice of sounds is critical to making this a successful exhibit.

ACKNOWLEDGEMENTS
The author would like to thank Heather Posner and Fay Dearborn for collecting the data for this study. This material is based upon work supported by the National Science Foundation under Grant number 0104478. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.
APPENDIX A

Observations
Observe and interview individuals or groups. Do not observe/interview anyone under 8. Note anything of interest. In particular, make note of the following:

1. Did they stop?
2. Did they look for the speaker?
3. Other observations…

Questions
1. Did you hear anything unusual while you were walking along this path?
   • If YES to Q1
2. Can you describe what you heard?
3. What were you thinking, what was going through your mind, when you first heard it? [Probe: don’t be satisfied with ‘curious’ or ‘surprised’. Say more? What were you curious about? Anything else?]
4. How interesting did you find that experience? Would you say that was …
   Uninteresting Somewhat Neutral Somewhat Interesting
   Uninteresting Interesting
5. What made it ______________ for you?
6. Was there anything annoying about this experience?
7. Can you describe any other sounds you noticed while you were walking along this path? [Probe to exhaustion] Any sounds at all you remember hearing on the way --they don’t have to be unusual.
8. I know that we give you no information about this exhibit, but can you make a guess as to what this exhibit is about? What do you think the exhibit designer is trying to show with this exhibit?
   • If NO to Q1
2. Can you describe any sounds you noticed while you were walking along this path?
3. Are there any sounds you try to listen for while you’re walking?
   a. What about when you’re walking near the bay?