Assignment VCD 2019

Introduction

In 1977 NASA sent two phonograph records into space aboard their Voyager spacecraft. Better known as the 'Golden Records', these 'business cards' from our planet contain both images and sounds that are supposed to introduce any extraterrestrial life form or future humans to "the diversity of life and culture on Earth". Even though a lot of time was spent to carefully select the content for the discs, the accuracy in which earth's diversity is portrayed (from a whale song to a string of DNA and woman in a supermarket) is arbitrary and questionable. At least from a contemporary point of view on human behaviour, art, science and technology.

John Lomberg, one of the editors of the original Golden Records acknowledged that the content of the discs could be outdated before ever finding an alien audience. In 2006 he initiated 'One Earth Message', a new and crowd sourced interstellar message which would be streamed from the New Horizons, an interplanetary space probe launched in that same year. Yet with technology allowing for much more content to be included in the message, a message based on input from an enormous source of information, the decision on what would be included and what not became even more tedious.

For our 'interstellar VCD message' we have pre-selected 24 images and 6 videos for you to work with. We refer to them as our 30 subjects. Instead of assuming that everyone and everything would read the same message and including just a singular set of instructions we would like you to help us explore the meaning and creative potential of our curated data set

https://en.wikipedia.org/wiki/Voyager_Golden_Record
https://www.newhorizonsmessage.com
http://paglen.com/lastpictures/main.php?m=overview&p=

Part 1: Analyse

We will supply you with 10 visual images that you need to analyse. The images vary from visualisations of objects to works of art. We refer to them as our **10 subjects**.
The analysis consists of:

- **Technique**: what is it and how was it (the subject) made?
- **Perception**: which principles are used?
- **Context**: what can you tell about the maker, the socio historical setting and tradition in which the subject was created? In what physical/digital context does the work exist today?
- **Connection:** how do the three aspects mentioned above relate to one another? (e.g. what influence does context have on perception?).

Use a maximum of 150 words per visual image to formulate your analysis of the subject (10 in total) and where/when possible support this analysis with your own visuals. Be selective, for example by focussing more on technique in the analysis of 'image 1', and on perception when

analysing 'image 2'. Your motivation and point of view should become clear from the description as well as through the supporting imagery. (e.g. why do you believe the subject is overly interesting when approached from a specific direction?) If absolutely necessary these illustrations may include some integrated words or a 1 sentence long caption.

Part 2: Evaluate

Choose **4 subjects** (out of the 10 we already provided) to be investigated further. You will conduct empirical tests to gain more knowledge about what people see and how they experience the subject (feel free to include emotion), and what kind of factors influence this. For example, you could investigate whether the colours that Van Gogh used originally elicit a different type of emotion then the colours as they appear today. Or measure whether the font Helvetica is better readable in an urban or a natural environment. The assessment of this part focusses on your motivation, the type of question you formulate, how you operationalise it (what type of experiment) and how you report and interpret the outcome.

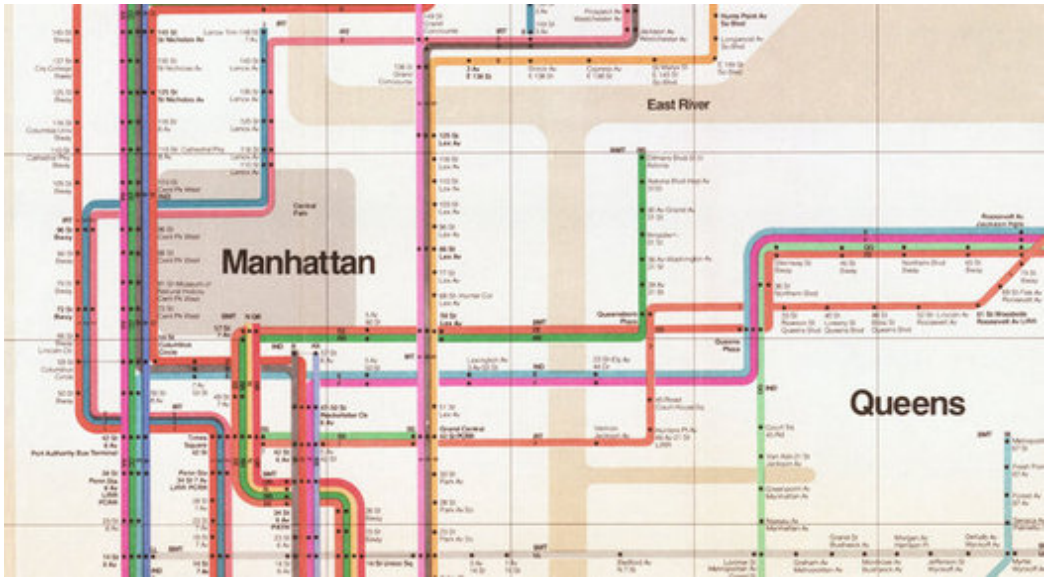
Part 3: Create

Choose **3** out of the **4 subjects** you selected in Part 2 to complete this last part of the assignment:
One of which you will communicate the **analysis**, and a **second** one of which you will communicate the **evaluation**. This communication needs to be performed through the use of P5.js.
(Mind, that this javascript library also contains the possibility of showing pictures and videos, so if you really think that an old fashioned picture is the perfect way of communicating your findings, you could load this picture in P5!)
Lastly, take that **one** particular visual image/subject that **you feel most connected to** and use your analysis + P5 sketch of this visual to communicate why this is the case.

Deliverable: 3 links to your sketch on https://editor.p5js.org in a small document containing motivation (why did you choose this subject, how did you approach your sketch in P5), explanation (what is your sketch about) and reflection.

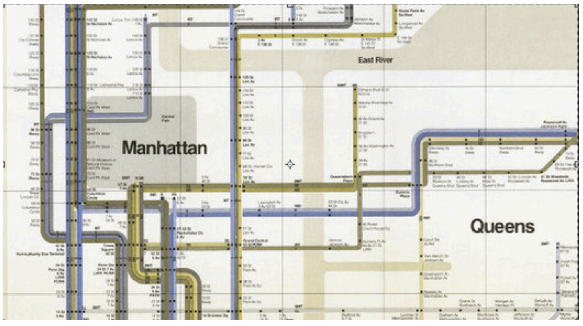
PART 1 ANALYSIS - EXAMPLE

Massimo Vignelli's 1972 NYC subway map:



Analysis of 150 words:

gravida in fermentum et sollicitudin ac orci phasellus **egestas** tellus rutrum tellus pellentesque eu tincidunt tortor aliquam nulla facilisi cras fermentum odio eu feugiat pretium nibh ipsum consequat nisl vel pretium lectus quam id leo in vitae turpis massa sed elementum tempus egestas sed sed risus pretium quam vulputate dignissim suspendisse in est ante in nibh mauris cursus mattis molestie a iaculis at erat **pellentesque** adipiscing commodo elit at imperdiet dui accumsan sit amet nulla facilisi morbi tempus iaculis urna id volutpat lacus laoreet non curabitur gravida arcu ac tortor dignissim convallis aenean et tortor at risus viverra adipiscing at in tellus integer feugiat scelerisque varius morbi enim nunc faucibus a pellentesque sit amet porttitor eget dolor morbi non arcu risus quis varius quam quisque id diam vel quam elementum pulvinar etiam non quam lacus suspendisse faucibus interdum posuere lorem ipsum dolor sit amet consectetur adipiscing elit duis tristique sollicitudin.



Colour blind travellers will get lost.

Using Euclidian representation works much better

PART 2 EVALUATION - EXAMPLE

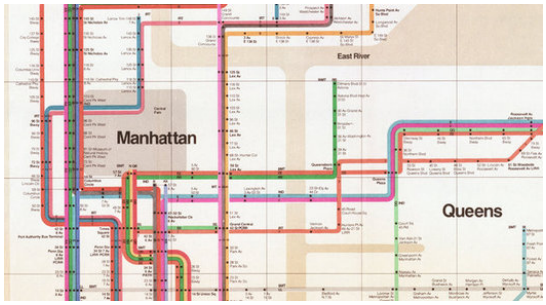
Image = Massimo Vignelli's 1972 NYC subway map:

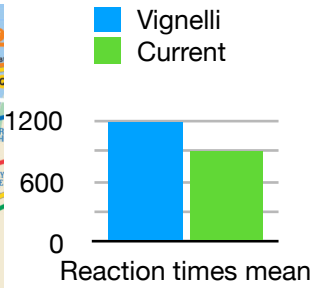
Question = Does Vignelli's representation negatively impact how fast you find a station?

Experimental paradigm: I used *visual search* and measured reaction times of how fast users would find stations. Instead of showing a visual example, i just used the station names to be found.

Methods: used 10 different stops, showed it 10 people. Use powerpoint two present the map, and used timer function on phone. [alternatively: I used P5 to generate an automated experiment that helps record the time.]

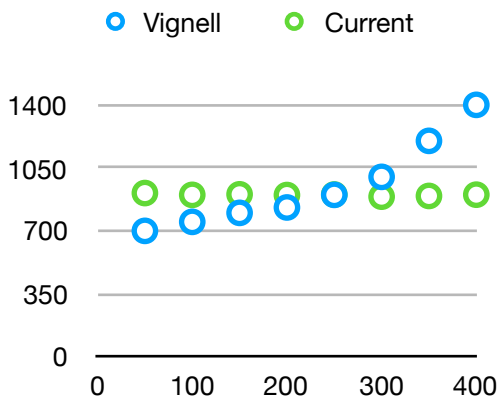
Results





Discussion

Vignelli's was generally slower but I also found larger difference between stops. It seemed that in the middle of the map, the stops were faster seems than in the periphery, as opposed to near constant search times in the contemporary map. To visualise this I made a plot:



The reason could be the 'center bias' that is often present when doing eye tracking. Although eye tracking is not the same as visual search, in may explain why central stops are more easily

found as peripheral stops. Yet, it is difficult to understand why this affect is absent in the contemporary map. I think that is doe to that almost all stops here were in the center so more of an artefact of the experiment than an actual underlying mechanism at stake.

PART 3 REDESIGN - EXAMPLE

Motivation [max 100 words]: Vignelli's saying 'dot means stop, no dot no stop', which i visualised by attaching his head to a dot.

Explanation of sketch [max 100 words]: I integrated the use of png with transparent layers so as to let his head float. Furthermore I made use of an example file, here is the comments [not totally necessary. MW]:

```
// Sketch by Maarten Wijntjes, student number (i wish...)
// I adapted the P5 drawing sketch, found here: https://editor.p5js.org/p5/sketches/HyeH4xJmOQ
// and put Vignelli's face under the dot... 'no dot no stop'
// but for the rest pretty random and just for illustration purposes

//comments below were in original sketch:
```

Link to the sketch https://editor.p5js.org/maartenwijntjes/present/i3UoG-af0

Process and reflection: I did not have experience with coding and found less free than I normally design when using sketching techniques or photography. The reason is that I like more the physical aspect of doing design, the movement of my hands over the paper and this physical process seems to be totally absent when using code to sketch. On the other hand, during the online courses I discovered that you could also use sound, and actually have a pitch estimation when using machine learning with ml5.js which gave me some inspiration for another project about singing.