Things I Have Learned from U.S. Design Exhibition and Research

米国訪問学習会で学んだこと

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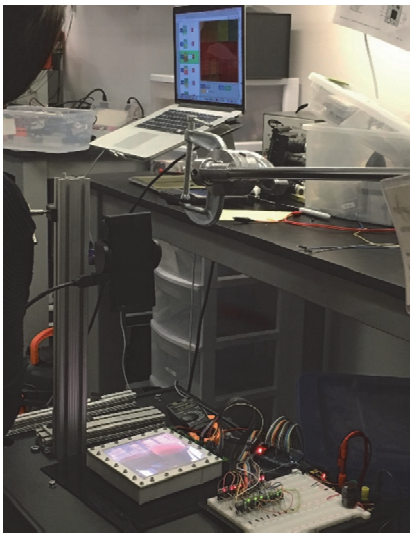
In September 2016, a group of Design School students including me participated in the design school U.S. study tour program which we had a chance to visit some famous research centers as well as breathtaking sightseeing spots in San Francisco. During the visit, we were invited to visit a well-known research center named FXPAL. Besides the academic related program, we also had the opportunity to explore the well-known Exploratorium museum to see how objects and phenomena were exhibited and to learn about their design. During this study tour program, the students were expected to critically ponder the design of each site visit to reflect what they had understood about how and why things were designed the way they were.

FXPAL Site Visit

Locating in a research district of Stanford area, Palo Alto, FXPAL is well-known for its research projects for Fuji Xerox. With a warm welcome to this outstanding research laboratory, the students were invited to a brief introduction to some of the ongoing research projects of this laboratory. During the visit, the students were expected to critically ponder the design of research projects as well as work style to figure out why they were designed, what it took to design in such ways, and some relevant aspects of design study. Therefore, through this short site visit, what did this FXPAL teach us about the design study?

Always give a green light to cool ideas...

FXPAL is an interesting research center where many researchers come to work as a team. There are a wide variety of project themes, and they are in various forms and scales. Each of the research projects is deemed intriguing, realistic, and innovative, and especially most of the research projects are, remarkably, built out of the real necessities in improving the workplace and work style, and some are focusing on integrative analytics for contextual and actionable intelligence.



pic.1 Innovative project "ThermoTouch: Design of a High Dynamic (Temperature) Range Thermal Haptic Display"

What is interesting about this FXPAL research center is the way those innovative projects are proposed. Dr. Girgensohn mentioned that some of the developed projects are used in Fuji Xerox products, while some of them are just developed based on the innovative, creative, and imaginative ideas of the team in FXPAL. They make sure that those cool ideas always get a chance to be worked on. For instance, the ThermoTouch project (pic.1) is quite innovative as it allows people to feel and experience the thermal (e.g., variation of heat in the launch of a rocket) through the haptic display.

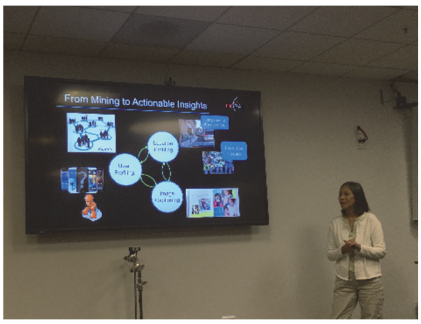
Basically, I think this work policy is beneficial for the future development in some ways. It is quite convincing and favorable to open some opportunities for the researchers to propose their interesting research projects and develop it even though it is not matching with any current demands of Fuji Xerox products. However, these imaginative and innovative projects could be very beneficial some days in the future, so it is not a waste of time to allow such innovative ideas to come in, and when it is fully developed, they can always file a patent as their own creation or invention.

In my opinion, multi-cultures and multi-nationalities of the U.S. play a great role in creating such a work style because people from different backgrounds tend to see the demands and display their interests in different fields and areas, so it is good to take advantage of such diversities.

Invest on innovative ideas, Benefits may come later...

What I have learned about the work style design in FXPAL is that it is

important to invest on cool ideas so that the researchers can produce a great innovative, creative, and imaginative project. Giving researchers enough space and confidence in generating their innovative ideas is deemed a good investment which will later bring unexpected benefits to the company (e.g., their innovative research projects about Tabletop Telepresence, HyperMeeting, Social Media Mining (pic.2), … .) I think this kind of work style is favorable for both company and employees as it does not limit the growing capacity of each individual through limiting their work scope or predetermining their project plan.



pic.2　Beneficial project
"Social Media Mining"

Overall, I think this FXPAL is an interesting research center which currently and will produce a lot of innovative and creative inventions (e.g., HyperMeeting, Telepresence, Social Media Mining, …) to ease the working and living of human being. At the mean time, it constitutes a great place to develop creativity and work flexibly in team as it allows the diversity of ideas and proposals.

Exploratorium Site Visit

On the last day of the study tour, we visited the Exploratorium, which is a museum of science, art, and human perception. It is an impressive museum that has a well-designed concept. This visit has given me a unique and nice museum experience compared to other museums I have visited. If I were asked to describe this museum in three words, I would say "extraordinary, learning, inspiring". What did this museum teach us about the design?

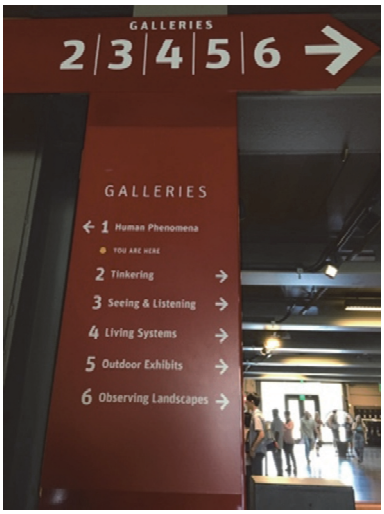
Extraordinary, Learning, and Inspiring Museum Experience!

What is interesting about this Exploratorium is the way this museum is designed. First, this museum comprises of a variety of tastes (sections) for different groups of people ranging from child, adult, to elderly (pic.3), and from people who have a tendency toward

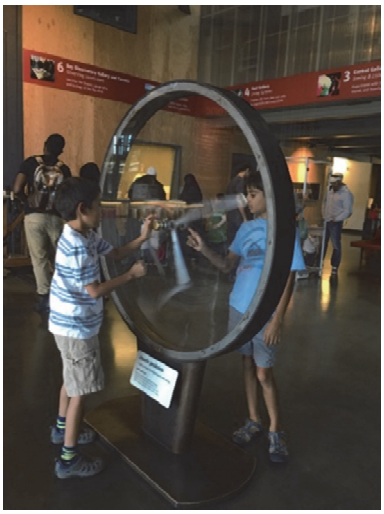
pic.3　Adults and kids enjoy
the science exhibition.

social related phenomena to those with an interest on science phenomena. Moreover, the design has made the viewing experience easier by having a good sense of guiding with a clearly labeled section for each exhibition so that the visitors know where to go first and next (pic.4).

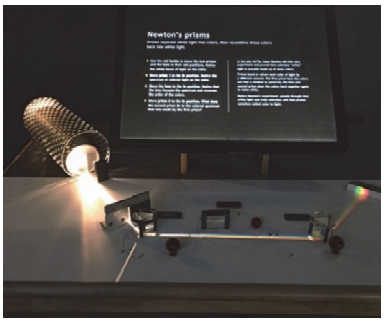
What is special and unique about this museum is the way it engages visitors with the exhibition of each displayed item or phenomenon. It allows visitors to experience the real experiment of some phenomena; as a result, they can learn it in a fascinating and enthusiastic way (pic.5, 6). In addition, I would say this museum design is quite innovative and creative as it has integrated the fun concept along with technology as a tool to exhibit their item (e.g., visual effects to explain the science phenomena, … .)



pic.4 Good sense of guiding



pic.5 Engaging exhibition



pic.6 Practical and interactive explanation of Newton's Prisms

A hidden role of museum...

A museum should not be just a place to exhibit the items, but it should have an intention to communicate the ideas or teach the visitors some concepts through the exhibition in an enjoyable way. For this reason, I think this Exploratorium succeeds this criterion, and it has become an amazing place for parents to bring their small kids to see and learn about some phenomena as well as experiencing the extraordinary exhibitions altogether.

I think if this concept of design is applied to elementary and junior high schools to teach the students about some physics, chemistry, biology, and mathematics phenomena, the students will definitely enjoy learning and easily understand the explanation.

Overall, I would rate this Exploratorium very high as I think it has accomplished an essential goal of a museum. I would recommend this museum to any kinds of people who are curious about phenomena and who want to experience

the extraordinary museum experiences.

Lesson learned from the entire study tour

As a conclusion of this entire study tour, I have learned that the design is very culture and experience based. Although the main purpose is to provide an efficient product or service for human beings to ease their daily routine and working operation, “how” and “why” things are designed are completely tailored to the culture and familiarity of the users. For instance, the working style in the FXPAL which is influenced by the region it locates in and the multi-national people. This reflects how design is quite personalized to certain types of users, regions, cultures, and so on to ensure that people can make the best out of the design of those products and services.

Inquiry towards studies of design

+ Culture consists of many elements such as people, religion, language, and so on. Which element of culture has the most influence on the design studies?
+ Which stage of the design processes should we consider the culture element?