Week 3: The Reversal of Control



Initial Concept

In Week 3, I began exploring VR storytelling through **bodily interaction**, rather than relying mainly on environments and objects to communicate ideas.
This time, I chose **puppets** as the starting point for the project. Puppets naturally represent a relationship of control. Their movements are determined by someone else, and although they have physical bodies, they have no real independence.
This made me think about the relationship between individuals and public opinion on social media. In online spaces, people may appear free to express themselves and shape their identities. However, external judgement, approval, and rejection can gradually influence how they behave, often without them even realising it.
Based on this idea, I wanted to create a VR experience in which the relationship of control gradually reverses. At first, the player acts as the puppeteer and can control the puppet's movements. As the experience progresses, however, the puppet begins to guide the player, asking them to imitate its actions.
Through this process, the player gradually shifts from being the one in control to becoming the one being controlled. I wanted to use this change in bodily interaction to explore how individuals can slowly lose control over their own behaviour under the influence of external judgement and expectations.

Visual Research & Exploration

After developing the concept of the reversal of control, I began thinking about how visual design could represent the relationship between individuals and public opinion.
I wanted to create an environment somewhere between a traditional puppet theatre and a surreal space. In this environment, the puppets would not only be performers controlled

by external forces, but also represent individuals who gradually lose their ability to express themselves under the influence of judgement and collective expectations. Initially, I explored more abstract and dreamlike theatre environments. However, I gradually felt that overly complicated spaces might weaken the symbolic meaning of the puppets. I therefore moved towards a more traditional puppet theatre aesthetic, keeping familiar elements such as wooden stages, curtains, and spotlights, while introducing floating structures and large numbers of suspended, fragmented puppets.



Fig. 1. Early visual research exploring theatrical spaces, suspended structures, and the relationship between performers and audiences.

For the puppet designs, I became interested in traditional marionettes and wooden artist mannequins. Compared with complex mechanical structures, I preferred simpler wooden bodies with clearly visible joints, making the idea of external control easier to communicate.



Fig. 2. Visual research into traditional marionettes and their mechanisms of movement and control.

I also wanted to use different degrees of physical fragmentation to represent how individuals might change under the influence of public opinion. Some puppets had lost their heads, others had exaggerated body proportions, while some were held in unnatural positions by strings. They appeared to be taking part in a performance, but no longer seemed able to freely control their own movements.

I also began exploring how comments and judgements could become part of the stage itself. Rather than presenting them as ordinary interface elements, I imagined them surrounding the theatre like an audience, with some even connected to the puppets through strings. In this way, the invisible influence of public opinion could become a visible form of control.

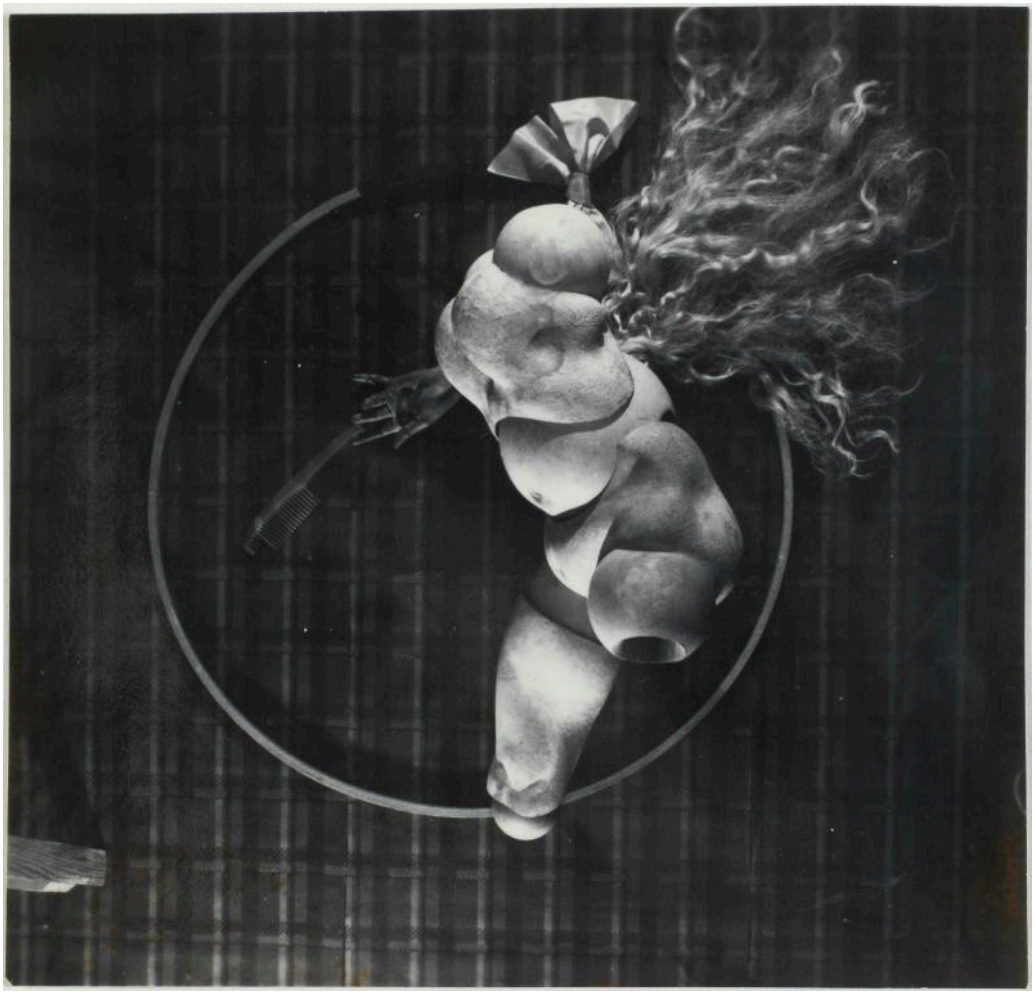


Fig. 3. Hans Bellmer, La Poupée. A visual reference exploring fragmented and reconfigured human forms.

Besides designing the puppets themselves, I also began researching different forms of stage design, looking for visual inspiration from traditional theatre.

I gradually realised that a stage is more than just a place where performances happen. Its spatial arrangement, lighting, and atmosphere can also influence how audiences understand a performance. This made me think about how theatrical visual language could be translated into a VR environment, allowing the space itself to become part of the storytelling.

I wanted to create a virtual environment that felt theatrical but also slightly oppressive. Rather than simply watching a performance, the player would gradually become part of the stage, experiencing the feeling of being observed and judged by others.

These references helped me develop a clearer direction for the environment and encouraged me to explore how space and lighting could communicate the influence of public opinion on individuals.



Fig. 4. Visual research into theatrical stage design, spatial composition, and lighting atmosphere.

For the lighting, I explored a combination of red and blue stage lights with individual spotlights, creating an atmosphere that felt theatrical but also slightly oppressive. I wanted players to feel that they were not only participating in a performance, but were also constantly being watched and judged.



Fig. 5. Visual research into theatrical stage design, spatial composition, and lighting atmosphere.

Through these explorations, I gradually established the overall visual direction: a seemingly traditional puppet theatre filled with unnatural bodies, suspended strings, and an ever-present sense of observation. I wanted this environment to transform the abstract influence of public opinion into something that could be visually experienced.

Puppet & Object Design

After establishing the overall visual direction, I began developing the puppets and other objects for the theatre environment.

During the early stages of puppet design, I experimented with different body forms and structures, including incomplete bodies, elongated limbs, and joints connected by strings. I wanted the puppets to retain recognisable human features while appearing noticeably different from normal human proportions. They seemed capable of performing, yet their bodies appeared to have been altered by some external force.

Some of my early designs were quite complex, with mechanical structures and decorative details. Although these forms were visually interesting, I gradually realised that too much complexity could weaken the characteristics of the puppets themselves. I therefore started looking at wooden artist mannequins and simplified the designs, focusing on wooden bodies with clearly visible joints and connections.



Fig. 6. Early AI-generated puppet design experiments exploring fragmented bodies, mechanical structures, and exaggerated poses. October 2026.

Based on this direction, I developed three different types of puppets. The first had no head, the second featured elongated and distorted body proportions, and the third was more severely fragmented, with different body parts mainly connected by strings. I wanted these variations to share a consistent visual style while giving each puppet its own distinctive appearance.

Throughout the design process, I continued adjusting their poses and proportions, exploring unnatural and slightly rigid body movements. I also considered the requirements for animation and interaction, keeping a more complete body structure for the puppet that would need skeletal rigging.



Fig. 7 — Development of Three Puppet Types

Besides the puppets, I began designing other objects for the theatre, including curtains, suspended structures, wooden puppet controllers, spotlights, and speakers. I wanted these elements to create a complete performance environment while reinforcing the visual relationship between controlling and being controlled.

For the production process, I used AI image generation tools to help explore different forms, continuously refining and simplifying the designs according to the project's needs. I then separated some of the designs into individual components and used Tripo AI to convert them into 3D models for further adjustment.

Through this stage, I gradually realised that object design was not simply about creating interesting forms, but about making each visual element contribute to the overall

concept of the experience.

Environment Development

After developing the main puppets and theatrical objects, I began bringing these elements together to create a complete virtual theatre.
Building on my earlier research into stage design, I wanted the environment to feel familiar as a traditional theatre while also introducing surreal spatial elements. I chose a wooden stage as the main structure and added floating circular frames, suspended puppets, curtains, and lighting equipment around it. My aim was to create a performance space without clearly defined boundaries.



Fig 8. Early AI-assisted concept explorations of the puppet theatre environment. October 2026.

For the initial development, I mainly used Blender to build the environment, importing and assembling different models while adjusting their positions, proportions, and spatial relationships. During this process, I experimented with different layouts and gradually realised that placing too many elements in one area could make the scene feel crowded and reduce the importance of the central puppet. I therefore continued adjusting the height and distribution of the objects, trying to maintain a visually rich environment while

guiding the viewer’s attention towards the centre of the stage.

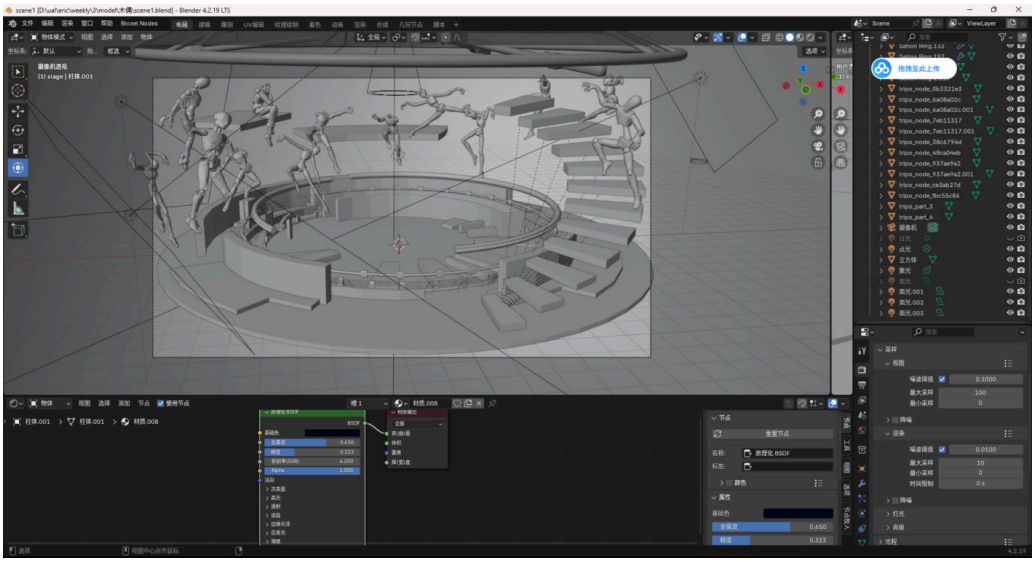


Fig 9. Initial environment development in Blender, exploring spatial composition and object arrangement.

October 2026.

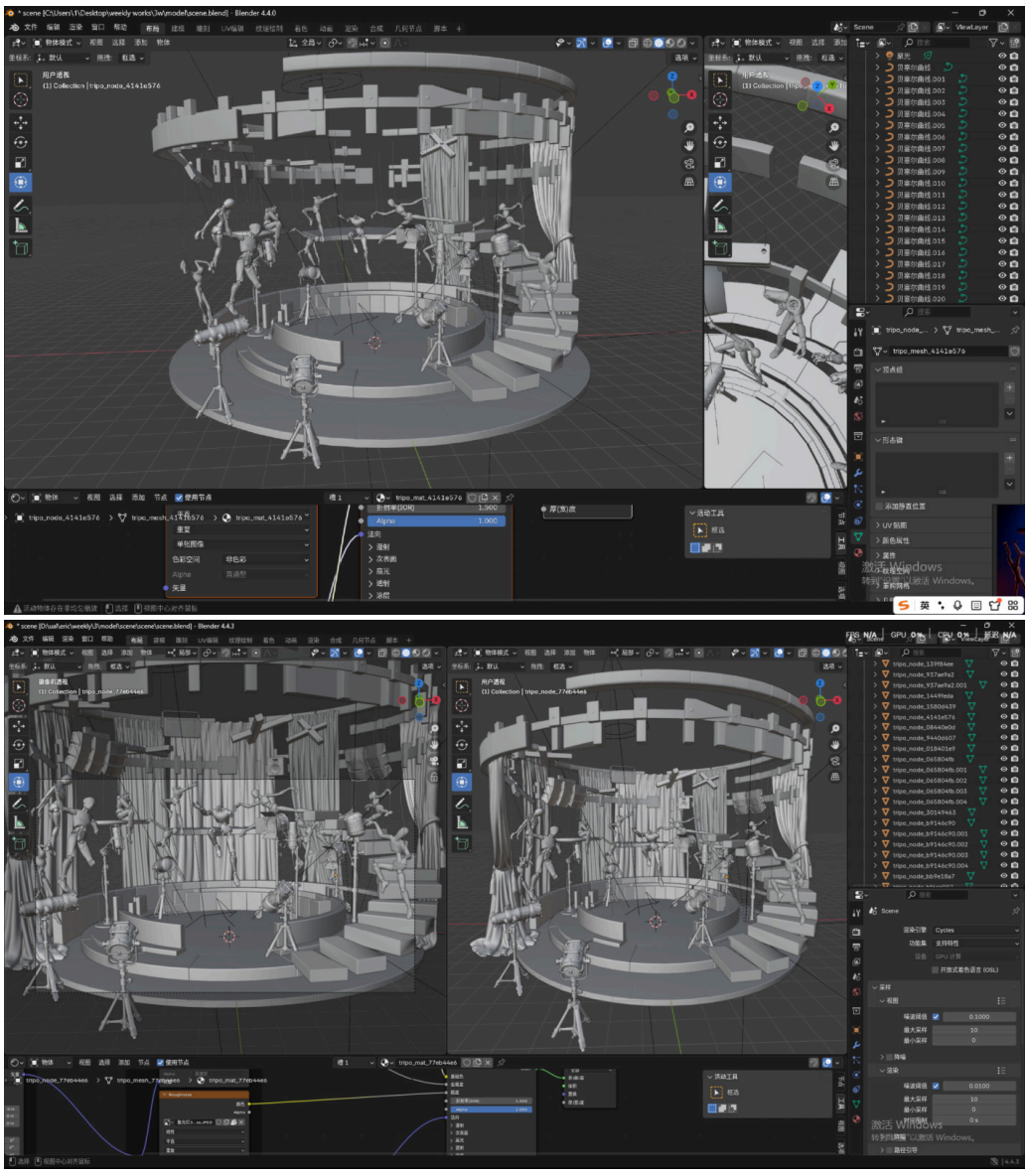


Fig 10. Initial environment development in Blender, exploring spatial composition and object arrangement.

October 2026.

After the initial scene was assembled in Blender, it was imported into Unity, where another team member took the main responsibility for scene integration, materials, and lighting adjustments. At this stage, we aimed to maintain a relatively dark theatrical atmosphere, using focused spotlights and contrasting red and blue lighting to highlight the main puppets and strengthen the dramatic feeling of the stage.

Through this process, I gradually realised that designing a VR environment requires more than creating an interesting composition from a single viewpoint. It also involves considering how players experience the space as they move and look around. For this project, the stage was not simply a background for the puppet performance. It was also a narrative space where players could experience the feeling of being watched and judged.

Interaction & Narrative

After developing the environment and puppet designs, we continued discussing how VR interaction could communicate the relationship between the controller and the controlled. I wanted players to do more than simply watch a puppet performance. I wanted them to physically experience a change in the relationship of control. We therefore developed the experience around three stages.

At the beginning, players enter the puppet theatre and can freely observe the suspended puppets and surrounding environment. They are then able to control the hands of the central puppet using VR controllers. At this stage, the player takes the role of the puppeteer, directly influencing the puppet's movements.

However, as the experience progresses, this relationship begins to reverse. The puppet is no longer simply being controlled. Instead, it starts guiding the player's movements, asking them to imitate its poses. If the player imitates the movements correctly, they receive applause. If they make a mistake, the puppet suddenly rushes towards them, creating a brief moment of fear.

I found this process interesting because it reflects how public opinion can influence individual behaviour. At first, players believe they are in control, but as they receive approval or rejection, they begin adjusting their actions according to these external responses. What initially feels like free movement gradually becomes a response to the expectations of others.

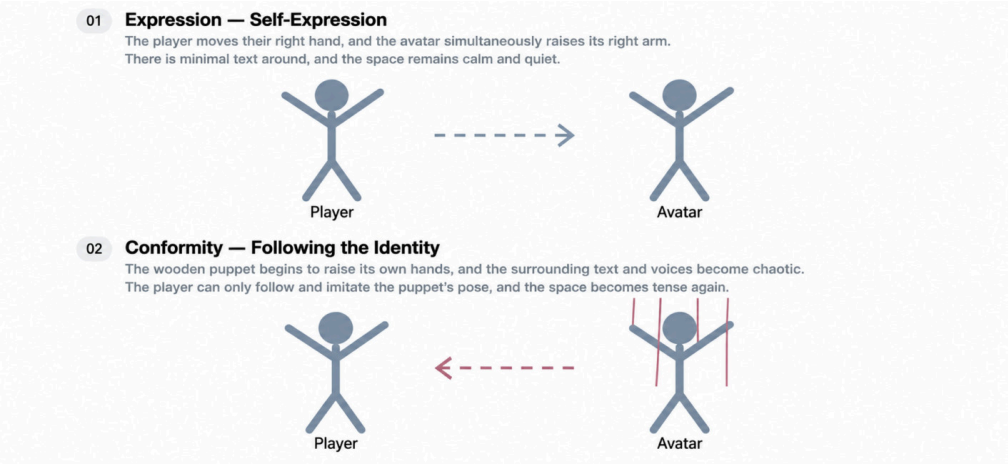


Fig. 11. Interaction concept illustrating the gradual reversal of control between the player and the puppet. October 2026.

For the narrative design, I wanted to avoid relying too heavily on direct explanations. Instead, I hoped players would experience this change through their own body movements. Rather than simply telling them that they were being controlled, I wanted them to gradually realise that they had shifted from controlling a puppet to following its instructions.

The technical implementation of the interactions and animation triggers in Unity was mainly handled by other team members, while I was more involved in the concept, visual development, and overall direction of the experience.

Through this process, I became more interested in the role of the body in VR storytelling. The player's movements are not simply a way of completing tasks, but can also become part of how a concept is communicated.



Fig. 12. VR interaction testing, exploring how the player's hand movements control the central puppet. October 2026.





Fig. 13. Interaction and animation experiments exploring imitation, feedback, and the reversal of control. October 2026.

Reflection & Conclusion

Compared with the previous two weeks, this project made me think more about the role of physical interaction in VR storytelling. Previously, I focused mainly on communicating emotions and ideas through environments and objects. This time, I explored how the player's body movements could become part of the narrative, with the changing relationship of control at the centre of the experience.

For the visual design, I spent a lot of time exploring puppet forms and theatrical spaces. From the more complex early puppet designs to the simpler wooden figures, I gradually realised that visual complexity does not always make an idea more effective. Sometimes, a simpler and clearer form can communicate the concept more directly.

During production, I also became more familiar with building complex environments in Blender. Arranging objects in three-dimensional space, maintaining a consistent visual style, and considering how players would view the environment in VR were all challenges that required continuous adjustments.

As the project involved many different elements, including models, environments, and interactions, teamwork was also an important part of the process. I was mainly involved in the concept, visual design, model development, and initial environment assembly in Blender, while other team members worked on scene integration, lighting, and interaction in Unity. This helped me understand the importance of communication and coordination between different stages of production.

There were also aspects of the project that could be improved. Because of the limited production time, we had to make decisions about how much detail and interaction we could include. With more time, I would like to improve the feedback between the player and the puppet, making the reversal of control feel more natural. I would also like to explore how the surrounding expressions of public opinion could respond more noticeably to the player's behaviour.

For me, the most important thing I learned this week was that VR storytelling does not always need to rely on text or dialogue. Body movements, spatial relationships, and interactive feedback can also become ways of communicating abstract ideas.