

# Everyone is You and Me

## Post-Redesign Evaluation

Adam Klinger and Nina Hido  
January 2013

### **THIS IS A POST-REDESIGN EVALUATION REPORT**

After an exhibit has been renovated, redesigned, or refurbished in preparation for the Exploratorium's move from the Palace of Fine Arts to Pier 15, an interview and observation study is conducted. The purpose of the study is to identify any major issues that would require immediate attention prior to the move. This collection of redesign evaluations will serve as a baseline of information for the Exploratorium's new exhibit set at Pier 15.

Post-redesign studies like this one **are conducted quickly**, which may mean:

- small sample sizes
- expedited analyses
- brief reports

# Everyone is You and Me

## Post-Redesign Evaluation

### Study Goals

After an exhibit has been renovated, redesigned, or refurbished in preparation for the Exploratorium's move from the Palace of Fine Arts to Pier 15, an interview and observation study is conducted. The purpose of the study is to identify any major issues that would require immediate attention prior to the move. This collection of redesign evaluations will serve as a baseline of information for the Exploratorium's new exhibit set at Pier 15.

General goals:

- To confirm that visitors are able to access and use the exhibit
- To confirm that visitors can build a basic understanding of the exhibit's content
- To uncover visitors' frustrations and confusions
- To understand whether visitors move on from an exhibit for intrinsic or extrinsic reasons

### Exhibit Description

Light coming from a real object cannot be distinguished from light coming from an image. Two people sit on opposite sides of a one-way mirror. This mirror reflects one third of the light, lets one third of the light through to the other side, and absorbs the last third. By changing the illumination on either side, one is able to combine the two faces into one face, combining some features of one person with some features of the other person.



## Methods

Uncued observations and interviews were conducted. A researcher randomly selected visitors who crossed an imaginary line on the floor that stopped facing the exhibit with two feet planted and either looked at or touched the exhibit for approximately 15 or more seconds.

Uncued visitors do not know they are part of the study until after they finish using the exhibit so their behavior can be considered representative of normal use patterns. This means that some of the visitors in this study may have used the exhibit only briefly.

Visitors were approached after they left the exhibit and asked if they would be willing to participate in a 7-question interview about their experience at the exhibit.

## Demographics

Gender	Count (N=12)
M	6
F	6

English as a Second Language?	Count (N=12)
N	10
Y	2

Estimated Age	Count (N=12)
8-12	2
13-17	2
18-29	1
30s	1
40s	4
50s	2
60+	0

Visitor Group Composition	Count (N=12)
Adults-only	5
Adults with children	5
Adults w/ teens	2
Adults w/ teens and children	0

## Findings

### Holding Time

This is the time the visitor spent using or otherwise engaged with this exhibit. The amount of time a visitor spends at an exhibit is influenced by many factors and can indicate level of engagement or interest, but not as a measure on its own.

<b>Time at exhibit</b>	<b>mm:ss (N=12)</b>
Mean	01:13
Median	01:04
Minimum	00:30
Maximum	02:12

### Visitor Behaviors

Visitors were observed as they used various parts of the exhibit.

<b>Align faces correctly, over lapping eyes?</b>	<b>Count (N=12)</b>
Yes	12
No	0

<b>Adjust light to mix faces?</b>	<b>Count (N=12)</b>
Yes	12
No	0

<b>Turn light up and press button to turn off side light?</b>	<b>Count (N=12)</b>
both people	12
only one side	0

### Visitor Interest

Visitors were asked about their interest in the exhibit and why they rated from “not interesting” to “very interesting” (1 – 7).

Interest Level	Count (N=12)
High Interest (6-7)	6
Moderate Interest (4-5)	6
Low Interest (1-3)	0

### Visitor responses:

H	It entertained the kids. [And how about you?] Really neat. [Tell me more.] Interesting to combine faces.
H	Its experiencing with light and with the people doing it, it's interesting.
H	Because I could see my face in certain light and then his face in different light.
H	It's fun to melt your face with someone else's. [Tell me more.] Also like my features on someone else's.
H	Cool. [Tell me more.] Face was inside of his face, Anthony's face was inside my husband's head.
H	Because it was fun to see the melting of the faces. [Anything else?] Easy to see how he looked before he had his moustache.
M	It was fun, good sharing. [Tell me more.] The idea of blending the faces, good couples' exercise.
M	Because it's not the best exhibit here but it's funny [Tell me more.] Physical thing I've never seen before.
M	Strange, and also original, never seen it before. Funny how the faces melt into one another.
M	It didn't have a wow-factor. [Tell me more.] Probably the way two faces blend, different in age in this case.
M	Because if the kinds would stay still enough to do it I would have given it a higher number.
M	There are other interesting exhibits in the museum, and I've seen this one before, because I've been to lot of science museums.

### Visitor Frustration or Confusion

Visitors were asked to tell us if there was anything confusing or frustrating, what the source of the frustration was, and whether or not it made them want to leave the exhibit and move on to another one.

Source of visitor frustration or confusion*	Count	# that wanted to move on
Looked like a mirror	1	0
Age difference between users	1	1
Not enough time	1	0
Took effort to get lighting right	1	0
Nothing frustrating	9	--

\*Totals may add up to more than N = 12 because visitors gave more than one response.

### Visitor Understanding

Visitors were asked what they think the exhibit was about with the goal to determine whether or not they have a basic understanding of the concepts presented and to identify possible areas of misunderstanding. We acknowledge that this study has a small sample size and that these findings illustrate trends and may not be representative.

It appears that visitors DO have a basic understanding of concepts presented.	X
It appears that visitors DO NOT have a basic understanding of concepts presented.	

#### Visitor responses:

- Light and reflection, how stronger light affects the image.
- (Pauses a long time) No. (laughs).
- Experimenting with different lights you can do different things.
- Reflection and light.
- You could say interactive.
- Seeing your partner's face and you at the same time, but it's not a mirror.
- Blending faces [Tell me more] (pause, long pause) nothing comes to mind.
- Trick lighting; in certain light it creates an illusion.
- About the effect of the lighting, how it affects images.
- Use of light and mirrors to melt two different images.
- Light waves, how mirrors make reflections.
- Difference between reflection and the power of the light on each side of the glass.

### Visitor Reasoning for Leaving the Exhibit

The goal of this question is to explore how open or closed-ended the exhibit seems to be for the visitor. Visitors tend to leave exhibits for intrinsic reasons, such as feeling bored, or finished with the experience, or for extrinsic reasons, like having to go to lunch or being distracted by another exhibit. Leaving for intrinsic reasons could suggest a more close-ended exhibit experience.

Reasons for moving on to the next exhibit	Count (N=12)
Intrinsic	5
Extrinsic	7

Visitor responses:

Intrinsic	I was done with it.
Intrinsic	Done.
Intrinsic	Done.
Intrinsic	It didn't hold my interest any longer.
Intrinsic	Seen all (there is to see here).
Extrinsic	Wanted to try the other face-blending exhibit (my father's nose).
Extrinsic	Continue seeing other stuff here at the museum.
Extrinsic	Arrived from Italy, more things to see.
Extrinsic	See if there are similar ones out there.
Extrinsic	Daughter.
Extrinsic	Wanted to try Your Father's Face.
Extrinsic	Kids.

## Conclusions

*Based on this small sample, we conclude that the redesigned exhibit does not require immediate remediation. This evaluation did not identify sufficient impediments to visitor use, engagement or basic understanding.*

## APPENDIX: Graphic Panel

6012\_L1\_EveryoneIsYouAndMe\_ControlPanel (19.625" x 9.25") .5" round corners w/ 2 internal perforations | Embedded 1/16" polycarb + 1/16" ABS

**everyone is you and me**

Create a completely new person by blending your face with your partner's.

Find a partner!

**Try this:**

- Sit down. Line up your faces so that your eyes overlap.
- Adjust the **light** so that each of you sees a mixture of your faces.
- Turn the light all the way up, and have your partner do the same. Now press the **button** to turn off the light from the side.

**Light**

**What's going on?**

This glass works like a mirror or a window, depending on how it's lit. When your side is brighter, it's easier to see your own reflection. When your partner's side is brighter, you see more of their face. At what point do you feel that your face is no longer your own?

Films have shown one person seamlessly changing into another person (or a monster) for decades, creating a dreamy, surreal shift of identity.

## Acknowledgements

The authors would like to thank Antti Vikstedt for observing, recruiting and interviewing visitors for this study.

This material was created with funding provided by the Gordon and Betty Moore Foundation. Any opinions, findings, conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect their views.

GORDON AND BETTY  
**MOORE**  
FOUNDATION