

BEYOND MASTERPIECE

Project Type: Data Visualization + UI/UX + JS| Solo

Duration: 2020.Feb (two weeks)

Instructor: Arvind Satyanarayan





Marianna
Female | 27 Years Old
Artist & Museum Expert

Profession

Architecture student with Art History background

Frustration

- A lot of online websites did not provide any interaction content that can reduce the distance between art and people.
- It is hard to overview all works (macro level) and make comparison between works with similar properties (micro level)
- It is not designed for browsing through because the exploration methods is neither dynamic nor fluent (e.g. Always require to go back and repeat the process)

Needs

- Fun and dynamic methods of content deliveries
- Tools for making comparison or reminding me a good relation with other works.
- Make a good overview



Bibek
Male | 34 Years Old
Zero background users
* Not the target group of most of the online museum site

Profession

Entry-Level Mechanical Engineering

Frustration

- Art work display will not be interactive
- Confused about what to search for and how to get started with the art journey
- Limited art knowledge for in-depth explore
- Low efficiency of understanding and appreciating the work without reading redundant text

Needs

- More friendly and simplified structure guided new users
- Stories behind every work
- Tools helping me make good relation and be reformed after read the text network

Emotion

Phase

Activity

Touchpt

Goal

Problem

Search

Overview

Appreciation

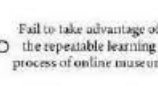
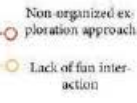
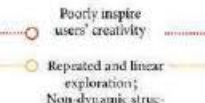
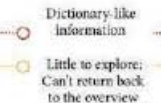
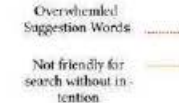
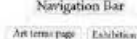
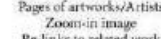
Relation

Exploration

Analyze



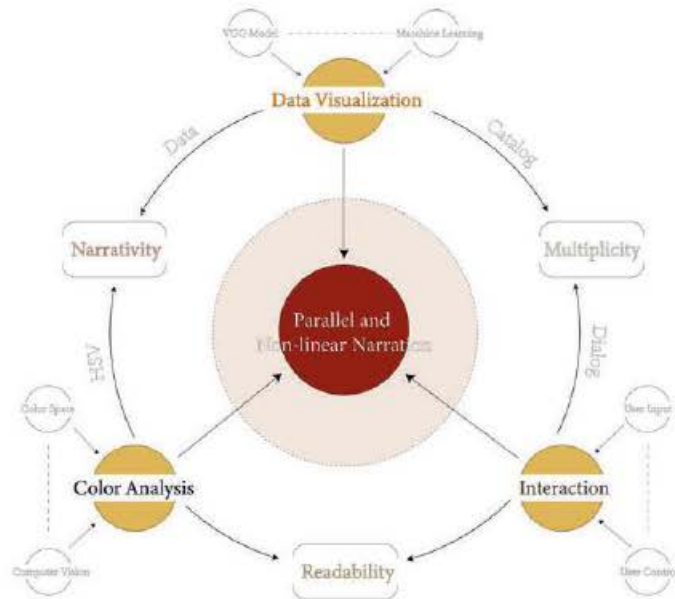
Lack of implementation



Major limitations

Similar with the case study of MoMA's website, online museums such as Tate Modern, The Metropolitan Museum, etc. failed to take advantages of an online experiences.

- Fail to attract and inform users at the beginning
- Non-hierarchical and limited selection of exploration approaches
- Information system that is only designed for professionals with art background
- One-way communication with making dialog with users
- Fail to invoke thoughts



Thus, the concept is to integrate and reconstruct the narration sequence of the online museums exhibition with the methods of data visualization, and to close the gap between arts and wider range of users by emphasizing on color that is based on a general concept, compared with painting genres and artists. Furthermore, this system will fully develop the interactive power of online media and turn the traditional one-way communication of museum appreciation into a two-way inspiration.

Process

MoMA API

Metadata
85,079 artworks
26,465 artists
139,003 records

Artwork
Title
Artist
Date made
Medium
Dimensions
Date

Artists
Name
Nationality
Wiki QID
Genre ULAN ID

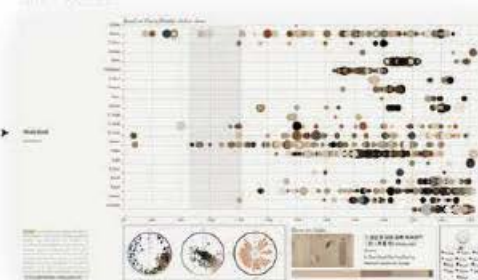
+ Processed data
Primary Color
Semantic Color
Image Links

Nested by layers of Categories along a time-line
Color
Artists
Culture
Tags

VGG16: Convolutional Network for Classification and Detection
Image Classification
Based upon similar primary color and layout

D3JS
Encoding Options
Color Palette
Interaction

UI Ver.1



While exploring different approaches and options of storytelling and interaction, remedy, add, reprocess, combine data for specific tasks is important for optimization. In order to create multiple-exploration ways for users, the data here is arranged into a tree branch structure that its traces are the multiplication with the main category and subcategory.



In the first iteration of an implemented live demo, scrolling is a main method of exploration in the first iteration and all information is packed into one page.

Self-Evaluation

Cons

Too much information to digest together
Panel layout filled the space but is confusing

Pro

Multiple interaction methods to explore
Hierarchical data narration

Interaction

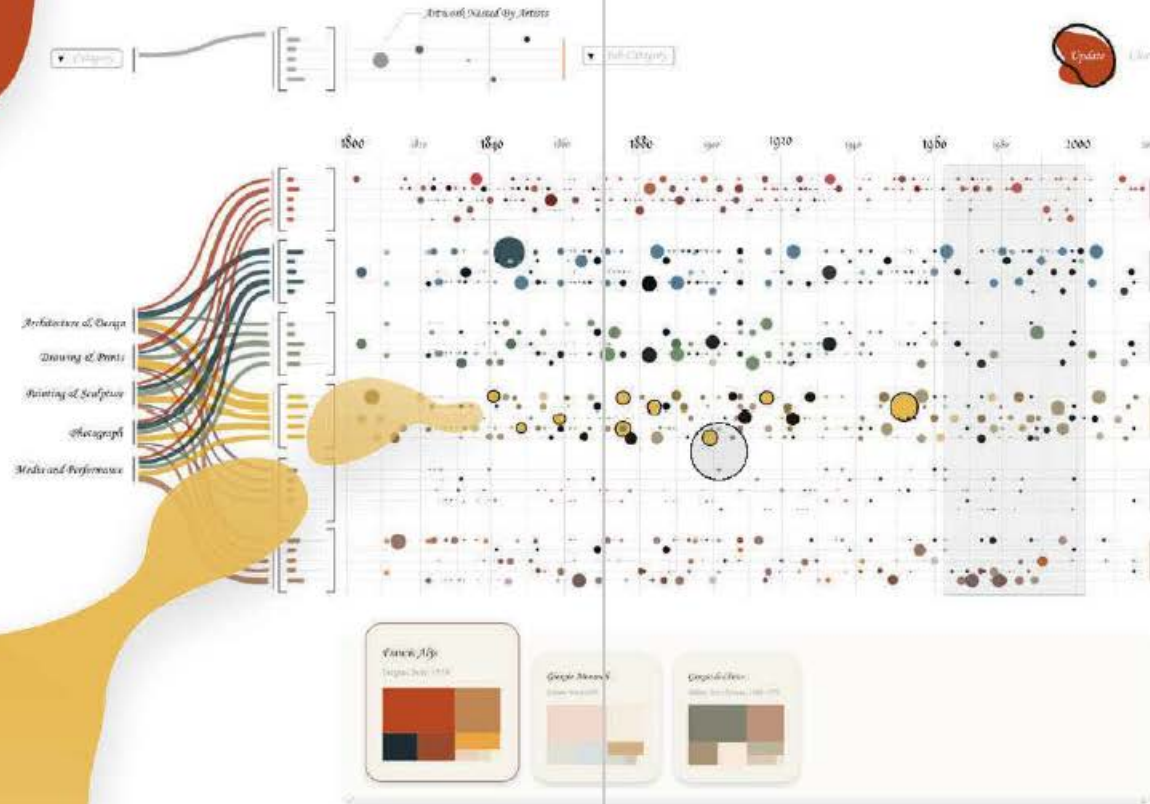
- Brushy
- Hover
- Dropdown
- Click
- Scroll

Category

- Color
- Artist
- Culture
- Tag

Sub-Category

- Color
- Artist
- Culture
- Tag



WorkBook

Analyze

ColorSpace

Interaction

Selections of input data provides multiple ways of exploration that allows users obtain new experiences everytime they revisited the site. Through interaction, such as click, hover, and brush, users are free to highlight information and zoom into details dynamically.

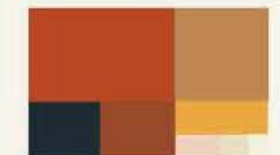
Data Limitation

Color's semantic classification (either it is red or blue) is based upon subjective perception. The color model reference I use can be found at here:

en.wikipedia.org/wiki/HSL_and_HSV#cite_note-39

Francis Alys

Belgian, born 1969







Nature-Mort

Still Life | 1916
Pablo Picasso

Numbered from the edition of 269 in pencil in the lower left margin. Printed and published by Galerie Charpentier, Paris. The work is held as part of the Pablo Picasso (Málaga, 1881 - Mougins, 1973) in pencil in the lower right margin.

Madame X



Workbook

Explore

ColorSpace

By **Scrolling**, the 3D representation of the HSV Color space will zoom in allowing users explore the internal color structure immersively. When moving the mouse in this interface, the 3D model will also be slightly follow your movement, creating dynamic looking.





Users	Favourite	Frustration	Confusion	Other	Improvements
Miles 26 Chinese Architecture students	Scroll effects Color space	Slow loading	Couldn't find «next step»...	Termal help explaining vi- sualization re- sults	Progression bar and Skip function Next step icon appear after sele- ction New phase name
Dorothy 34 British Administrative staff	Color space Color nodes Hover animation	Some tabs is small Switch is slow	I don't know that I can scroll to acti- vate animation	Color palette of a culture?	VGG16 Model optimization & limitation visualization
Lili 36 American Consultants	Legend Similar images	Can't jump between phases	Similar images is not similar	Get a more funny name for phases	