POVs, HMWs, and Experience Prototypes Maya B, Tara B, Alex C, Shubha R

Our studio theme is learning and education. We went into last week with a problem domain focusing on parent-child interactions. Our initial need-finding interviews spanned topics of difficult conversation topics, technology-aided communication, and parent-assisted learning. At the end of the week, we emerged with the following POV:

We met Nicole, a high school junior.

We were surprised to learn that despite the fact that her mother tutoring Nicole was a contentious and potentially traumatizing experience for Nicole, she still found the sessions extremely helpful.

It would be game-changing to extricate the parent-child emotions while harvesting the 1-on-1 attention and maternal sense of investment in her child.

With guidance from our TA, we decided to pivot and tackle a different problem domain. This week, we looked into the visitor learning experience at Cantor Arts Center. We conducted 11 additional interviews with a wide variety of backgrounds, from the head of exhibitions and other Cantor employees, to art aficionados and artists, to inexperienced adults, students, and children.



We first met Sophia, a Stanford student and a Cantor employee. After talking with her about a visitor's options for viewing the museum exhibits, we developed the following POV:

We met Sophia, a Stanford student and Cantor Arts Center employee.

We were surprised to find there are no self-guided tour options at the Cantor museum.

It would be game changing to provide a way for visitors to get the structured knowledge a tour conveys while also having the freedom to make their way through the museum in their own way.

From this POV, we generated several HMW's including the following:

How might we make the museum experience more responsive to the visitor's personal preferences and opinions?

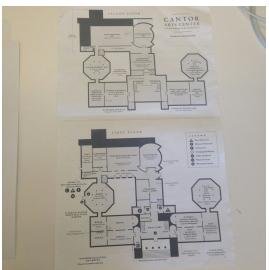
From this HMW, we brainstormed numerous ideas before creating a related experience prototype. Inspired by short "personality quizzes" on sites that incorporate recommendation engines such as Pinterest and Netflix, we elected to compile a short questionnaire about a guest's tastes in art, which would then produce recommendations as to what guests might enjoy viewing. Our sense was that such a system might combine elements of a traditional guided tour through a museum with the flavor of a visitor's particular tastes. Moreover, we saw the quiz model as an opportunity to address a problem that came up in several of our need-finding interviews -- the fact that visitors, upon visiting a museum like the Cantor, are often overwhelmed by the volume of works they could potentially view, and do not quite know where to start. The thought was that if a visitor was given suggestions as to where to begin among the works, most likely with works that they would enjoy, some of this off-putting indecision might be averted. Most importantly, this experience prototype would make the museum experience more responsive to a visitor's personal preferences by highlighting particular segments of the museum that a visitor would be more likely to enjoy, based on indicated preferences.

In making this prototype, we assumed that most visitors have a somewhat developed sense of what sorts of art they prefer, and that they'd like to see similar art rather than discovering entirely new forms of art. We also assumed that they might benefit from such an assessment prior to actually seeing exhibits within the museum, which influenced our decision to test this experience prototype on guests who hadn't yet seen pieces inside Cantor.

To make the prototype, we pored over the database of art pieces currently on display at the Cantor (available at the museum's website). From these works, we selected a few that had been identified to be archetypes of particular sorts of art (Latin American, Asian, contemporary, etc.). These representative pieces were then juxtaposed in groups of four on sheets of paper which we printed out. From each set of four (grouped on a single page), we decided, we would prompt a user to choose one of the four as the work of art they would most like to see. A series of three such questions were posed, with the intention of determining which types of art might be most attractive the guest in question. We took two key measures to simplify our approach for

the purposes of our experience prototype: (1) we only classified paintings according to exhibit of origin (Latin American, Asian, contemporary, etc), and (2) we only asked three questions. (1) was critical because we did not want to complicate the predictive methodology of the quiz at the outset -- in this experience prototype, we simply enumerated the number of painting selections from each exhibit in the museum when recommending paintings to visit. (2) was also important because it sped up the prototyping process, but allowed us to troubleshoot across multiple rounds of questioning and provided the a baseline as to how much guest preference information we can garner from just three data points.





We tested this particular experience prototype at Cantor Arts Center itself. In particular, we walked step-by-step through the process with Annelie, a visitor and avid museum-goer visiting from France. We provided her with our questionnaire and prompted her to select one painting among each set of four, and then mapped out a path to the relevant areas of the museum. From our experience walking through this workflow with Annelie, a few elements that worked well (as well as some that didn't) became clear. We were pleased to find that, as per our assumption, Annelie and other guests we spoke to about this experience prototype were excited to see find new art to experience within the realm of their preferred genres. That is, there is some room for discovery and recommendation, but that these should not stray too far from the particular types of art a person broadly prefers. She also seemed to really respond to the notion that a quick, self-directed quiz might ease or structure her museum-going experience by giving her a starting point within the museum.

A few issues that did not work also arose. One among these was the fact that at certain points, Annelie found it hard to choose between two equally appreciable pieces of art for the purposes of the the quiz. In some cases, she found two equally interesting works but could not compare them (and hence choose one) without any common benchmark. Moreover, when she ruled out a painting during the quiz, she struggled to articulate precisely why she did not appreciate the painting in question, falling back on phrases like "just because," or "I don't really like its feel."

This could be indicative of a larger issue we may encounter further down the road if we do build out this feature -- that the sense of what makes "good" or "bad" art to an individual is likely highly specific and somewhat abstract. From the experience prototype for our quiz idea, we learned that the guiz likely needs to incorporate more than just the image of a painting -- it probably also needs to include its artist, and year. More mechanically, we noticed that Annelie prompted us for information beyond what was directly presented to her, and also saw her preferences spanning certain types of paintings (landscapes, cities, portraits) rather than just the simplistic partition discussed above on the basis of the origin of the painting. She also mentioned that it'd be easy to choose one from two rather than one from four. From this prototyping exercise we found that our original assumption that visitors enjoy viewing art similar to their own preferences was validated, but we hedged that observation against Annelie's observation that she often breezes past exhibits she has seen on multiple occasions when visiting museums. For instance, as a Parisian, she has seen much of Rodin's sculptures already, and therefore often prioritizes other exhibits when visiting the Cantor. Therefore, another assumption also emerged: users also want to discover unfamiliar things they might not have seen before. No other new assumptions emerged per se, except that iterating on this guiz, its contents, and its delivery, are critical to the execution of this idea.



We also interviewed others who were not as knowledgeable about the museum and art in general. Hannah, for example, has interests that lie elsewhere, but found herself at Cantor accompanying a friend. After talking with her about her experiences viewing the art, we generated the following POV:

We met Hannah, a college student studying math who accompanies her photographer friend to museums.

We were surprised to find Hannah liked musuem exhibits that allowed her to understand the context of the art and connect with the artist and learn more about what he or she was trying to express with the piece.

It would be game-changing if museums could offer far more immersive experiences that connect visitors with the artist and context.

From this POV, we generated several HMW's including the following, which aims to explore the opposite:

How might we shift the focus to the visitor's creative potential rather than the artist's original intentions?

From this HMW, we brainstormed numerous ideas before creating a related experience prototype. The proposed solution that we came up with was to provide the visitor with a way in which to interact directly with the painting in front of them. Through guided and/or unguided physical interaction with the medium, the visitor would hopefully be able to learn more about about what the painting was attempting to convey and the artist's perspective. To start out with, we assumed that this activity would be particularly well-suited for children, and that they would find it to be an enjoyable experience. We also assumed that they would be bored walking through the museum and experience text fatigue (or perhaps not even attempt to read the text next to the pictures).

In order to transform this proposed solution into an experience prototype, we printed out pictures of paintings and art works at the Cantor Arts Center, and collected a number of colored markers and pencils to work with.



In order to create a better experience, we decided to test the prototype at Cantor Arts Center, itself. At Cantor, we met a group of 10-11 year old schoolchildren from Fair Meadow Elementary

on a field trip. We decided to test this prototype with the children to see what their experiences would be interacting physically with the artwork. We asked each child to imagine themselves standing in front of a large version of a printed painting that we handed them. Before they chose coloring tools, we asked them to draw what came to mind when thinking about this painting and when thinking about what the artist wanted the viewer to understand. Each child then used colored markers to draw on and next to the paintings. Perhaps we didn't give explicit enough instructions when we told the children to think about what the artist would have wanted to depict. One child ended up drawing a flying pig, simply "because he wanted to." Despite that, the results were telling. The children who interacted with abstract art ended up tracing over the lines to help them better understand what the artist wanted to display. While many of their theories seem ludicrous to us - a princess and a skeleton come to mind - it is possible that they are seeing patterns in the art that adults lack the imagination to notice. Also, after observing them, we realized that the children particularly enjoy the social aspect of this experience prototype - something that we hadn't even considered before. They were especially interested in sharing both the pictures they were interacting with as well as their drawings on the pictures with their friends and parents. Perhaps this stems to an inherent trait of children: that they enjoy showing what they've seen, learned, or made with others in their lives. Their experience also affirmed our initial assumptions, since the children seemed particularly invested in their drawings and appeared to have an enjoyable experience. While our seconds assumption regarding text fatigue wasn't conclusively tested, we noticed that the children seemed to connect more with the art than they had before interacting physically with them.





Another POV stemmed from our conversation with a very credible and knowledgeable source. As a modern artist and someone that is training to be a guide at the San Francisco Museum of Modern Art, Cindy, was able to provide us with the perspective of an actual artist, as well as that

of someone who has recently been thinking significantly about the visitor experience at art museums. From this interview came this POV:

We met Cindy, an artist and museum guide in training.

We were surprised to find visitors want to participate in the process of art curation in a museum.

It would be game-changing if we could allow visitors to curate their own personal collections of what interested them and what they thought went well together.

Afterwards, we created several HMW's, including one that challenges the status quo for how guests interact with museums:

How might we provide a museum experience that can be easily rearranged according to a visitor's preferences?

After another rapid brainstorming session, we created a third experience prototype. In this experience, we envisioned an opportunity for guests to collage, collect, and mix-and-match the images they had seen and liked in the Cantor Arts Center. In building up to this idea, we thought back to Cindy's mention of the artist Rauschenberg, who permitted his gallery attendees to weigh in on the process of arranging his art in particular ways. In her interview, Cindy remarked that considering the impact that remixing or rearranging art has can enhance and deepen one's own appreciation of even a single piece in isolation. In an effort to capture this potential learning experience, we sought to enable personal curation of observed art pieces for each visitor.

We made the prototype by browsing the Cantor library of art and printing out potentially appealing pieces for the guest to choose from. We then offered these cut-outs to museum-goers, encouraging them to select among the paintings and collage and rearrange them as they wished. We provided a folder for them to paste their selections on, and assessed both the process and the finished product.





We tested the prototype by offering the cut-outs, miniature versions of paintings guests may have already seen, to two randomly selected guests in Cantor. We encouraged the visitors to arrange the cutouts on a blank page in any form they pleased, and on the basis of any criteria they preferred. As they completed the activity, we also gauged their interest levels and chatted with them about aesthetic choices ("Why did you select this particular painting to place above the other one?").

What went well in this experience prototype was the moms' (interviewees') general enjoyment at the task at hand. Both professed to enjoying crafts, and suggested that the activity was like using Pinterest, which both utilize to find and arrange various images. We also noticed that because the activity was tactile, it was perhaps less impassive than the quiz activity, which could leave a visitor with a shorter attention-span bored or disengaged. What could have been improved in this particular prototype was better engagement of the users with the activity over a longer period of time. Both users seemed excited by the activity at the outset, but towards the end of the process, the process of identifying and placing pictures seemed a bit rote and rushed, and one of the moms was easily distracted by the chatter of her infant child. While the latter is understandable, from these details we learned that the activity should be more consistently engaging, and perhaps should involve some deeper thought. One other interesting finding is that the users seemed to enjoy discussions centered on weather paintings "vibed" off one another -- for instance by enhancing each other's colors or thematic overtones.

We assumed this curation activity would be users' primary focus, but we found this assumption to be incorrect. We supplanted this old idea with a new assumption, that "not everyone's first priority at the museum is to learn - may have to leave out some people from our user base"



After conducting all three experience prototypes, we have elected to move forward with the quiz-recommendation model. The quiz introduces a new, unique element to the museum experience, and we were enthused by the degree to which the people testing our prototypes latched on to the idea. We see it satisfying several needs we identified among museum goers --

the desire to experience new art, indecision paralysis, and others. Finally, Sara Kabot, the head of exhibitions, personally endorsed the quiz prototype as an exciting new direction for Cantor to take.