

BACKSTAGE
-THE DESIGN PROCESS-

L'OPERA

LEL

HOW TO CHOOSE AN OPERA



01

02

03

04

MAIN THEME: OPERA



RESEARCH

We researched the history of opera, like the different types of structures and storylines. In order to choose from many operas we decided on some criteria to select the final five.



CRITERIA

Considering the constraints of the ride system, we chose three criteria to select the operas.

1. EASE OF IDENTIFICATION AND DURATION OF THE THEME SONG

2. VARIED STORY SETTINGS

3. DIFFERENT EMOTIONS RELATED TO THE STORY



THE FINAL SELECTION

- **RIGOLETTO** set in renaissance Italy with the famous aria LA DONNA È MOBILE.

- **AIDA** set in ancient Egypt with the recognisable TRIUMPHANT MARCH.

- **TURANDOT** set in mythical China with the romantic aria NESSUN DORMA.

- **CARMEN** set in Seville, Spain with the passionate HABANERA and the OVERTURE.



OTHER OPERAS

Particular attention was paid to the final aria that is sung in the theatre. That song has to represent the concept of an opera in a very limited time and make you feel your journey was worth it to this point.

We chose the aria of the QUEEN OF THE NIGHT from the opera **MAGIC FLUTE**, a very impressive performance by the female lead.



HOW TO BUILD A ROOM



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SETTING THE STYLE



A STORY IN A STORY

To set the correct style for this ride we had to make clear in the design that the guest is backstage during various rehearsals. We don't intend to be in Egypt or ancient China, but instead in an opera house during a rehearsal. This inspired us to take our cues from original opera set dressing for our own props and decor.



SET THE TONE OF A STORY

We wanted the story to be light-hearted, with funny and exciting moments. This shows the opera experience as an engaging form of art for modern audiences.



GAGS

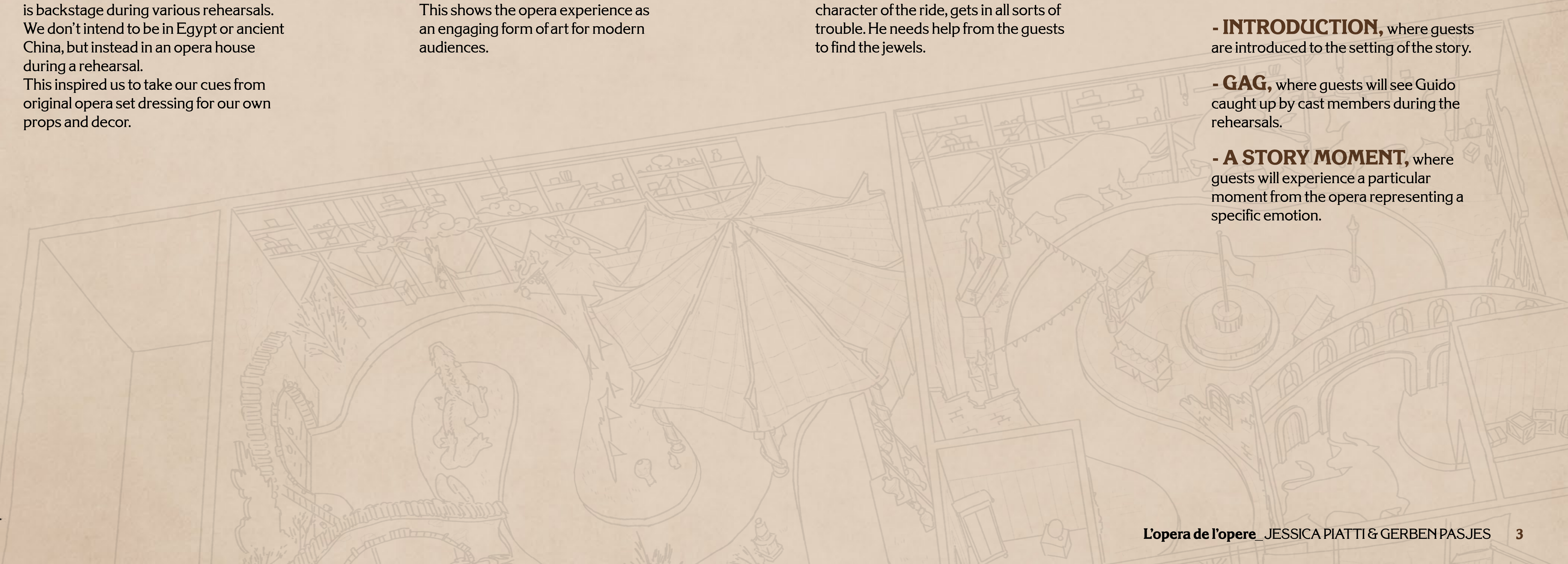
To remind guests of this tone, we planned story-based gags where Guido, the main character of the ride, gets in all sorts of trouble. He needs help from the guests to find the jewels.



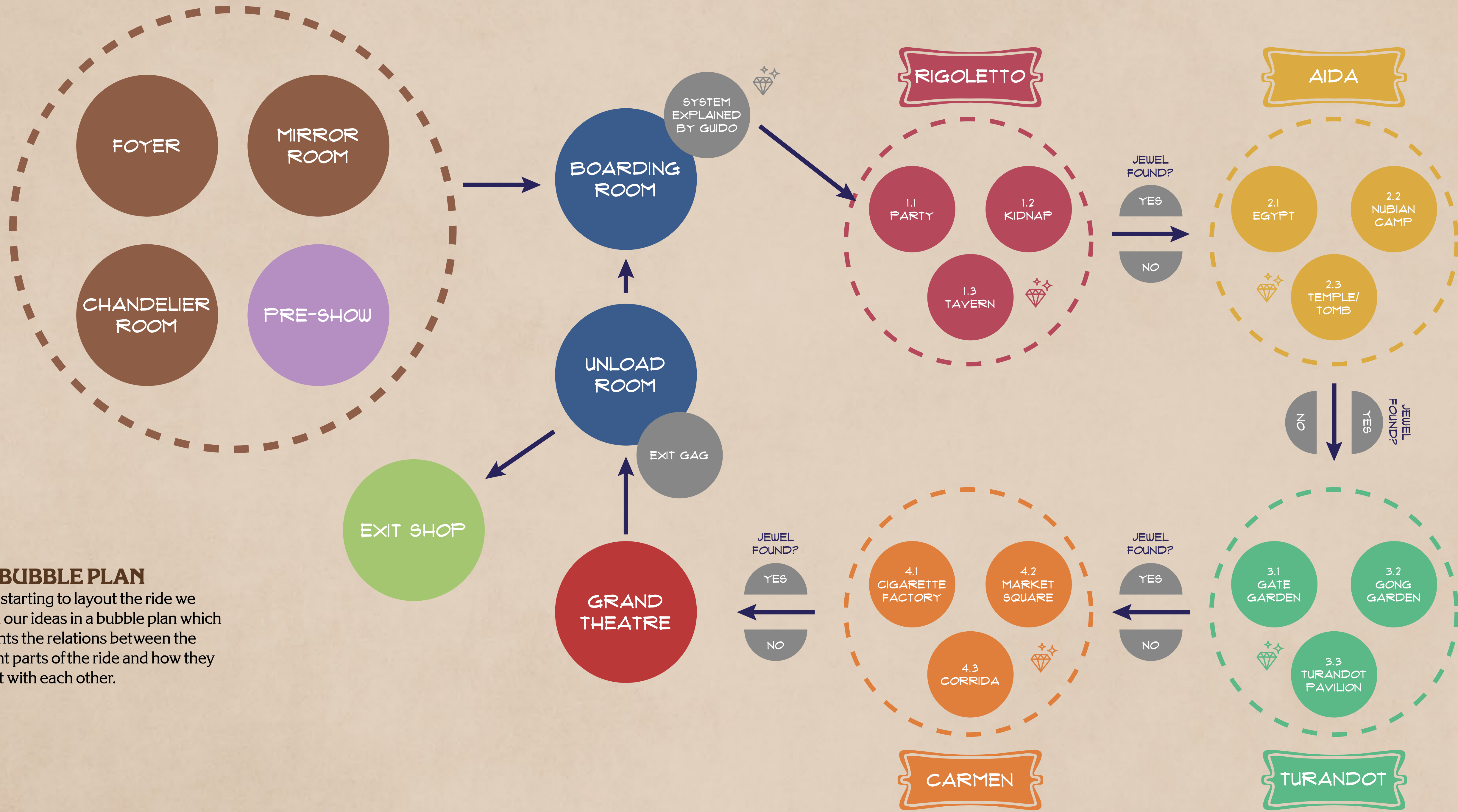
ROOM STRUCTURE

Every main opera room is divided in three different vignettes:

- **INTRODUCTION**, where guests are introduced to the setting of the story.
- **GAG**, where guests will see Guido caught up by cast members during the rehearsals.
- **A STORY MOMENT**, where guests will experience a particular moment from the opera representing a specific emotion.



HOW TO START BUILDING THE RIDE



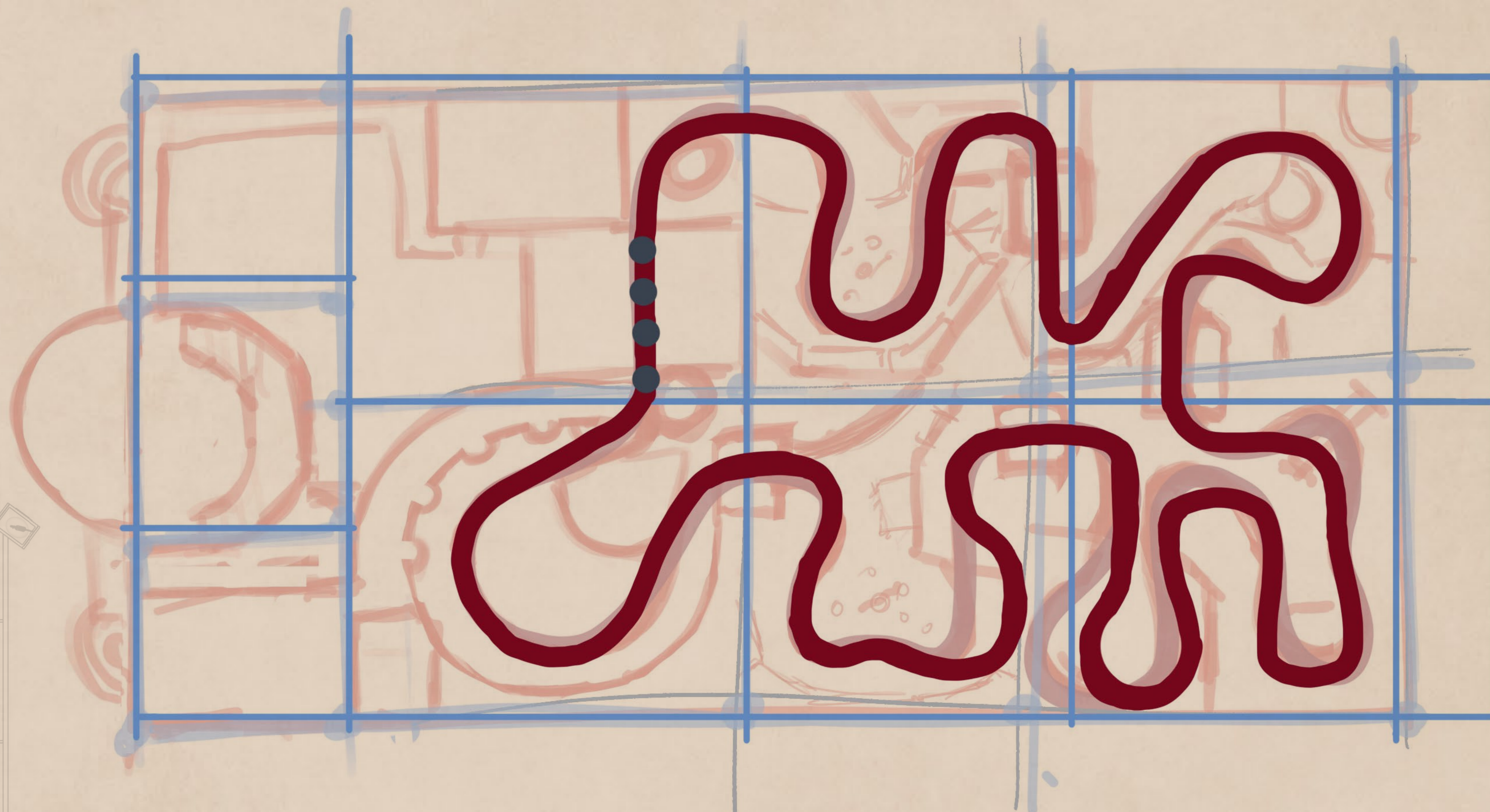
THE BUBBLE PLAN

Before starting to layout the ride we framed our ideas in a bubble plan which highlights the relations between the different parts of the ride and how they interact with each other.



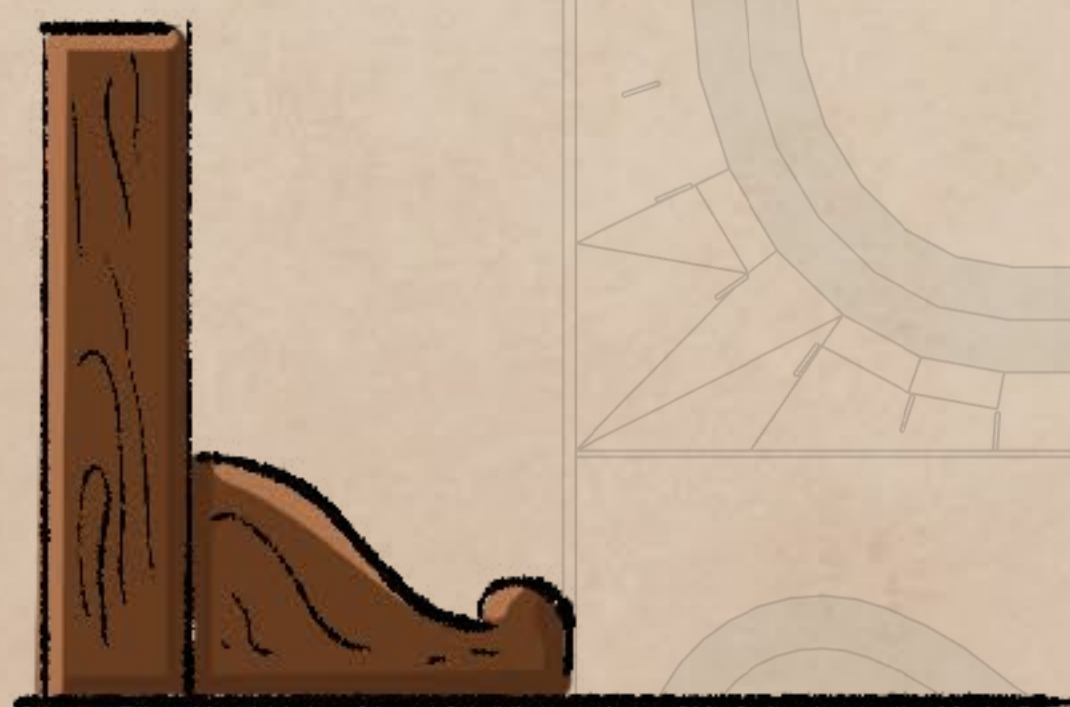
FLOORPLAN SKETCH

Once we had an idea of what the rooms were and how they functioned, we started sketching the floorplan. Since there is no location plot yet we chose for a modular approach, with a minimum-size front facade for theming. This was our base for a 3d model.



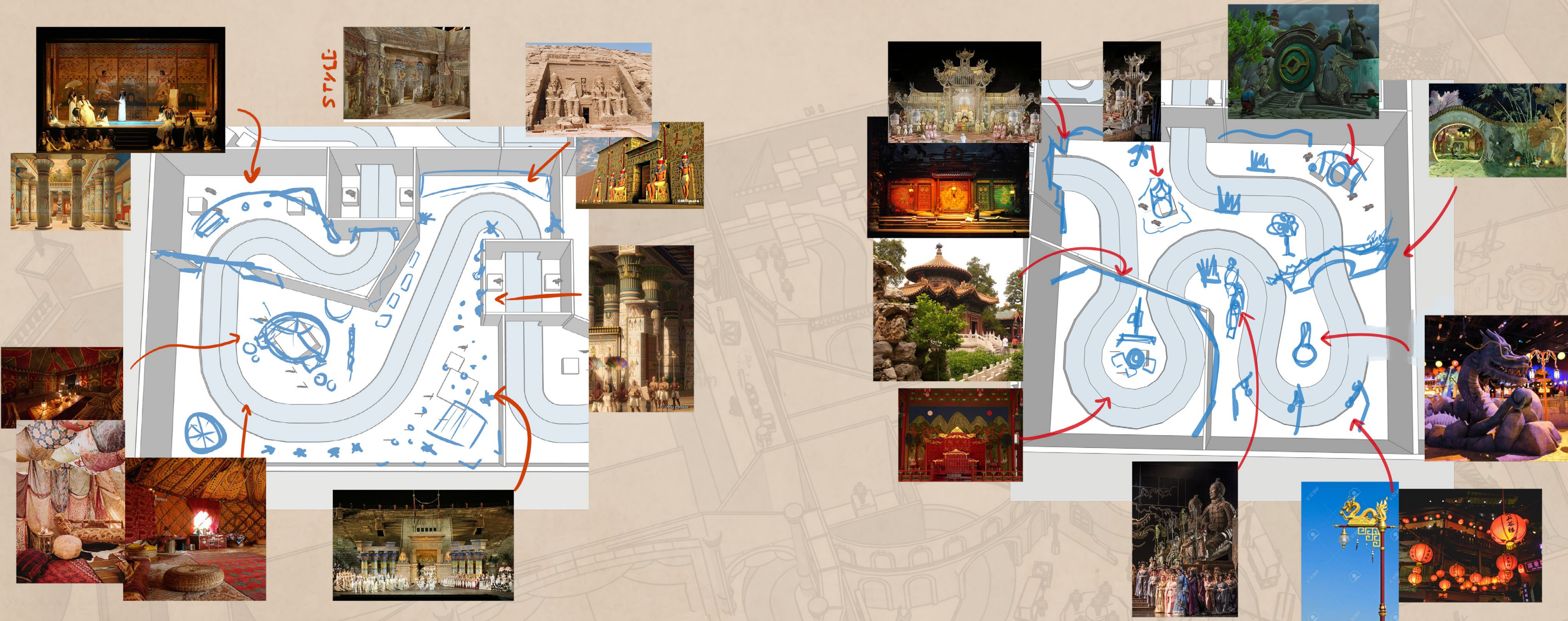
PUT DOWN YOUR FIRST THOUGHTS

A quick sketch without too many constraints allowed us to layout ideas with freedom. This floorplan was later changed in size using benchmark footprints of similar attractions, like the *Phantom Manor* in Paris. We based technical details like the safety envelope on benchmarks as well, to ensure the design is as feasible as possible.



3D LAYOUTS

Firstly we refined the floorplan with realistic measurements. We then built walls, ride path and queueline. Here are our approaches to the staging of two rooms (AIDA and TURANDOT).



STAGING A ROOM

After researching the opera's style and staging, we looked for references to create little scenes in contrast with each other. Despite it being a big room we divided the space in different vignettes belonging to the same story, creating different environments using props and varying the height of the ceiling.

A STORY IN A STORY

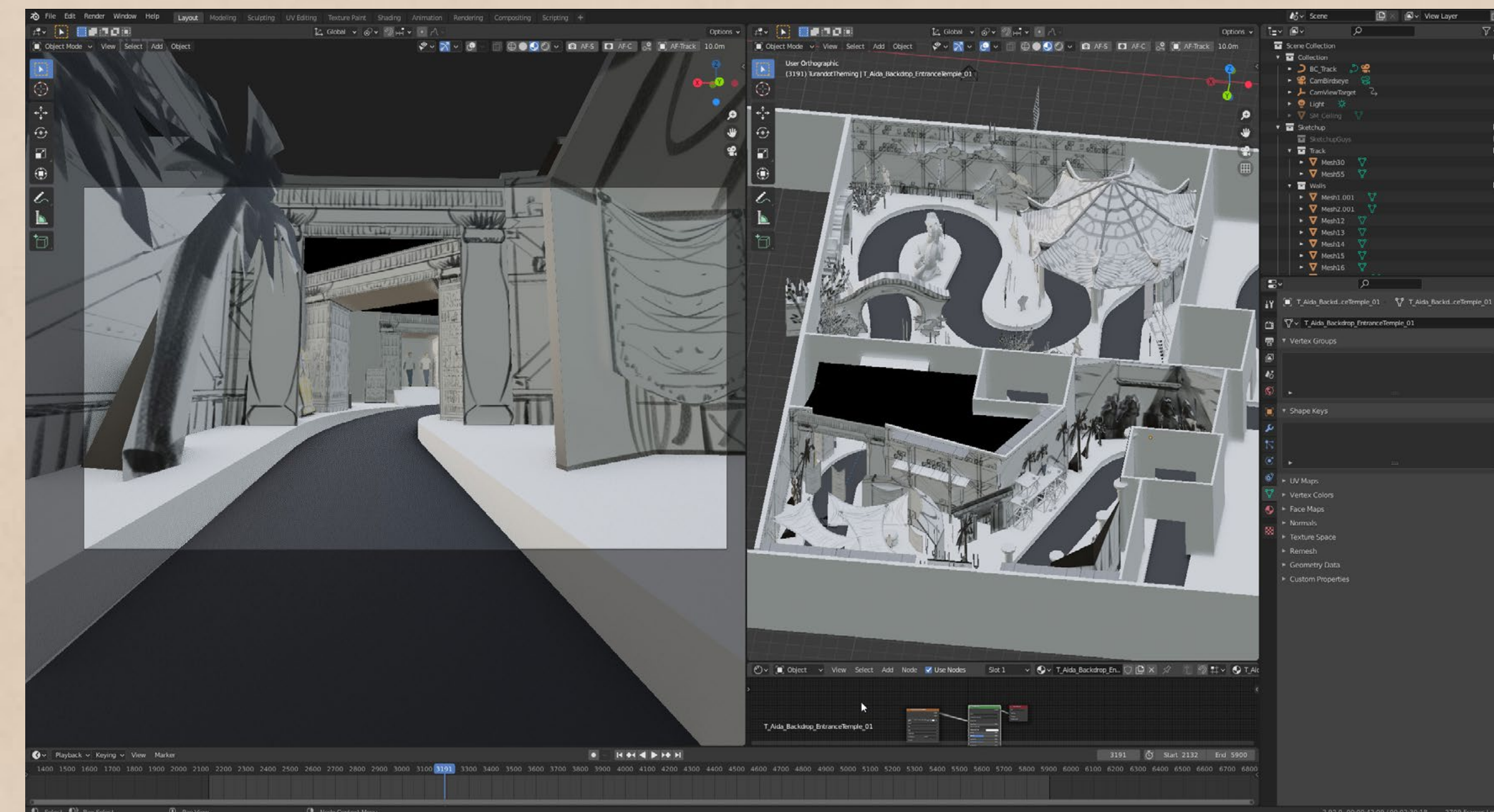
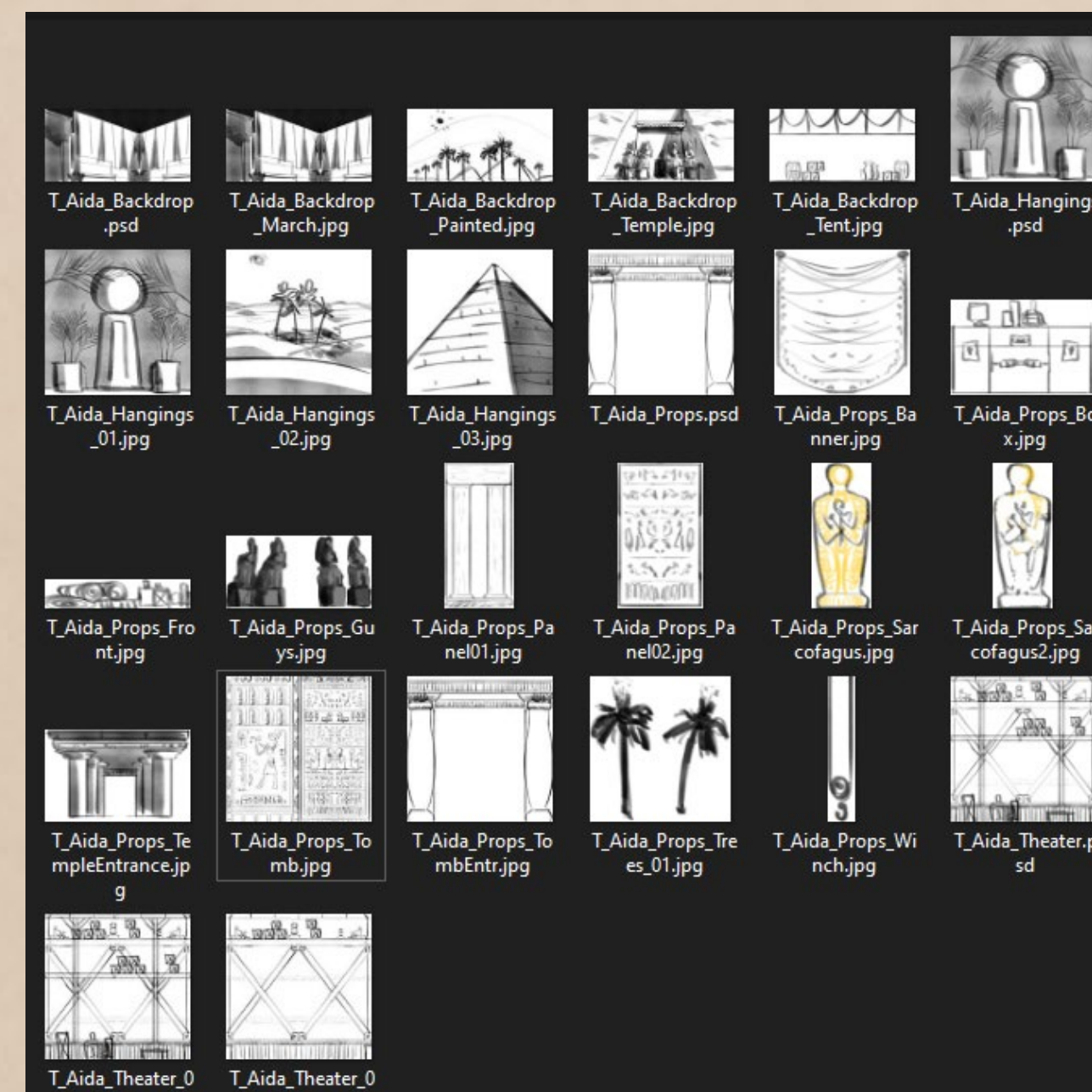
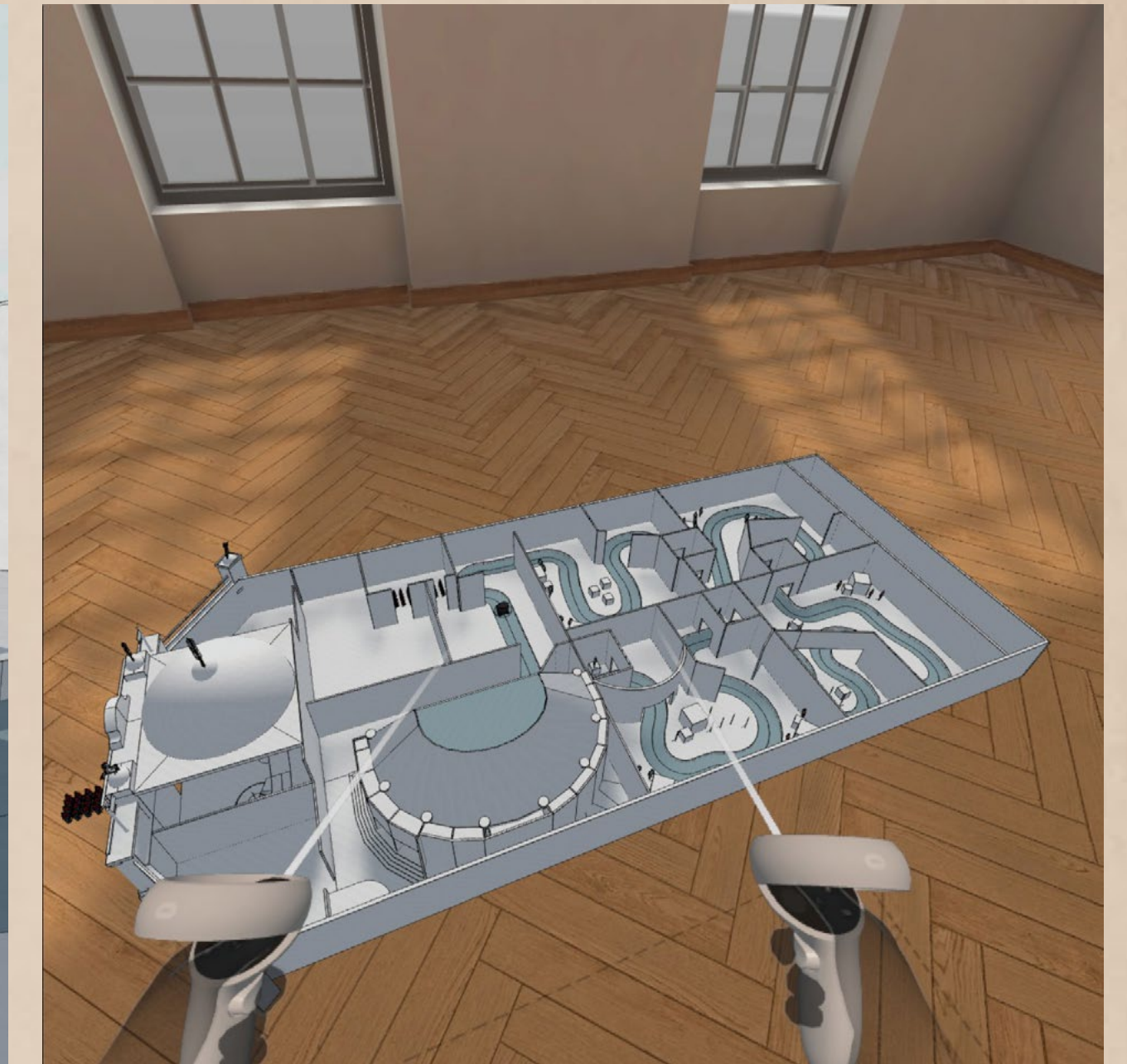
It is important to remind guests they are in a theatre building. All the sets are a representation of a location or a story. We do not pretend people are travelling to real China, but they are in a set in the backstage. This led to the choice of an old theatre backdrop style typical of the 1850s.

USING NEW TOOLS

Using VR, we were able to test out our floorplan design and adjust the scale of the rooms accordingly. Once we were happy with the feel of the space, we use those dimensions in other packages such as Blender to create more detailed assets.

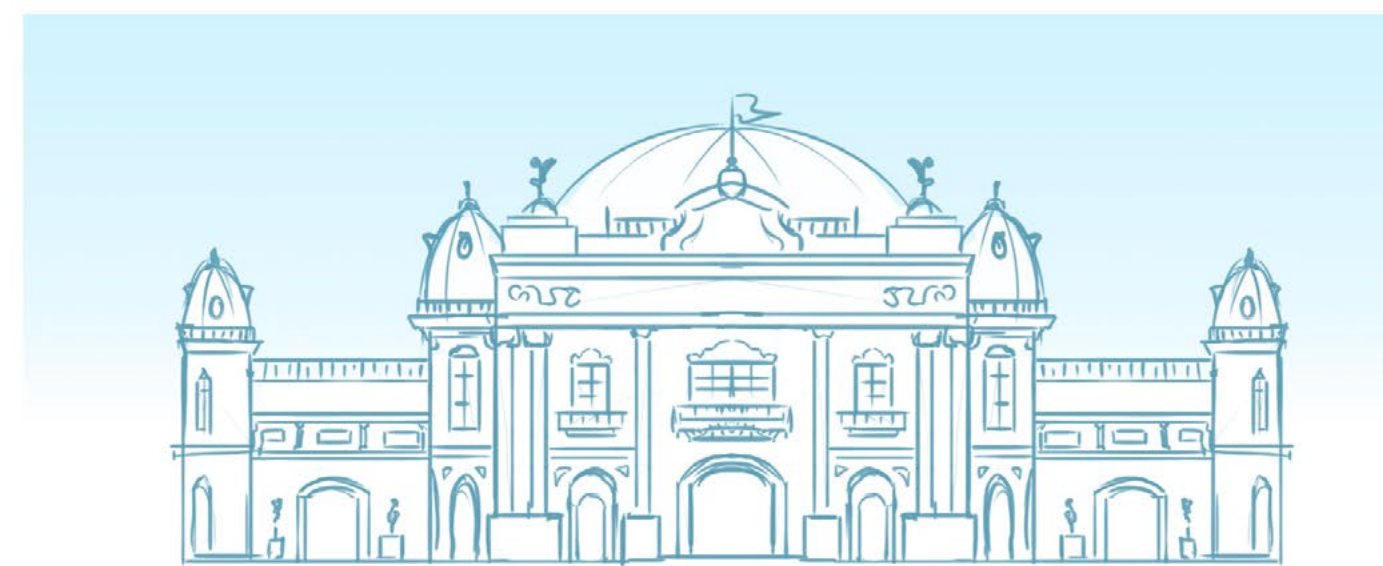
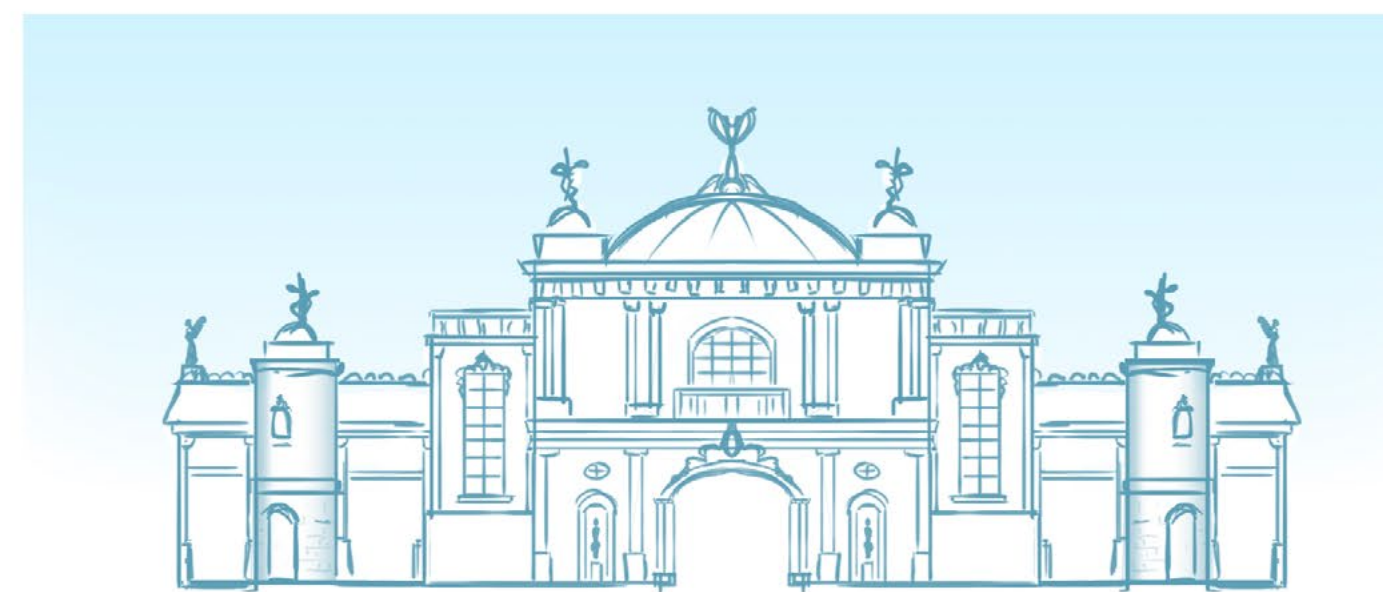
Using a number of flat painted textures, we were able to quickly block out and iterate on the design.

By animating a camera along the spline we tested if the design worked from the guests' point of view, as well as render the vehicles for the birdseye.



HOW TO BUILD A THEATRE

In order to design the building facade we researched classical opera houses from all over the world to identify a classical style. From all those theatres we made sketches based on their architecture.

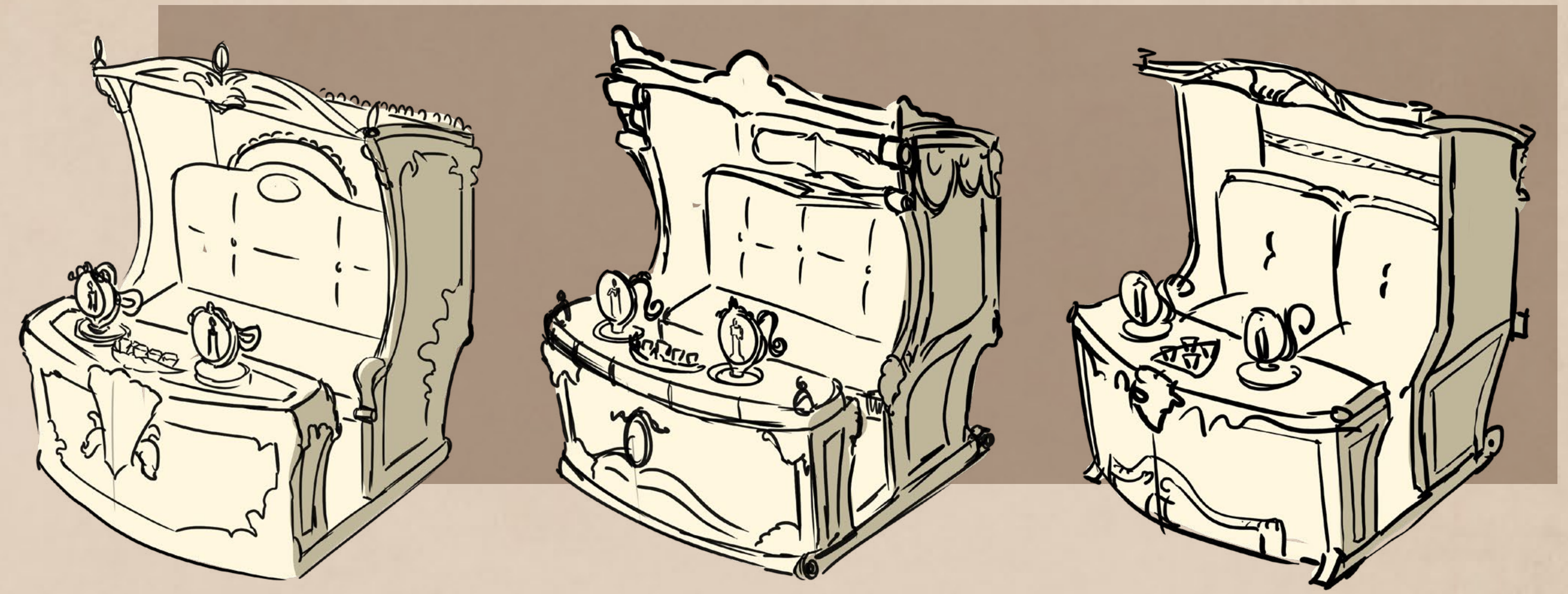
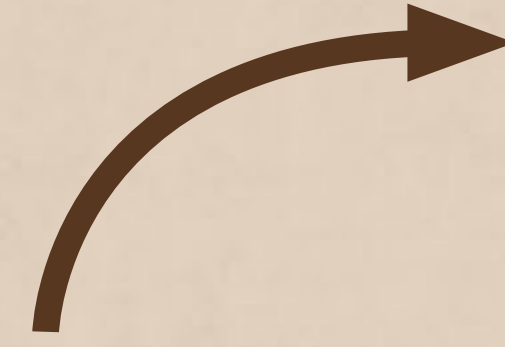


THE RIDE SYSTEM

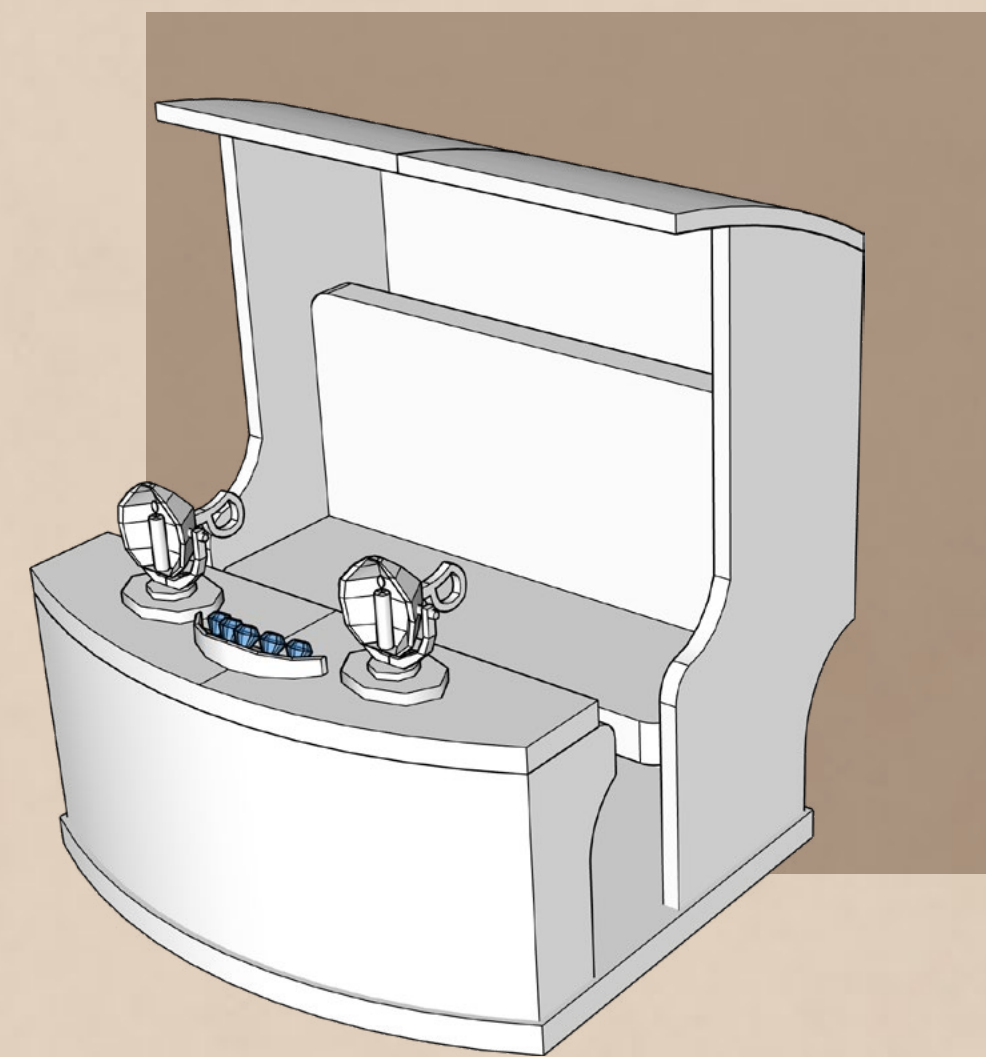
We opted for a classic omnimover system with 54 vehicles and a runtime of 7 mins, resulting in a THRC of about 1064.



MOODBOARD



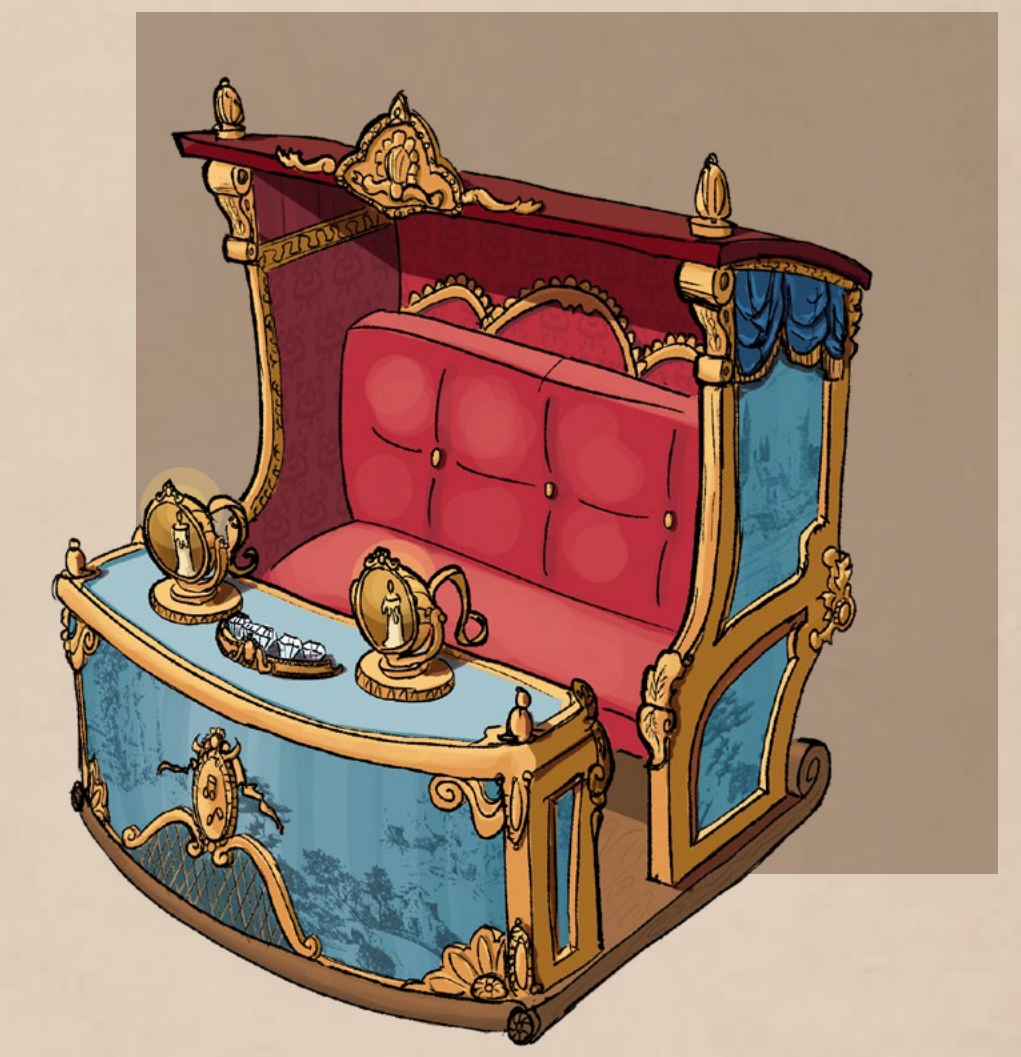
ROUGH SKETCHES



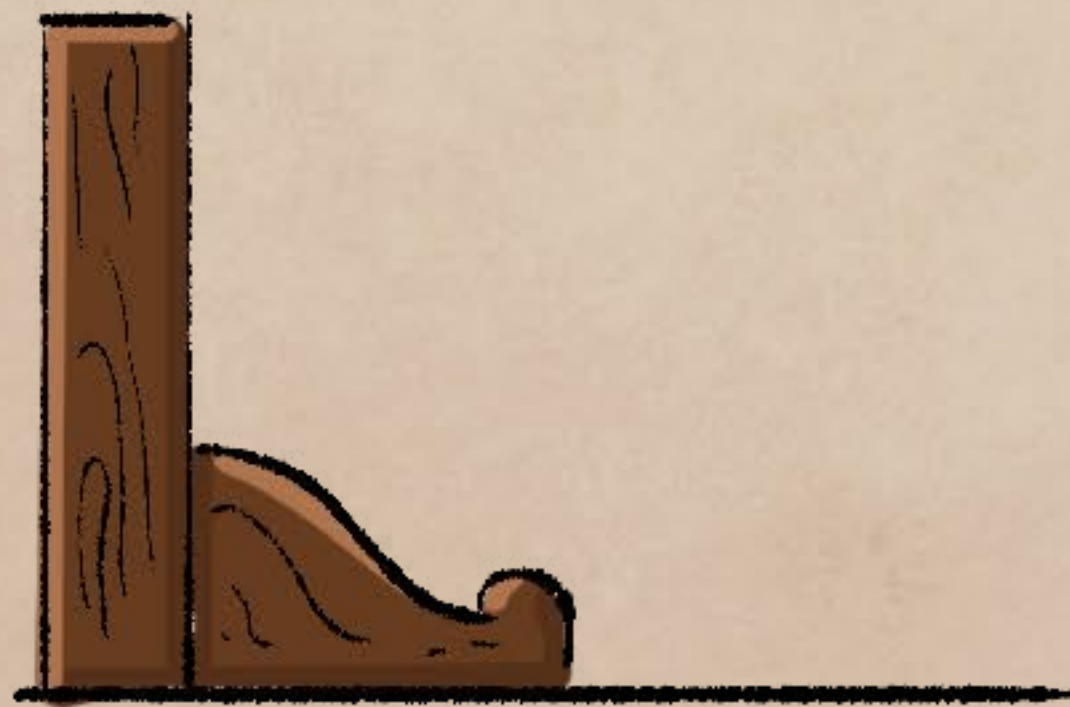
SKETCHUP



BLENDER



ILLUSTRATION



THANK YOU

