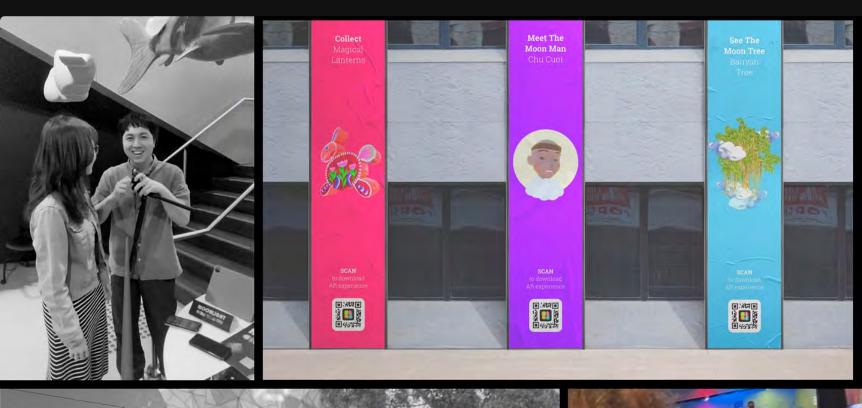
CRAFTING AR LANTERNS: **FUTURE** PRACTICE TO PRESERVE THE PAST

BUI QUYNH NHU

LUCIAN RODRIGUEZ LOVELL



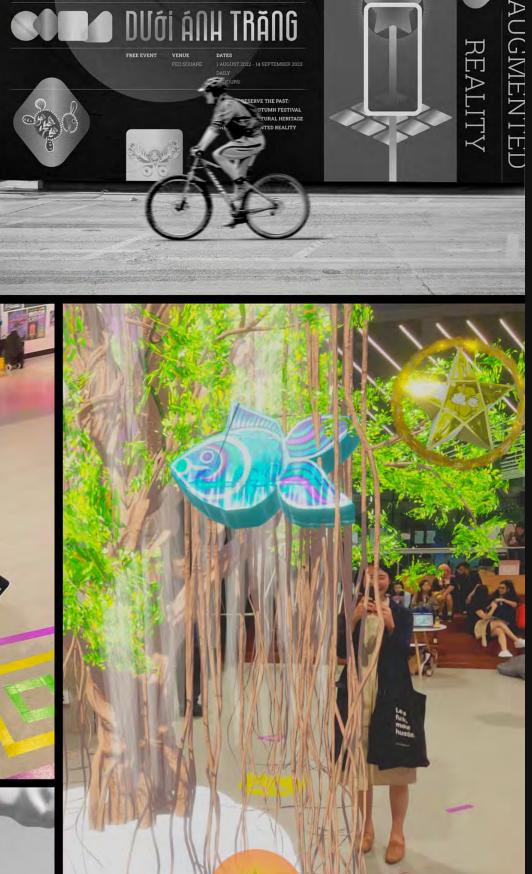












MOONLIGHT

SOURA DƯỚI ÁNH TRĂNG

Acknowledgement of Country

WORKSHOP ALL

Exploring a Speculative Design Practice that Combines *Traditional Hand-craft Decoration* with *Contemporary 3D AR techniques*, as a way of **Preserving and Extending Intangible Cultural Heritage (Lantern Making)**

- Introduce The Speakers
- 'Play to Preserve the Past' AR Series
- AR Lantern: Physical Design
- AR Lantern: Digital Translation
- AR Lantern: Interactive Development
- Extended Reality Lantern Parade

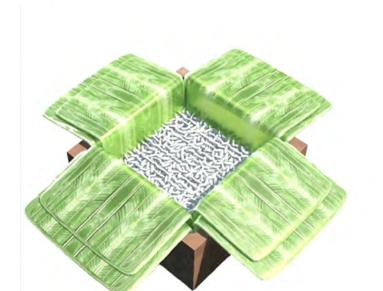


ABOUT NHU

Nhu is a Designer-Researcher living between cultures

- O Preserving and celebrating Vietnamese heritage.
- From Saigon (HCMC), Vietnam.
- Researcher at RMIT PlaceLab
- O PhD Student & Sessional Academic
- O Graphic design, 3D animation, motion capture, VR and AR.





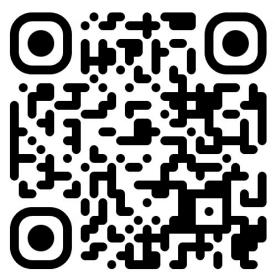






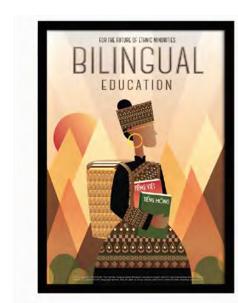












ABOUT LUCIAN

Lucian Rodriguez Lovell (he/him) is a XR Designer, Researcher for the Centre of Digital Environments (CODE), and Lecturer for BA Game Design (RMIT).

- Living and Working on the Unceded Wurundjeri
- Territory (Melbourne)
- O Interrogates XR, HCI, AI, Digital Cultures
- O Creative Practice of Mixed-reality Games (AR and VR),
- Experimental Digital Experience Design, and Physical to
- 3D Imaging Processes.
- O PhD Candidate RMIT Practice Research Symposium



PLAY TO PRESERVE THE PAST

This Workshop is based on 'Play to Preserve the Past', a series of Mobile Gameplay that investigates Augmented Reality (AR) Technology and Interactive Design as a Potential Future Solution to Safeguarding Intangible Cultural Heritage*.

*Intangible cultural heritage (ICH) has a wide range of expressions and can be identified as oral traditions (storytelling); social practices, rituals, and festive events (festivals); knowledge and skills used to produce traditional crafts (making lanterns); and other variants worth acknowledging like childhood play and culinary traditions.

- UNESCO

AR Heritage Lab

Available for iOS. Android coming soon.

iPad & iPhone







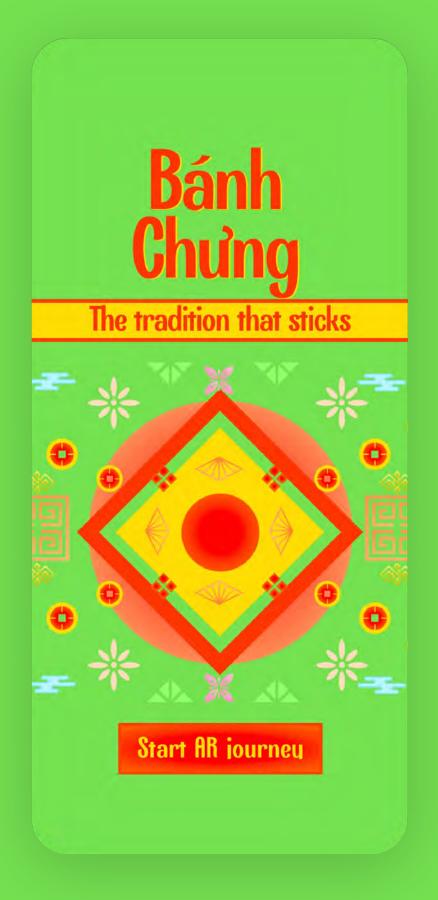
Wisdom of the Lost Folk AR Adventure

Banh Chung AR Adventure

Moonlight AR Adventure



BANH CHUNG AR





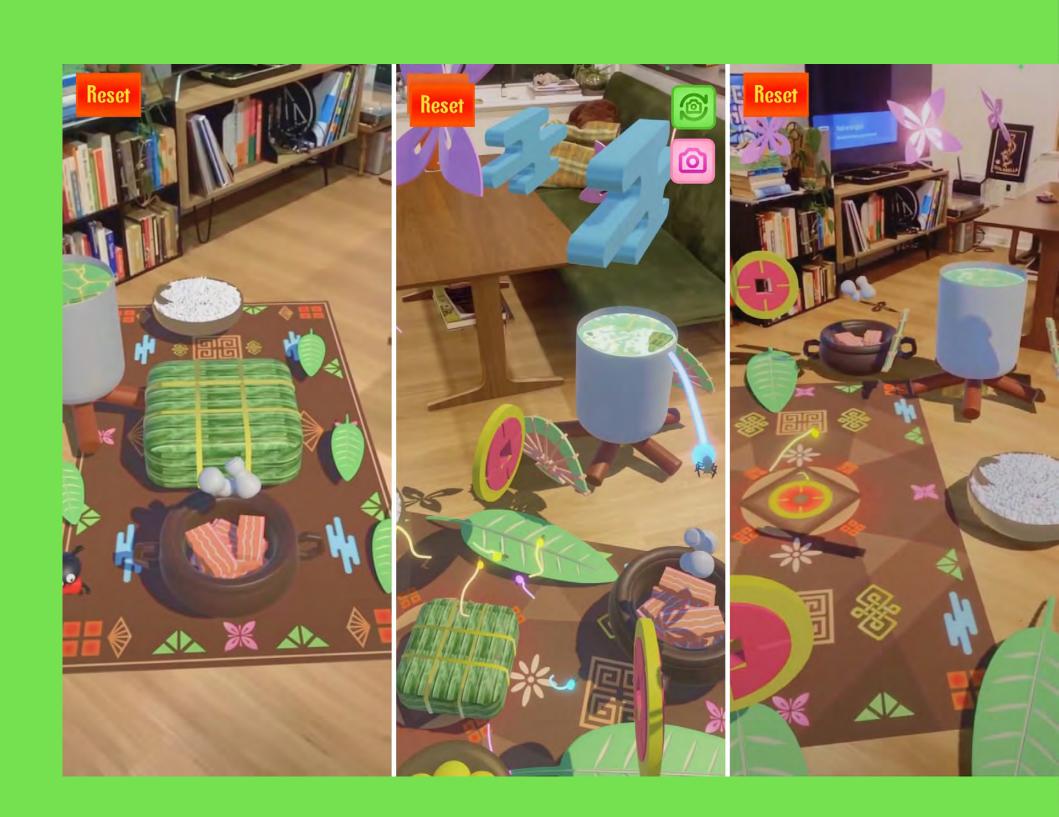




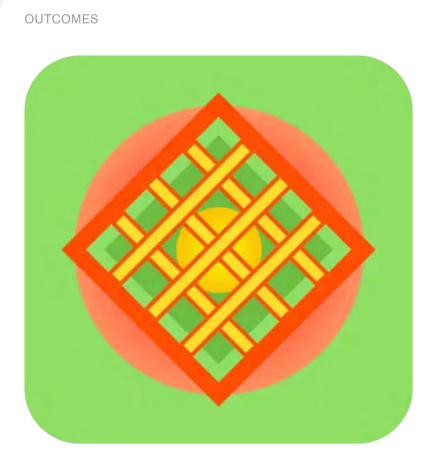
BANH CHUNG AR



I can't be home this Lunar New Year, but this feels like home...



PLAY TO PRESERVE THE PAST



PROJECT 1

making process.









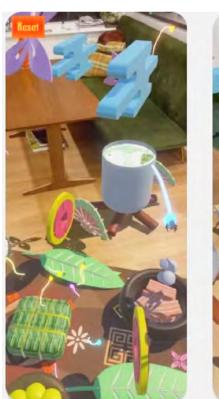






Lucky money design with Vietnamese test saying: "Happy New Year









Tools: Adobe Illustrator, Photoshop, Premiere,



MOONLIGHT AR







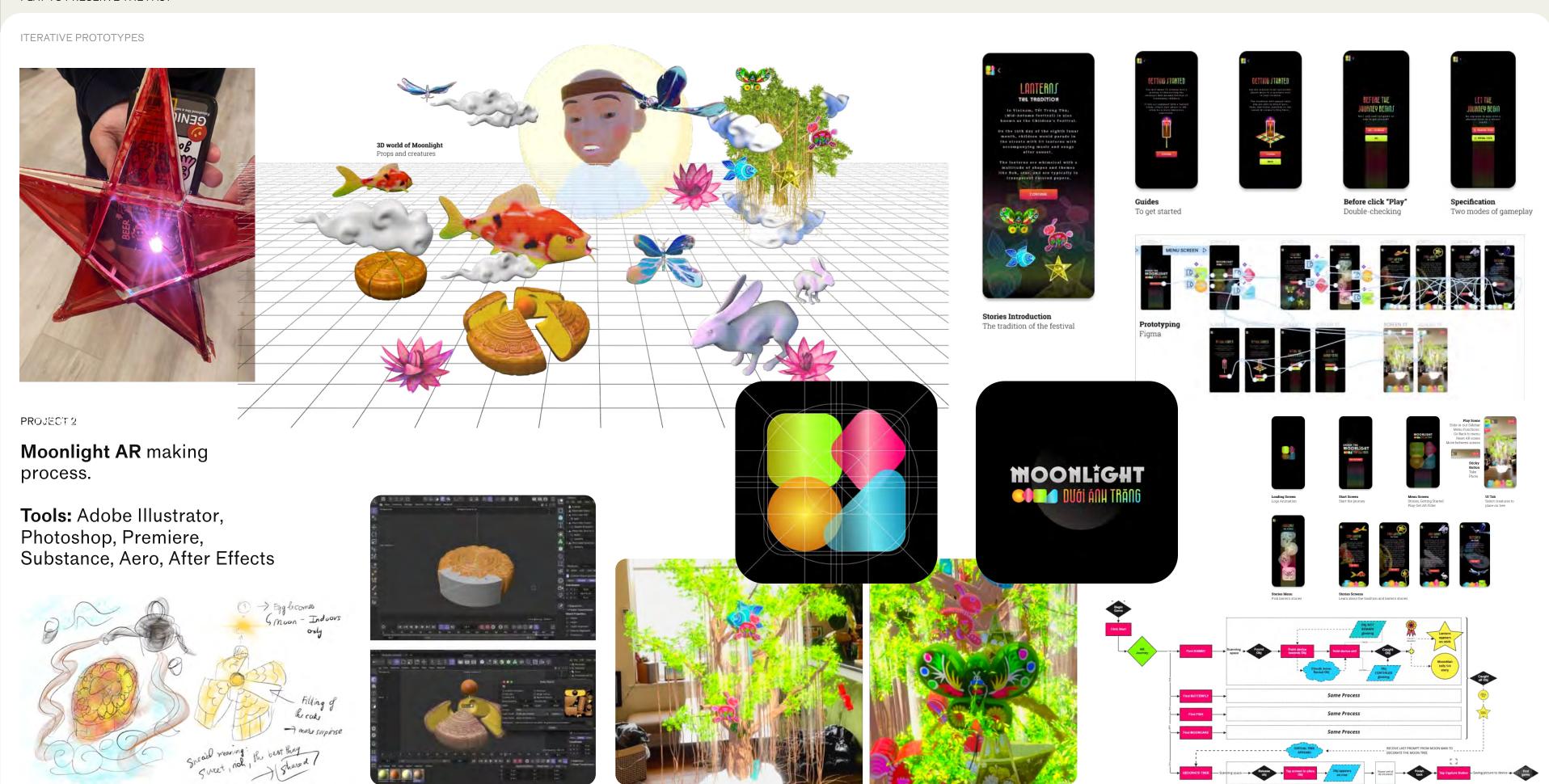
MOONLIGHT AR



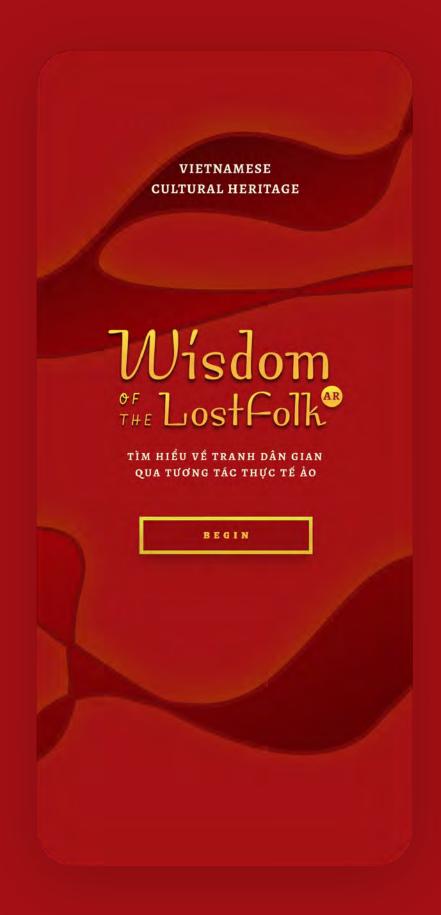


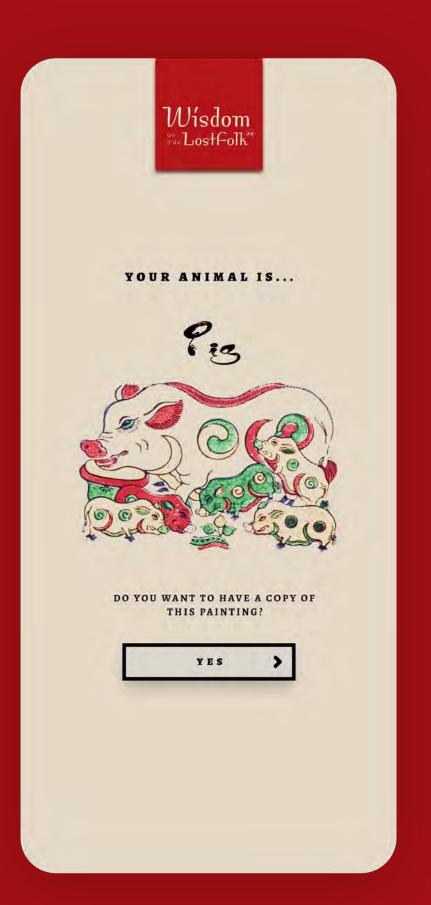


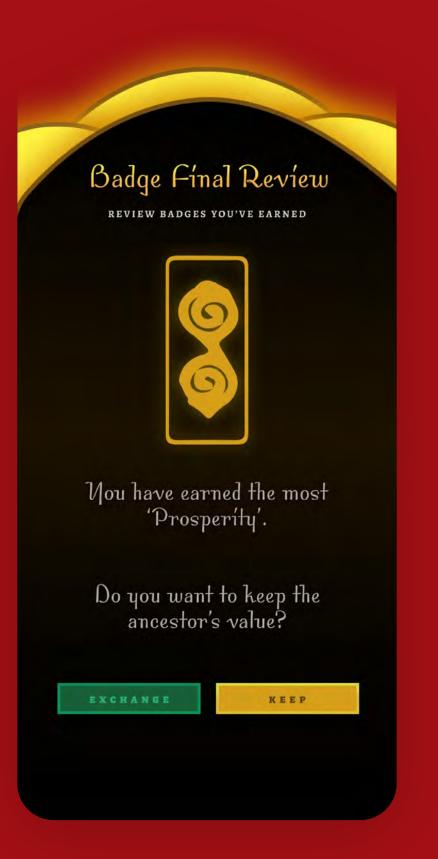
PLAY TO PRESERVE THE PAST



LOST FOLK AR

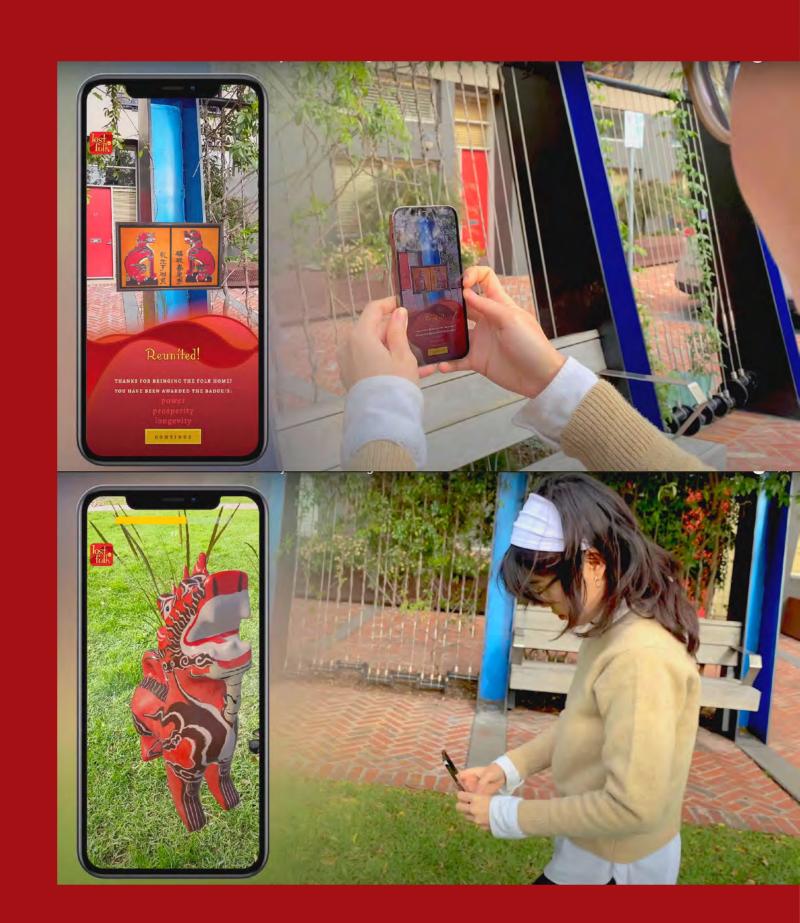






LOST FOLK AR





OUTCOMES



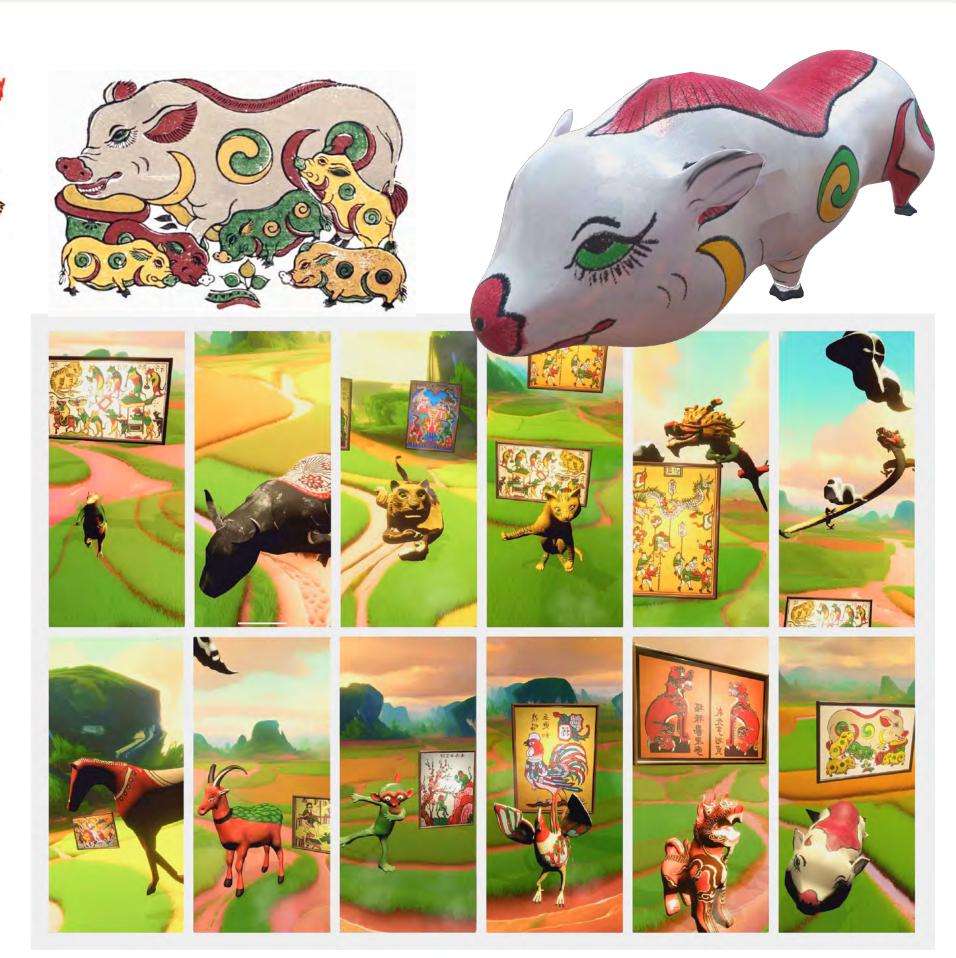




Lost Folk AR making process.

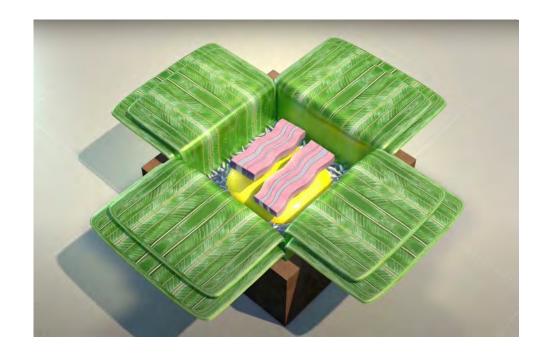
Tools: Adobe Illustrator, Photoshop, Premiere, Substance, Aero, After Effects





Design Findings from Play to Preserve the Past

UpdatingHeritageAesthetics forContemporaryAudiences



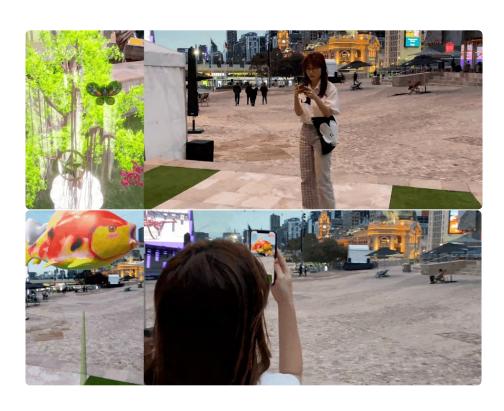
Value-BasedGame Mechanics



Reconfiguring
Home Space
into Ritual
Space



PhysicallyEngaging theBody in RitualMovements



IMPLICATIONS

Research Impact

The findings and artefacts aim to explore the evolving intangible heritage form, inspire creativity, influence policy, and redefine how technology and heritage connect.







DIGITAL HERITAGE, VIRTUAL HERITAGE, AND NEW HERITAGE

▲ New Approach

that marries autoethnography and reflective practice

▲ Perspective

from the lens of a problem-led practice-based research, illuminate the complexities

PRACTITIONERS IN THE FIELD

▲ Robust Framework

pragmatic design considerations upholding cultural authenticity while using AR 3D technologies

▲ Underscore Urgent Need for New Research

to further investigate comprehensive strategies that navigate the intricate relationship between cultural heritage and technological intervention.

SUSTAINABLE DIGITISATION

▲ Inform Policy

in light of Vietnam's current absence of cultural heritage digitisation policies and guidelines

▲ Spark Discourse

encompassing globalisation, digital reproduction, and the politics of heritage authorship, among other pertinent topics.

WORKSHOP PROVOCATION

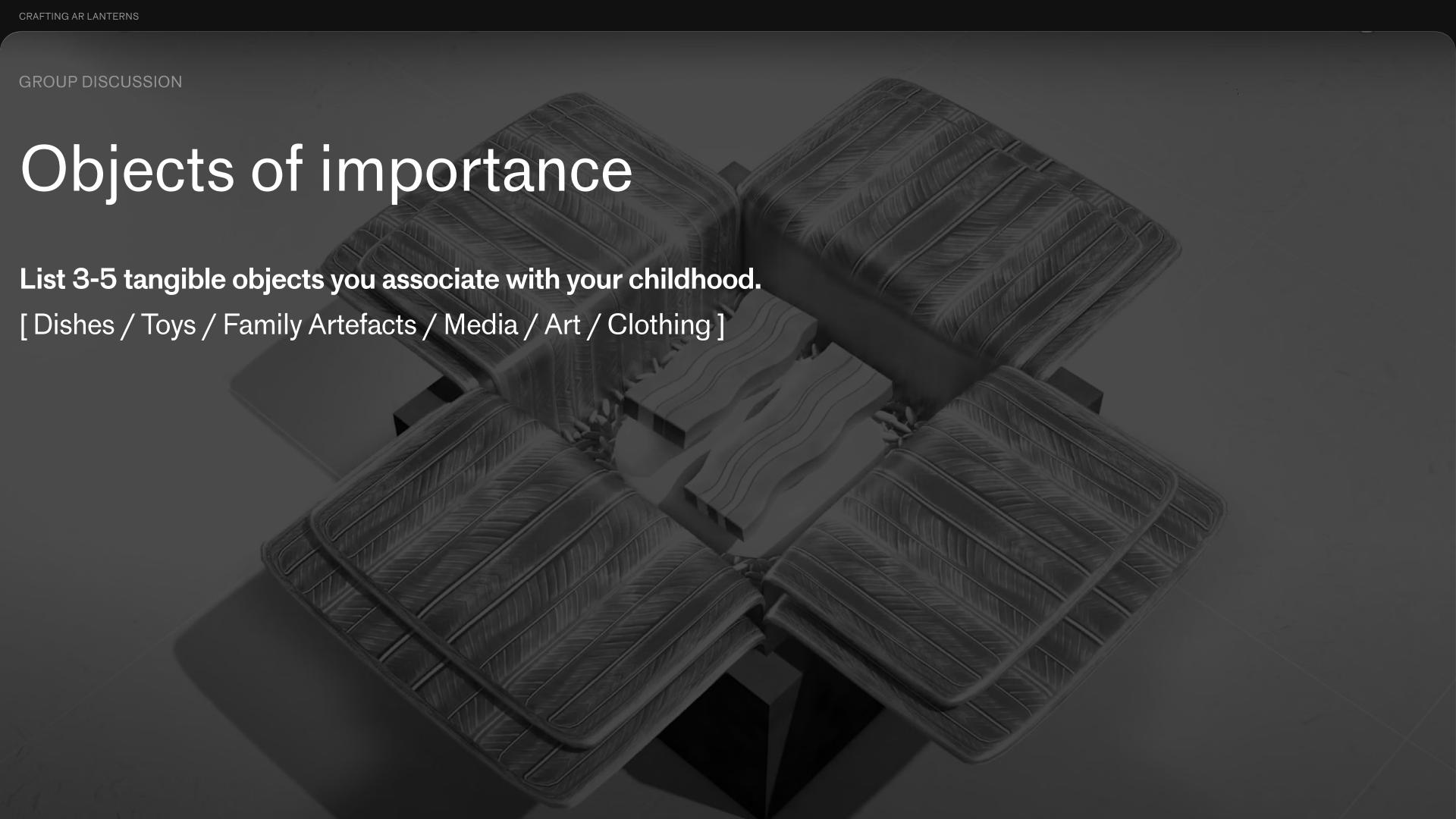
How can cultural practices evolve with and through new technology and media?

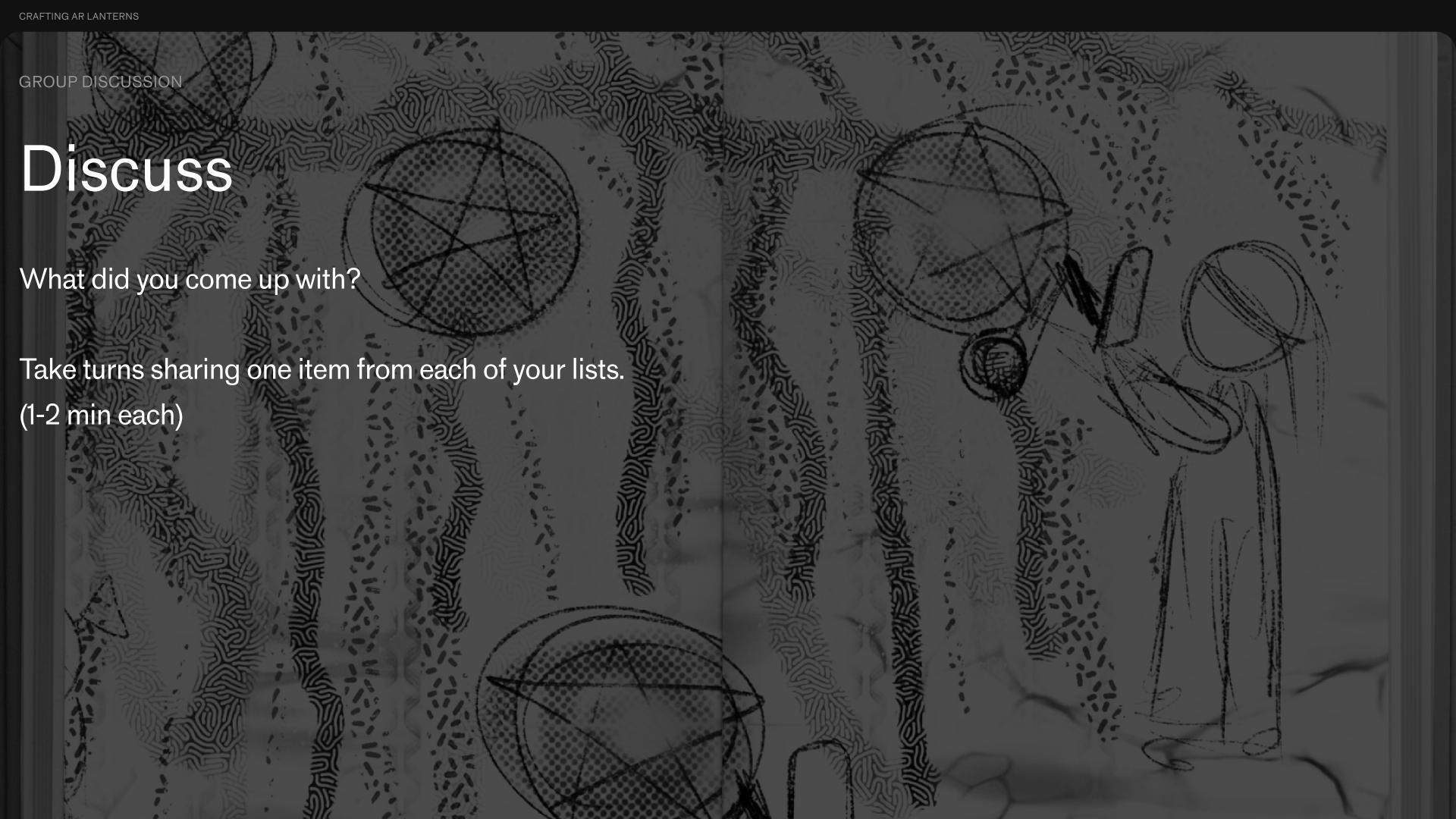
For the intangible aspects of culture to survive the passage of time, it must be maintained in cultural relevance and regularly practiced and learned in communities and across generations.

- UNESCO

Stories of culture, heritage, and identity have a power that may be invisible, yet shape the communities we live in and the ones we visit.

- Jepson and Clarke 2014





Designing our AR Lanterns

We will begin by designing a unique 3D Lantern, inspired by our personal reflection on cultural practices. We will then digitise our drawings.









STEP 1 DRAW YOUR LANTERN - 20MIN

- ◆ Draw a square Make it big!
- ◆ Draw an outline

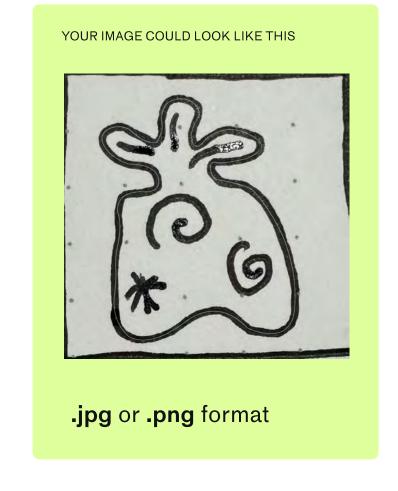
Simple and strong unbroken lines. This will form the front shape of your lantern.

◆ Fill

Fill your outline with colours and designs

STEP 2 PHOTOGRAPH YOUR LANTERN DESIGN - 5MIN

- ◆ Finished your artwork?
- ◆ Take a photo of your work
 Try and keep the lines of the box as straight as possible.
- ◆ Transfer to your laptop



Digital Translation

Let's head over to the computer and put the AR experience together.





STEP 1 ILLUSTRATOR - 5MIN

◆ Open Illustrator

Create a 1024px x 1024px project.

→ Import your image

Drag in your image texture. Scale and crop so the square meets the artboard edges.

◆ Trace with pen tool

Create a path following the outline of your shape

◆ Export

Path as .svg and texture as .png

STEP 2 BLENDER - 20MIN

◆ Import SVG

Rotate correctly, Add Solidify Modifier, Convert to Mesh

◆ Clear Material

Clear existing material, delete UV's

◆ Remesh and Sculpt

Optional: Remesh, Resculpt model

◆ New Material

Create new material, import texture, Box unwrap

STEP 3 PREPARING MODEL

♦ Export the model with texture from blender

♦ GLTF (.glb/.gltf) is preferred

AR Experience

Let's head over to the computer and put the AR experience together.



FOR AR GAME DEVELOPMENT

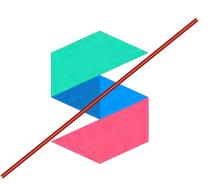






FOR AR AND XR EXPERIENCES





FOR THIS WORKSHOP



AR Experience

Let's head over to the computer and put the AR experience together.





- ◆ Open Styly Studio
- ◆ Create a blank scene
- ♦ Import your 3D model in .glb format

STEP 2 INTERACTIONS AND FEATURES

♦ Add AR Functions

Add > Functions > AR Object Occlusion (Fast)

♦ Add Interactions

Consider making your lantern animated or equippable, you can add URL's on-click too!

◆ Make copies

Consider copying your lantern to fill the sky!

♦ Publish

Click the globe icon to publish your scene.

STEP 3 ON DEVICE TESTING

- ◆ Download the Styly app on your phone
- ◆ Login and run your scene!

SITE SPECIFIC EXHIBITION

We would like to create a site specific AR installation featuring your creations, filling the sky around Shibuya Station.

Email us your GLB file to be included!

Create City XR Experience



Sapporo Odori Park



Tokyo Shinjuku West Exit



Tokyo Shibuya Station



Niigata Furumachi



Niigata Bandaijima



Nagoya Station



Kyoto Station



Osaka Shibatacho



Osaka Dotonbori



Fukuoka Tenjin Station



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