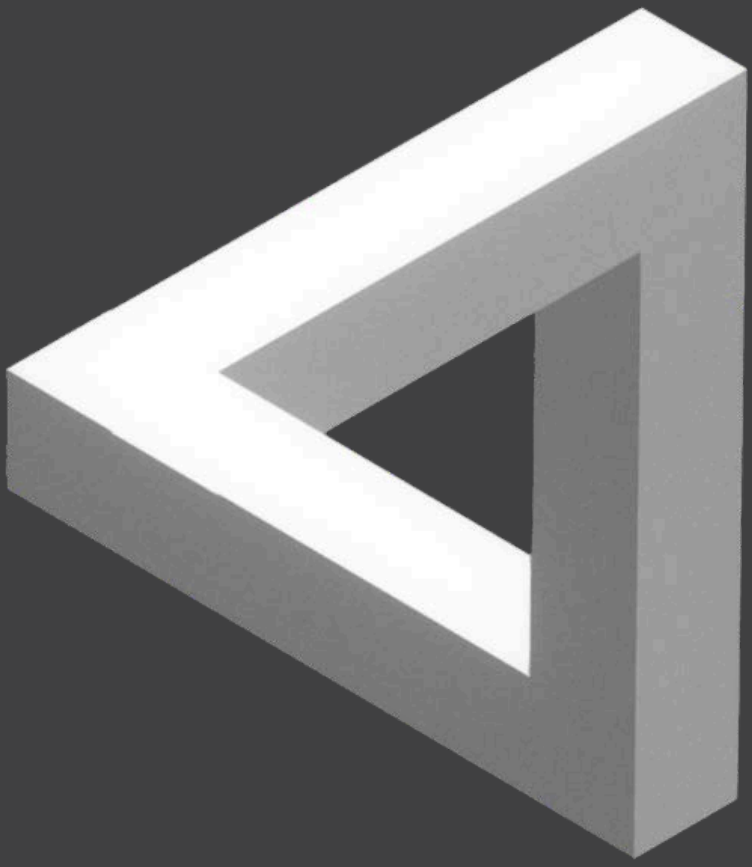

Impossible Space

< Behind the Scenes >

curated by: Ellish Ye, Jingyan Lu

Contents

Ludography (list of games)

- Antichamber
- a Museum of Dubious Splendors
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- Echochrome
- Islands: Non-Places
- Maquette
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- Moncage
- Monument Valley
- Perspective
- POOLS
- Portal 2
- Rental
- Shadowmatic
- Split Fiction
- Superliminal
- The Stanley Parable
- Titanfall 2
- Viewfinder

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Explanatory Video

Link:

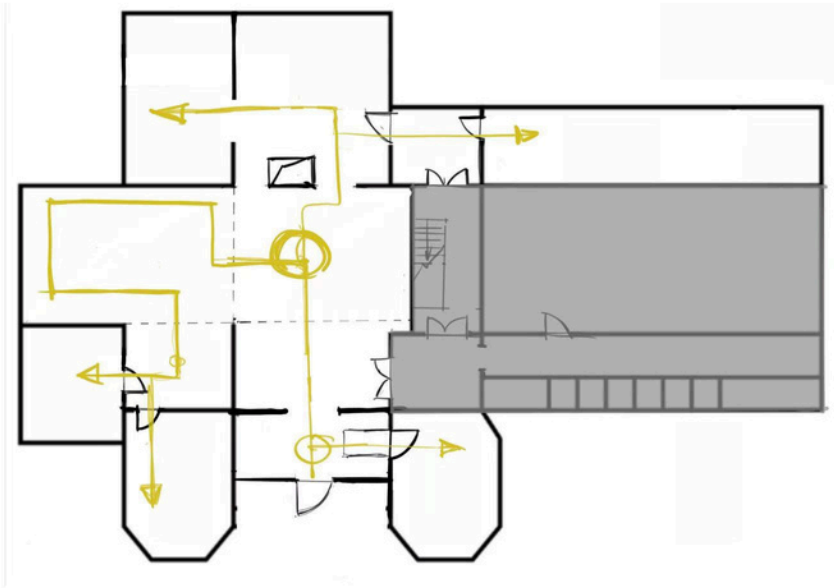
Impossible Space Exh Explanatory Video

Floor plan V1 (Zone)

Based on the on-site study of the existing church building, the exhibition space is divided into four main zones and one small "easter-egg" zone.

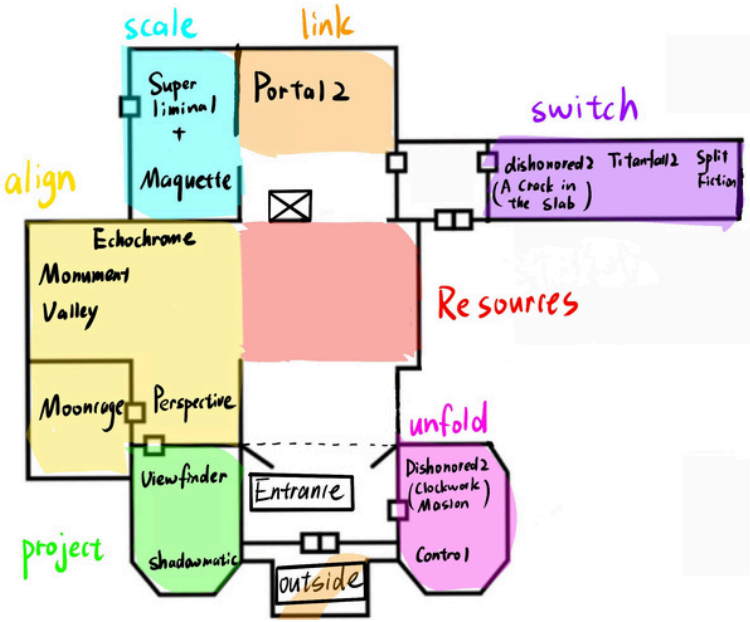
- **Zone 1 | Entrance & Central Hall**
  - Positioned along the main west-east axis, this serves as both the visitors' first encounter and the central circulation hub.
  - (Formerly: West Transept to Crossing)
- **Zone 2 | Main Exhibition Hall**
  - The most ceremonious and visually striking space, extending through three stories and featuring stained glass and vaulted ceilings.
  - This is the core exhibition area.
  - Two smaller rooms branch from here—one dark and enclosed, the other bright and well-lit—creating a contrast of spatial atmosphere.
  - (Formerly: Choir)
- **Zone 3 | Secondary Gallery**
  - Composed of one semi-enclosed and one enclosed space, hosting conceptual or extended exhibits.
  - (Formerly: East Transept)
- **Zone 4 | Terminal Gallery**
  - A long, narrow space at the far corner
  - (Formerly: Aisle part)
- **Zone 5 | Hidden Space**
  - A small "island" adjacent to the main spatial "continent," serving as a subtle postscript to the exhibition.

Floor plan V2 (Circulation)



- Visitors enter from the **West Transept**, arriving first at the **Crossing**, where theoretical background and contextual information are displayed. This is the first branching point in the visitor journey.
- Most will naturally be drawn to **Zone 2**, the main exhibition area with its strong visual appeal.
- After exploring it, visitors return to the **Crossing**, then proceed to **Zone 3** (secondary gallery) and finally to **Zone 4**, the terminal space.
- **Zone 5**, the easter-egg space, awaits at the end—a quiet discovery before exiting (in contrast to the other zones, where impossible space is articulated through interactive mechanics, this final zone approaches the theme through animated sequences).

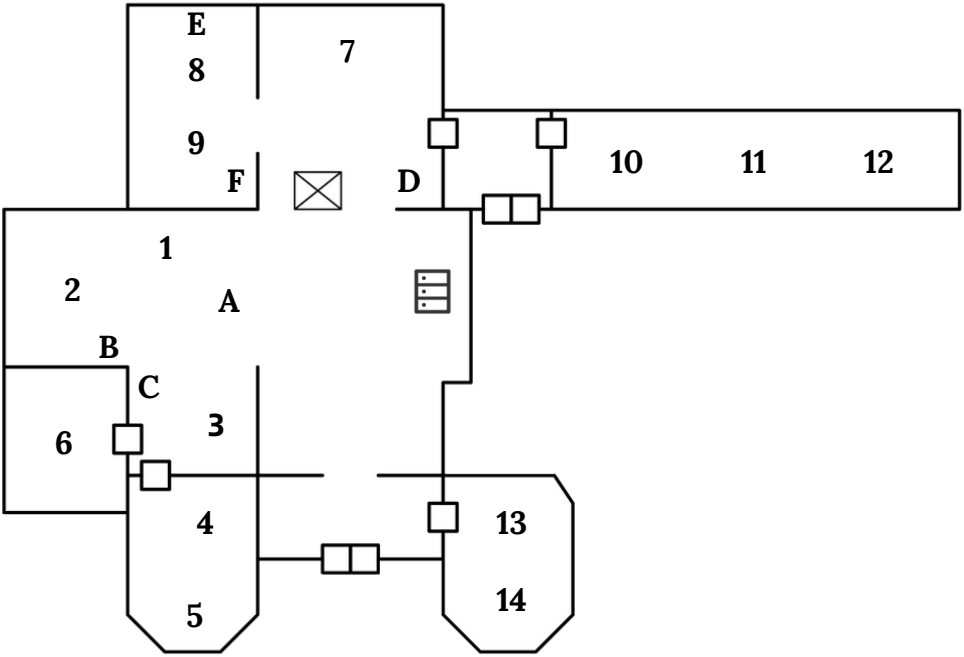
Floor plan V3 (Theme and Keywords)



The exhibition theme is "**Impossible Space**", focusing on the **stunning game mechanics** in video games.
By extracting shared design logics from different titles, we propose a set of **verbs** as conceptual threads that reveal how these unique spatial perceptions emerge:

Verb	Game Examples	Spatial Experience
Align	Monument Valley	Spatial shifts through visual alignment
Project	Viewfinder	Creating connections through projection and viewpoint
Scale	Maquette	Altering perception through scale manipulation of projects
Switch	Titanfall 2	Transitioning between timelines or dimensions
Unfold	Control	Dynamic transformation and unfolding of space

Floor plan V4 (Brief Placement)

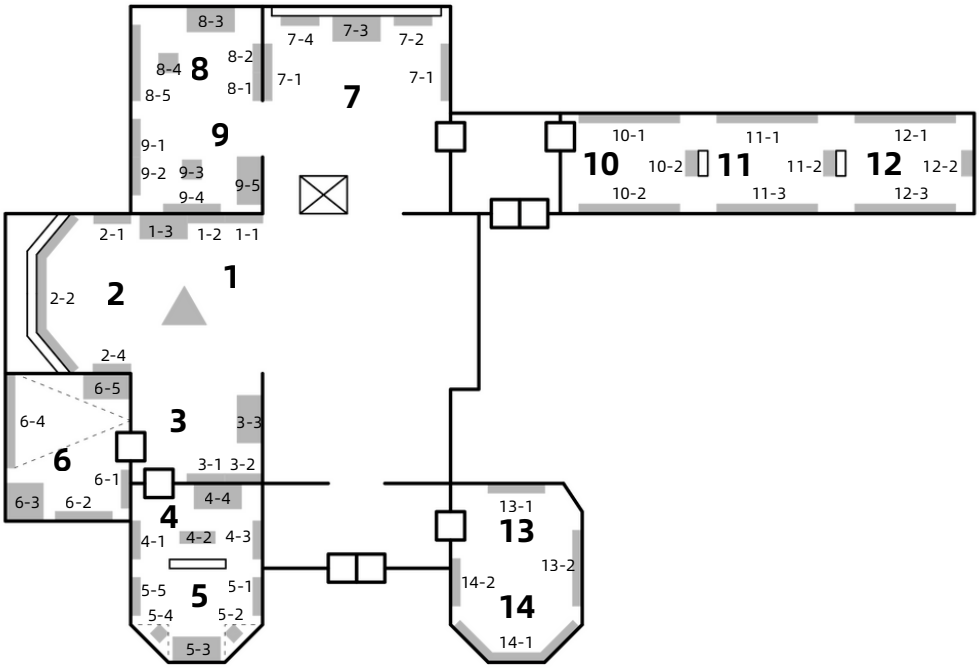


1 - Echochrome, 2008
2 - Monument Valley, 2014
3 - Perspective
4 - Viewfinder
5 - Shadowmatic
6 - Moncage
7 - Portal 2
8 - Superliminal
9 - Maquette
10 - Dishonored 2 (A Crack In The Slab)
11 - Titanfall2 (Cause and Effect)
12 - Split Fiction (Split)
13 - Dishonored 2 (Clockwork Mansion)
14 - Control (Ashtray Maze)

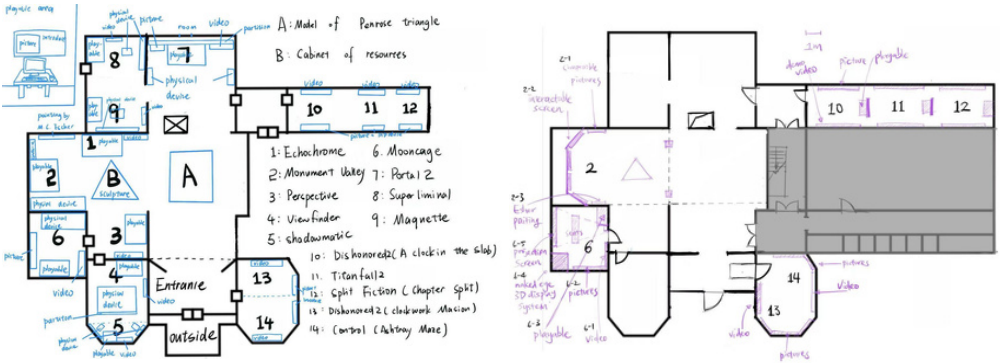
A - Impossible Triangle Monument, 1999 [Installation]
B - Ascending and Descending, 1960 [Painting]
C - The Ambassadors, 1533 [Painting]
D - Doctor Strange, 2016 [Flim clip]
E - Ames room, 1940 [Video]
F - The Twilight Zone, Small Town, 2020 [TV clip]

Pull-out file cabinet of Dig Deeper books & materials

Floor plan V5 (Final Detailed)



We selected the **display materials** for each game (including images, videos, playable, and devices, as well as their spatial placement), and assigned reference numbers to each item. Further details can be found in the following sections.

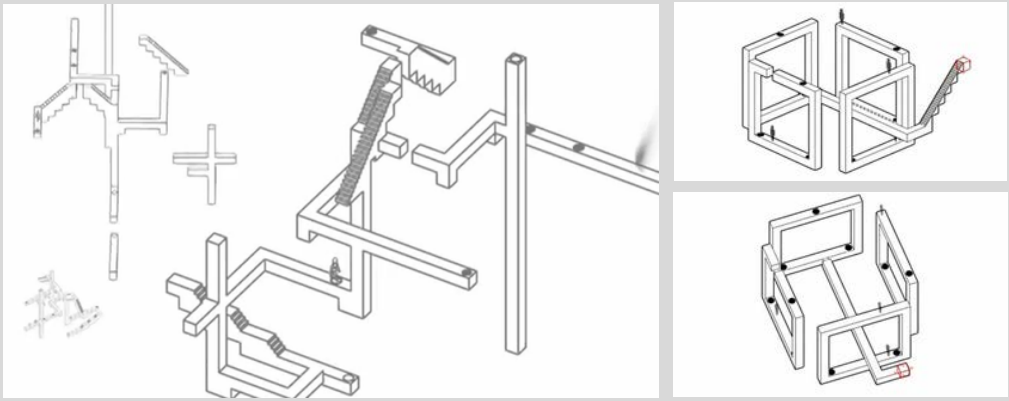


Hand-drawn sketches in the iteration process

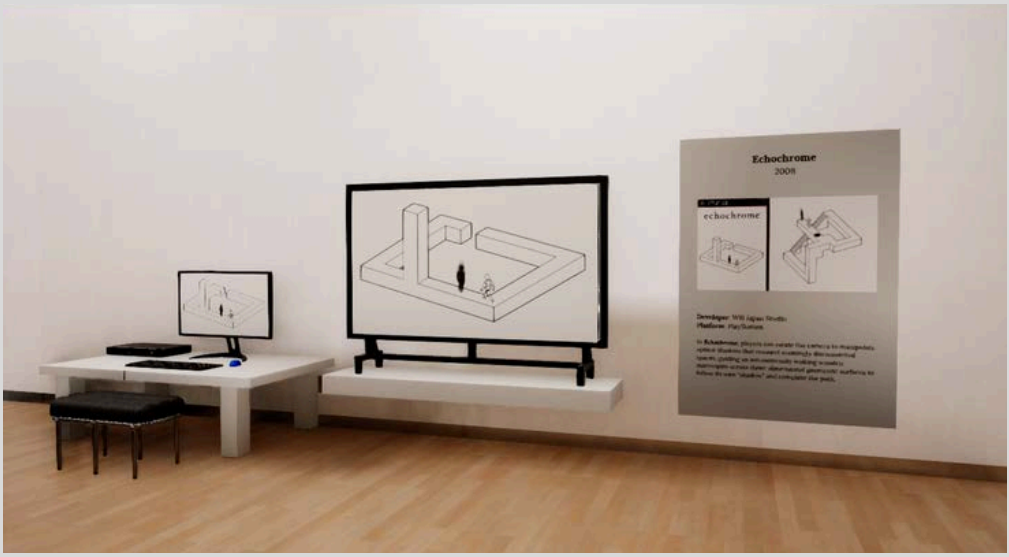
1 - Echochrome

Display Materials

[1-1] Pictures. The picture contains information such as the game's name, release time, developer, and introduction.
[1-2] A short video. A simple YouTube video demonstrates its gamplay.
[1-3] Playable game. Visitors will play Levels A1–A5 of perspective (Windows version) using a PlayStation, and display screen.



Screenshot from gameplay video

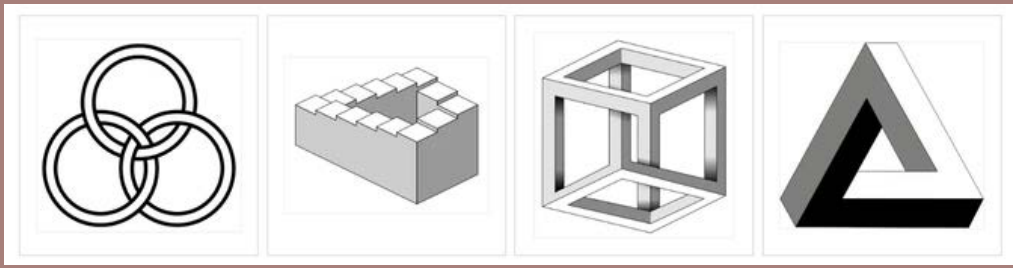


3D Site Layout (Draft)

2 - Monument Valley

Display Materials

[2-1] Pictures. The intro picture contains basic info, along with a sequence of pictures of Notable impossible objects. Borromean rings, Penrose stairs, Penrose triangle etc
[2-2] Playable game on screen. Visitors will play the first chapter of Monument Valley 3 (Windows version) using 4 big touchable screen
[**A] A sulpture** of Impossible Triangle
[B] A Painting by M.C. Escher. Ascending and Descending, M.C. Escher, 1960



Pictures of impossible objects, Borromean rings, Penrose stairs, Penrose triangle etc

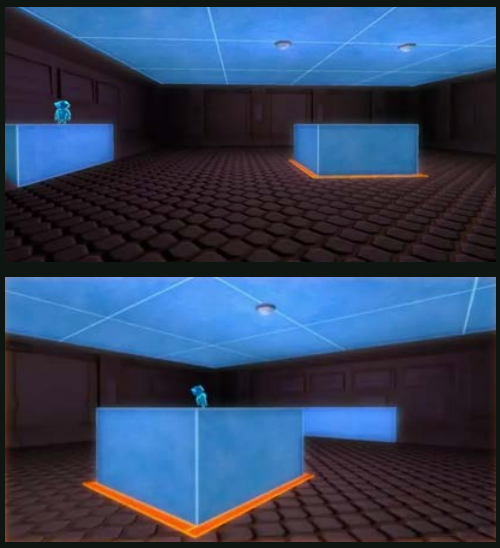
3D site layout concept (photo-collage)

A sulpture of Triangle on site (draft and refence)

3 - Perspective

Display Materials

[[3-1] Pictures. The intro picture contains basic info, along with some in-game screenshots showing how to switch between fixed-perspective 2D and 3D
[3-2] A short video. A simple YouTube video demonstrates its game mechanics.
[3-3] Playable game. Visitors will play first 10 minutes of perspective (Windows version) using a mouse, computer, and display screen.
[C] A Painting. The Ambassadors, 1533



Pictures of in-game screenshots showing how to switch between fixed-perspective 2D and 3D

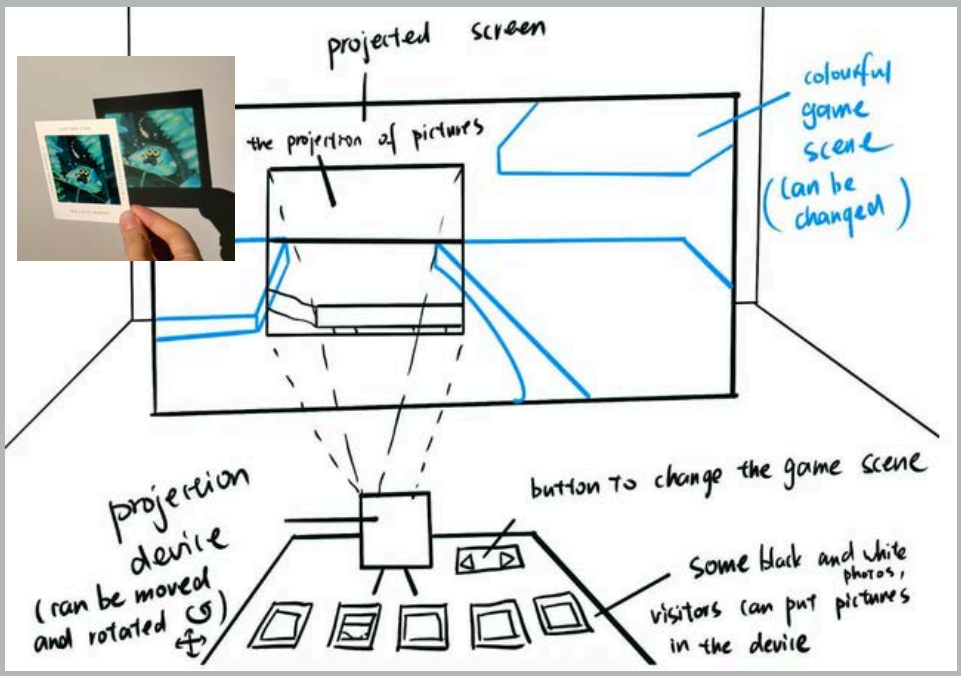
3D Site Layout (Draft)

4 - Viewfinder

Display Materials

[4-1] Pictures. The intro picture contains basic info, along with in-game screenshots to show how the content of the photos is integrated into the 3D scene
[4-2] A short video.A simple YouTube video demonstrates its game mechanics.
[4-3] Playable game. Visitors will play Chapter 1 of viewfinder (Windows version) using a mouse, computer, and display screen.
[4-4] A physical device. A physical projection device that projects a black-and-white photo similar to those in games. By projecting the 2D photo onto 3D objects, it connects roads that were originally disconnected.

Pictures of in-game screenshots



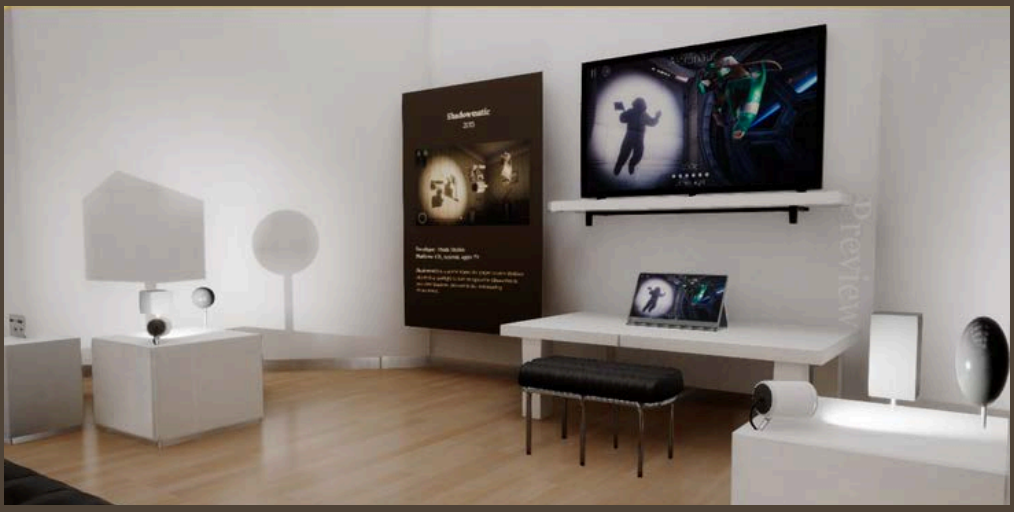
A physical device of projection (white box modelling and hand-drawn sketches)

5 - Shadowmatic

Display Materials

[5-1] Pictures. A sequence of game screenshots. Ten selected completion screenshots from different levels, illustrating puzzle solutions and spatial design.
[5-2] [5-4] An interactive light-and-shadow installation. A projection device with suspended objects inside a black box, each object rotatable to let visitors experience the game's core shadow-casting mechanic in real space.
[5-3] Playable game. Visitors will play the first three chapters of *Shadowmatic* on an iPad touchscreen.
[5-5] A short video. A simple YouTube video demonstrates its game mechanics.

Reference picture for installations



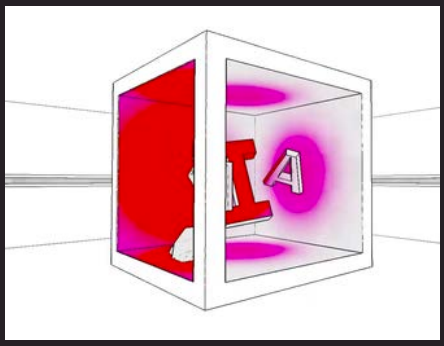
3D Site Layout (Draft)

6 - Moncage

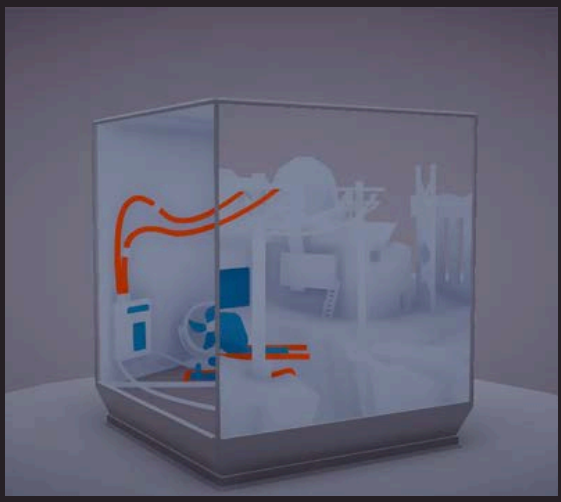
[6-1] A short video. A brief clip introduces the game's initial design inspiration — a YouTube demo showing the portal effect made possible by the newly accessible stencil buffer in Unity 4.2.

Inspiration video for Moncage

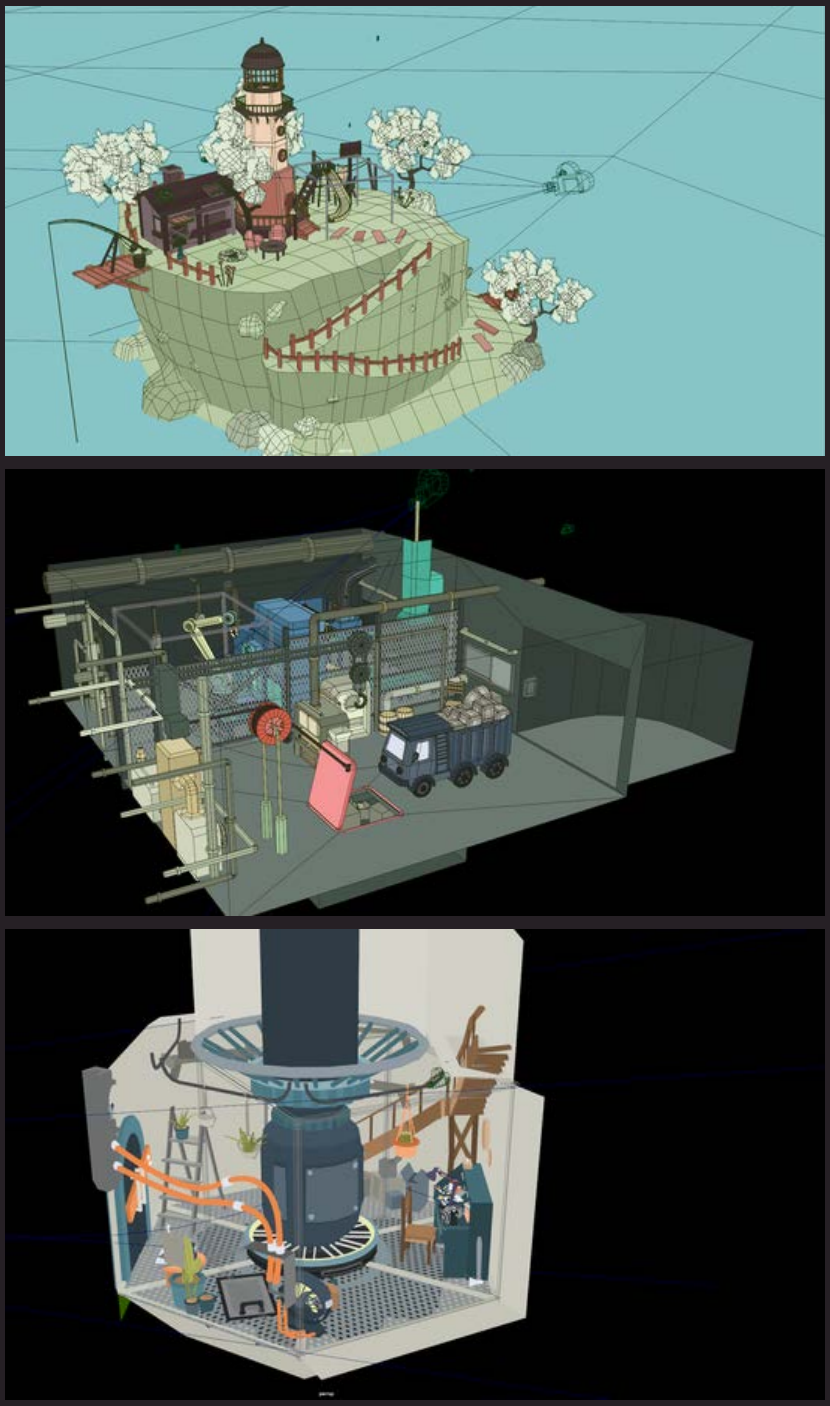
[6-2] A sequence of pictures. A visual timeline showcasing the game's development process, from early white-box prototypes to the final release version.
[6-3] A naked-eye 3D display system
[6-4] A projection screen displaying the game level currently being played on the computer
[6-5] Playable game. Visitors will play the first chapter of Moncage (Windows version) using a mouse, computer (with monitor), and a huge display screen (mentioned above).



Similar stencil buffer effect in Antichamber



Pictures of iteration

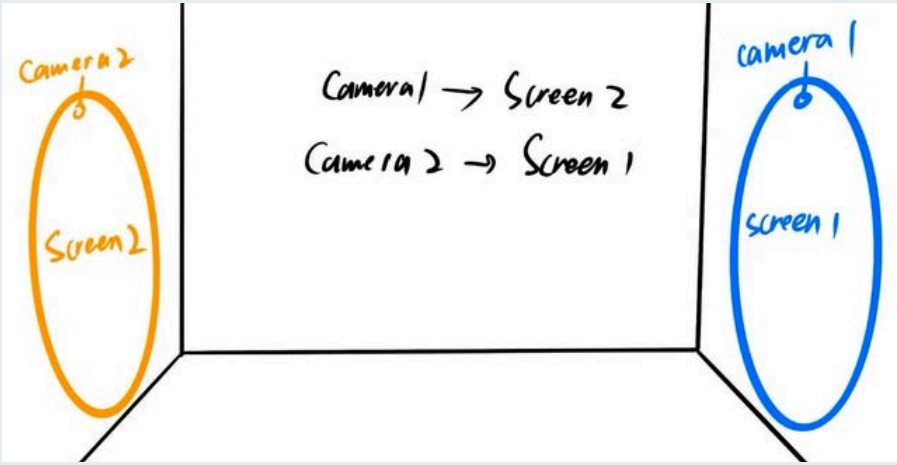


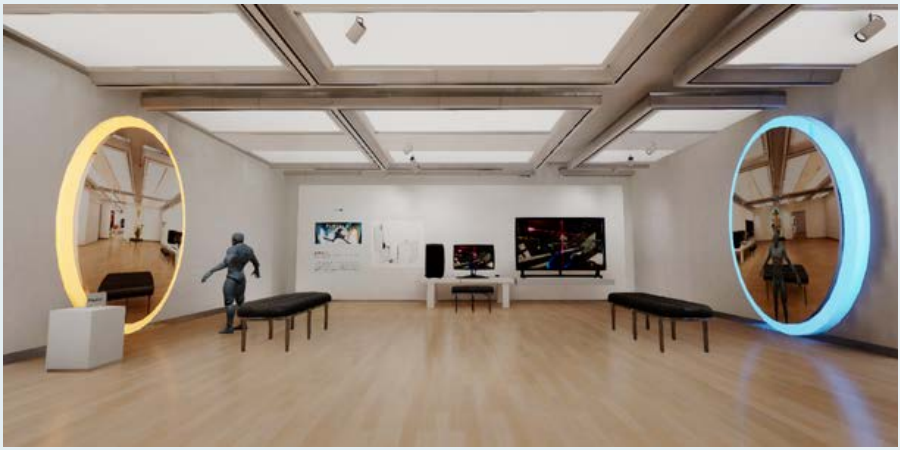
Pictures of art and modeling process

7 - Portal 2

Display Materials

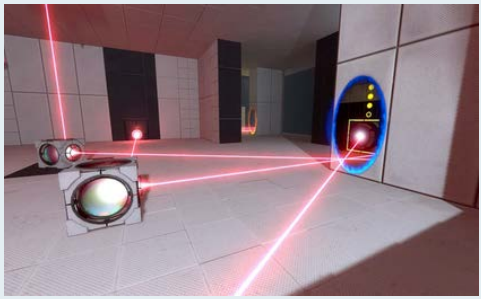
[7-1] A physical device. Two screens placed opposite each other, with cameras above the screens. The scenes captured by the cameras are projected onto the opposite screen in real-time, allowing visitors to experience the feeling of a portal.

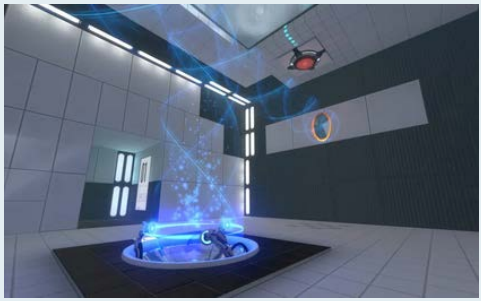


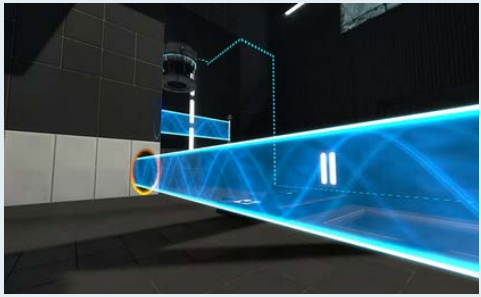


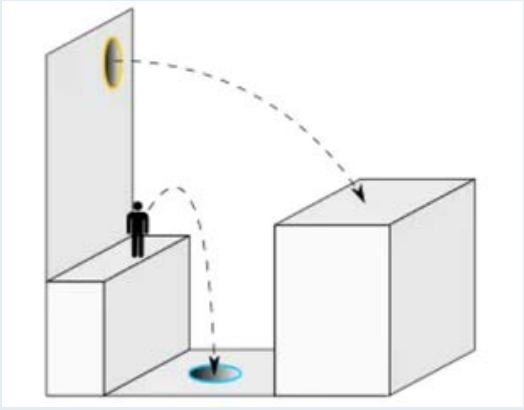
The portal device on site ((white box modelling and hand-drawn sketches)

[7-2]Pictures which can help players understand the mechanism of the portal.









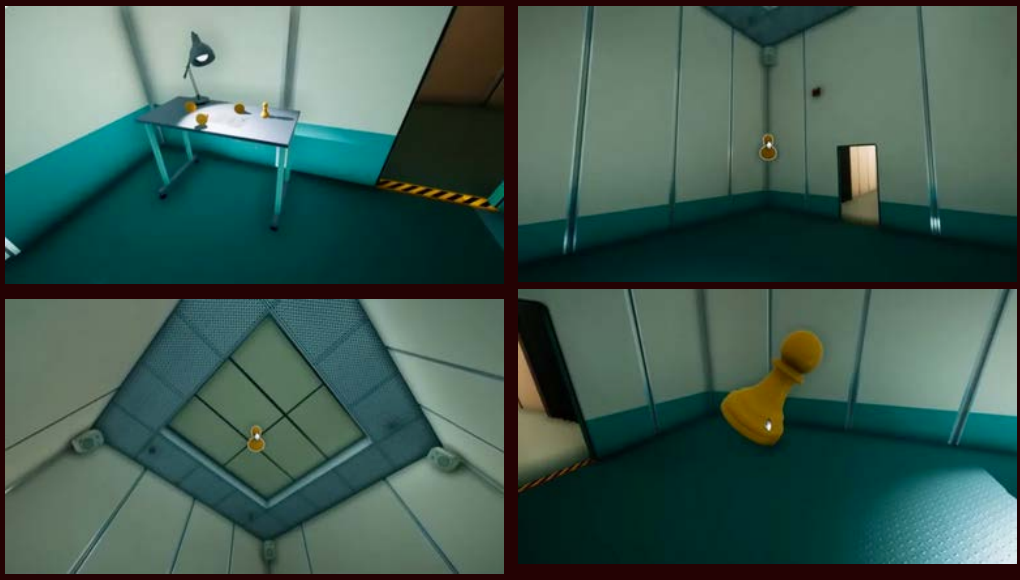
Pictures of screenshots and diagrams of mechanism

[7-3] Playable game. Visitors will play first chapter of Portal 2(Windows version) using a mouse, computer, and display screen.
[7-4] A short video. A simple YouTube video demonstrates the integration of its game mechanics and level design

8 - Superliminal

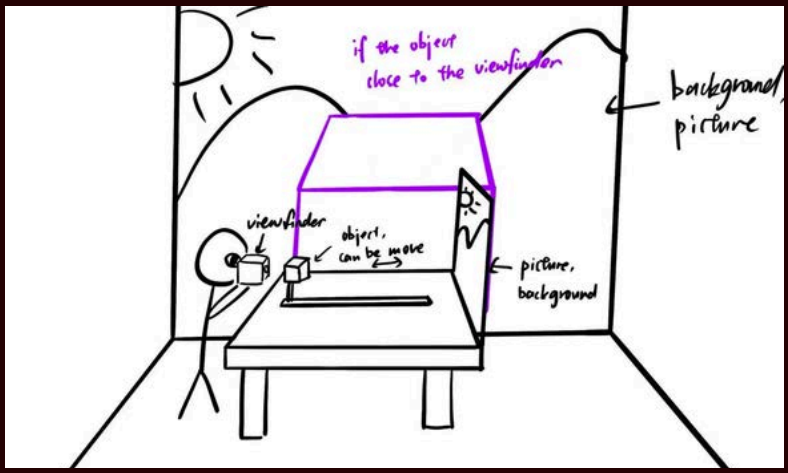
Display Materials

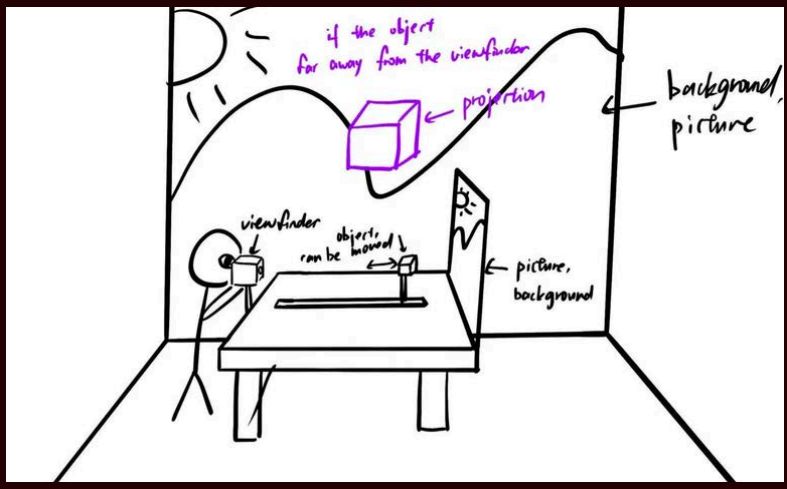
[8-1] Pictures. The pictures show the mechanism by which objects in the game change their size through perspective via screenshots.
[8-2] A short video. A simple YouTube video demonstrates its game mechanics
[8-3] Playable game. Visitors will play first two chapter of perspective (Windows version) using a mouse, computer, and display screen.



Pictures of screenshots showing object changes size

[8-4] A physical device. A physical movable object and a projection device. A viewfinder is placed in front of the movable object, and the moving distance of the movable object will be recorded. The closer it is to the viewfinder, the larger the projected item will be, and vice versa.





A physical device of perceiving object at different distances

9 - Maquette

Display Materials

[9-1] Pictures. Some game screenshots show the mechanism that links the miniature scenes with the external scenes
[**9-2] A short video**. A simple YouTube video demonstrates its game mechanics

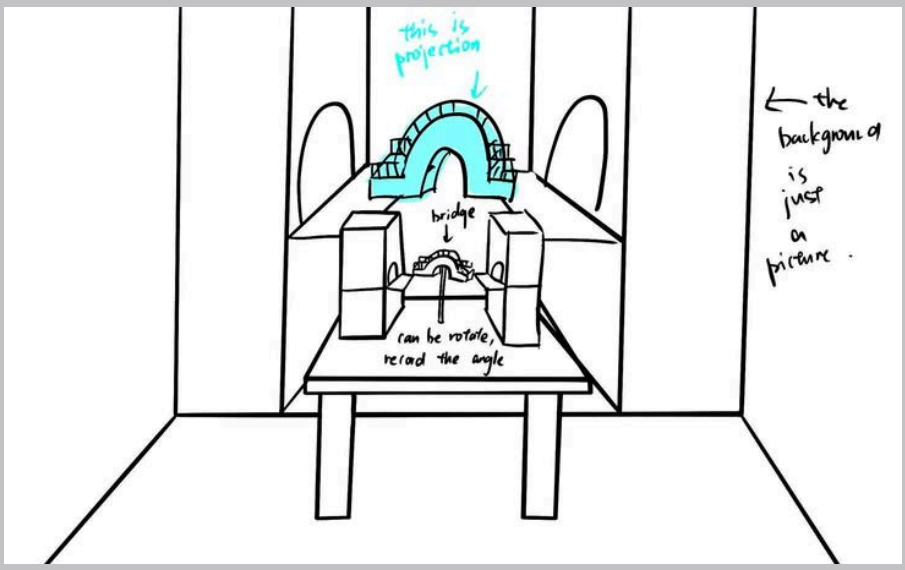
Dome in real scale

Orange cube in real scale

Go inside the dome

Find miniture model of smaller dome and cube

[9-3] [9-4] A set of physical devices and projections. there is a rotatable bridge on the device, and the projection on the wall will change according to the rotation angle, demonstrating the mechanisms in the game
[9-5] Playable game. Visitors will play first three chapter of perspective (Windows version) using a mouse, computer, and display screen.



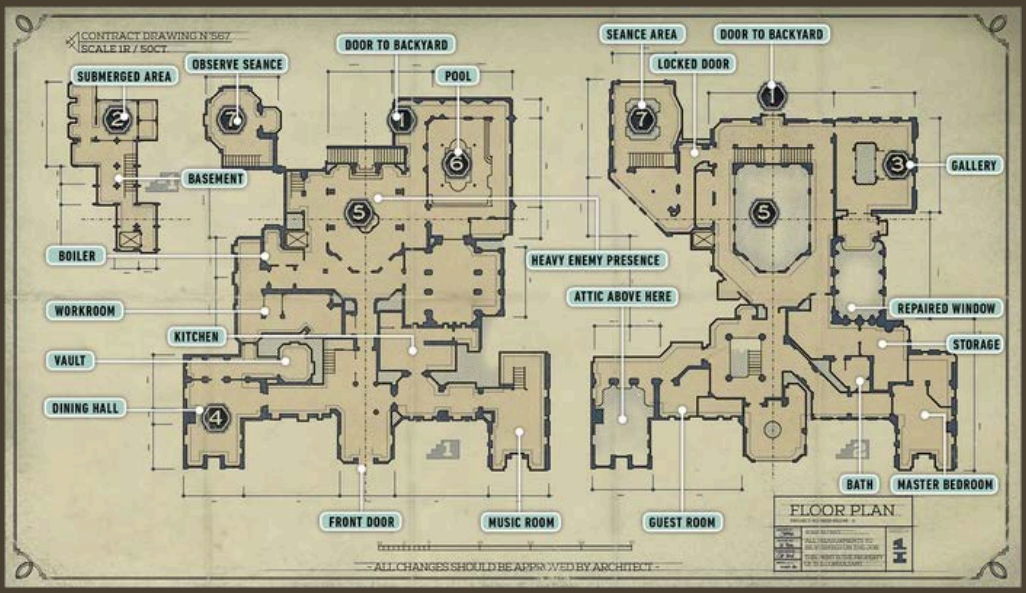
The device on site ((white box modelling and hand-drawn sketches)

10 - **Dishonored2** (A Crack in the Slab)

Display Materials

[10-1] A annotated map of the Aramis Stilton's Mansion level, accompanied by screenshots of its various scenes.
[10-2] Playable game. Visitors will play the A Crack in the Slab chapter of Dishonored 2 (Windows version) using a mouse, computer, and display screen.
[10-3] A premade video. A split-screen reel of A Crack in the Slab showing the final rendered level on the left and the whitebox development demo on the right, highlighting the evolution of its spatial design.

Pictures of in-game screenshots



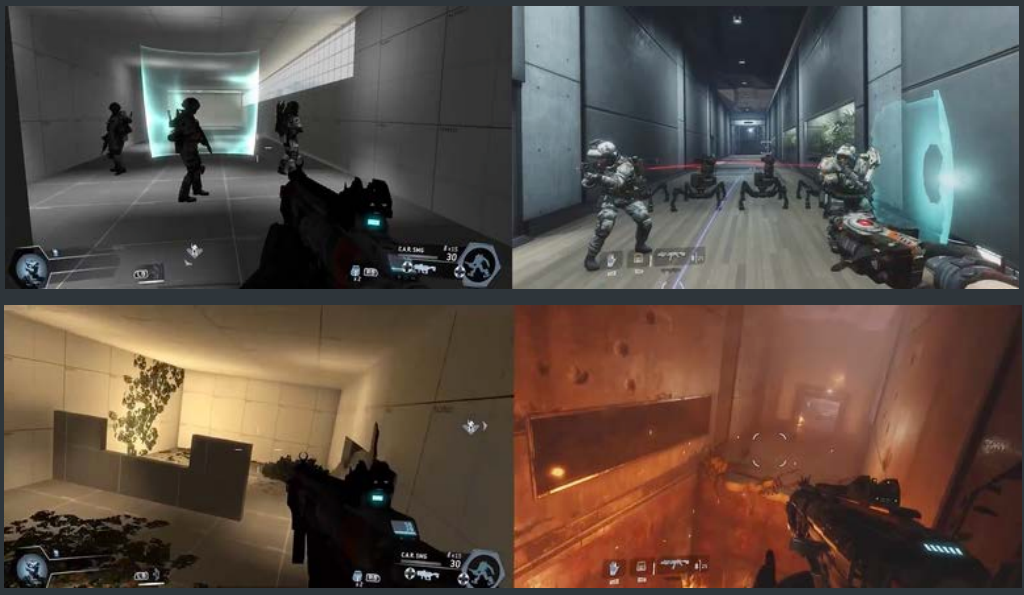
Pictures of Aramis Stilton's Mansion Map

11 - Titanfall 2 (Effect and Cause)

Display Materials

[11-1] A sequence of photos. A series of paired screenshots showing the same viewpoint across two timelines.
[11-2] Playable game. Visitors will play the Effect and Cause in Titanfall 2 (Windows version) using a mouse, computer, and display screen
[11-3] Game Developer interview video.

Pictures showing the same viewpoint across two timelines (left is in the past, and right is present)

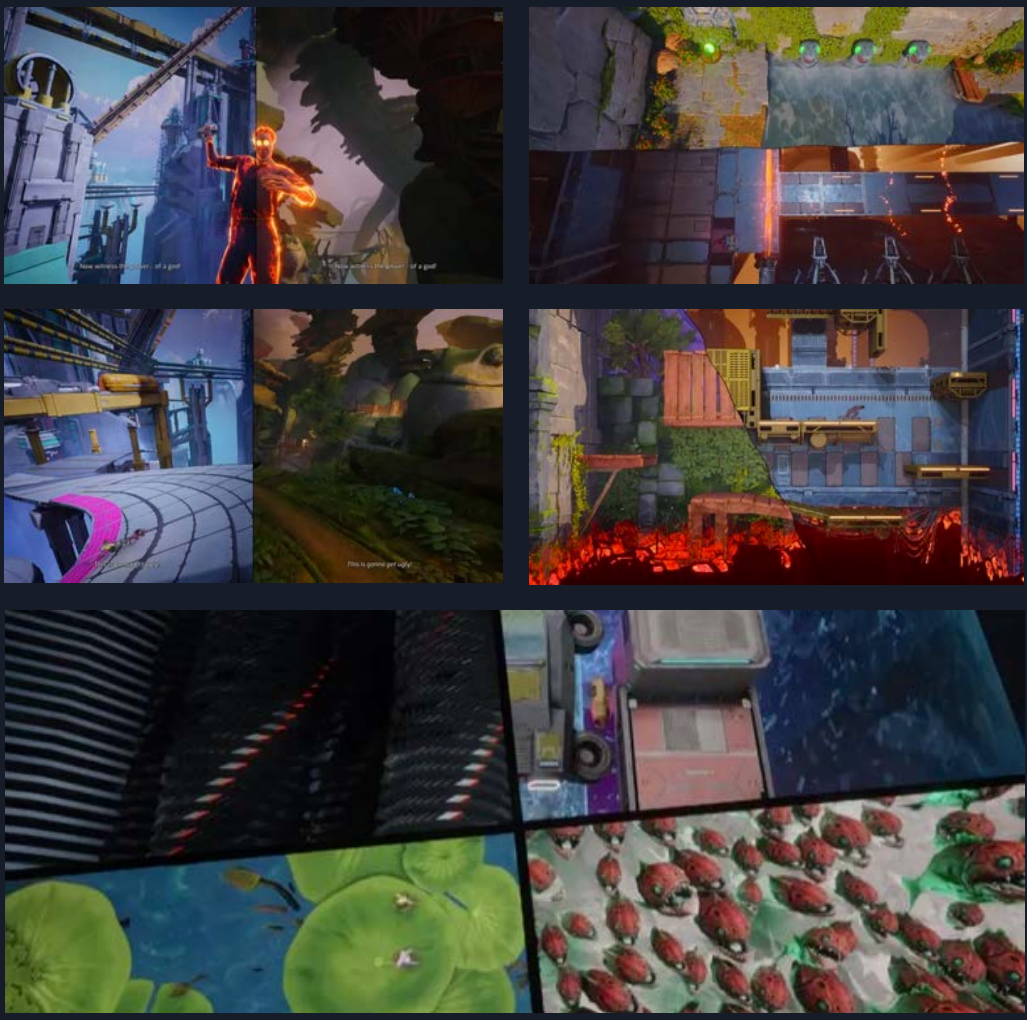


Video screenshots of developer's interview (left: whitebox / right: in-engine build)

12 – Split Fiction (Split)

Display Materials

[12-1] A sequence of pictures. Some in-game scene screenshots show how to achieve the division and recombination of space on the screen
[12-2] Playable game. Visitors will play the Split chapter in Split Fiction (Windows version) using a mouse, computer, and display screen
[12-3] A short video. A simple YouTube video demonstrates its game mechanics

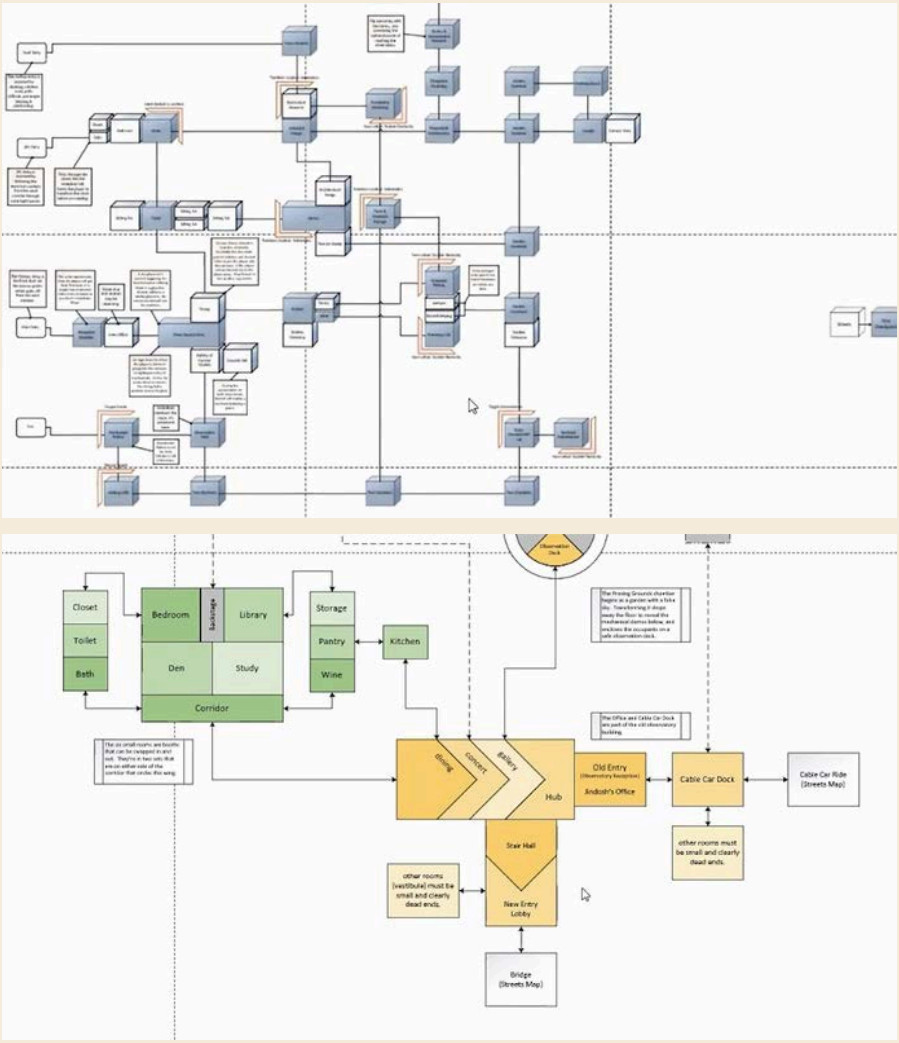


Video screenshots of in-game split screen

13 - **Dishonored2** (Clockwork Mansion)

Display Materials

[13-1] Pictures. Level map, in-game screenshots, and diagrams illustrating the gameplay flow and pacing.
[13-2] A pre-made video showing the level walkthrough

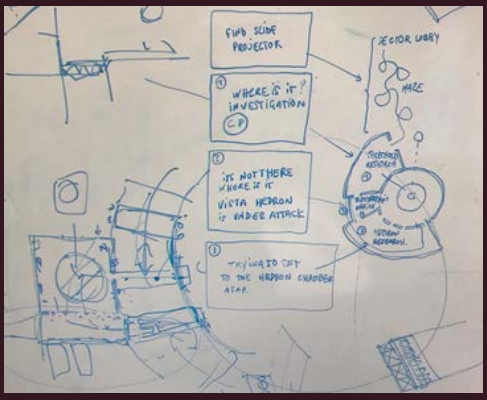


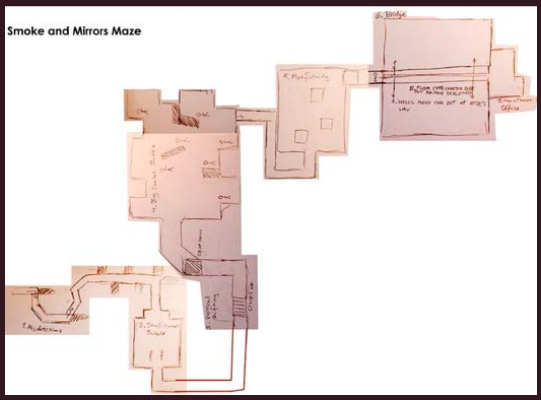
Pictures of developer's diagrams of gameplay flow and pacing

14 - Control (Ashtray Maze)

Display Materials

[14-1] A set of behind-the-scenes images. Highlights the environment design and VFX desgin of the Ashtray Maze.
[14-2] A pre-made montage video. Showcases the intricate spatial and visual transformations of the Ashtray Maze level.

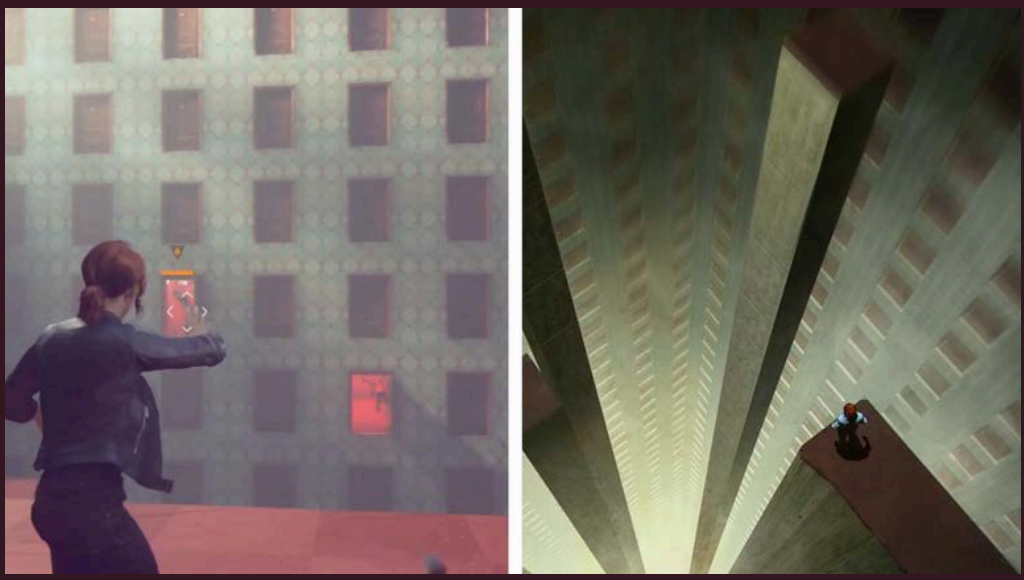




Behind-the-scenes images showing floor layout

Behind-the-scenes images showing whitebox

Whitebox VFX iteration and final in-game implementation of the scene transition animation.



In-game footage (left) and scene concept art (right)