Traditional Museum VS. Online Museum

Aggregation of Narration

Exhibits in different Spaces can be aggregated online, according to a cultural trend, a historical age, a visual style, or similar social topics, etc. The narration of the online museum is no longer confined by the linear sequence of a physical one. It can be defined by the users.

Online Musuem

No Physical Inference

Online museum break out the limitation of human ability (observation, body strength, etc) and eliminate the interferenced factors. Users may have direct dialogue with pure art and appreciation.

Limitation

Database is based on open access API and data selection can be biased.

Traditional Musuem

Multimedia Promotion

The spatial configuration of the museum makes the media like a basket, that is able to packed into almost all other media. Multiple interpretation can work together on the audience's multiple senses to promoting cognition.

Traditional Musuem

Extensity and Superficiality

Traditional Museum is difficult to layer depth and make fluent narrative coherent system like online media. The learning process is non-repeatable, and information amount is always overwhelmed. This determines its extensity and superficiality(relatively). Thus, it is not friendly to visitors who choose complex visiting process and abstract content.

Diagram elements

Online Museum — Traditional Museum

Accessibility → **Container** → **Communication** → **Impact**

Internet / Threshold

HTML / XLS / Devices

Observation, Analyze, Comparision
Search, Explore, Simulation
Interact Content
Type, Click, Scroll, Hover, Sound
Keyboard, Mouse, Camera, Microphone
Virtual Tour
VR/AR

Creation
Technological observation
Updated Database
User Control
Sharable

Architecture / Partition / Quality / Light / Materials

On-Site Tour
On Foot / Installation / Artificial Light / VR/AR
Atmosphere
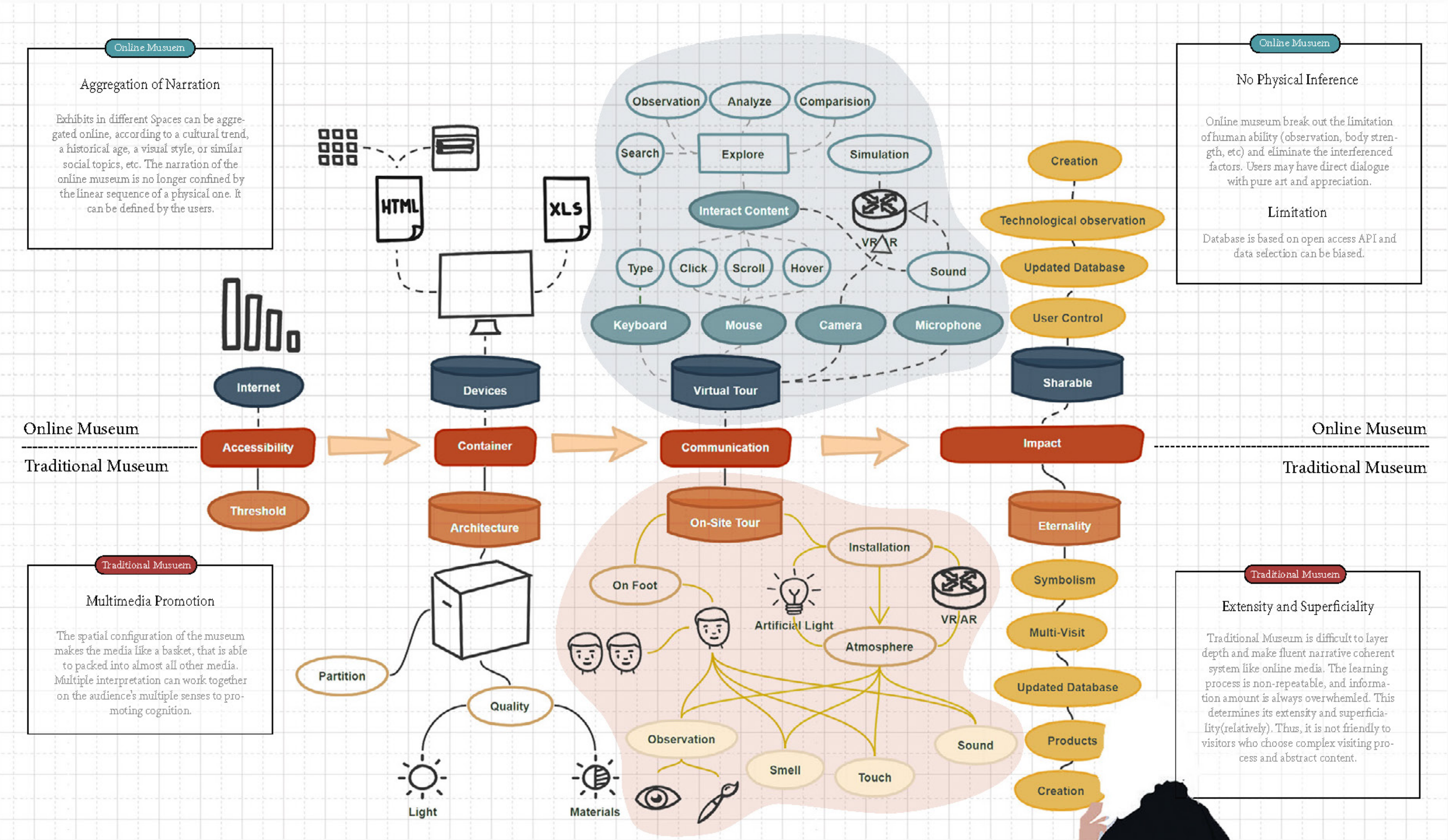Observation, Smell, Touch, Sound

Eternality
Symbolism
Multi-Visit
Updated Database
Products
Creation

There is an *irreplaceable* relationship between online museums and traditional museums. Although online museums are not physical, they are also not limited to real space. The narrative methods are more *centralized, analytical, in-depth and selective*, which can possibly liberate people's cognitive dimension of objects and narrow the distance between people and art on the basis of traditional museums

Marianna

Female | 27 Years Old

Artist & Museum Expert

Profession

Architecture student with Art History background

Frustration

- A lot of online websites didn't provide any interaction content that can reduce the distance between art and people.
- It is hard to overview all works(macro level) and make comparision 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 restart 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 | 24 Years Old

Zero background users

*Not the target group of most of the online museum site

Profession

Entry-Level Mechanical Engineer

Frustration

- Art work display will not fascinate me
- 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 gamified structure guided new users
- Stories behind every work
- Tools helping me make good relation and brainstorm after read the first artwork

Emotion
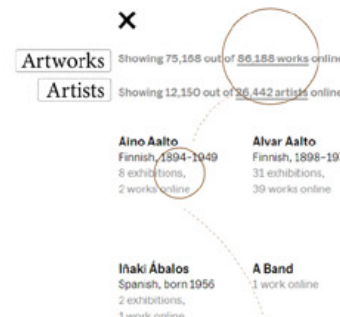
Phase

🔍 Search   ▦ Overview   ▣ Appreciation   ▭ Relation   ⬇ Exploration   ◌ Analyze

Activity

① Search moma.org
✕
Artworks — Showing 75,168 out of 86,188 works online
Artists — Showing 12,150 out of 36,442 artists online

Aino Aalto
Finnish, 1894–1949
8 exhibitions,
2 works online

Alvar Aalto
Finnish, 1898–1976
31 exhibitions,
39 works online

Iñaki Ábalos
Spanish, born 1956
2 exhibitions,
1 work online

A Band
1 work online

② ✓ Has image   On view

① Ruby Sky Stiler
Pink Figures from Pu
2019

② Show more results ▸

① Read Image

Ulrike Müller has 6 works online.
There are 2,454 paintings online.

Medium
Vitreous enamel on steel

Dimensions
15 1/2 × 12" (39.4 × 30.5 cm)

Credit
Fund for the Twenty-First Century

Object number
784.2018.2
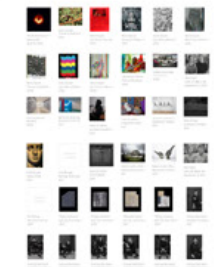
Copyright
© Ulrike Müller

Department
Painting and Sculpture

① Click Relinks

B. Ingrid Olson has 5 works online.

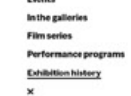There are 19,374 photographs online.

② Restart the selection process

① Download
Copyright
© 2020 Nicholas Nixon

② Art terms

③ Event Browse
Events
In the galleries
Film series
Performance programs
Exhibition history
✕

Lack of implementation

Touchpt

🔍 Search Port

Overview Port

Pages of artworks/Artists
Zoom-in image
Re-links to related work

🔗 Overview Port

Navigation Bar
Art terms page   Exhibition Page
Download link

Goal

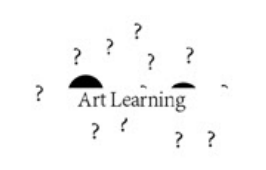Find a destination   Choose a startpoint   Appreciate an Artwork   In-Depth Exploration   Multi-aspects Exploration   Art Learning

Problem

Overwhelmed Suggestion Words ○   Overwhelmed Content ○   Dictionary-like information ○   Poorly inspire users' creativity ○   Non-organized exploration approach ○   Fail to take advantage of the repeatable learning process of online museum

Not friendly for search without intention ○   Non-hiearchical Structure ○   Little to explore; Can't return back to the overview page without refresh ○   Repeated and linear exploration; Non-dynamic structure ○   Lack of fun interaction ○

Major Imitations

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-hiearchical 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
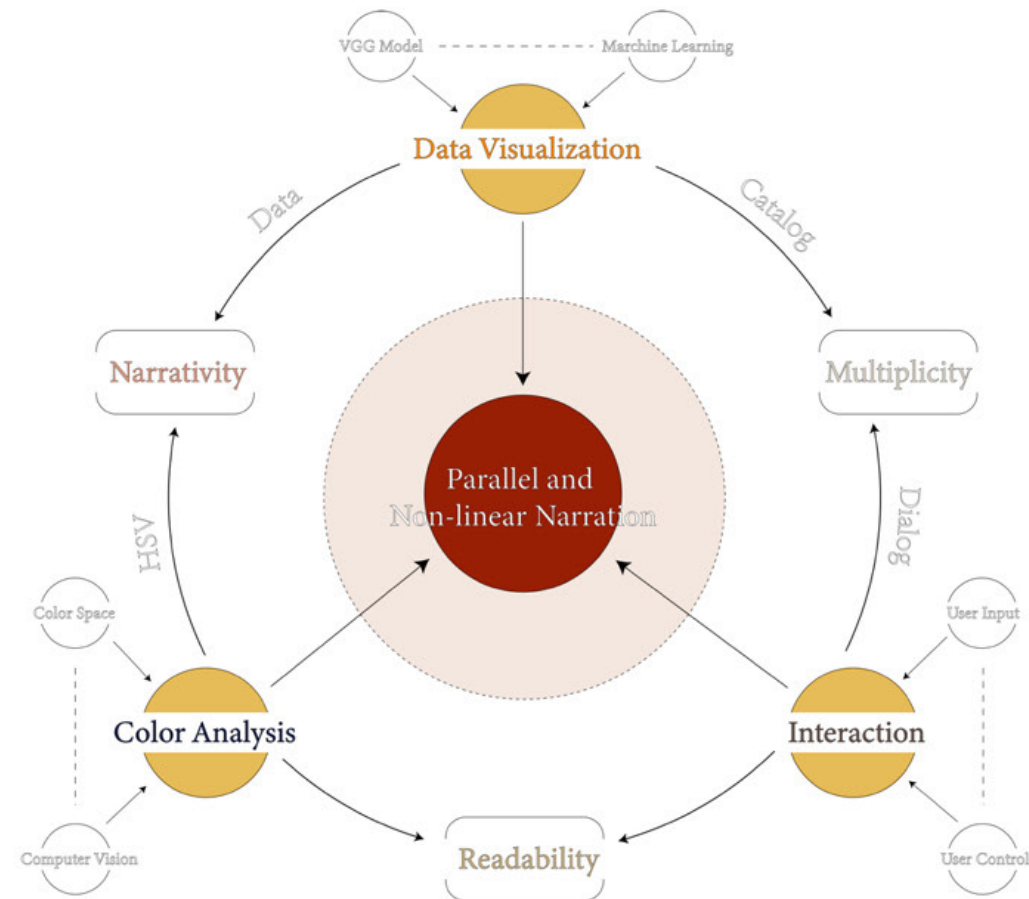
Thus, the concept is to integrate and reconstruct the narration sequence of the online museums exhibition with the methods of data visualization, and to close the gap between arts and wider range of users by emphasizing on color that is based on a general concept, compared with painting genres and artists. 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

MoMAAPI

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

Artwork
Title
Artist
Date made
Medium
Dimensions
Date

Artists
Name
Nationality
Wiki QID
Getty ULAN ID.

+ Processed data
Primary Color
Semantic Color
Image Links

Add Image
Clean data
Management

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

Color
Artists
Culture
Tags

VGG16: Convolutional Network for Classification and Detection

Image Classification
Based upon similar primary color and layout

D3JS

D3JS
Encoding Options
Color Palette
Interaction

Encodings

Color Palette

UI Ver.1

While exploring different approaches and options of storytelling and interaction, remodify, 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 catagory* and *subcatagory*.

Artwork Nested By Artists

In the first iteration of an implemented live demo, scrolling is a main methods of exploration in the first iteration and all information is packed into one page.
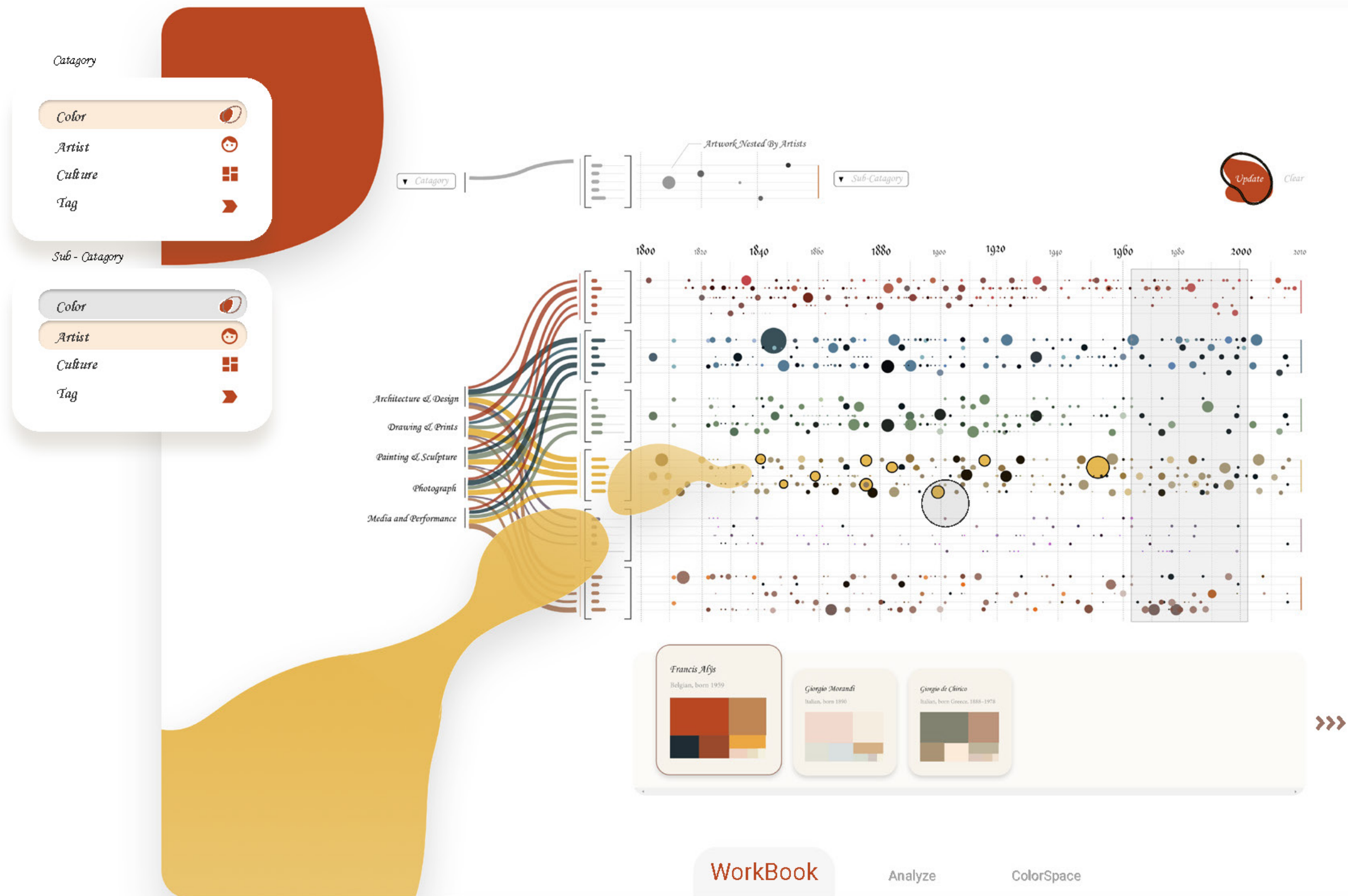
Self-Evaluation
Cons
Too much information to digest together
Panel layout filled the space but is confusing

Pros
Multiple interaction methods to explore
Hierarchical data narration
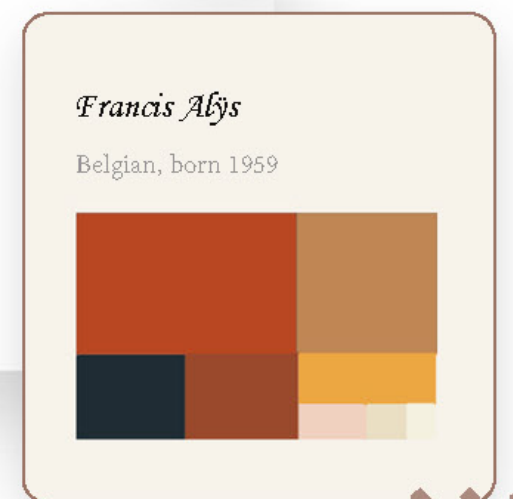
Interaction

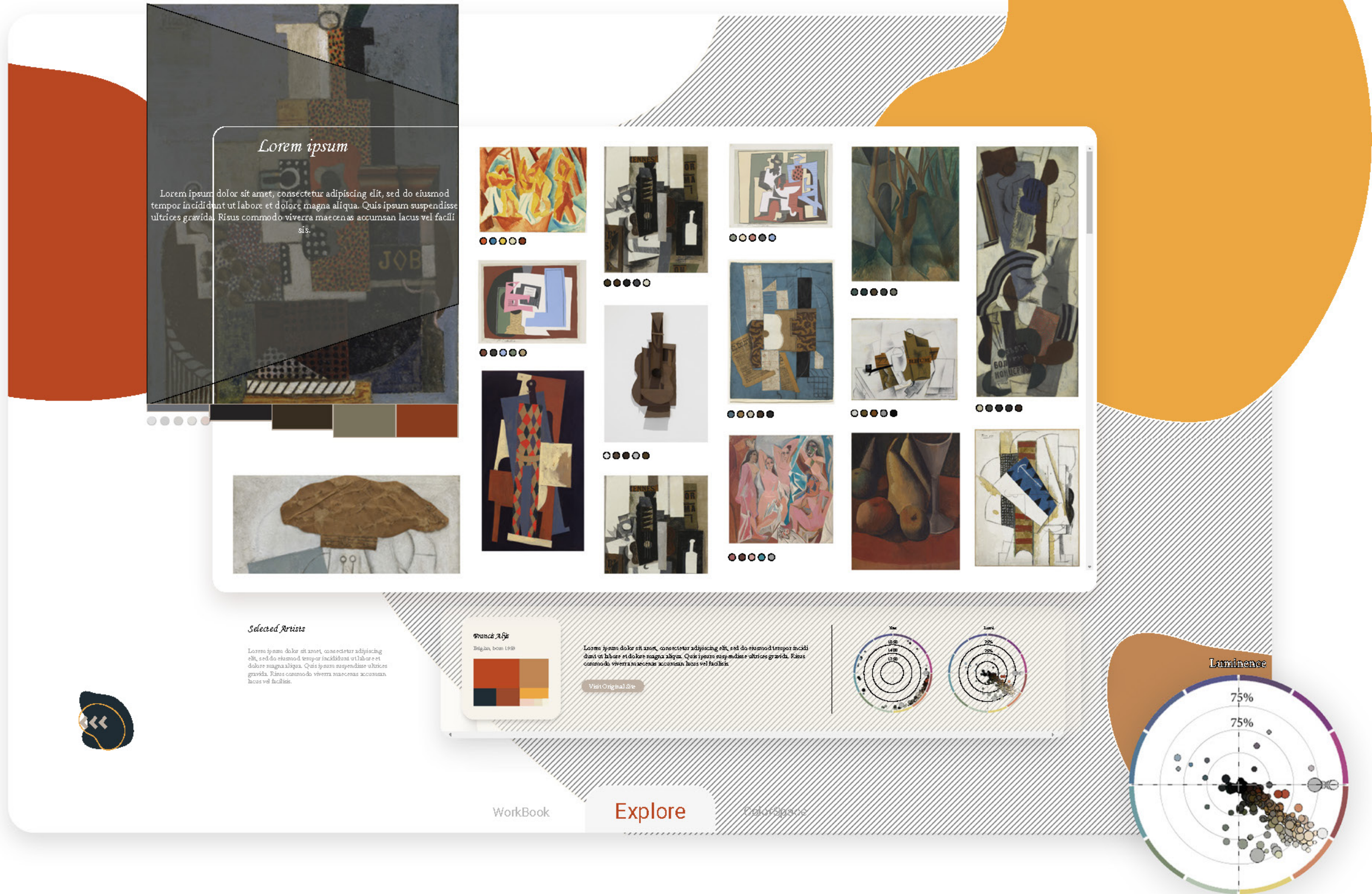BrushY

Hover

Dropdown

Click

Scroll

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

Catagory

Color
Artist
Culture
Tag

Sub - Catagory

Color
Artist
Culture
Tag

▼ Catagory   Artwork Nested By Artists   ▼ Sub-Catagory   Update   Clear

1800   1820   1840   1860   1880   1900   1920   1940   1960   1980   2000   2010

Architecture & Design
Drawing & Prints
Painting & Sculpture
Photograph
Media and Performance

Francis Alÿs
Belgian, born 1939

Giorgio Morandi
Italian, born 1890

Giorgio de Chirico
Italian, born Greece, 1888–1978

WorkBook   Analyze   ColorSpace

Francis Alÿs
Belgian, born 1959

Lorem ipsum

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Quis ipsum suspendisse ultrices gravida. Risus commodo viverra maecenas accumsan lacus vel facilisis.

Selected Artists

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Quis ipsum suspendisse ultrices gravida. Risus commodo viverra maecenas accumsan lacus vel facilisis.

Francis Alÿs

Belgian, born 1959

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Quis ipsum suspendisse ultrices gravida. Risus commodo viverra maecenas accumsan lacus vel facilisis.

Visit Original Site

Luminence

75%

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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.

Nature Morte Job

Still Life | 1916
Pablo Picasso

Numbered from the edition of 300 in pencil in the lower left margin; Printed and published by Atelier Commelynck, Paris. This work is hand signed by Pablo Picasso (Malaga, 1881 – Mougins, 1973) in pencil in the lower right margin.

Find Similar

WorkBook   Explore   ColorSpace

Users	Favourite	Frustration	Confusion	Other	Improvements
Miles 26 | Chinese Architecture students	Scroll effects Color space	Slow loading	Couldn't find «next step»…	Textual help explaining vi- sualization re- sults	Progression bar and Skip function Next step icon appear after selec- tion New phase name VGG16 Model optimization & limitation visualization
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?	
Liz 30 | American Consultants	Legend Similar images	Can't jump between phases	Similar images is not similar	Get a more funny name for phases	