

ANIMATION : GAMES ART

Final Major Project

Element 1

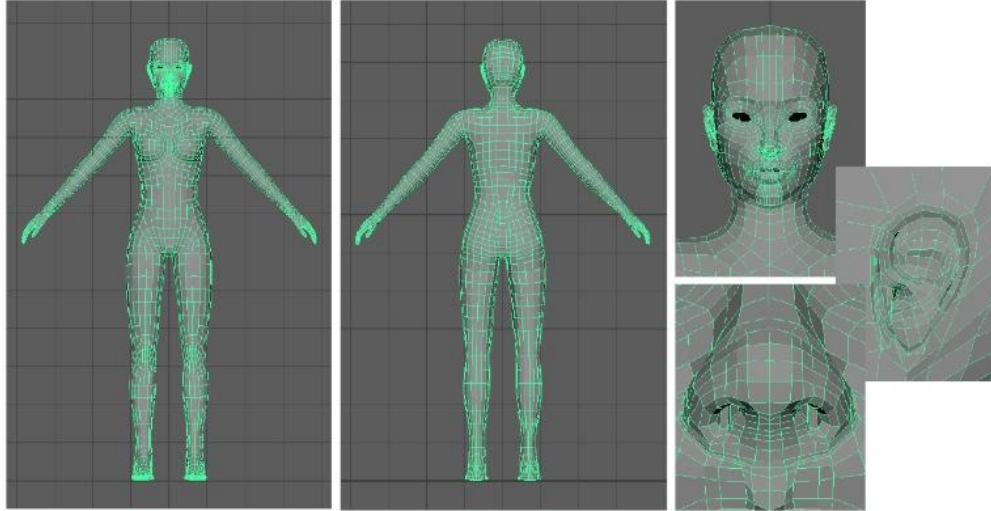
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SUMMER WORK



In my summer project, I aimed to have at least two characters modelled with strong topology of body, face, hair and clothing, which I could then use to practice body sculpting. At this stage, I am unsure whether I want to go into character or environment modelling, but I feel that my characters are the weaker of the two, especially in the technical side. Working on topology and anatomy was one of the areas I struggled most during the character project.

As a modelling project, the process of blocking out and then using the blockout to create a high poly model is fairly simple, but I hoped to dedicate some time to getting accurate anatomy, which may lengthen the time scale of the project. Beginning with a blockout in Maya, I focused on good topology of the base character before using that model in ZBrush to work on the sculptural and anatomy aspects.



Overall I was very happy with the outcome of this project, as I feel that my anatomical sculpting skills are stronger than when I started, and that the characters look like the art I was basing my project on. My only regret would be that I had less time than I would have liked, so some areas, especially the faces and wings, are lacking the detail that I would have liked.



SUMMER INITIAL IDEAS

Concept 2 - Battle Field - Gods Pantheon



Concept 2 - Battle Field - Gods Pantheon II



Concept 2 - Battle Field - High Fantasy



Concept 3 - Some Kinda Hall? Thing?? - Train Station



Concept 3 - Some Kinda Hall? Thing?? - Church

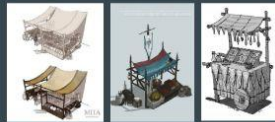


Concept 3 - Some Kinda Hall? Thing?? - Baroque



Concept 1 - Market Place - Ren Faire

- outside, in a field? would need trees n stuff to fill the scene edges
- easily editable to fit the time frame
- good range of references



Concept 1 - Market Place - Futuristic

- cool points
- very different vibe than my last project
- more scope for creativity
- atmosphere



Concept 1 - Market Place - Town Square

- more range in models (inside/outside)
- buildings/architecture
- streets? square?
- height- rope, washing, flags etc



WHAT TO CONSIDER

- (I did research on algerian culture and markets)
- Creating a map for the market could be helpful (from versions, different routes)
- What stalls do we wanna present?
- We wanna keep the traditional colours
- The market takes place in the middle of the desert
- Dystopian
- Human or robotic and different creatures are present in this world
- A mix of fantasy and sci-fi
- Contrast between wealthy and poor (the city is more like on the poorer side, more authentic rather than futuristic)
- What's the weather like? hot, it's dry, sunny, cloudy, rainy, snowy



Over summer, my final project ideas were narrowed down to either a Market Place, a Battle Field, or a Hall. I quickly decided on the market as having the most potential, as I would get to work with imagined culture and characters, and could have the widest diversity in scenery.

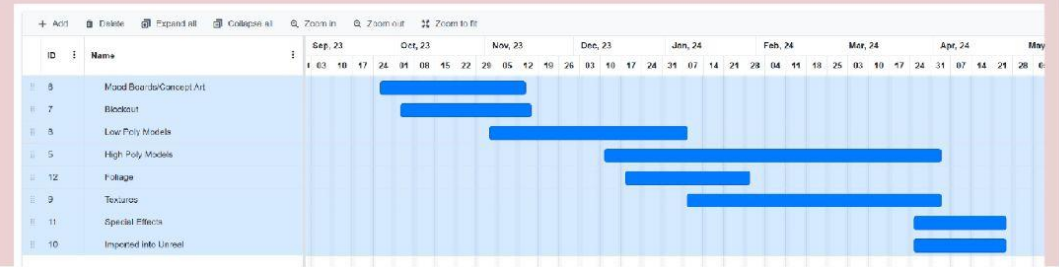
Moving forward from my original pitch I joined with a team who happened to want a marketplace for their world, and since I had not decided on the themes for my work yet, I could blend my initial ideas with theirs. My group explained their own concepts and ideas, allowing us to compare and decide on how the collaboration could benefit all of us. The beginning stages of the team already having a conceptualised theme and culture to their work gave me a clear starting point, similar to having my own brief.

The game, titled 'Akuji' was set in a futuristic world, with a baseline of Tibetan culture, and my environment would be a small town in a desert, with an authentic and traditional feel. Having started research into the types of environments I wanted to do, in themes as well as what the workflow would entail, we could easily connect the gaps between our ideas, through initial notes and moodboards. A clear visual of the project direction also meant that we could confirm that we were aiming for the same thing.



COLLABORATIVE BRIEF

PITCH PACK



I will be creating a marketplace environment for the wider project game 'Akuji'. This will be a lively townscape, in a realistic style.

SYNOPSIS

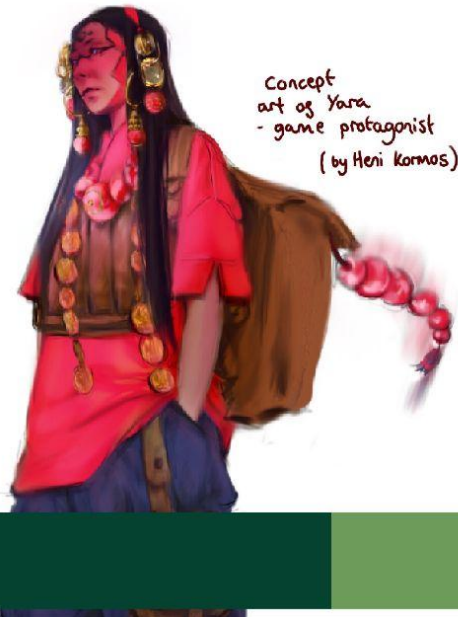
A relaxed town is a common scene in many games, and serves as a base of operations for many a protagonist. With opportunities for meeting NPCs, trading or bartering, or learning more about the characters or world, the bustling environment is often a key point of interest. In Akuji's world, puritan culture meets futuristic, but the town I will be focusing on is rooted in Tibetan culture. Through traditional colours, shapes and patterns throughout the environment, I can focus on establishing accurate references to real life, before exploring the blending of cultures within a travelling market, or more fantasy elements. Since the world is set in a fictional future, there will be more opportunity to play with landscape shapes, and fantastical elements that act as an extension of a concisely themed area. I aim to have a finished environment that can be walked by a character. My target audience for this project is teenagers and young-adults, from a variety of backgrounds.

Asset Name	Maya	Figma	Done	Zbrush	High Poly	Substance	Painter	Texture	done	Model in	Unreal
World Cables Small											
World Cables Big											
Table 1											
Table 2											
Table 3											
Cloth 1											
Cloth 2											
Cushion 1											
Cushion 2											
Cushion 3											
Bench											
Bench Backed											
Bench 2											
Stool											
Chair											
Chair											
Rug 1											
Rug 2											
Rug 3											
Wood Block 1											
Wood Block 2											
Wood Block 3											
Pile of Cables 1											
Pile of Cables 2											
Yaras shoes w/ais/floor											
Candy											
Yaras Casing											
Decorative Cabinet											
Chest											
Mechanical Arm 1											
Mechanical Arm 2											
Food Market stall											
Chair											
Bowl 1											
Bowl 2											
Pan 1											

RISK ASSESSMENT

Working by myself on a larger-scale environment means that I need to be very careful when managing my time, as I don't have help if I fall behind. I also need to manage my own expectations and what I can expect to do, since I don't want to overwork myself or burnout through aiming to do things in the project that aren't feasible. Having a team to rely on for creative decisions and second opinions will definitely help, since I can alleviate some of the pressure from myself.

To plan my project I will primarily be using a spreadsheet asset list, which contains every asset that needs completing and every stage of its creation. This management list is the same as I have used in my previous environment projects, and has been very successful in the past. I will also be using a Gantt Chart to visualise an overview of my project and every step that will need completing before it's completion.



AESTHETIC INSPIRATIONS



HORIZON: ZERO DAWN

In a post-apocalyptic world where nature has reclaimed the ruins of a forgotten civilization, pockets of humanity live on in primitive hunter-gatherer tribes. The game covers a wide diversity in landscapes and culture. The town of Meridian is very similar to the aesthetic style

ZELDA: BREATH OF THE WILD

The Legend of Zelda: Breath of the Wild is a 2017 action-adventure game, where the player controls Link as he sets out to save Princess Zelda. The player can explore several towns and settlements, all rich with personality, and very unique. The Gerudo town, set in the desert, is particularly similar to the themes of my work, in its aesthetic, both colours and lighting.



THE LAST OF US

Smuggler Joel is tasked with escorting teenager Ellie to safety. Although Joel is traumatized by his past, their brutal cross-country journey gives him something to fight for. The post-apocalyptic world of Last of Us shows many human moments frozen in time- an example of environmental storytelling. The realistic style is also close to what I am aiming for.

ASSASSIN'S CREED MIRAGE

In Assassin's Creed Mirage, Basim, a cunning street thief with nightmarish visions, seeks answers and justice. The art style is very close to life, but still has an artistic quality that I enjoy, as well as the implementation of real-life culture within a game world.



ENVIRONMENTAL STORYTELLING

UNDERSTANDING

Environmental storytelling is a way of portraying themes, narrative, or story, through the placement of objects or props. The concept originates in the theme park industry, but in games can give context to plot points, or suggest the long-term or recent history of an area. In games, this works in harmony with non-environmental storytelling, such as NPC dialogue.

LIMITATIONS, BOUNDARIES + CONTEXT

This kind of visual guidance can be used to give boundaries to a space, or point players in the desired direction, without having to explicitly tell them. The placement of certain elements within the context of the game world, can also push them to make certain decisions. For this reason, it is important to know the link between the real-world and game world, and how the audience will connect the two.

IMMERSION

Identity buy-in is a key to connecting with an environment, as the player assumes an identity that reflects the world. For example, an identity in a fantasy world may be a knight-type character. In this case the player should be able to infer that they are a knight or similar based on their surroundings, such as beginning the story in a castle battlement. Environment design works together with character design and player interactions to build this immersion.

HISTORY

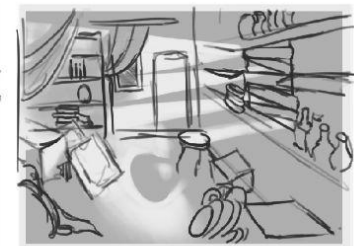
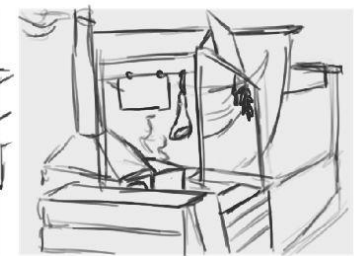
The history of an area should be able to be inferred from the player's surroundings. A basic example of this would be fruit scattered across a street, and a nearby fallen cart, would suggest that the cart has recently been tipped over. Long term history can also be made visible through more permanent structures, such as landscape or architecture.

ENGAGEMENT + COHERENCE

Each element of the story comes together to actively engage the player with their environment, and be constantly problem-solving how the visual queues fit together. Coherence and theme within a singular environment is very important to have a flowing narrative that is easy for players to put together.

EXAMPLES

- Blacksmith forge with tools scattered around, forge fire is on
 - Decorations part-way being set up for an event
- Market stall half way packed up, with a cart nearby containing wares
 - Food part cooked, or part-eaten
- One table is covered in alcohol bottles, a man is passed out nearby
- A shop has the windows covered, dust hangs in the air and covers all of the surfaces



Below are some examples that use environmental storytelling to give context for the wider world, or explain the surroundings.

THE SURGE



THE LAST OF US II



SCOTT OLSON



CULTURAL INSPIRATIONS

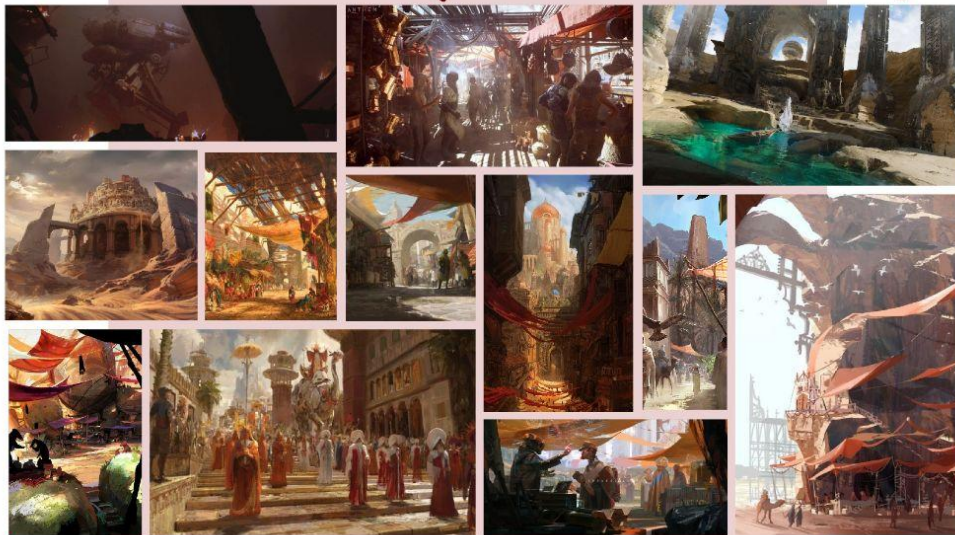
Tibet developed a distinct culture due to its geographic and climatic conditions. While influenced by neighbouring cultures from China, India, and Nepal, the Himalayan region's remoteness and inaccessibility have preserved distinct local influences, and stimulated the development of its distinct culture.

Tibetan Buddhism has exerted a strong influence on Tibetan culture since its introduction. Buddhist missionaries introduced arts and customs from India and China. Art, literature, and music all contain elements of the prevailing Buddhist beliefs, and Buddhism itself has adopted a unique form in Tibet, influenced by local beliefs. Tibet's geographic and climatic conditions have encouraged reliance on pastoralism, as well as the development of a different cuisine from surrounding regions, which fits the needs of the human body in these high altitudes.

↑
Desert setting contrasts
real Tibet - low altitude
→ may need to account
for this

lights + shadows
→ contrast
play with light shapes
↓

natural
rock formations
surrounding town
↓

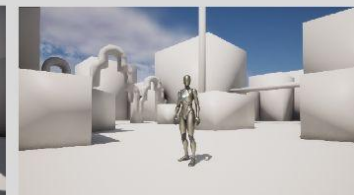
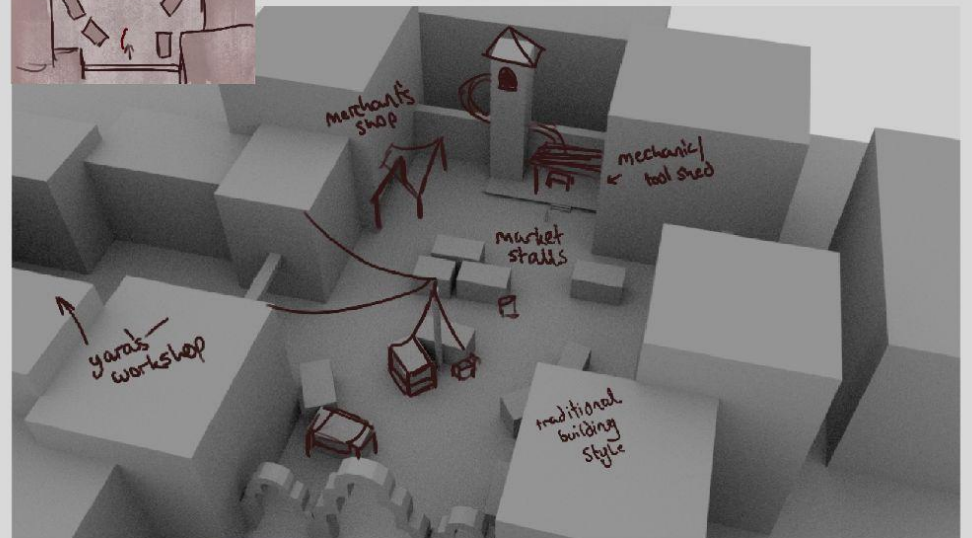
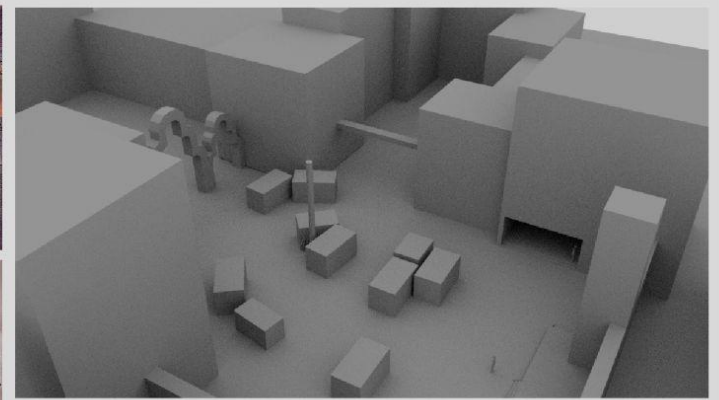
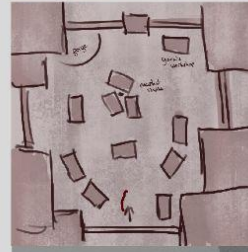


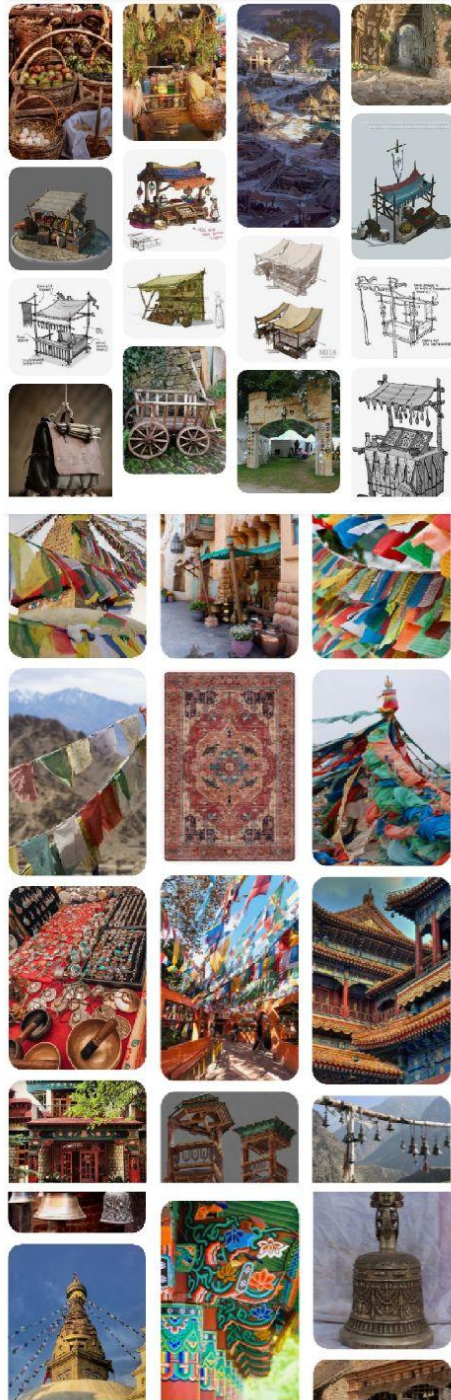
↑ fabric
echoes natural
shapes of surroundings
green = nature
→ balance orange tones

↑ Buildings match
sandy surroundings?
- cohesive colour
palette

↑ (centre)
layering created
with tall buildings
+ awnings
- connects higher floors

↑
- red/orange/ yellow
colour palette
- use of fabric / awnings
to create shape + interest





Asset Name	Progress	Low Poly	High Poly	Textured	Imported	Notes
Asset 1						
Asset 2						
Asset 3						
Asset 4						
Asset 5						
Asset 6						
Asset 7						
Asset 8						
Asset 9						
Asset 10						
Asset 11						
Asset 12						
Asset 13						
Asset 14						
Asset 15						
Asset 16						
Asset 17						
Asset 18						
Asset 19						
Asset 20						
Asset 21						
Asset 22						
Asset 23						
Asset 24						
Asset 25						
Asset 26						
Asset 27						
Asset 28						
Asset 29						
Asset 30						

ASSETS

Based on my research and my blockout, I began to create an asset list based on each area or section of my environment, such as the market, mechanic's shop etc. I used a spreadsheet which I can mark off as I complete the Low-Poly, High-Poly texturing and importing, which tells me what percentage of my project is complete.

From this list, I began to sculpt the simple, low-poly assets, which I could use to more accurately test the physical scale and scope of my project. This would also allow me to make sure that the number of assets I had planned was feasible.

While making my assets, I frequently asked for feedback from my team, to make sure it fit our shared vision.

← Inspiration moodboard + research
← WIP asset list

I plan to use these beginning stage assets to test small areas of my scene, analysing each one and working out what gaps needed filling and what further props would need working on. I had already left space on my asset list for these additions, aiming to produce around 150 props total.

Making use of the same prop with different textures, as well as trim sheets for my buildings, would lower my workload significantly, and I hoped to gain feedback on further ways to streamline my project. As of right now, I am unsure how much foliage or nature will be needed for my scene, so I plan to tackle this later in the project, separate from my other assets.

Low poly early stage props →
Multiple bases that can be decorated uniquely →



MECHANIC'S WORKSHOP

PROOF OF CONCEPT



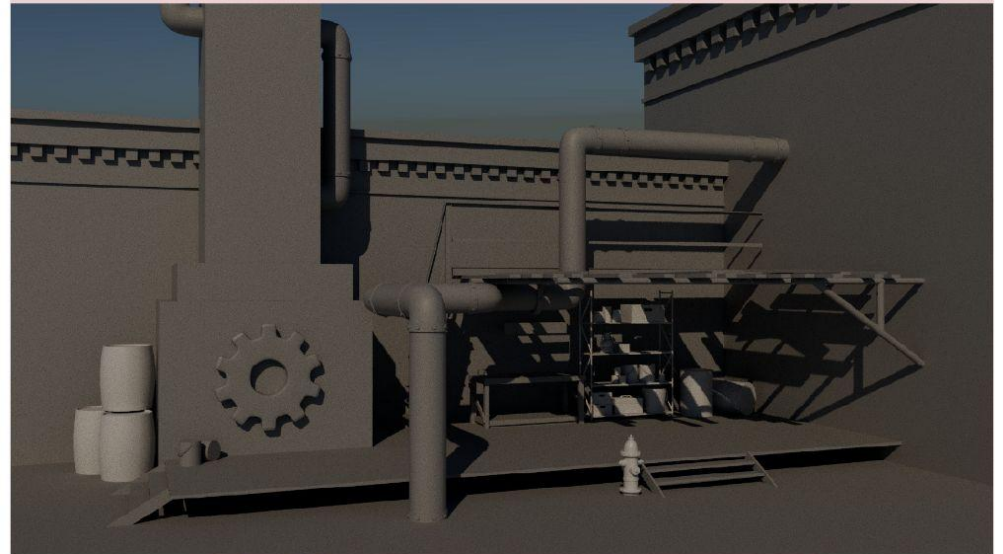
Initial sketch
- draw-over
of blockout

To test my pipeline of concept board, sketch, and blockout, before texturing, I chose a small section of my marketplace to focus on, - the mechanic's shop. I used images of real life workshop to base the area on, before sketching over a section of my blockout.

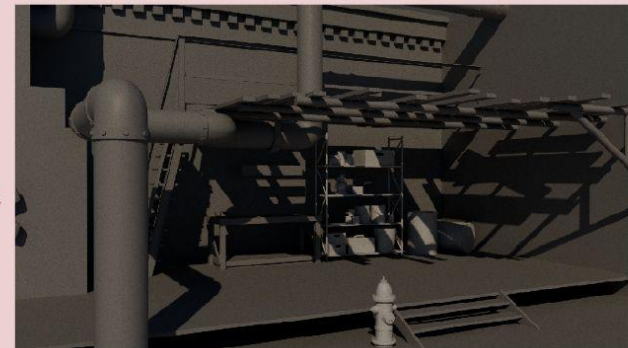
Having this blockout meant. I could scale my drawings accurately, and know how the ideas would fit with the surroundings. I then made an asset list, and a series of assets and props for this area before importing them into that area of the scene.

I found it easier to create things that were built-in, such as the slatted roof, or raised walkway within the environment itself, as it was easier to get an idea of scale. I also used a scaled model of a woman to size all of my props. I experimented with different arrangements of objects before landing on my final outcome. Overall I am very pleased with the outcome, and am confident that this workflow will work going forward. Adding more detail is also optional, dependant on how much time I have left.

Pipes were made in small segments - horizontal, vertical, corner - and fit together
↓
may make more options ↓



may need more floor clutter?
- decide after floor texture



lighting test using Maya's Arnold render view

- may add more shade/adjust light angle to be less distracting

CULTURE + ARCHITECTURE



Tibet developed a distinct culture due to its geographic and climatic conditions. While influenced by neighbouring cultures from China, India, and Nepal, the Himalayan region's remoteness and inaccessibility have preserved distinct local influences, and stimulated the development of its distinct culture.

Tibetan Buddhism has exerted a strong influence on Tibetan culture since its introduction. Buddhist missionaries introduced arts and customs from India and China. Art, literature, and music all contain elements of the prevailing Buddhist beliefs, and Buddhism itself has adopted a unique form in Tibet, influenced by local beliefs.



angular
vs
smooth

contrasting rock
textures

orange/
green colour
palette

harsh
desert
environment

LANDSCAPE

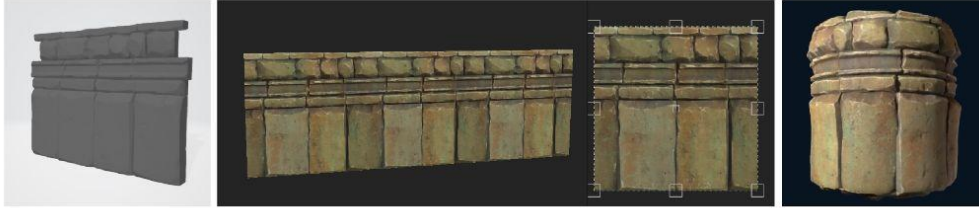
Tibet's geographic and climatic conditions have encouraged reliance on pastoralism, as well as the development of a different cuisine from surrounding regions, which fits the needs of the human body in these high altitudes. Since my own project is based on a futuristic town set in a desert, I will need to carefully balance the original cultural traditions, while still creating a realistic environment.



↳ red / green / white key colours

MY PROJECT COLOUR PALETTE

TRIM SHEETS



Following our lesson on trim sheets, I believed I had a basic understanding of them, but still wanted to make sure I knew all the ways they could be used, before attempting to make my own. Learning from other examples, which I can then translate into my own work is one of the easier ways to fully grasp a concept for me.

straight UV setup used on a curved edge →
Multiple sections/textures on the same material →



- many small types of building trim

← can create multiple assets which fit together



← can be used on doors and windows
- may be used on repetitive furniture

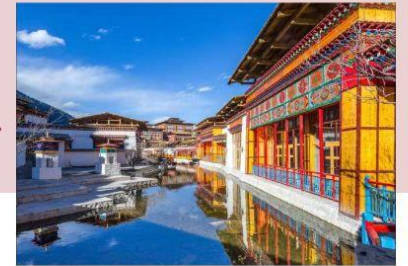
IMPLEMENTATION

Although my own use of trim sheets would not come in until later in the project, I wanted to experiment and plan the types of assets I might use them for, to hopefully save time in the long run.

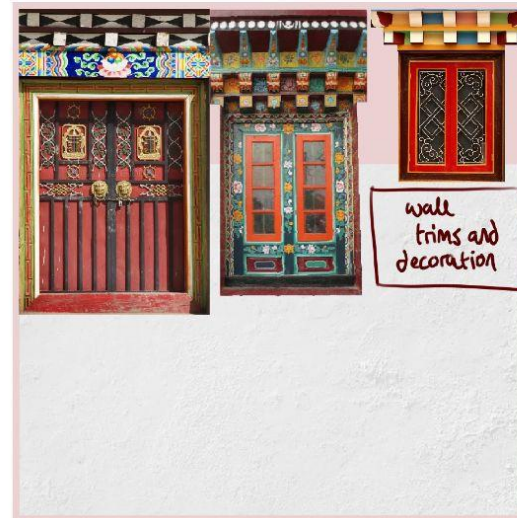
DISSECTING AN IMAGE

By picking out which sections of an image or design I was interested in, I could list every element that I would want on my trim sheet, keeping the material more concise.

- railing -
- gabric skirting -
- windows/awning -
- white wall -
- mosaic pattern -
- roog trims -
- roog spandrel -



doors + windows



wall trims and decoration



↑ example of mosaic pattern for window/door decoration

← multiple options for additions - decor + windows


← wall base - white wash concrete

PROOF OF CONCEPT BUILDINGS

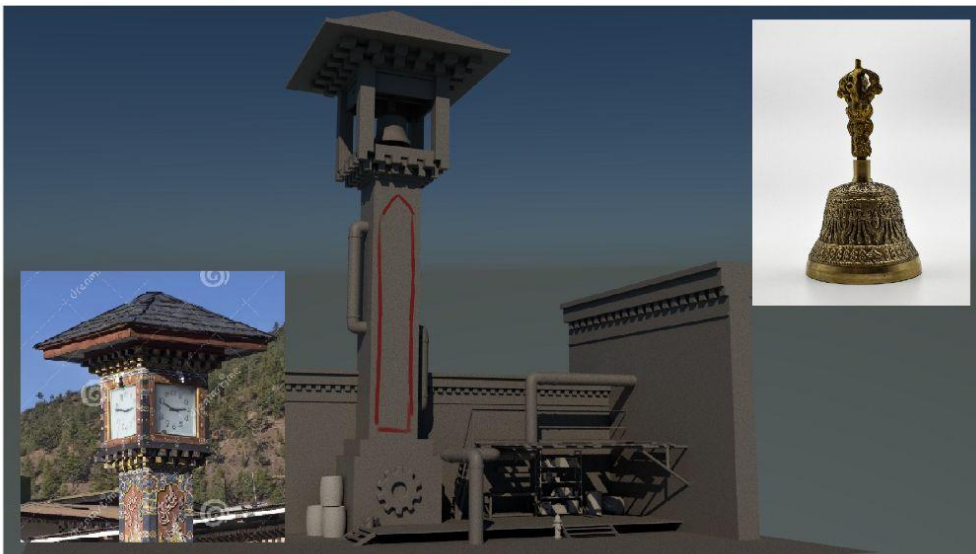
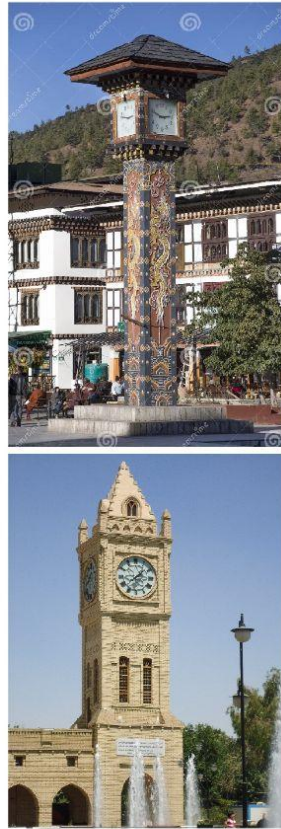
THE CLOCK TOWER

Developing on my research into architectural styles, I wanted to test an asset that acted as a functional building. I hoped to use the white base, along with red and green trim, and began researching Tibetan style clock towers. I especially enjoyed the decorative panels on some of them, which would allow me to incorporate some of the game lore that the rest of my team were working on. Soon after, I changed this tower to have a bell, since I had learned of Tibetan decorative brass bells, which usually are smaller in size, but which I hoped would serve as a center piece for the skyline of my town.

Notes

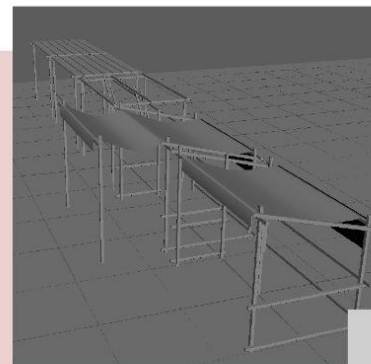
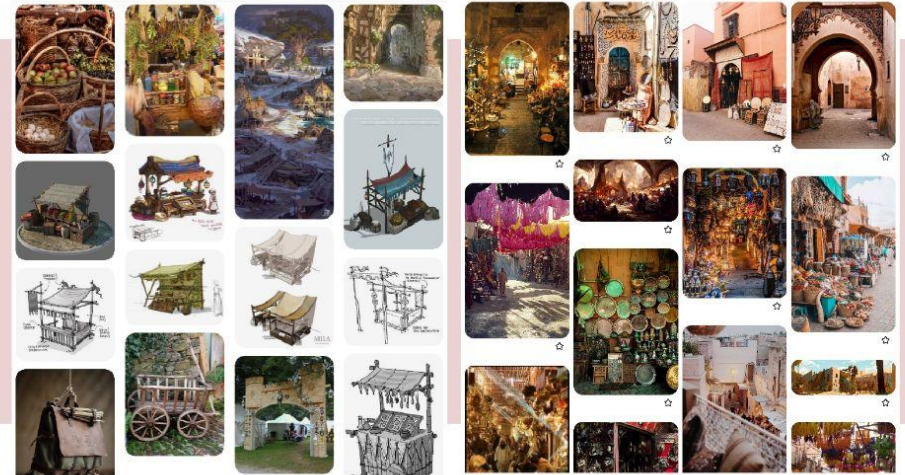
- may be too top heavy
- more detail around the top
- roof shape → 
- choose design for sides
↳ related to game lore?

Blending of aesthetic and functional
- contrasts with pipes
↓

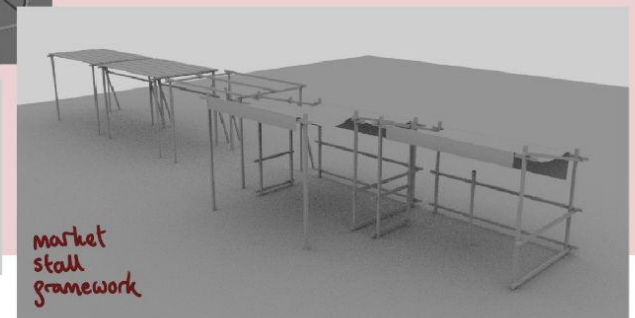


THE MARKET

changing the atmosphere from my initial mood-boards



To try and make the market stalls in the area as cohesive as possible, despite their unique wares, I used mood boards to gather a strong atmosphere. Building a set of frames that could be adapted for every kind of stall, and easily filled and adjusted, meant that the shapes throughout the market would remain the same. I plan to use the same colour palette throughout, but have a range of awnings and textures to make each stall unique.



market stall framework

PROOF OF CONCEPT TEXTURES

Before beginning any large-scale building modelling, I wanted to complete a test to show that I could transfer the design choices in my research and mood boards into my own work

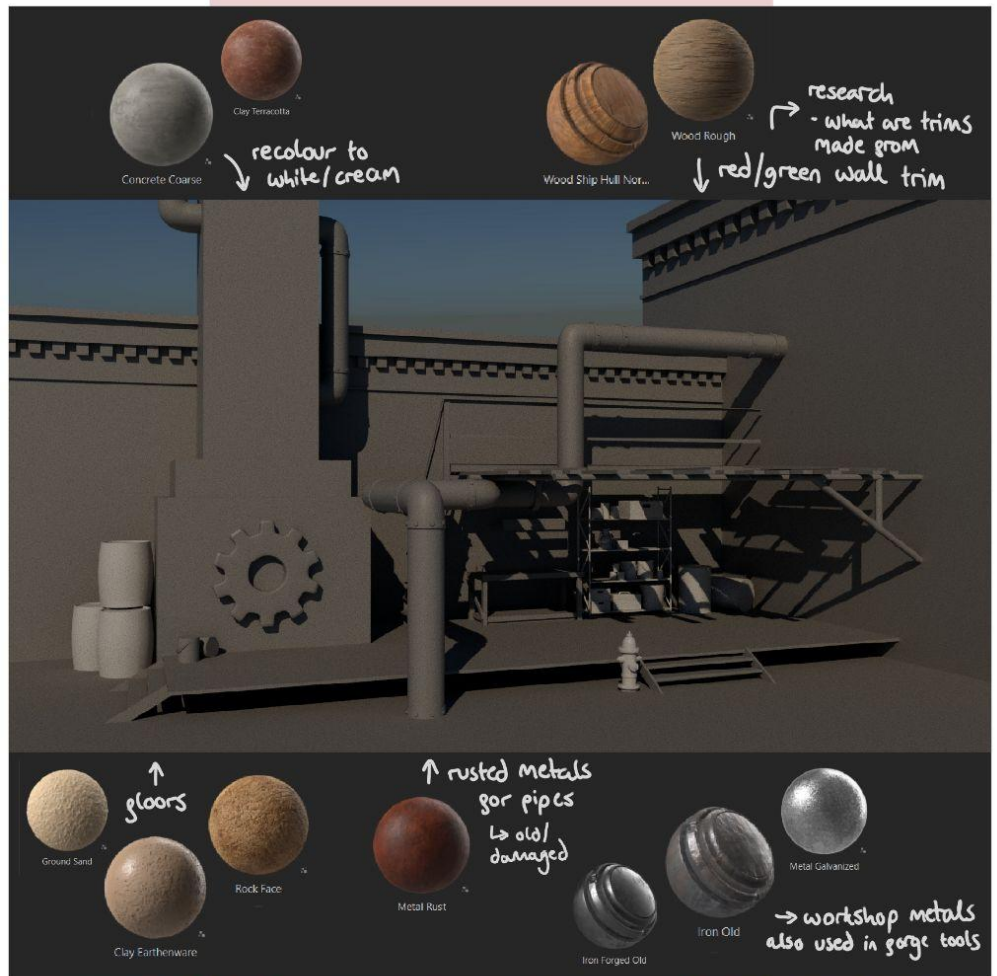


Could use Tibetan rugs for pattern inspiration

- square edge trim
- 2-3 key colours
↳ orange/yellow, blue/green
- dragon/tiger imagery



SCENE TEXTURE ANALYSIS



GOING FORWARD

With my experimental formation of this environment, my priority going forward is to have as many low-poly props made as possible, so that multiple small areas can be tested. I find this more efficient than sketching, as working in a 3D space is a lot easier to visualise in practice.

My immediate work will be finishing the smaller props for the market stalls, and market scenery, and then moving on to small built-in areas, such as the merchant's shop and the forge/armoury. I hope to keep up a good communication with my team as a valuable source of feedback and ideas.

Using references of both games and real life is also invaluable in these early stages, so I will continue to research these areas, both in-game and pre-production, such as art/concept books.

I have found so far that working in smaller areas at one time makes my work feel more manageable, and also gives each section its own characteristics. Doing research into specific decorating styles - colours, shapes, textures etc. - and atmosphere allows me to focus on making every part unique while still being aware of the wider surroundings. Continuing forward, I need to make sure I streamline my workflow as much as possible, so that the entire project is time efficient. I can do a lot of the architecture and large prop details with trim sheets, which I hope to properly explore and test in December.

FORGE

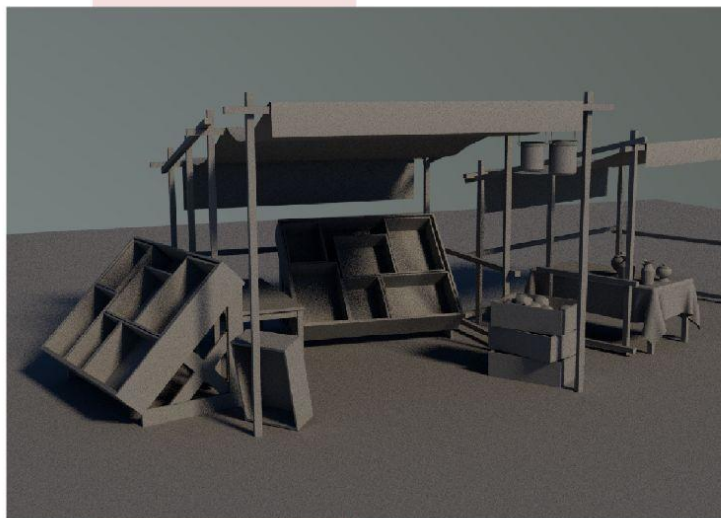
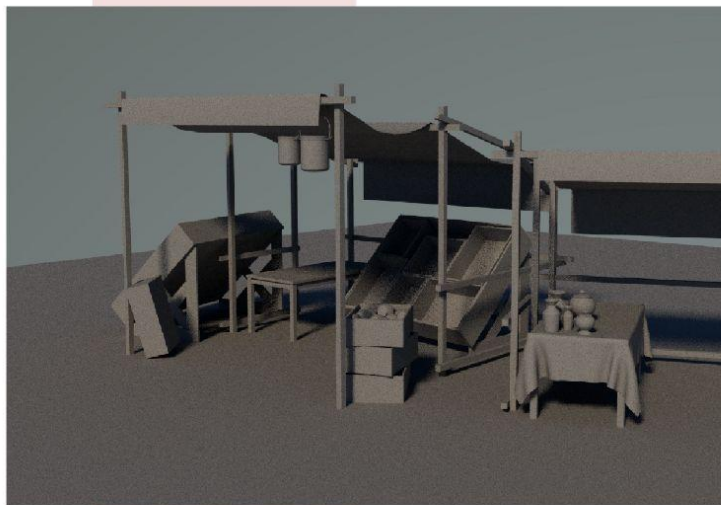


YARA'S WORKSHOP



MERCHANT'S SHOP





CRITICAL APPRAISAL

So far, I am pleased with the direction that my project has taken, especially in how myself and my team have worked together to come up with a shared vision for the outcome. I have found the development of ideas is significantly easier when I have a solid starting point, as well as people to offer opinions and their own input. This has definitely helped me feel confident in my project so far.

Having outside influence from environment artists on games such as Horizon: Zero Dawn, and The Last of Us has also given me a clear sight as to what I am aiming for, as both a style reference as well as quality. Having high expectations means I believe I can be more motivated to complete at a high standard. My research into the cultural aspects of my environment has also been invaluable, as it gives me a frame of reference and a way to root my imagery in the real world. Being able to link my real-life and game inspirations will also be important as I work out how I can translate life into a visually pleasing and cohesive environment that still feels real.

Referring to my current timeline, I believe that, as long as I continue at the pace I am currently progressing at, that my project will be completed to a successful level.

Having been able to complete tests in both modelling and texturing, as well as assembling some parts of the scene, my work so far has not posed any problems. Having some aspects of my project be optional means that should I encounter issues along the way, I have some parts that I can remove to simplify the process. One example of this is my plan to learn nodes in order to have adaptable cables that can run through the town, adding to the more futuristic side, however in the case that I am unable to complete this aspect, it should not be vital to the finished product. My main concern at this stage is other unforeseen setbacks that may disrupt the workflow, especially as I learn new techniques, such as trim sheets. To combat this I hope to stay ahead of schedule, and make sure that I take the time to learn these necessary processes properly, so that I don't encounter problems later in the process, as a result of previous mistakes.

Taking the time to make simplified sketches and blockouts before I model any large/ detailed assets should also ensure that I don't have to remake things that don't fit as I'd imagined. With proper pre-production running throughout my project, and continuation of tests, I should be able to easily keep on top of my work load.

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