Objectives

Project 1 for this course involved doing a self-portrait to introduce myself to the class. We were to use at least two of Wurman’s Five Hatracks [1] to structure the information about ourselves.

In this process document, I describe how I decided what I wanted to tell about myself, defined what details to provide, conceptualized how to convey the information, and implemented and refined the design.

The process culminated in a large-scale printed poster which I exhibited in class. After that, I revised parts of the poster, and show it at the end of this document. I shall also describe some of the lessons learned.

5 Hatracks

Wurman wrote about how information can be organized into five dimensions, listed here for quick reference.

- Location
- Alphabet
- Time
- Category
- Hierarchy

Learning from Others

The first thing I did was to think about what to share in my poster. Since I had never done a self-portrait, I sought experience from examples of years past. I had discussed with Barbara and also found some posters from the online Gallery maintained by the Design department [2].

Of the selection, a few notable and interesting ones were:

- freckles
- cultural identity
- favorite books
- significant people
- cooking
- countries visited
- activities in time (day/week)

From the posters, I noted many used:

- Many used graphical domains of representation (e.g. subway map, cooking) that do not necessarily tie directly with the presented topic of information.
- But some provided an added ‘dimension’ indicating the artist’s interest (e.g. cooking, playing the cello)
- Some portraits aimed to be comprehensive (e.g. timelines of activities)
- While others were more focused and thematic (e.g. freckles), telling stories and narratives

I felt that the graphical domains, though entertaining, were not necessary, and were probably detractive. I sought to keep my portrait abstract.

I also wanted to keep my content focused on a single theme, to be simple and elegant in design.

What to tell?

After a while of contemplation and a list of ideas, I narrowed down to three topics and stories:

**Favorite foods:** This could be interesting, but it may be difficult to find names of the dishes, and Americans may not understand them, as many dishes would be Singaporean. But it would celebrate my background, and show that I have an eclectic palate encompassing cuisines from several cultures.

**Languages:** This would be about my weakness and lengthy struggle with Chinese, and the growth of interest in programming languages. But talking about programming stuff may be geeky, and I may not have much to say about Chinese.

**How I got into HCI:** This would describe my path from Physics and a little interest in Art to Computer Science and Human-Computer Interaction (HCI).

Path to HCI

The development of my academic life to HCI has been something I cherished as unique (at least to people I knew back then), and this would give me an opportunity to study carefully what had influenced me and how.

I had also discussed with a colleague (fellow Ph.D. student) and she was interested to learn how I came to where I am from where I came from (Physics).

Therefore, I decided to pursue this story, and shall describe my detailing and information structuring procedure in the next section.

Fleshing out the Content

I considered my academic interests in terms of subjects. There were three in particular that have been integral in my life, with a fourth incipient one.

Physics
Computing
Art / Design
Human Factors

These four subjects would be the backbone(s) of my story, representing how my interest and dedication to each subject changed through my life, triggered by events and decisions.

What to present?

With the story, story elements, and LATCH dimensions settled, the information to be presented can be summarized as follows. The main elements are subjects represented as tracks that vary in their thickness depending on their influence or importance at that point in my life.

<table>
<thead>
<tr>
<th>Secondary School (Grade 7-10)</th>
<th>Junior College</th>
<th>Army</th>
<th>College</th>
<th>Research Stint</th>
<th>Grad School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Design</td>
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<td>Physics</td>
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<td></td>
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<td></td>
<td>Human Factors</td>
</tr>
</tbody>
</table>

Table to sketch information of where tracks should be emphasized

These tracks would be triggered by various events and decisions in my life, represented by nodal points scattered about the tracks.

What to draw?

I had yet to do any graphical sketches or doodles, and now that the information and dimensions were settled, it was time to investigate which graphical elements to employ. Here is a list I considered with bolded ones eventually selected, mapped to information elements.

Tracks
Thickness/Size
Color
Texture density
Transparency
Distance (along path)
Displacement (from points)
Shapes / Icons
Layout/Position

Subjects
Importance of Subjects
Time (history)
Relevance of events

Applying LATCH

When applying Wurman's LATCH framework, to structure events in this story, I realize that only a few dimensions are appropriate.

Time: The most natural dimension to order events (chronologically). This could also be used to indicate duration of events. Since I think of my life in terms of phases instead of years, I decided to order my life in stages:

Secondary School (Grade 7-10)
Junior College (Grade 11-12)
Military Service (2 years)
College (3 years)
Research Stint (1 year)
Graduate School

Category: Obviously the aforementioned subjects are arranged categorically.

Hierarchy: The subjects are represented in terms of their importance and influence, so this is hierarchical too.
First Review

At this point, we presented our portrait ideas to the class with the sketch (facing page) done in PowerPoint. My basic concept was four paths with different colors representing each subject. Note one that only starts mid-way. The thicknesses would vary depending on importance or influence at that time. Events and decisions would be scattered about the time-subject space. The paths would eventually converge to where I joined the Human-Computer Interaction Institute (HCII) to pursue my Ph.D.

The idea seemed generally well received and understood. I did not receive much feedback to work on.

Some Contentions

However, I still had some contentions to deal with, such as the following:

**Horizontal vs. Vertical?** How to orient the timeline. Horizontal would be too "ordinary," so I stuck with vertical.

**Upwards vs. Downwards?** Rising like a tree or falling like a waterfall due to gravity? I decided to pursue the latter indicating that my paths are governed by forces outside my control.

**Control/Neat vs. Fluid/Organic?** Many past posters tended to use neat lines and shapes. My ideas tended to flow more organically as I placed my events or influences depending purely on when they affected me, disregarding controlled order. Fluid, organic shapes would be able to convey this surrendipity.

**Events vs. Decisions?** It is easy to place events, but how can I represent decisions? Through a branching metaphor? How would that fit in this idea of paths? I eventually decided to classify decisions as events — important ones.

**Domain vs. Abstract?** I was wondering why so many past students used a specific domain. I did not find any that naturally mapped to mine, so I wanted to pursue the abstract.

Some Explanations

This quick sketch indicated some ideas for the final poster:

Physics feels orange-yellow, Computing feels green (color of motherboards), Art / Design feels violet (because that was my favorite color), Human Factors feels blue.

Paths converge to a destination.

Words have a "reverse-perspective" effect where the words on the top are larger because earlier events do have more influence.
Exploratory Sketches

With the general layout settled, I proceeded to explore through sketches how to execute the design. All sketches were done on my Tablet PC.

• Narratives as threads to secure discipline 'paths'/ropes, OR
• Narratives are what constitutes the volume of the threads?

During a discussion with Barbara as she was pushing for a proximity or even overlap relation between my paths, I described the notion that the paths were actually "tubes" that relate to one another in a 3D space. Taking slices along their axes, could show us something like a Venn diagram.

But how to represent this? 3D to 2D projection? That would be hard to draw. Barbara suggested making the poster into a 3D entity.

I struggled with the notion to overlap the tubes. How can that be represented on a flat poster?

Eventually, I questioned why an overlap relation was needed. Any "overlap" could be represented by the contribution of the paths due to the specific events (e.g. that a Physics website involves elements of Physics, Computing, and Design).

I also explored the idea of a transient desire. For example, since I stopped taking art classes in Secondary School, I had always wanted to eventually come back to it. That is my transient desire, which I do occasionally fulfill.
Flow of Events to Paths

Execution of ideas through and implementation of sketches. Explorations of how to draw events “flowing” onto the paths.

Rough layout

Multi-source tributary

Dual-influence event

Shaping exercise

Radial gradient

Translucent overlap

Feathered edge

Feathered + overlap

Execution: Layout

I took a top down “whittling” approach to implement the design. Starting with four bars to represent the paths, I zoned out regions representing periods in my life. Then I positioned the events starting with major ones.

Secondary School

Junior College

Army

College

1-yr RA

Grad School

Then I started working on the "tributaries," starting from big events, then to the smaller ones. Please turn over...
Critique

Except for the audience understanding that I've done a lot of learning during my military service, I feel the reception was relatively poor.

Some viewers did not understand some technical terms (e.g., Matlab).

Many viewers were confused that reading should start from the bottom, since gradient fade which should have been for goals are on top, bottom is flat like a tree trunk, and extensions look like thorns. I was recommended that I could have made the bottom drip instead of cutting it off flat. This would have supported the gravity analogy.

Some viewers found the time scaling to be ambiguous as it was not strictly scaled to years. I had wanted to scale it to my impression of how fruitful I found that period. Barbara pointed out that this was subjective and reduced the clarity of communicating time.

Lack of narrative left viewers lost as design was too abstract.

Lessons Learned

Even though I had tested my design with some people, I realize that they were already too familiar with my abstract concept and what it stood for. The class did not understand or remember that, and a supporting narrative (commonly used) could have been a suitable introduction. On other posters, there was a significant appreciation for verbiage used, which points out to me the importance of textual elaboration to engage the viewer even for a graphical medium. Overall, I learned that there will always be a tension between clear communication that follows norms, and the flexibility that comes with artistic freedom.

In terms of what the self-portrait reveals: it can be sad how clearly my involvement in Physics that I have trained so hard in has been reduced to such a low significance.

Revision

To make my design a little clearer while preserving some artistic integrity, I made some revisions. Inspired by my fascination with abstract art (e.g., Jackson Pollock), I likened my graphical elements to that of paint splashing and dripping on a canvas.

Please turn over for the final revision.