

# Time-Lapse

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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

## Mind – Formative Time-Lapse

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### PURPOSE

Jona Frank's Time-Lapse consists of 4 different sets of photographs that currently sit in a small alcove near the entrance to the Mind Section. (See Figure 1.) Each set of photographs consists of 7-8 photos of the same subject at different times during his/her life from childhood to adulthood.

Figure 1. Time-Lapse in the Mind Alcove



This formative evaluation attempts to answer the following about Time-Lapse:

- Does going from one photo to the next change visitors' impressions of the subject? In particular, which order (younger to older or older to younger) effects the greater sense of change?

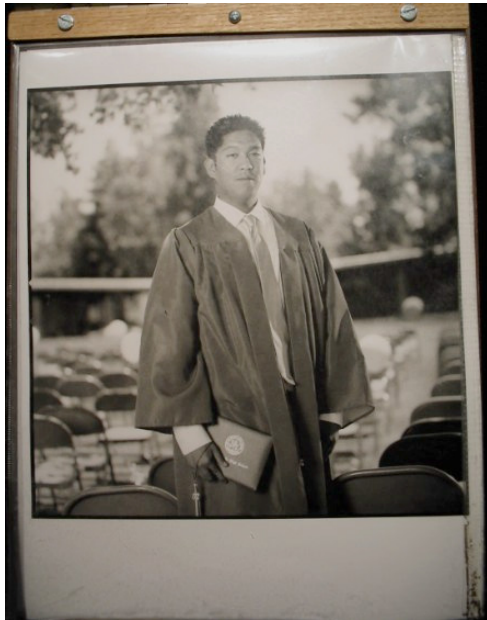
- Do visitors feel sympathy for (or empathy with) the subject? Does that feeling change between the first photo and the last photo?
- Do visitors feel they understand who the subject is? Does that understanding change between the first photo and the last photo?

## METHOD

We chose two sets of photographs for our interview with visitors:

- Set A is a series of 7 photographs of a male Asian/Pacific Islander (Figure 2).
- Set B is a series of 8 photographs of a female Caucasian (Figure 3).

**Figure 2. Oldest photograph in Set A**



**Figure 3. Youngest photograph in Set B**



We approached every third visitor, 12 years old or older, who crossed an imaginary line, for a cued interview. Consenting visitors were asked to look at the two sets of photographs. For each set, the evaluator flipped through the photos in sequence, either from younger to older or from older to younger, and asked questions. The interview questions can be found in the appendix to this document.

There were 4 different presentations designed to account for the ordering of Set A and Set B:

	First Set Shown	Second Set Shown
<b>Presentation 1</b>	Set A Younger to Older	Set B Older to Younger
<b>Presentation 2</b>	Set B Older to Younger	Set A Younger to Older
<b>Presentation 3</b>	Set A Older to Younger	Set B Younger to Older
<b>Presentation 4</b>	Set B Younger to Older	Set A Older to Younger

We cycled through these four presentations. For example, every 4<sup>th</sup> visitor, who we interviewed, saw Presentation 1.

### DATA COLLECTED

We collected data on

Date	Day
April 5, 2007	Thursday
April 6, 2007	Friday
May 2, 2007	Free Wednesday
May 5, 2007	Saturday

$N = 44$

Gender	Count (out of 44)
Female	23
Male	21

Age Group	Count (out of 44)
Teen	6
Adult	38

### RESULTS

Does going from one photo to the next change a visitor's impression of the subject?

Figure 4 and Figure 5 show how much visitors thought their impressions of the subject changed from photo to photo for Set A and Set B, respectively.

Figure 4. Set A - How much visitors' impressions changed from one photograph to the next

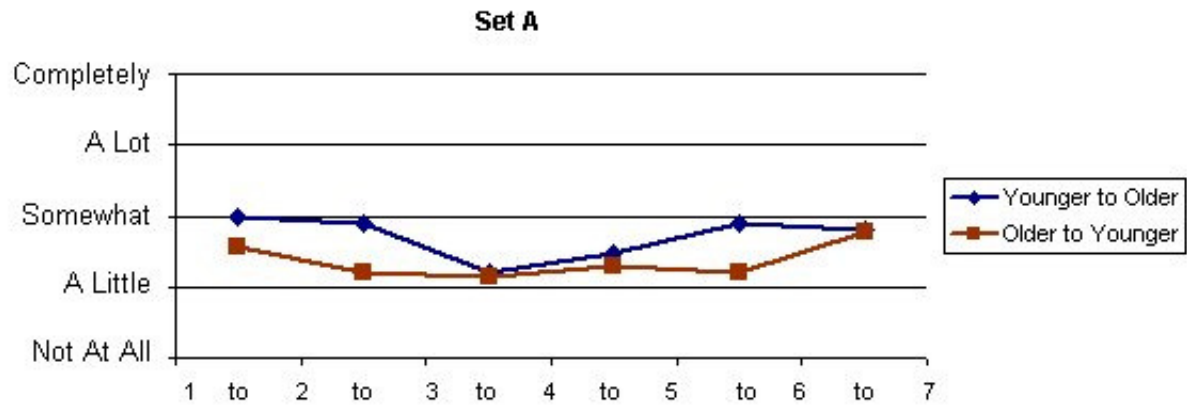
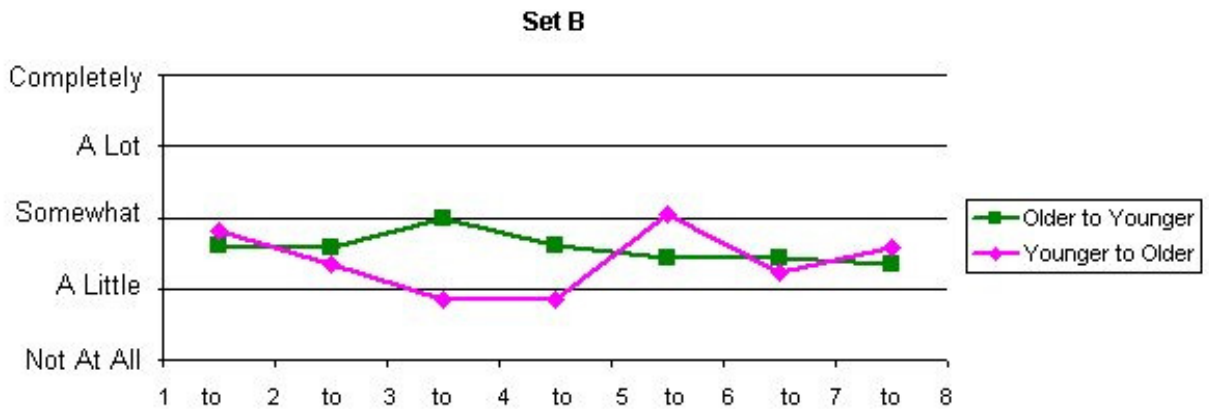


Figure 5. Set B - How much visitors' impressions changed from one photograph to the next



To try to capture overall change, we averaged the ratings visitors gave as they moved from one photograph to the next. We found:

- Overall, visitor thought Set A changed *Somewhat* going from younger to older and *A Little* going from older to younger.
- Overall, visitor thought Set B changed *A Little* going from younger to older and *Somewhat* going from older to younger.
- In neither Set A nor B did we detect a significant statistical difference between visitors' ratings for the overall change, going from younger to older compared to going from older to

younger. For Set A,  $t(40) = 1.231, p = .225 > .05$ . For Set B,  $t(40) = .690, p = .494 > .05$ .<sup>1</sup> The means for each set and each ordering are provided in Table 1.

**Table 1. Mean overall change for each set and each ordering.** The ratings “Not At All”, “A Little”, “Somewhat”, “A Lot:” and “Completely” were mapped to 0, 1, 2, 3, and 4 respectively.

Set	Ordering	N	Mean
A	Younger to Older	21	1.63
	Older to Younger	21	1.36
B	Younger to Older	21	1.39
	Older to Younger	21	1.54

Do visitors identify with the subject more, less, or about the same after seeing all the photos?

- A majority (28/43, 65%) of the visitors we interviewed identified with the subject in Set A *more* after seeing all the photos in that set. (See Table 2.) We did not detect a statistically significant difference in showing the set going from younger to older compared to older to younger;  $\chi^2(2, N = 43) = 3.064, p = .216 > .05$ .

**Table 2. Set A – Identifying with the subject.** Do people identify with the subject more, less, or about the same after seeing all the photographs?

	Younger to Older	Older to Younger	Total
<b>More</b>	17	11	28
<b>About the same</b>	3	7	10
<b>Less</b>	2	3	5
<b>Total</b>	22	21	43

- Likewise, a majority (24/44, 55%) of the visitors identified more with the person in Set B after seeing the entire sequence. (See Table 3.) Again, there was no statistically significant difference for ordering, from younger to older compared to from older to younger;  $\chi^2(2, N = 44) = 2.390, p = .303 > .05$ .

<sup>1</sup> We note that the sample size is small and we would not have detected anything but a very strong signal.

**Table 3. Set B – Identifying with the subject.** Do people identify with the subject more, less, or about the same after seeing all the photographs?

	Younger to Older	Older to Younger	Total
More	14	10	24
About the same	5	9	14
Less	2	4	6
Total	21	23	44

Do visitors feel they understand who the subject is more, less or about the same after viewing all the photos in that set?

- About 60% (26/43) of the visitors felt that they had a better understanding of who the subject in Set A was after seeing all his photos. (See Table 4.) We did not detect a statistically significant difference in showing the set going from younger to older compared to older to younger;  $\chi^2(2, N = 43) = 4.614, p = .100 > .05$ .

**Table 4. Set A – Understanding the subject.** Do people understand the subject more, less, or about the same after seeing all the photographs?

	Younger to Older	Older to Younger	Total
More	16	10	26
About the same	5	11	16
Less	1	0	1
Total	22	21	43

- About the same percentage (27/43, 63%) felt that they had a better understanding of who the subject was in Set B after seeing her photos. (See Table 5.) There was no statistically significant difference going from younger to older compared to older to younger;  $\chi^2(2, N = 43) = 1.422, p = .298 > .05$ .

**Table 5. Set B –Understanding the subject.** Do people understand the subject more, less, or about the same after seeing all the photographs?

	Younger to Older	Older to Younger	Total
More	12	15	27
About the same	6	8	14
Less	2	0	2
Total	20	23	43

### What did visitors find interesting about the photos?

We asked visitors to compare Set A and Set B to identify what they found interesting. Sample quotes for each category of visitors' response are included below.

- There's something interesting about the person as shown (16/42)
  - More specifically, visitors were interested in the emotions and/or the personality one set of photos seem to convey (7/43).
    - Visitor8: My perception based on this first photo was maybe a little misguided--like her posture, closing up, like she's apprehensive, closed off, trying to find out what she wants in life
    - Visitor34: He looks like he'd be a bit of a character. She looks boring. She looks sad, he looks happier. She looks depressed. I think that makes a difference.
  - In particular, visitors were interested in the life story a set of photos seems to outline (8/42).
    - Visitor23: It seems like in the first picture where she's old it's like she's gone wrong. Like she's lonely/ Like she's done something wrong. And then you see she used to be more friendly and outgoing.
    - Visitor26: Because I was able to discover something about an individual's past--who they are and what they come from. There was more variety in what was happening, perhaps more of a story, with (A) than with (B). (B) was just more of a chronology. Nothing so unusual.
- Visitors identified with one of the subjects (10/42)
  - Visitor14: The girl.. Just because she's a girl.
  - Visitor40: I've had family... I was chubby when I was little. I prefer this one (A), he was happy and cute and he's a man now. I was able to identify with him.
- The movement from older to younger was more interesting than younger to older (6/42)
  - Visitor5: Because from here I could see when she's my age and the see her past. I always think it's interesting to find out what they did in their life and where they are coming from instead of in this one (A) where he has his future in front of him
  - Visitor13: It's interesting to go older to younger. At the younger stage you identify less with them. This one here (A), he's just standing there with no smile. She's got a little smile though, like she was with her family or something.
- The movement from younger to older is more interesting than from older to younger (5/42)
  - Visitor10: 'Cause you can see him growing up and progressing in his life. This one (B) is backwards and out-of-order.
  - Visitor44: The way this series was presented: someone younger getting older. I'm curious to see what they become.

- They thought there were more changes in one compared to the other set of photos (5/42)  
 Visitor1: It has more variety. I felt like a lot of them (in B) were the same.  
 Visitor35: Because his age difference was more shocking to me.
- The female subject is attractive (to male visitors) (3/42)  
 Visitor12: She's cuter than he is. (laughing--his girlfriend is standing behind us listening in)  
 Visitor41: 'Cause I like girls. Like maybe I can hook her up.
- No reason given (3/42)

#### Did visitors' impressions change more with one set than the other?

We also asked visitors to describe why their impressions changed more with one set than the other. These were their thoughts with sample quotes.

- There were more changes in the emotions or temperament of the subject (11/41)  
 Visitor27: I think because in the initial ones she looks kind of shy and afraid but then she becomes more sure of herself and confident.  
 Visitor33: She looked like she changed more dramatically. She looks more young and innocent in this (top photo), and at the end she looks like she's in a very different place.
- It went from younger to older (6/41)  
 Visitor6: To see it going forwards is more interesting; backwards is less effective.  
 Visitor19: Because it went from a boy to a man. In school to graduating; that made a difference to me.
- Visitors paid more attention to the more interesting subject and noted more changes (5/41)  
 Visitor14: More with the girl. I don't know, I think I was just more interested in her.  
 Visitor32: I think because I liked the pictures more so they were intellectually more interesting.
- The subject seems to have changed, but the visitor did not specify how (3/41)
- The subject's life situation seems to have changed more (3/41)  
 Visitor21: Because at first you think it's going to be another sad series, but then you see graduation, and then he's looking good in the car, and there are good times that you don't expect from the first photo.  
 Visitor26: I'd formed an impression about him, in terms of his age and social standing. Stepping back in time, I thought there was a level of achievement I hadn't realized. He was perhaps older or more able than I originally thought. Or academic. As I get older, I find it harder to tell how old people are.
- Visitors felt there were more photos in one set than the other (2/41)

- Visitor1: Maybe more with (A). Were there more pictures in that one (A)? I felt like it spanned a longer period of time.
- There were more information revealed about the subject with successive photos (2/41)
  - Visitor8: Through the rest of her life path--the more exposure you get to her upbringing, her educational upbringing.
- It went from older to younger (1/41)
  - Visitor42: With this guy's it was like thinking back on a younger age, his childhood. Like it showed a younger age.
- No reason given (8/41)

Was there a gender effect in visitors' sympathy/empathy for the two subjects in the two photo sets?

We looked to see if visitors were more sympathetic or empathetic to the subject according to gender. Recall that Set A was of a male subject and Set B was of a female subject. If there were a difference, the finding would argue for a diverse set of subjects.

- We did not find a statistically significant difference in the number of visitors who sympathized or empathized with set A or Set B according to visitor gender,  $\chi^2(2, N = 41) = 4.155, p = .125 > .05$ . (See Table 6.)

**Table 6. Visitor empathy/sympathy with the subject according to gender.**

Visitor's Gender	Empathized/ Sympathized			Total
	Equally for Set A and Set B	More with Set A (Male subject)	More with Set B (Female subject)	
Female	4	2	16	22
Male	6	5	8	19
Total	10	7	24	41

## SUMMARY

- On average, visitors felt that their impressions of the subject changed *Somewhat* or *A Little* as they flipped from one photograph to the next.
- After viewing a set of photographs from the first to the last, a majority of the visitors felt that they identified with the subject more and also understood the subject more than when they saw just the first photograph.
- The order of presentation of each set of photos (i.e., from younger to older or from older to younger) did NOT make a difference that we could detect with statistical tests. That is, we did not find any statistically significant difference in visitors' overall rating of how much they thought the subject changed, or how much they felt they could identify or understand the

subject after viewing their photos. However, we note that in their interviews, a few visitors did mention that the order affected how interesting they found the photos and how much they felt the subject changed. Even so, we do not have a strong indication which, if either, is the better ordering, sequencing each set from younger to older or from older to younger photos.

- Visitors seemed more focused on the emotions and the stories the photos conveyed.

### **ACKNOWLEDGEMENTS**

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**APPENDIX A****Questions**

I'm going to show you two series of photographs. Each is a sequence of photos of the same person.

This is the first series and this is the first photo in this series.

**A B**

1. When you look at this picture, do you feel you can identify with this person and where she is in her life? [Like, you've felt the same way she seems to feel in this photo.]

Completely	A lot	Somewhat	A little	Not at all
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2. Do you feel like you understand who this person is?

Completely	A lot	Somewhat	A little	Not at all
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Here's the next photo. It's the same person but older.

3. Has your impressions of this person changed...

Completely	A lot	Somewhat	A little	Not at all
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Here's the next photo of this same person.

4. Has your impressions of this person changed from the photos that came before this one.

Completely	A lot	Somewhat	A little	Not at all
------------	-------	----------	----------	------------

5. Has your impressions of this person changed

Completely	A lot	Somewhat	A little	Not at all
------------	-------	----------	----------	------------

6. Has your impressions of this person changed

Completely	A lot	Somewhat	A little	Not at all
------------	-------	----------	----------	------------

7. Has your impressions of this person changed

Completely	A lot	Somewhat	A little	Not at all
------------	-------	----------	----------	------------

8. Has your impressions of this person changed

Completely	A lot	Somewhat	A little	Not at all
------------	-------	----------	----------	------------

Here's the last photo of this same person.

9. Has your impressions of this person changed

Completely	A lot	Somewhat	A little	Not at all
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10. Now that you've looked through this series of photos, do you feel you can identify with this person? [Like, you've felt the same way she's felt in her life.]

More	Less	About the same
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Compared to when you looked at the very first photo in this series.

11. Do you feel like you understand who this person is?

More	Less	About the same
------	------	----------------

Compared to when you looked at the very first photo in this series.

Here is the next set of photos.

**A B**

12. When you look at this picture, do you feel you can identify with this person and where she is in her life? [Like, you've felt the same way she seems to feel in this photo.]

Completely	A lot	Somewhat	A little	Not at all
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13. Do you feel like you understand who this person is?

Completely	A lot	Somewhat	A little	Not at all
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Here's the next photo. It's the same person but older.

14. Has your impressions of this person changed...

Completely	A lot	Somewhat	A little	Not at all
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Here's the next photo of this same person.

15. Has your impressions of this person changed from the photos that came before this one.

Completely	A lot	Somewhat	A little	Not at all
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16. Has your impressions of this person changed

Completely	A lot	Somewhat	A little	Not at all
------------	-------	----------	----------	------------

17. Has your impressions of this person changed

Completely	A lot	Somewhat	A little	Not at all
------------	-------	----------	----------	------------

18. Has your impressions of this person changed

Completely	A lot	Somewhat	A little	Not at all
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19. Has your impressions of this person changed

Completely	A lot	Somewhat	A little	Not at all
------------	-------	----------	----------	------------

20. Has your impressions of this person changed

Completely	A lot	Somewhat	A little	Not at all
------------	-------	----------	----------	------------

21. Now that you've looked through this series of photos, do you feel you can identify with this person?

More	Less	About the same
------	------	----------------

Compared to when you looked at the very first photo in this series.

22. Do you feel like you understand who this person is?

More	Less	About the same
------	------	----------------

Compared to when you looked at the very first photo in this series.

Now that you've looked through both sets of photos

23. Which one was more interesting? A B  
Why's that?

24. Did your impressions change more with one than the other? Which one? A B  
Can you say more as to why you feel that?

25. Did you feel more empathetic/ sympathetic towards one person compared to the other?  
Like you felt like you understood who that person was and how that person felt in the course  
of his/her life? Which one? A B

a. Can you say a little bit about why that is?