



Designing fear through anticipation, vulnerability & exploration.

VR Narrative exploration experience

F O R L O R N

UX Researcher - UX Designer

School project - 3 months - 6-person team - Unity

Overview

Awakening in a dark cave with only a lantern to guide them, players explore the environment and progressively uncover the story of a forgotten civilization.

The experience was designed to make players fear what might happen, rather than what they could actually see.



Lantern

Limited means of interaction

Darkness

Restricted visibility

Environment

Story discovered through exploration



How can we make players afraid of what might happen, rather than what actually happens ?

UNCERTAINTY

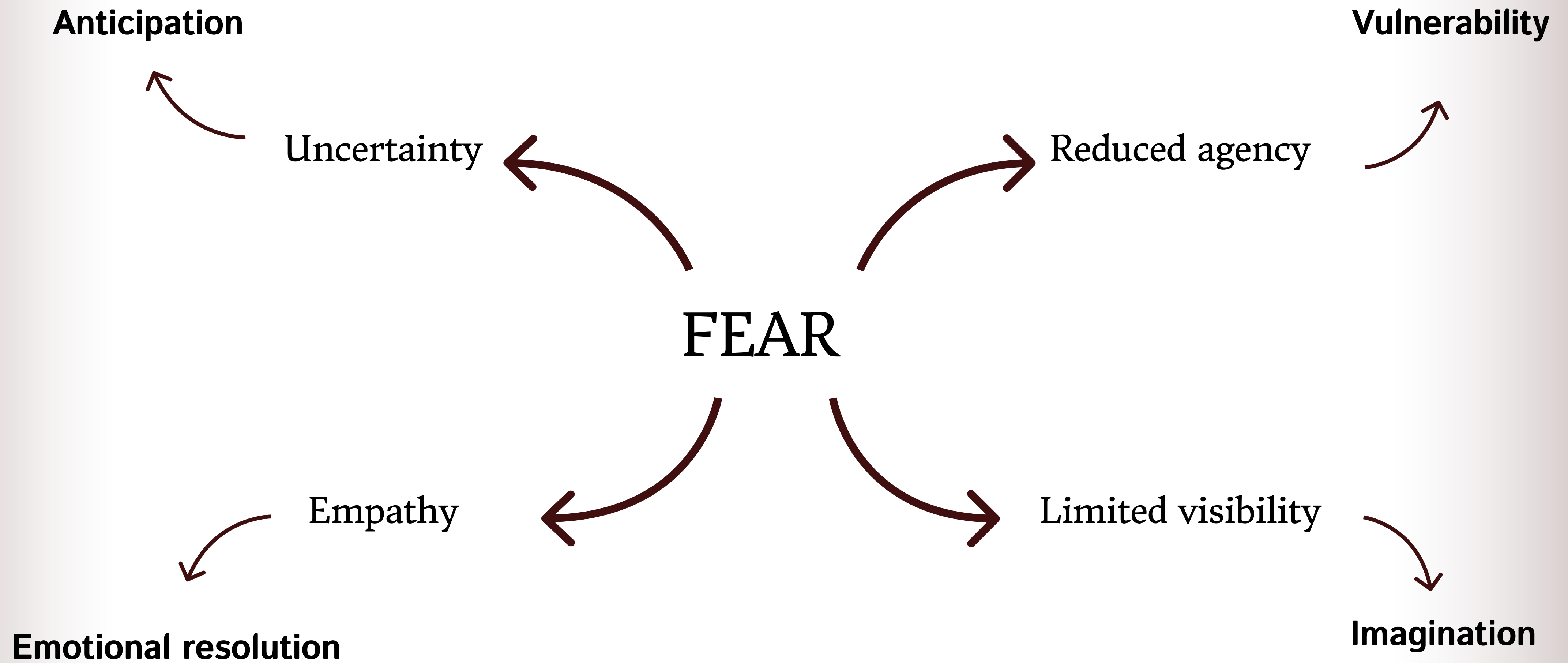
What could happen ?

VULNERABILITY

What can I do about it ?

ANTICIPATION

When will it happen ?



These findings became the foundations of our experience pillars.

Our experience pillars

Anticipation

Research
Player experience

Create fear through
uncertainty and
anticipation.

Exploration

Research
Player experience

Give players a
reason to keep
moving forward.

Environmental storytelling

Research
Player experience

Reveal the
narrative through
exploration.

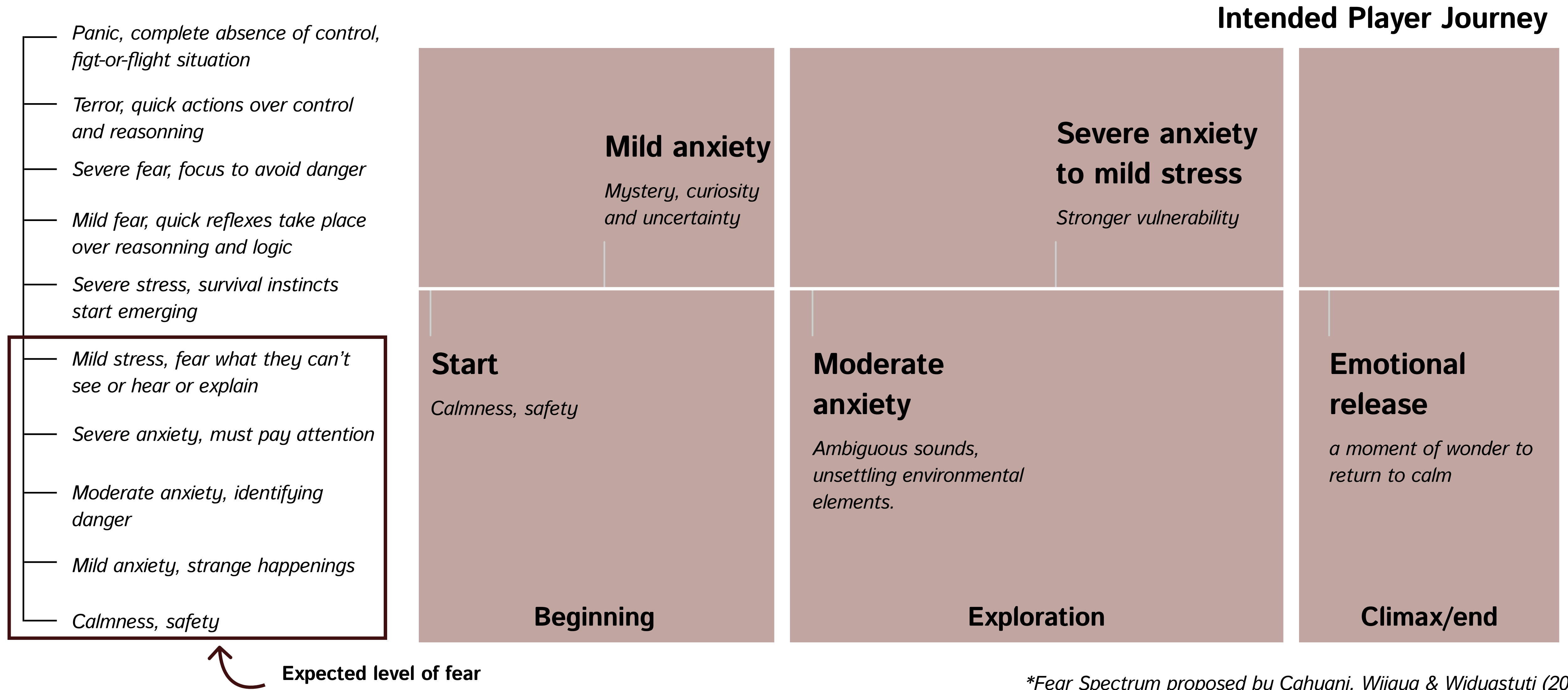
Empathy

Research
Player experience

Transform fear
into emotional
connection.

Turning a Fear Model into de Design tool

I used the Fear Spectrum as a shared reference to quantify and calibrate emotional intensity with the team.*



**Fear Spectrum proposed by Cahyani, Wijaya & Widyastuti (2021)*

Research #01

Environmental Storytelling

Can players understand the story through the frescoes ?

OBJECTIVE

- *Narrative comprehension*
- *Readability*

METHOD

- *15 participants*
- *Questionnaire*

FINDINGS

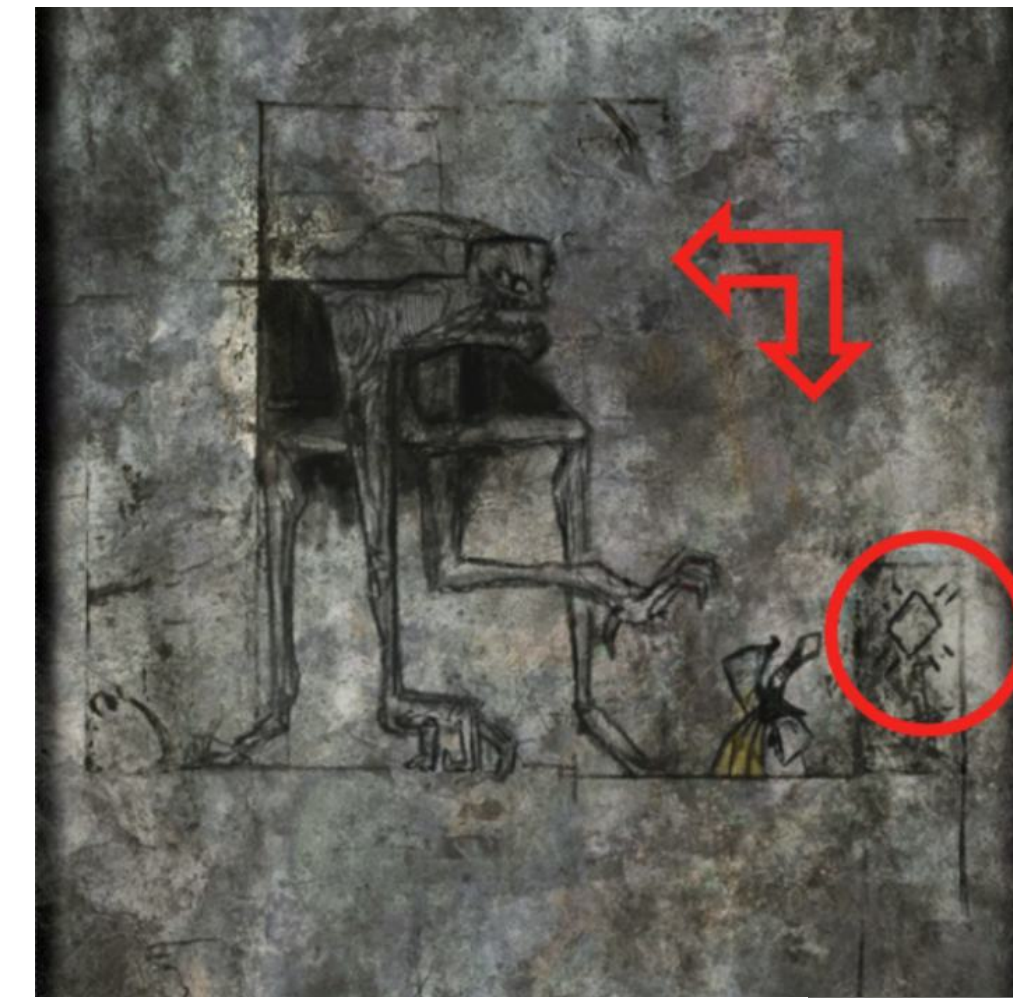
Narrative information was not sufficiently clear.

DESIGN IMPLEMENTATION

Improve hierarchy and reinforce key narrative information.

OUTCOME

Improved comprehension in the second test.



Research #01

Environmental Storytelling



Adjusting lighting



No fresco interaction

Fresco interaction (shines when approaching)

Does the experience create the intended level of fear ?

OBJECTIVE

- Emotional progression (fear)
- Environmental storytelling
- Comfort (physical and visual)
- Audio

METHOD

- 8 participants
- semi-structured interviews & fear spectrum

FINDINGS

- Despite fear-based reactions such as slight startles or hesitation to move forward, the participants reported feeling little fear, just a slight apprehension.
- The frescoes did not capture their attention sufficiently and were therefore not clearly understood by everyone.
- Some players felt uncomfortable during the game and had difficulty seeing due to the dim lighting.
- Some auditory misunderstandings.

DESIGN IMPLEMENTATION

Calibrating fear elements, adding fresco interaction (frescos shine when approaching), calibrating lighting, adding accessibility options (switching hand, automatic lantern), working around sounds.

Research #01

Environmental Storytelling

Can players explore the environment comfortably in VR ?

OBJECTIVE

Previous test iterations :

- Emotional progression (fear + empathy)
- Environmental storytelling (fresco interaction)
- Comfort (lighting adjustments)
- Audio

Curent test objectives :

- Motion sickness
- Accessibility (seated mode, switching hands, one hand mode)

FINDINGS

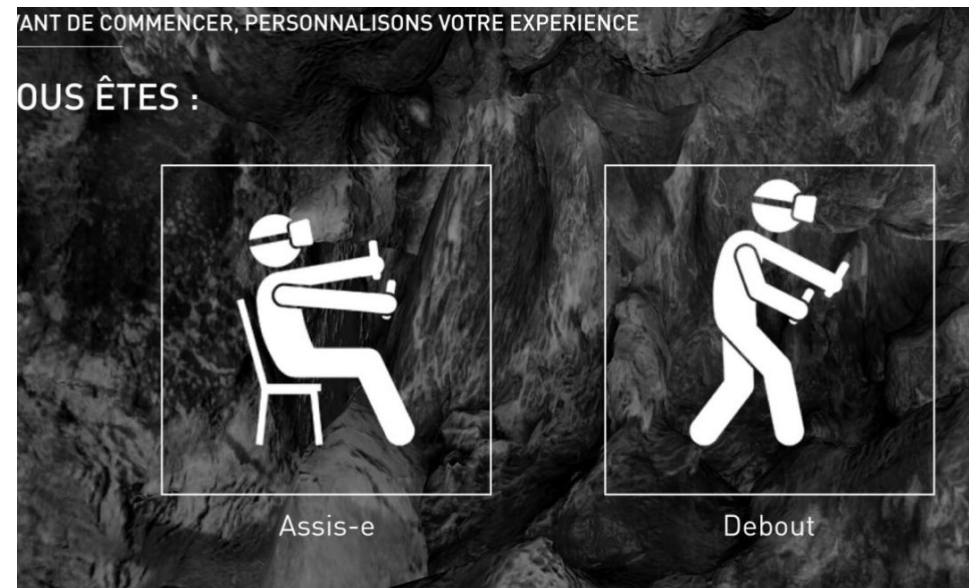
- Emotional progerssion was still lower than what we expected (progression of tension was still a bit shy and environment lacked environment elements to build empathy)
- Frescoes were more attracting to participants.
- Navigation was easier with lighting adjustments but the balance between uncertainty and visibility was off.
- Audio elements lead to hesitation while exploration
- Motion sickness was a problem for some participants
- Accessibility options were well received

METHOD

- 6 participants
- semi-strutured interviews

DESIGN IMPLEMENTATION

- Adding more options to reduce motion sickness
- Adding narrative elements to the environment to build empathy earlier in the experience
- Adding a feature that increases the lantern's brightness and range when you hold it high, along with luminescent elements



Adding seated mode



Placing narrative elements next to fresco to have more impact



Adding luminescent elements

Research Impact

What I would do differently

Emotional Design

Research on fear helped the team structure the emotional progression and calibrate the intensity of different sequences.

Narrative

Iterative testing improved the readability, placement and discoverability of environmental storytelling elements.

Comfort

Playtesting identified physical and navigational discomfort that led to changes in lighting and interaction.

Then

Broad, long playtest sessions covering multiple research questions.

Now

Shorter, focused studies with deeper questions to have clearer actionable outcomes.

Accessibility

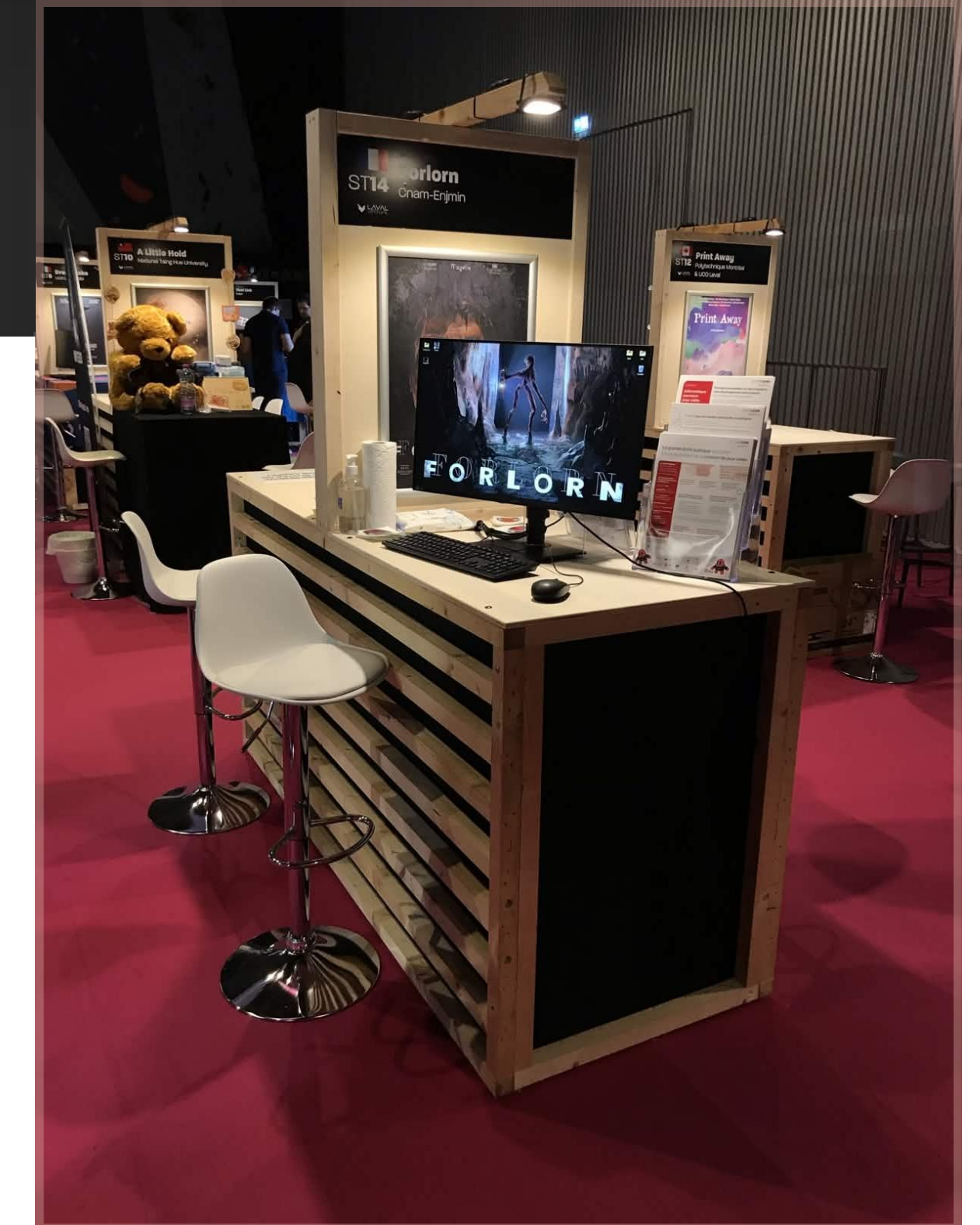
Player feedback directly informed accessibility priorities, including seated mode, hand switching and automatic lantern holding.

Design Decisions

Research findings provided a shared evidence base for discussions between Game Design, Art, Sound and management.

Communication with the team

Research findings used to support multidisciplinary discussions and pillar experience pillars through presentation slides and prioritised recommendations



Laval Virtual experience

Forlorn was exhibited at Laval Virtual as a student project, giving us the opportunity to test and present the experience to a broader audience.

Our stand to present Forlorn