

Anthropocene

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Museum of Humanity's Memory

ASD Core 2 Studio 2020

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'The Digital Archive: An Exploration of the Threshold between the Real and the Virtual'

CORE STUDIO 2 / 2020

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"Today abstraction is no longer that of the map, the double, the mirror, or the concept. Simulation is no longer that of a territory, a referential being, or a substance. It is the generation by models of a real without origin or reality: a hyperreal. The territory no longer precedes the map, nor does it survive it"

Jean Baudrillard

Architecture Core Studio 2 expands the scope of architectural problems to rather open up to the world of potentials and possibilities within a projective field: that is the responsibility to refute, to counteract and to respond, generating a critical discourse. If on the one hand we would argue that such stance implies first and foremost to attain a holistic and critical understanding of the world and the issues that future generations face and to grasp how such issues can be affected by our actions within our disciplinary field, on the other hand it supposes the urgent development of techniques that can liberate thought from the local place –site, type & time, for making design-agency to care about the future, the universal conditions and to start grasping new notions that will inevitably lead to the invention of new forms of archive, production and inhabitation.

We will foster within the projects a sensitiveness –much like the one of an artisan, one that stems from the utilization of certain tools and that develops by crafting together skills and end-pieces. The final work shall thus be a synthesis of the relationship between design-agency, future experience and the employment-integration of such tools in the design process; it should present an exploration of what at core is the creative potentiality of such tools and their capacities to make us not visualize but envision experiences other. To such end throughout the studio the students will be introduced to VR as means of production. VR will be taken not directly as a means of phenomenological representation, not only, but as a new tool through which design could challenge aprioristic notions of place, type and narrative, meaning, questioning the linear-accumulation of commodified experiences of spaces, in time. Within this hyperreal context the relationship between what we call 'material' and 'digital' will need to be readdressed and thus become the main driving core of the projects. As designers we must deal with a context in which experience is modeled and lived; as designers we must find a way to hold back the 'real', after its post-modern questioning; as designers we must still find an answer out of the predicament that is pictured by the following words by Jean Baudrillard: "Illusion is no longer possible, because the real is no longer possible. It is the whole political problem of parody, of hypersimulation or offensive simulation, that is posed here".

Our program will be informed by the cultural contexts of:

- + future growth, problems related to spatial limitations;
- + data storage problems of any sort, material and digital that will necessarily needed to be archived and accessed –cemeteries (corpses), municipal (data and historical files), libraries, museums (artifacts), biological (seeds and genes);
- + memory cultivation and preservation: a spatio-cultural issue that presents both, material/physical limitations and digital/intangible potentials.

The studio shall thus carry one project-building throughout the term that engages the students by asking to develop programs related to the experience of archives (storing-displaying- engaging facilities). At the end of the studio students are expected to be able to translate spatial-material-programmatic-representational ideas into visual narratives from which a comprehensive architectural proposal, digital and otherwise, emerges to articulate programs driven by the necessity to archive and to display.

Museum of Humanity's Memory

Students

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Tseng Yun Ching
Tsou Li Tian Matthew
Yang Yu Bing

The document is not the fortunate tool of a history that is primarily and fundamentally memory. In our time, history is that which transforms documents into monuments. In that area where, in the past, history deciphered the traces left by men, it now deploys a mass of elements that have to be grouped, made relevant, placed in relation to one another to form totalities; it might be said, to play on words a little, that in our time history aspires to the condition of archaeology, to the intrinsic description of the monument.
-- Michel Foucault, "Archaeology of Knowledge."

The Studio is working on 'A Museum for Humanity's Memory', where records of our past experiences are stored/fragmented and displayed/displaced. The museum will be a collective assemblage of our individual and collective memory as a society in the future.

The context is set in a dystopian world where the land is scarce and we are forced to live on/under the water due to rising in sea levels and climate change. Physical mobility is restricted to minimum. It is a world where humans are trapped between the virtual and the real under the ocean bed. Boundaries are blurred. Experiences are neither nor.

The civilisation as we know it ceased to exist along with its cities and our belongings along with it. We are forced to rely on our Memories as a civilisation. Memories are what connects us to our previous selves and to our futures. Our memories are the only record of our past, today and future.

"The archive as the privileged place for the experience of this temporal displacement is the archive as heterotopia; in this respect, archives are collections of time slices, of anonymous language; places of different experiences, for experimentations, and places that might permit the creation of different pasts, traditions or individualities. Of a double nature, archives are at the same time that which produces and reproduces the well-known and familiar and that which allows for ruptures and breaks with the past and the advent of something new. The archive creates, and it is created." (Ove Eliassen Knut, "The Archives of Michel Foucault")

The brief examines the definition of the Museum 'as a heterotopia' and the process of archiving as a way to connect our collective and individual history and keep record of our present for the future.

Our focus is on the Spatial Archiving of Humanity's Memories of Past as a Record of our Civilisation, focusing on the conceptual understanding of Archive as a series of events, disruptions, discontinuities and multiplicities.

Each Project is looking into different aspects of past civilizations as a tool to build a network of Memory Spaces for the Future Civilizations. The projects are informed by today's society's cultural context in order to speculate on the future. Each project focuses on an aspect of our Culture through the lens of a Memorial/Museum Space in order to emerge new meanings and connections among the society. The designs investigate the negotiation between the Physical and Virtual Spatial Constructs.

Areas / Project Requirements:

Entry / Information	:200m2
Main Exhibition Space	:500-1000m2
Specialised Exhibition Spaces	:500-1000m2
Museum Archive / Technical	:500-1000m2
Resting / Interaction Spaces	:500 m2
Circulation / Storage Spaces	:500m2
TOTAL	:3000m2

Present (2120)



Rubbish has covered most of the ocean water surface

Humans have to live in colonies among the structures on the seabed

Some have to even live within the undersea caves

TITLE TITLE TITLE

2120. Civilisation, now named "<name>", has been taken over by global warming and climate change. Anywhere above the sea level is no longer habitable as it is enveloped by the extensive amount of rubbish that could not disintegrate. The collective effect of the sheer weight of the rubbish, melted ice caps, and expansion of sea water, is the mass migration of humans into the ocean. A community of geologists had predicted the mass migration of humans to the ocean due to climate change and global warming. They had been working hard to archive geographical artifacts in whichever form to keep the memory of dryland

The "Museum of Memory" here commemorates the beauty of dry land formations that we once had

Landform

Artifact

The "Museum of Memory" will conclude with a reminder for humans to treasure the ocean, before we destroy our last stroke of hope to live on earth



The studio collectively built the scenario of 'living on/under the ocean' and all projects are situated within this context. The geographical conditions are set as hideaways for the future civilisations to survive, seek protection and strive.



History:

Climate Change and rising Sea levels have forced civilizations to move to the seas. Due to Climate Change and environmental disasters, Pandemics and Wars have left the surface of the earth unlivable. Since land was not habitable any more, societies were forced to search new environments for survival and the remaining civilizations moved to the Ocean.



Geography:

Most of the civilisation have sunken below the sea level, pandemics and natural disasters have destroyed all habitation on land. Landscapes are heavily constructed - an icon to the Anthropocene epoch.



Culture and Social Classes:

Societies are forced to redefine themselves. Collective history has been wiped clean along with the life on land. Societies are trapped to small colonies underwater



Technology:

Technology has enabled humans to live in a world of AR and VR to mask the destroyed landscape as a result of climate change. It has also allowed for smooth transitioning from wet to dry environments wherever and whenever necessary. Both augmented and virtual projections are made through VR lenses that humans wear all the time.



3200. The Earth is about 1000 years into Anthropocene and civilization has been taken over by global warming and climate change. Places above the sea level is hardly habitable as it is enveloped in pollution and high temperatures. The collective effect of the sheer weight of the rubbish, melted ice caps, and expansion of sea water, is the mass migration of humans into the ocean. Humans are now confined in underwater structures about 50 meters to 10 meters underwater.

The museum of memory sits on a large constructed landscape, which is extensive both in breadth and depth. Over 1000 years ago, before the apocalypse, this landscape used to be an open pit mine for copper and crystals, with resources that extend kilometers deep within the mountain range. It is amongst the biggest relic landscapes of the Holocene-Anthropocene transition period, almost like an icon to the afore-mentioned epoch.

The Museum is a part of network of Museums that are commemorating the series of event leading and relating to the Anthropocene. It commemorates the history of the landscape as well as the processes that has created this relic landscape. It. This is done through introducing visitors to resources that was, and is still being extracted from the earth, and the damages that the extraction process caused. Visitors would also see through the landscape's evolution over time, in reverse, and then be given the chance to experience the untouched environment through immersive reality. The Projection of the future environment, and what humans could do to offset the damage, would also be shown to the visitors. The main aim of these experiences is to help visitors understand the adverse impacts of the small things they take for granted, as shown in the contrasting environments of the past, present and future. Towards the end of the exhibition, visitors would be given the chance to negotiate and discuss with one another to build the desired environment thAat they want as a collective.

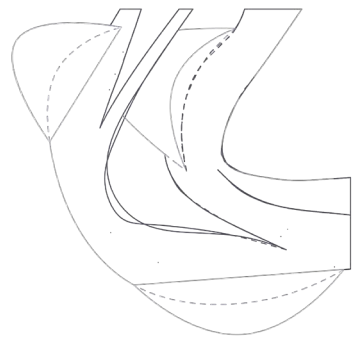
In addition to discussing about matters relating to the environment and the geographical evolution of the earth, the museum of Memory also discusses about humans' experiences as nature evolves over time, though in a more subtle manner. This is to convey that humans' experiences are also a huge part of this evolution. This could be in the form of exploitation of manpower as the environment is being constructed, or the sheer impact of the changing environment on humans' quality of life itself.

Hence in the world building exercise, the Museum intention is for the visitors to consider both the interests of humans and nature in the building process of their collective environment. The museum will then conclude with the final product, a holographic projection of the desired landscape as a small-scale monument that will be archived each time it is being made. These small-scale monuments are for people in the near or far future to look back and reflect on how their relative past, present and future evolve, and how people's idea of an ideal environment change along with it as well.

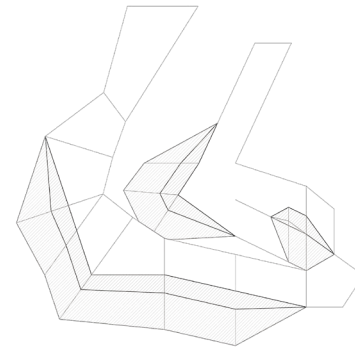


Description of Drawing
Chosen Site - Open Pit Mine

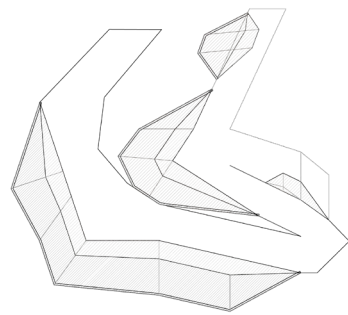
Design Iterations - Approach 1 (Triangulation)



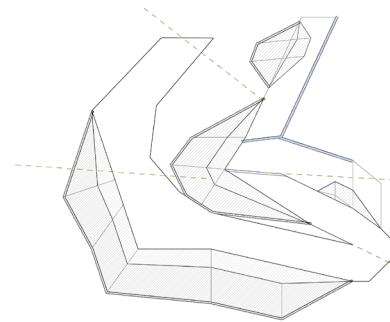
Initial Ideation -
Sketch of Ramp and
positon of spaces



2nd Iteration -
Making angular
edges

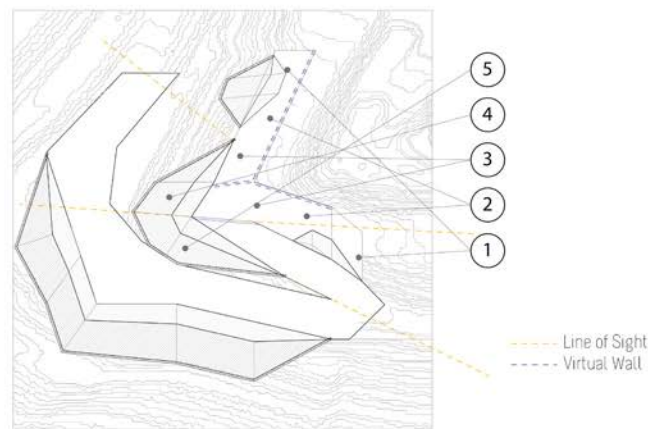


3rd Iteration -
Changes to the flow
of Museum



4th Iteration -
Designing virtual
spaces in relation to
physical spaces

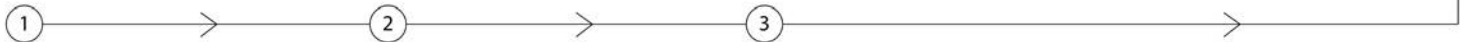
Circulation Diagram - Effects Description



Physical: The other side of the room at stage 5, on an elevated platform
 VR: A reverse timelapse from stage 5 to before construction of ground



Physical: A room where visitor will run towards after the explosion at stage 4
 VR: A Bird's Eye View of the explosion
 Effects:
 - Explosion sound



Physical: Glass Door / Entrance



VR: Events of Anthropocene



Artefact: Mineral Deposit

Effects:
 - Projection of Artefacts floating around
 - The interiors will change according to the option picked

Physical: Museum Corridor



VR: Mine Tunnel



Effects:

- Mining hammer clicking sound
 - Parts of the wall glisten
 - Potential VR branching out to see different type of mines

Physical: Glass Door / Entrance



VR: Mine Entrance: Explosion will occur when visitors enter the space after the door



Artefact: Drill/Mining Equipment

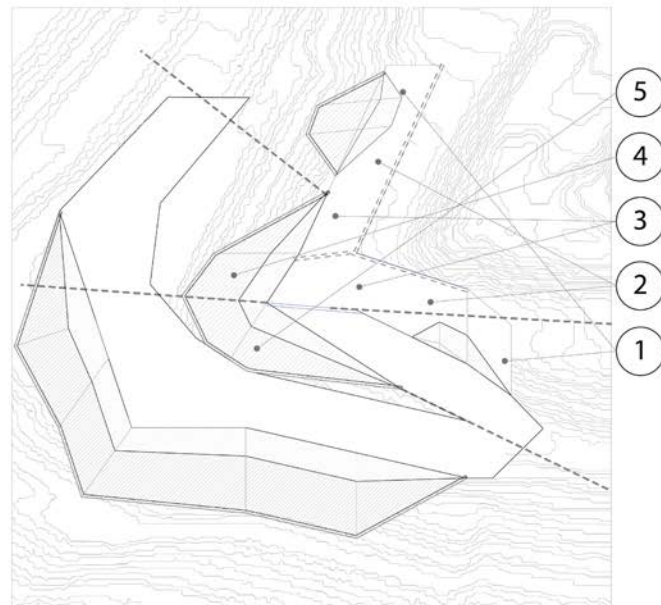
Effects:
 - Door opens when visitors reach
 - Heavy door opening sound
 - Dust particles falling down

Effects:

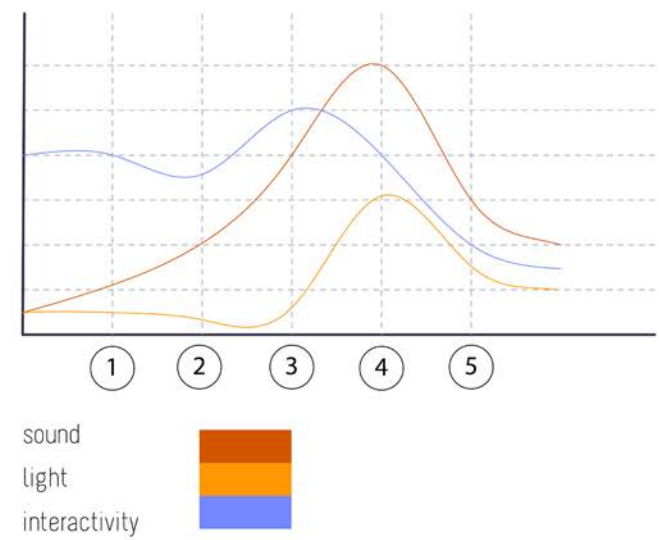
- Bomb timer ticks
 - Bomb explodes after 1 second
 - Ground shakes like mini earthquake
 - Rubbles falling from the walls and ceiling

Description of Drawing
 Overall Circulation Diagram

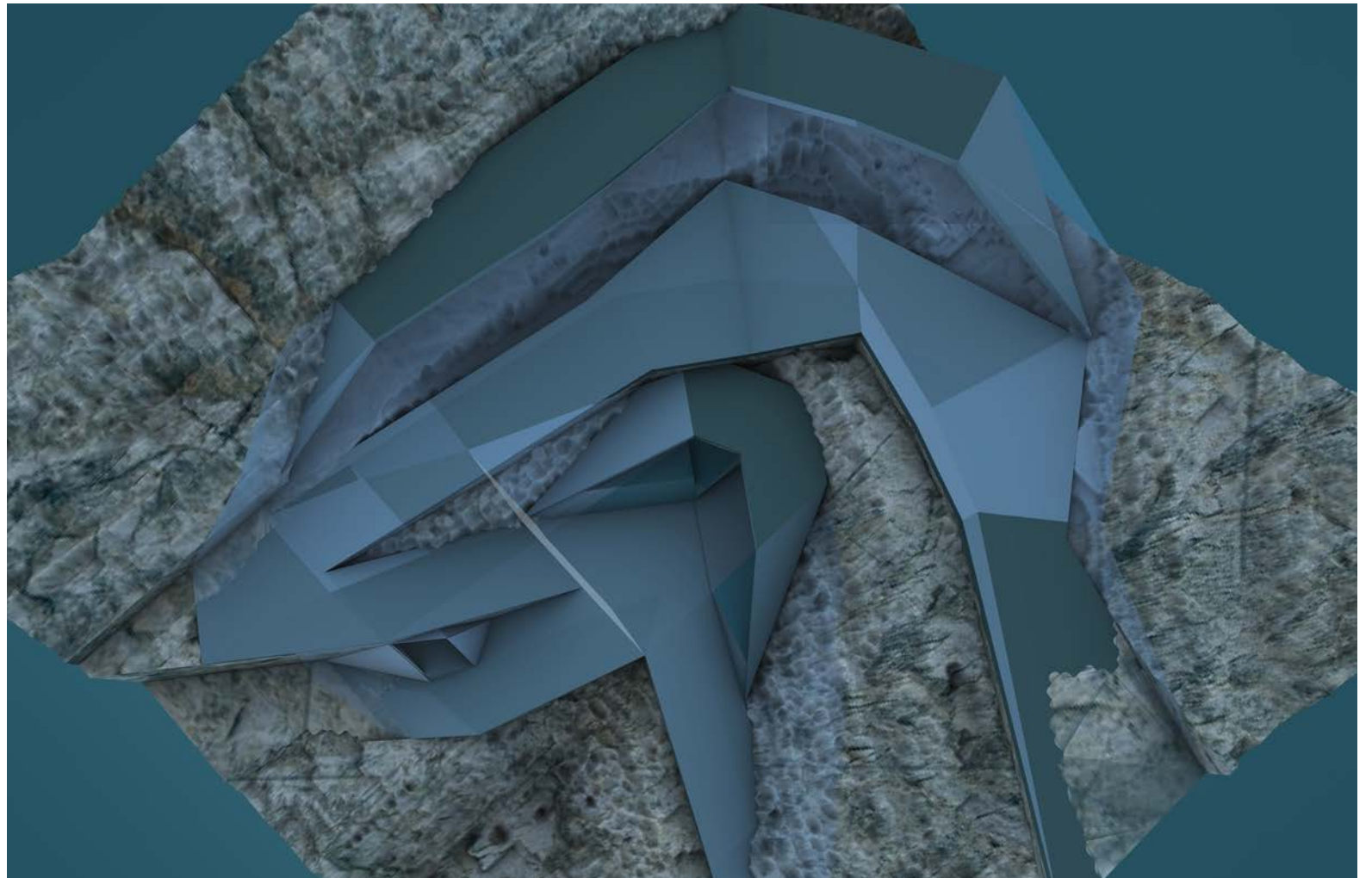
Circulation Diagram - Effects Description



Graph of Senses in Virtual Space



Description of Drawing
Senses Diagram



Description of Drawing
Form Screenshot

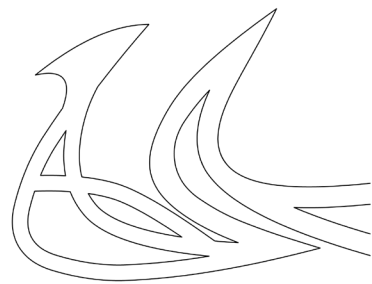
Design Iteration - Approach 2 (Curves)



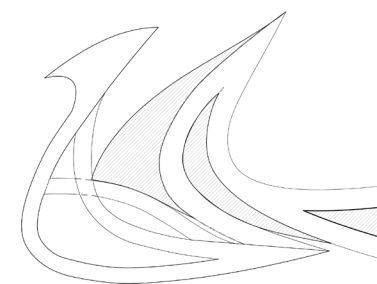
Initial Ideation -
Understanding logic
of slopes



2nd Iteration -
Creating lines for
extended pathways



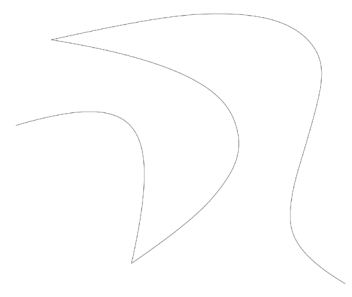
3rd Iteration -
Creating Silhouette
of overall form



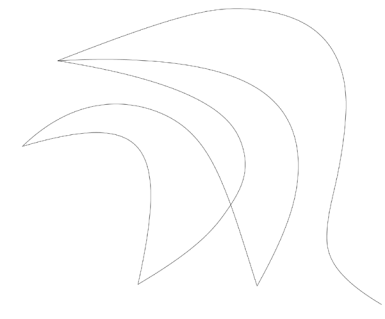
4th Iteration -
Allocation of layers,
heights and depths
of spaces

Description of Drawing
Form Generation

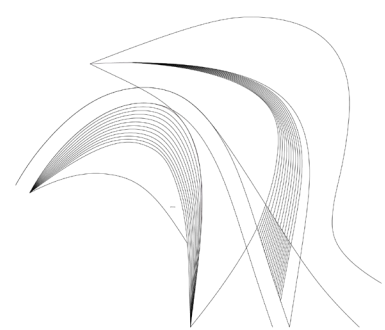
Design Iterations



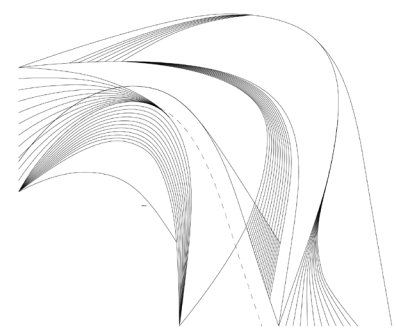
Initial Ideation -
Conforming to main
contour of slopes



2nd Iteration -
Connecting contours
and drawing second-
ary lines

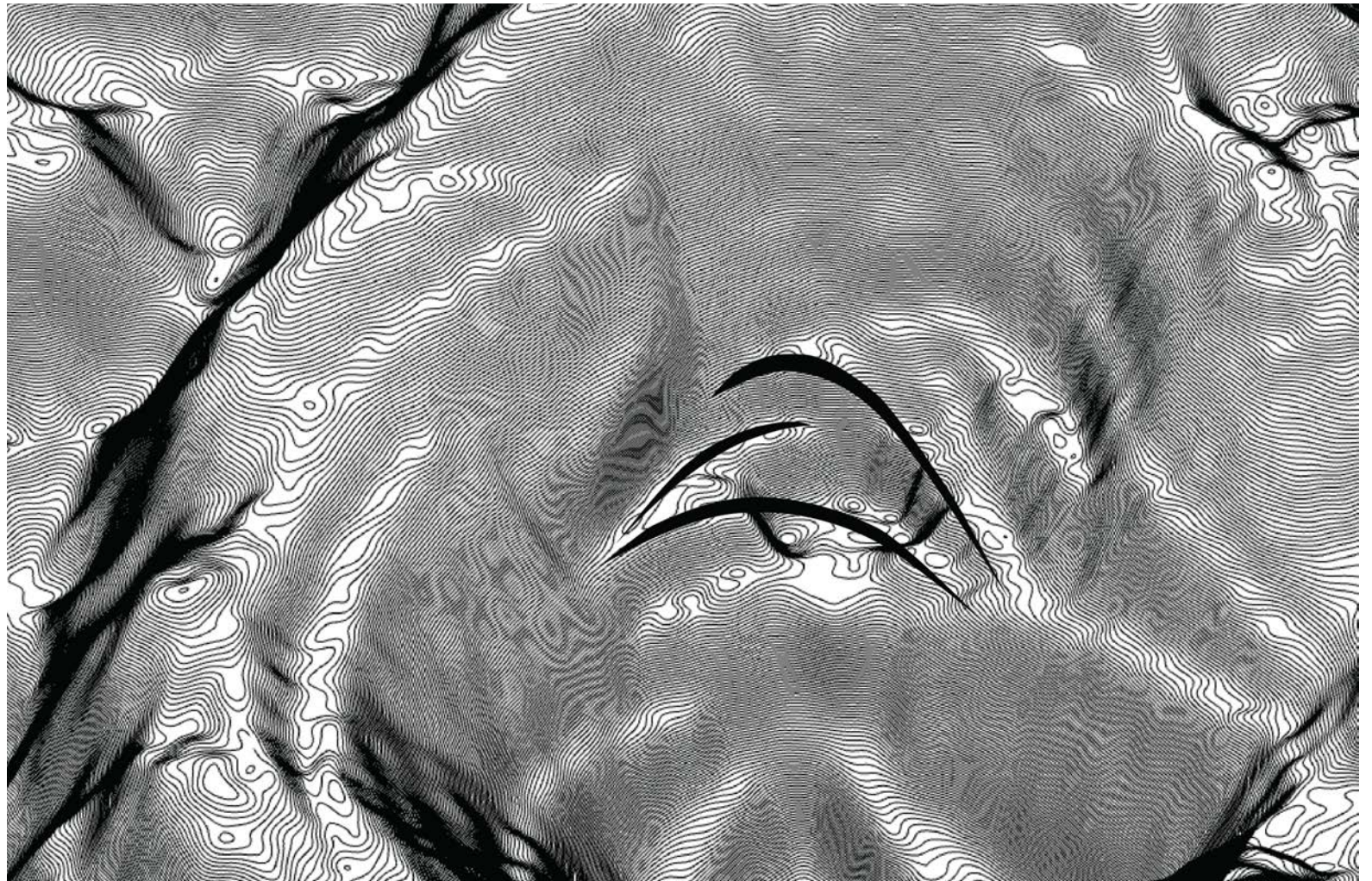


3rd Iteration -
Further connection
of contours by creat-
ing transitional
steps



4th Iteration -
Further articulation
of the contours

Description of Drawing
Form Generation

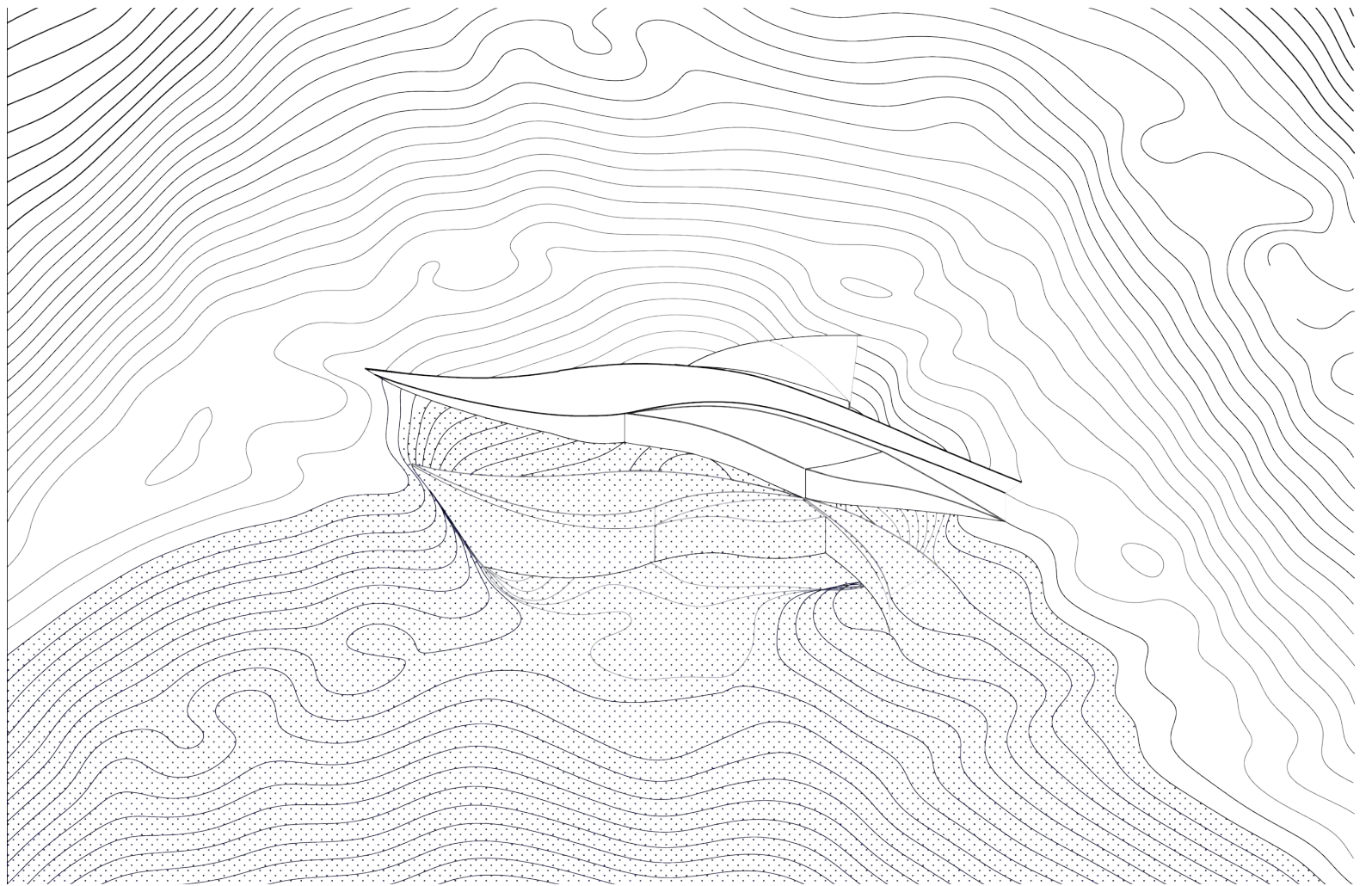


Description of Drawing

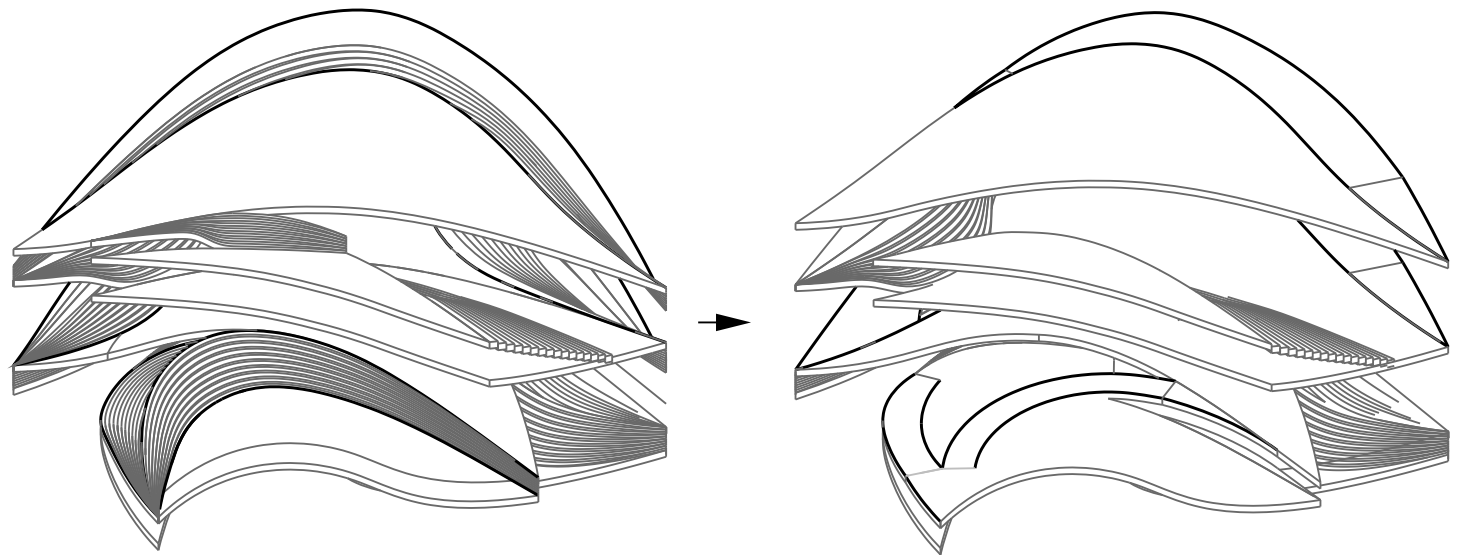
A different approach to form generation

Analysing contours while considering the elevations of the ramps.

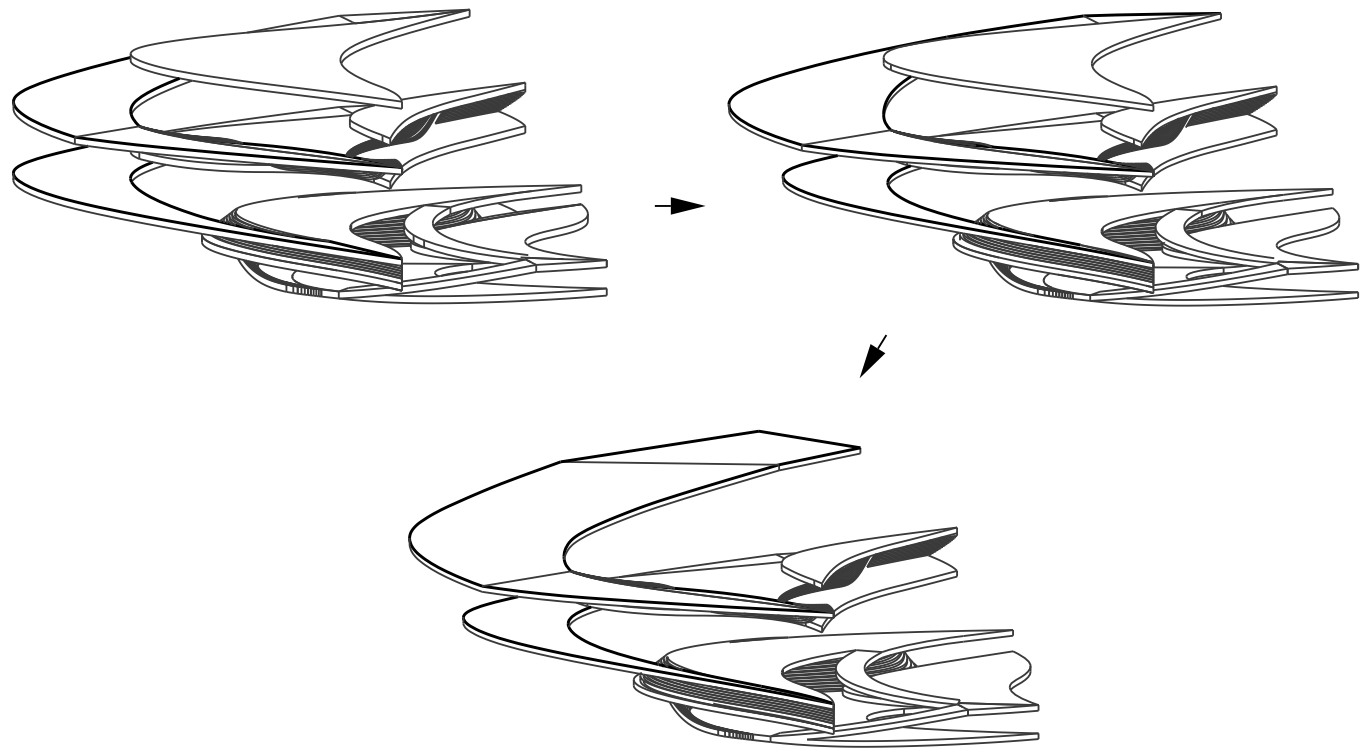
Analysing the volumes created by the ramps



Description of Drawing
Carving out volume of the ramps
and replacing it with spaces
dedicated for the museum



Description of Drawing
Moderation of circulation lan-
guage between floor plates



Description of Drawing
Fitting floor plates to match
existing contours



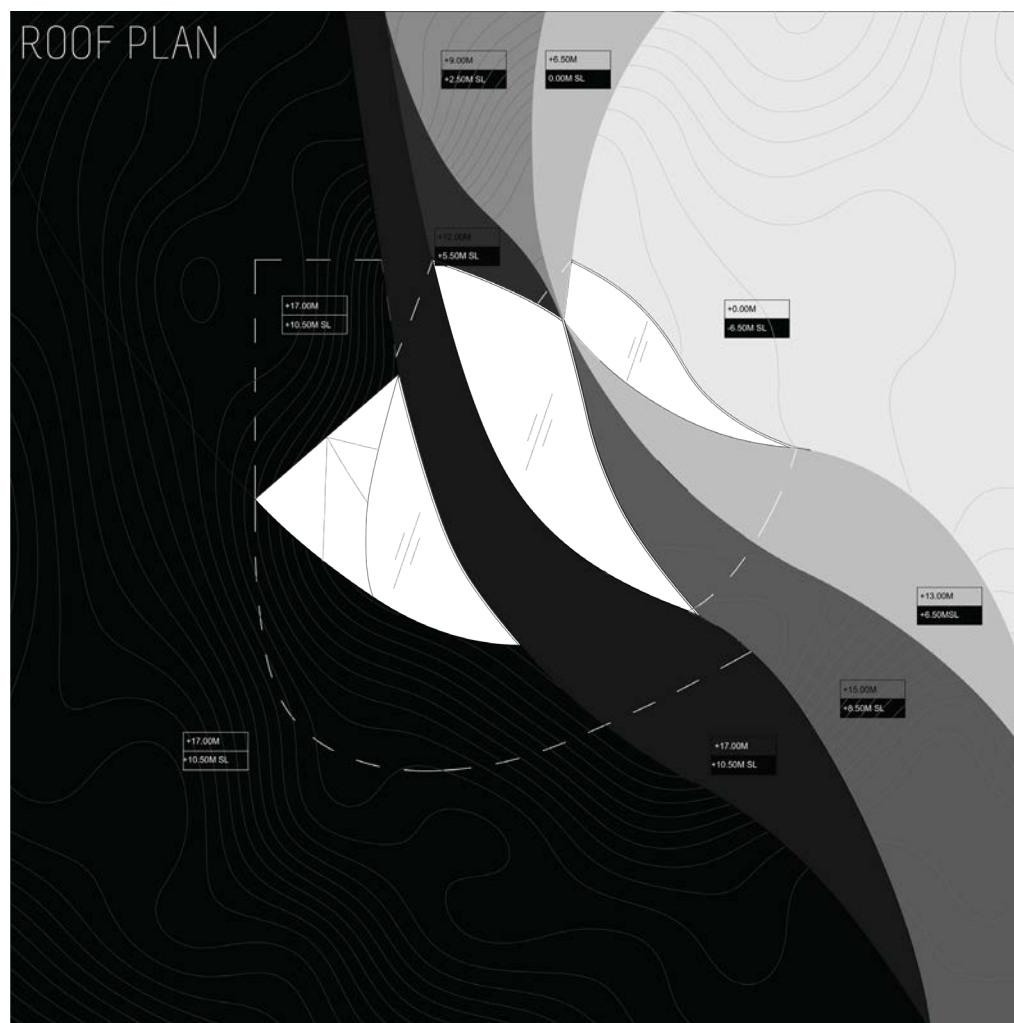
Description of Drawing
Basement Floor Plan



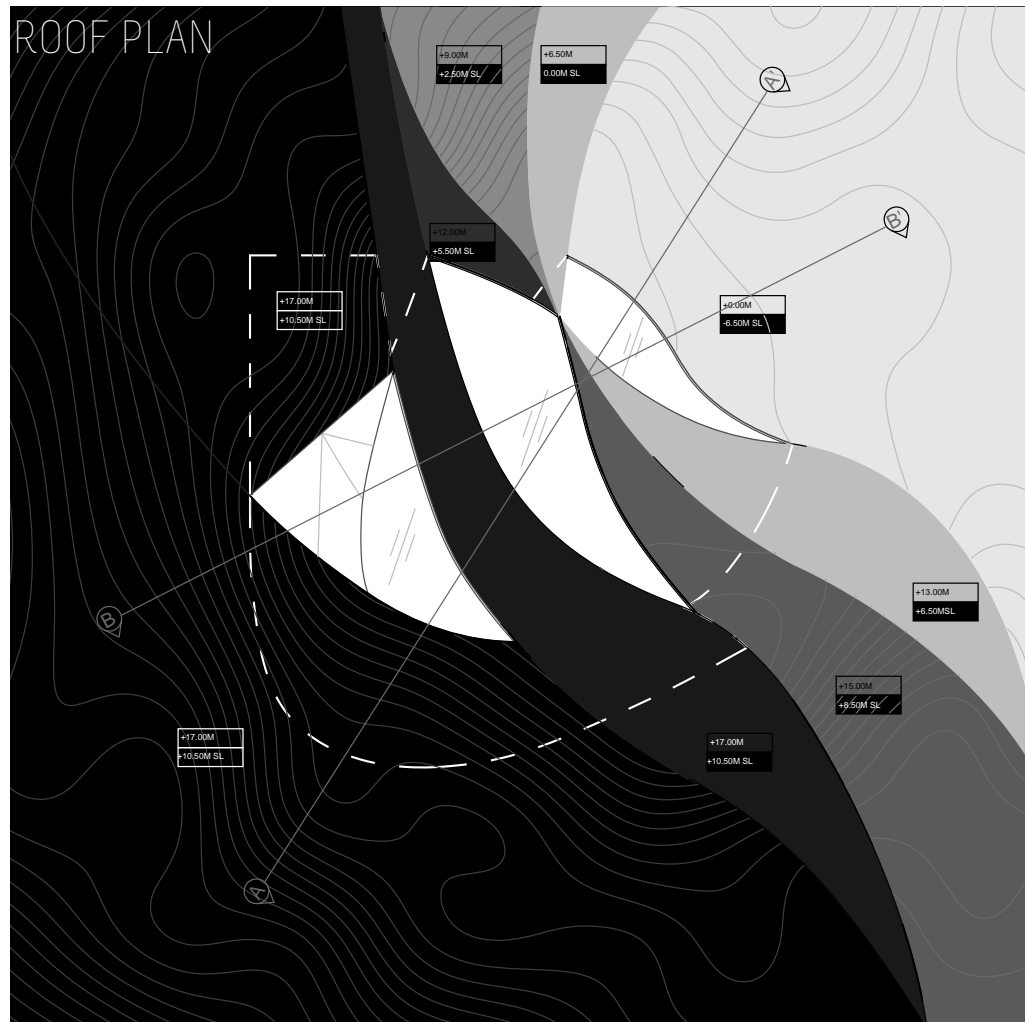
Description of Drawing
Level 1 Floor Plan



Description of Drawing
Level 2 Floor Plan

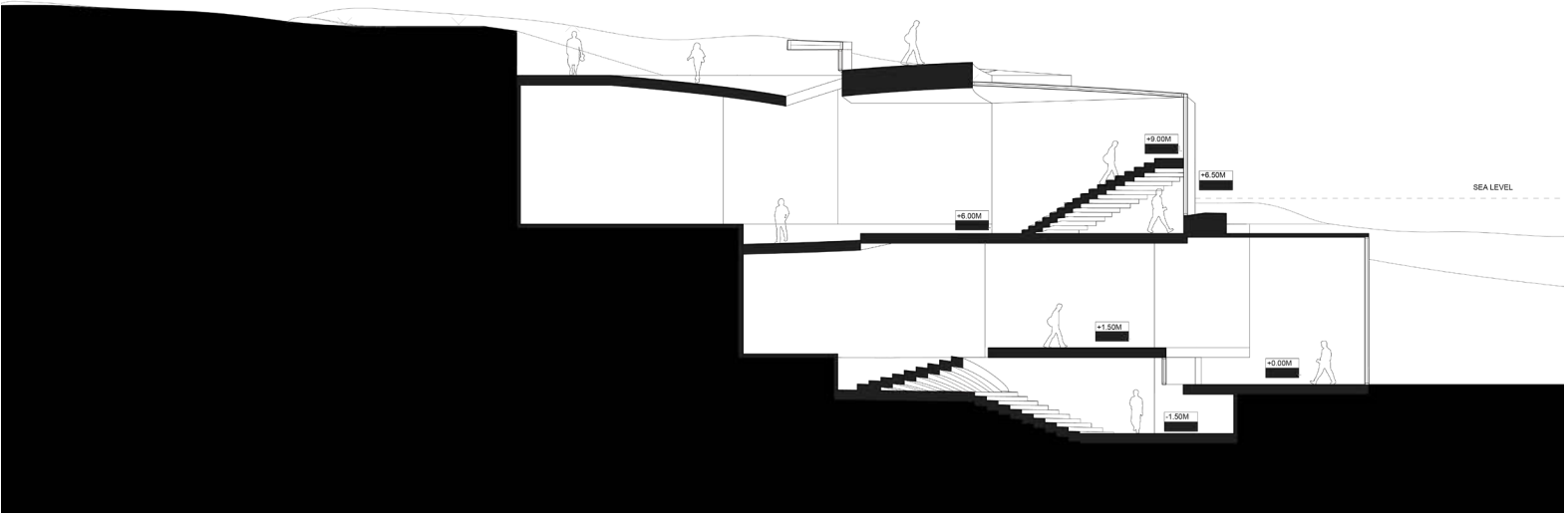


Description of Drawing
Roof Plan

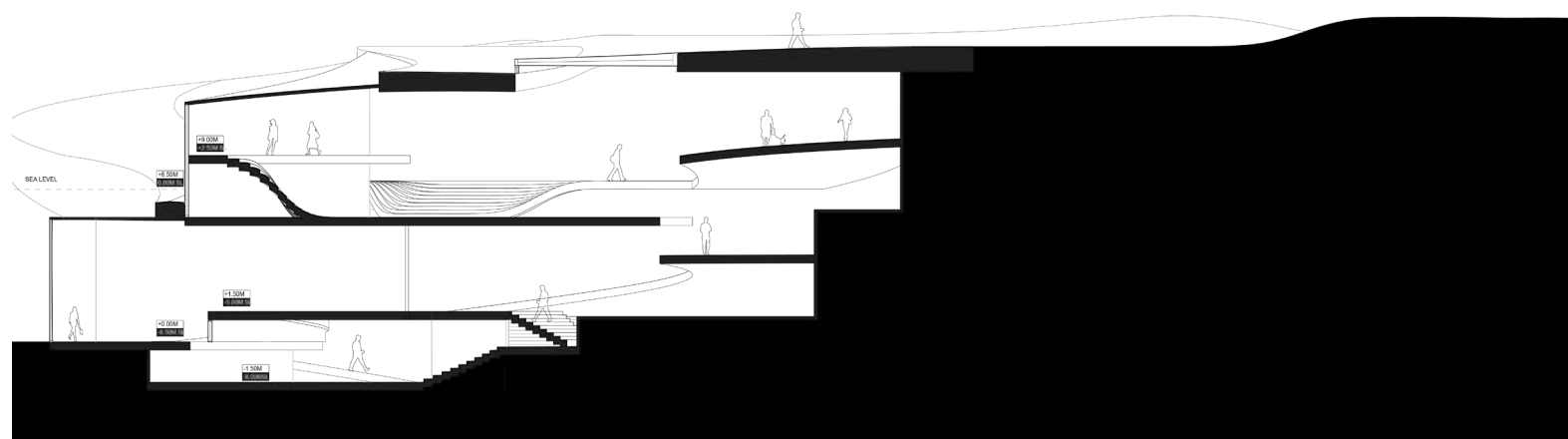


Description of Drawing
Roof Plan - Labelled

Anthropocene
Museum of Humanity's Memory
Sections



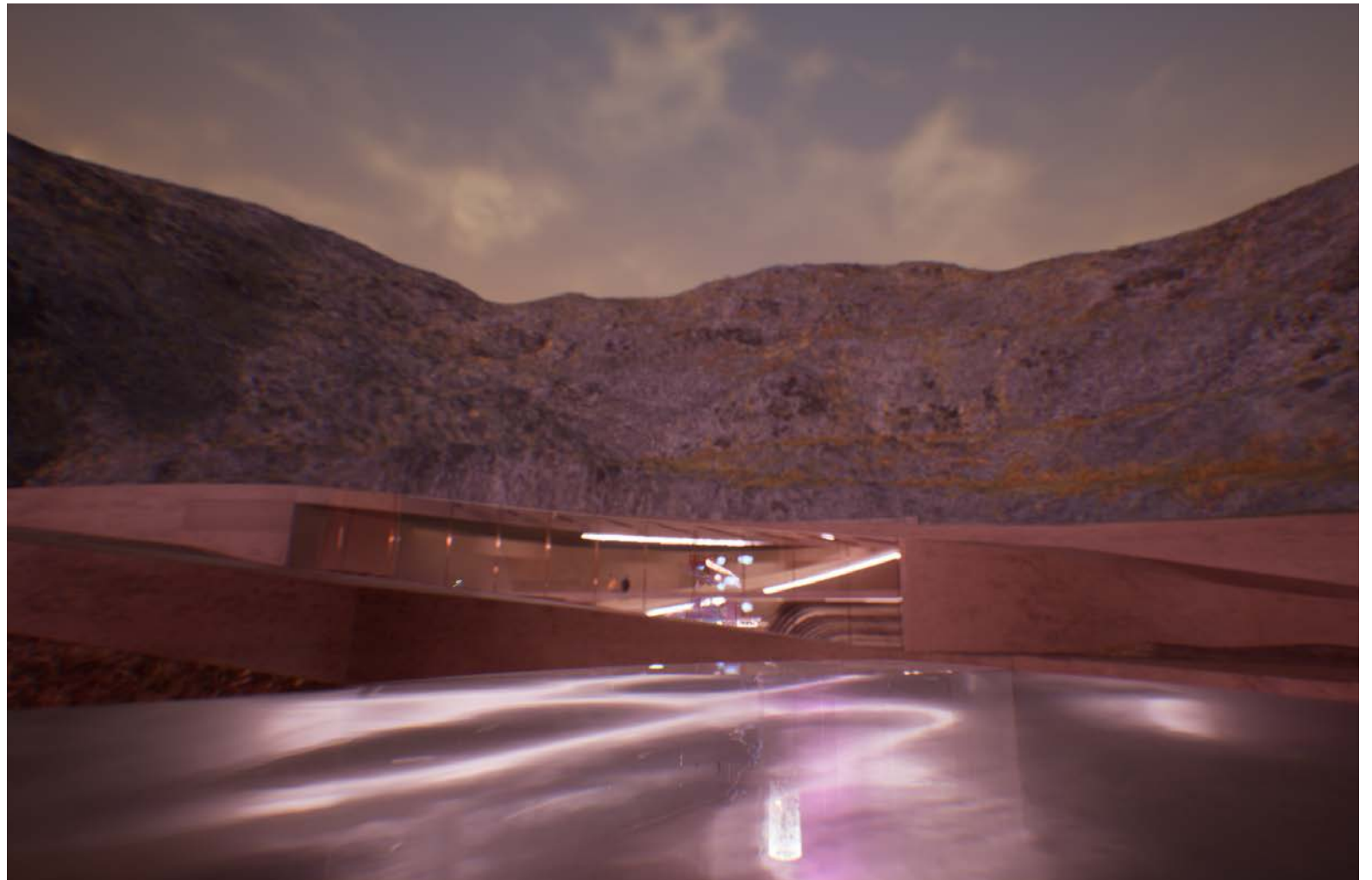
Description of Drawing
Section A-A



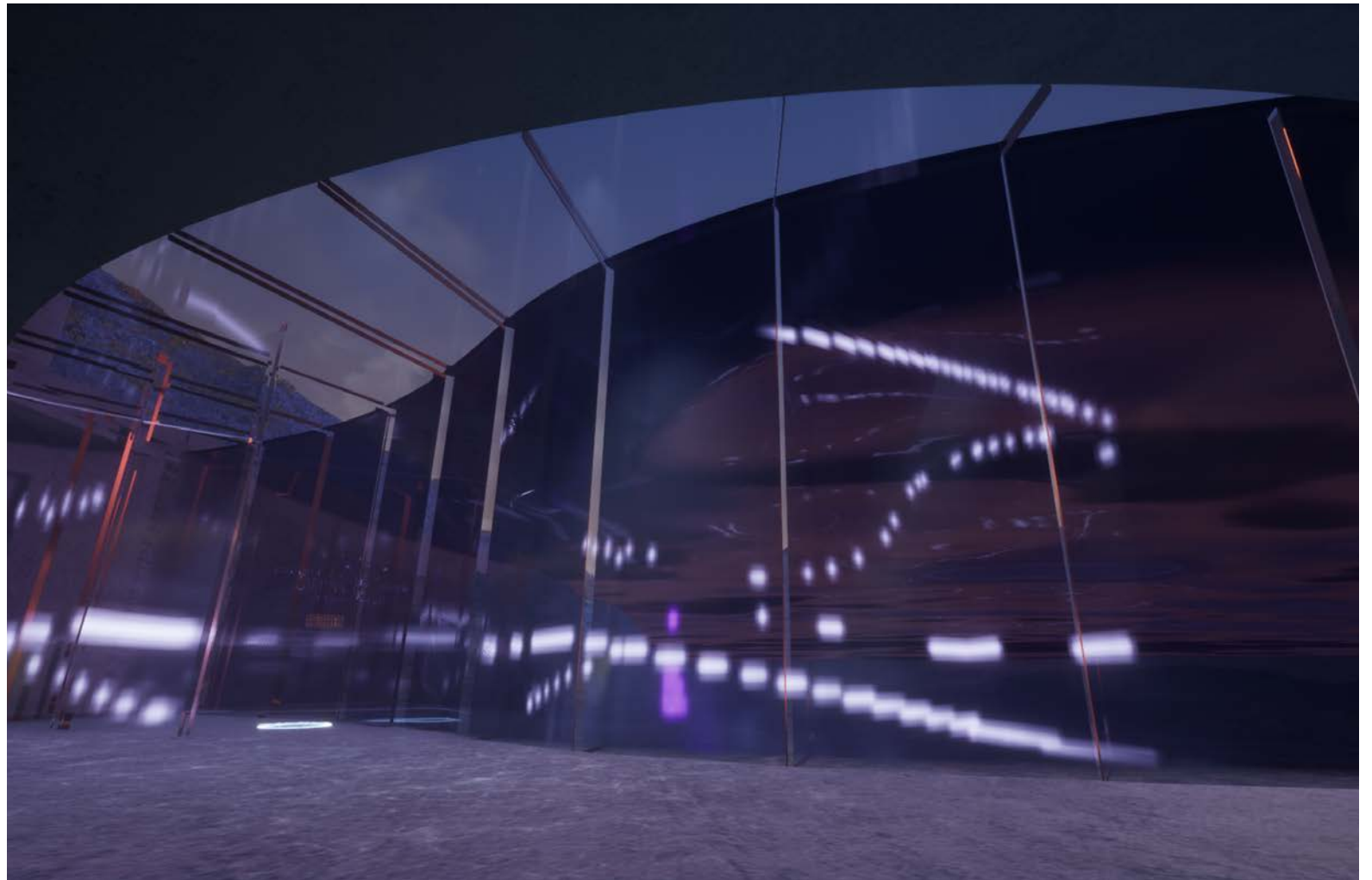
Description of Drawing
Section B-B



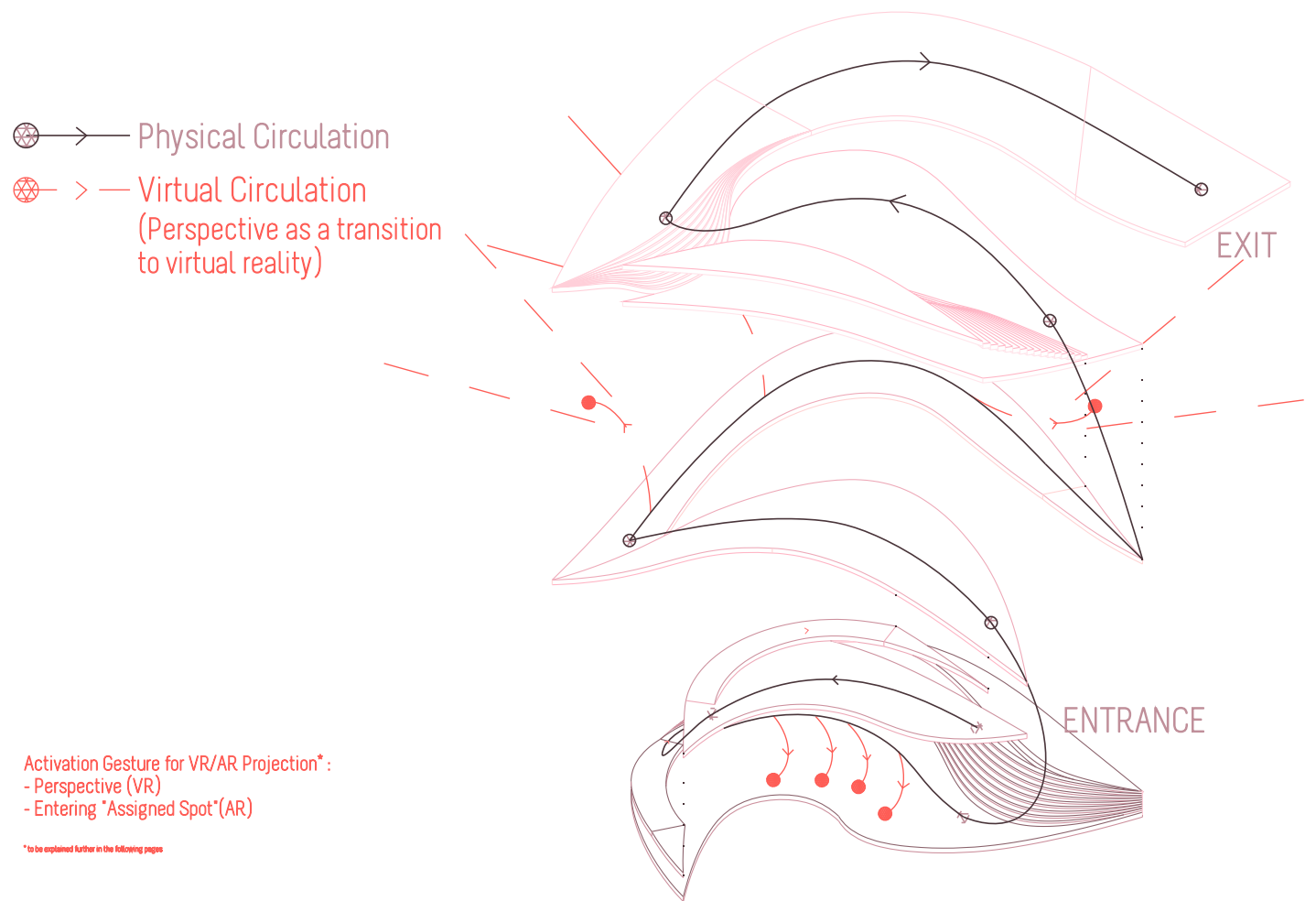
Description of Drawing
Museum Exterior



Description of Drawing
Museum Exterior



Description of Drawing
Museum Interior (Entrance)



Description of Drawing
Overall Circulation Diagram

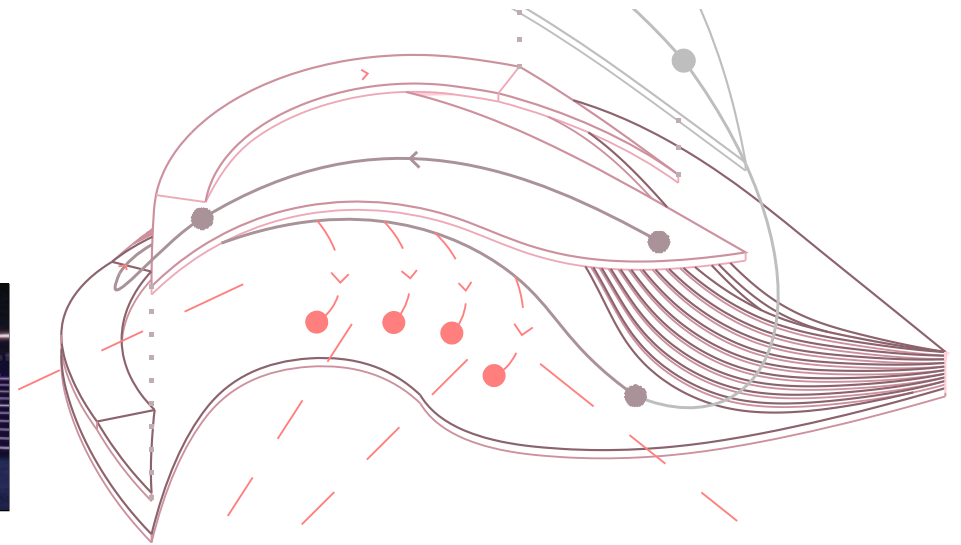


Description of Drawing
Exhibition 1 Space

Exhibition 1

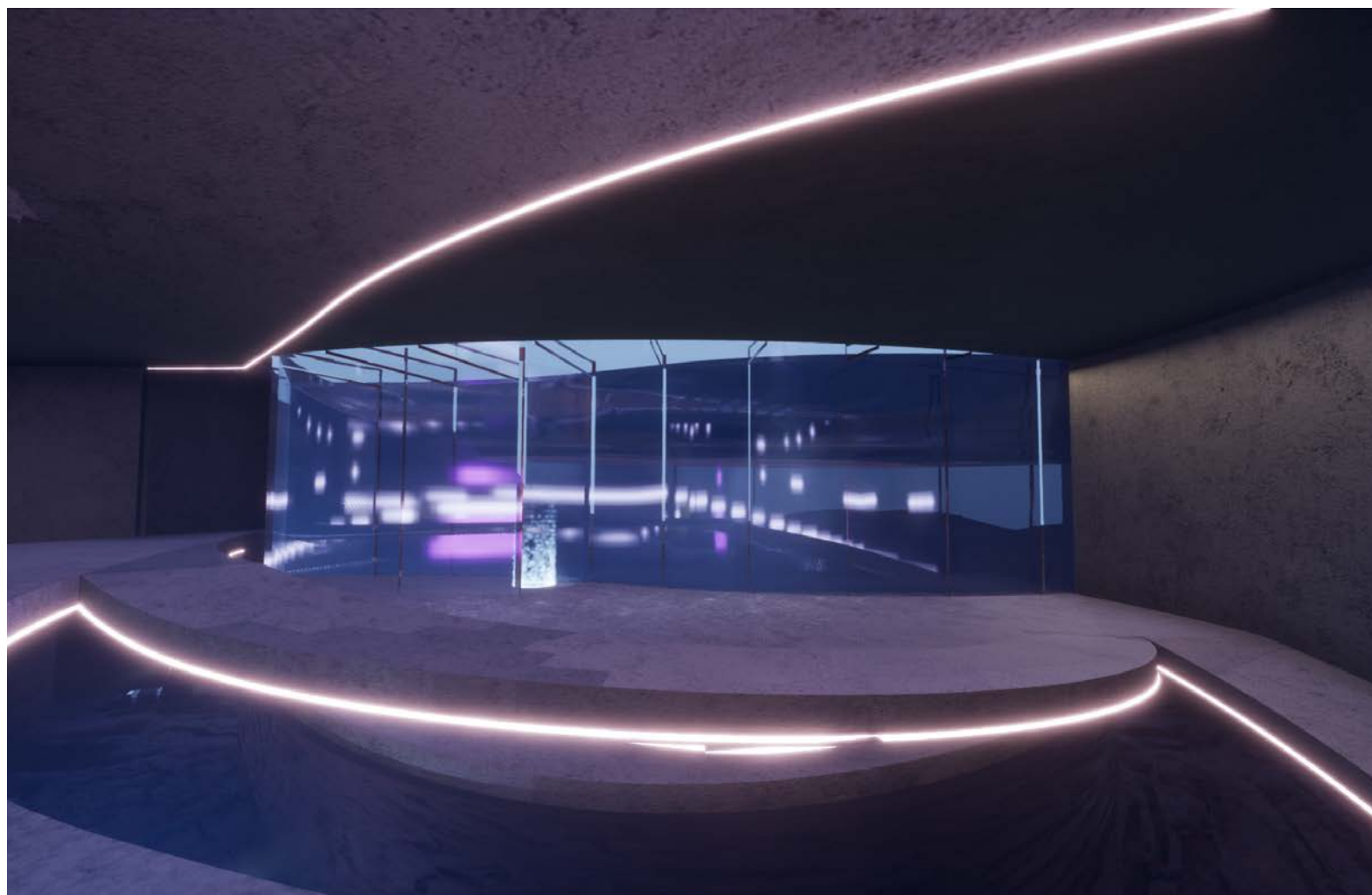


Viewer turn over to the right to view VR projection



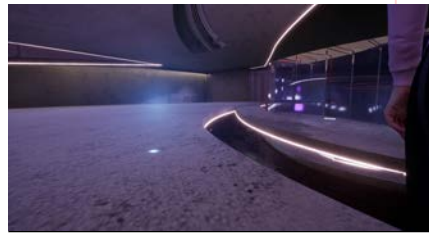
Viewers see virtual projections of moments relevant to the artefacts that they are interacting with





Description of Drawing
Exhibition 2 Space

Exhibition 2

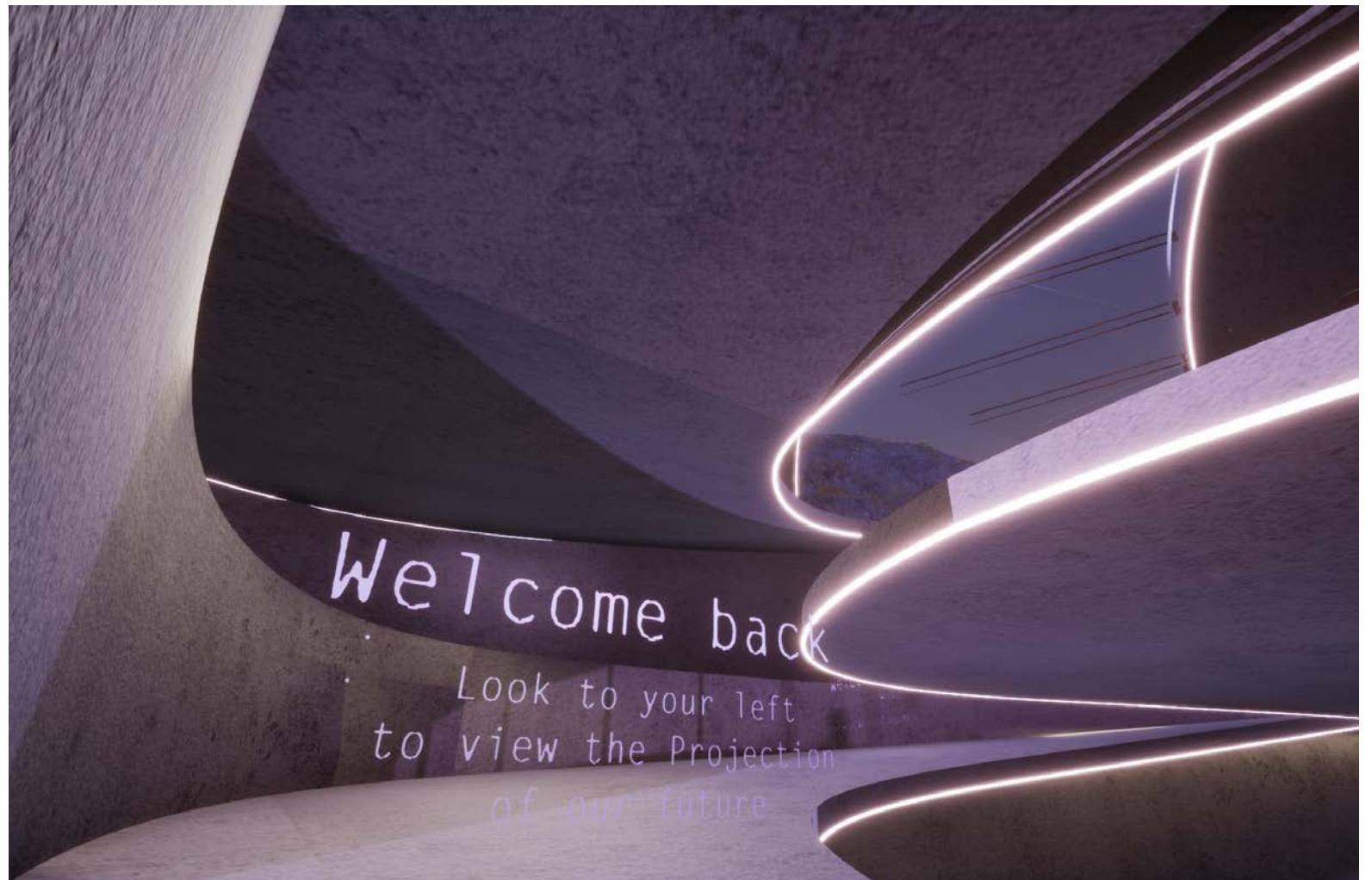


Viewer stand on the assigned spot to view AR projection



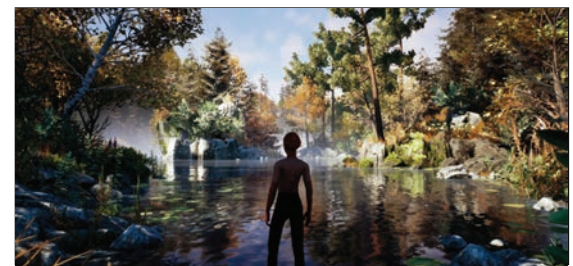
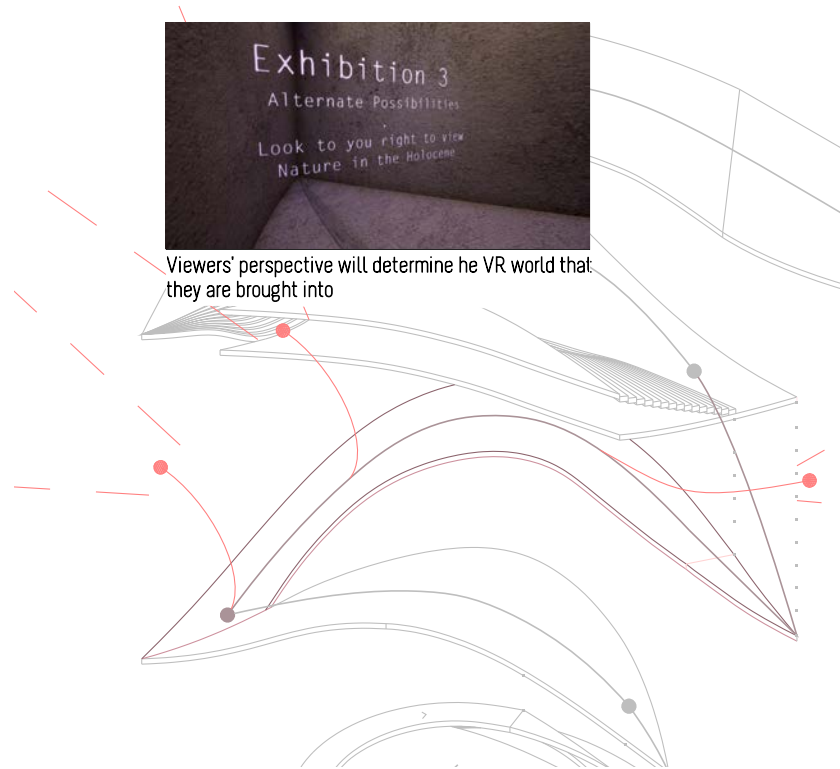
Viewers see augmented reverse time-lapse of the evolution of the landscape



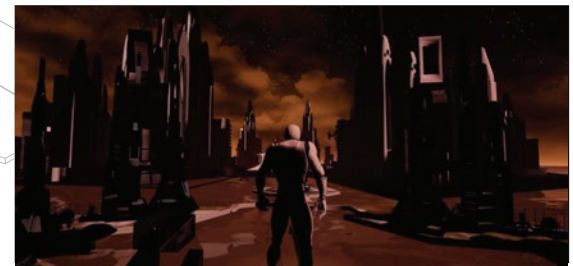


Description of Drawing
Exhibition 3 Space

Exhibition 3



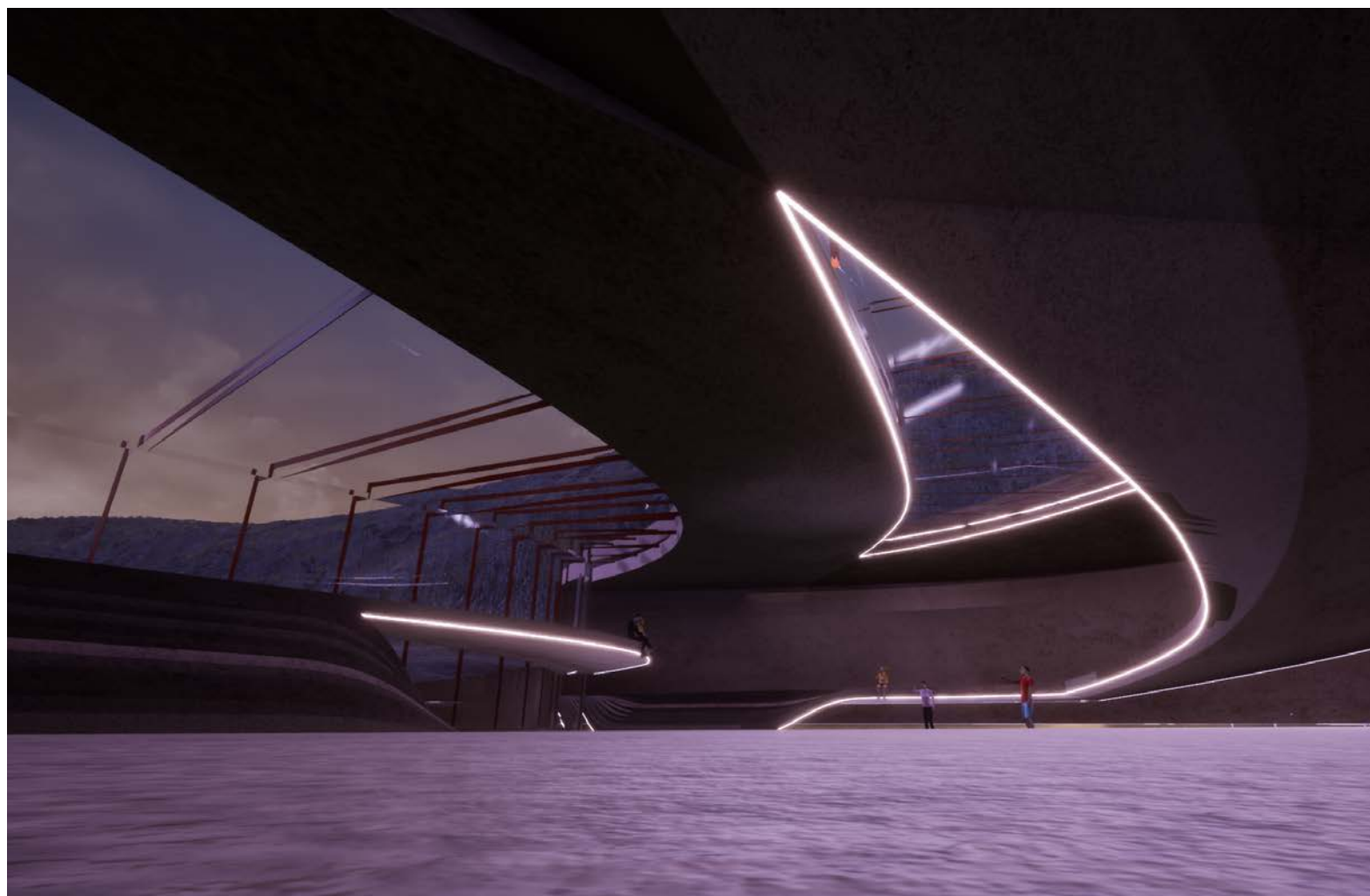
VR world 1: Pristine Environment in the beginning of the Holocene



VR world 2: Extrapolation of current trend; totally damaged world



VR world 3: Rehabilitated current environment



Description of Drawing
Exhibition 4 Space

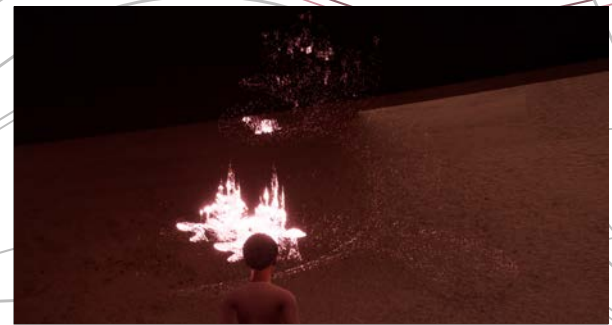
Exhibition 4



Viewers stand on assigned spot to view AR projection



Viewers participate in world building based on the environmental features they witness from the previous exhibition



The built world is stored as a small scale hologram monument for visitors to keep

To understand the inherent value of the landscape, as more than a platform that we step on, which resources we can extract.

To remind visitors of the consequences of their decisions

To ponder if Architecture could be more than just a reaction to our changes. Could it be part of the dialogue between human and nature as we progress towards the many to epochs to come.

Reading: **"Destroyed Sites: Places and Things Inside Out"** Hornstein, S. (2011). *Losing Site*. London: Routledge (D)

"The idea that a solid form cannot be shaken was the goal for architectural form"

Like our lives, the process of ending begins as soon as it was born, and the idea of permanence is not really the reality. It is only an ideal state of that architectural form. In my project's case, the ideal state of that landscape.

"All too often architecture seems simply to exist. Unless it is aesthetically moving and noteworthy"

we don't chart the life of a building or a space and take notice of its shape. Instead, its role as a container of our present and past is more of a priority. We take the rest for granted

Ultimately, there is a need to encourage a reflexivity so that there can be a meaningful appreciation and interaction with a place"

we shall be more aware of those taken-for-granted ideas and analyse further towards a more reasonable and mutually respectful dialogue between the spaces, those who live in them, as well as those who are intending to plan for the spaces.

This idea about how we perceive buildings is challenged in a very interesting manner by Rachel Whitebread, in her artwork "House". She used the reverse casting technique to make a concrete cast of the interior of an entire 3-storey house in London's East End with the intention of challenging what we think we know about how we use the space of our homes.