



# Experimental Visual Storytelling

Abbie Slater - 22019185

# CRG

## Game Art Summative Submission:

Criterion	% 0-29	30-39	40-49	50-59	60-69	70-84	85+
<b>Aesthetic Quality</b>	40 The visual quality of the submitted 3D diorama was very poor or wasn't submitted at all. Geometry, materials and shaders were missing or severely underdeveloped. Composition, lighting, and camera work were absent or ineffective, resulting in an unfinished outcome.	The visual quality of the diorama was limited. Geometry, materials and shaders were basic with little evidence of refinement. Composition, lighting, and camera work lacked consideration, producing an unconvincing render.	The visual quality of the diorama struggled to meet the minimum standards. Geometry, materials and shaders showed basic functionality but little sophistication. Composition, lighting, and camera work were attempted, but overlooked in places leading to inconsistent and the under-developed outcomes.	The diorama demonstrated a suitable visual standard. Geometry, materials and shaders were completely developed with some aesthetic consideration. Composition, lighting, and camera work were considered but lacked balance, resulting in a competent but unpolished render.	The diorama demonstrated a good visual standard. Bespoke geometry, materials and shaders were well developed and consistent across assets. Composition, lighting, and camera work were strong, producing an engaging and aesthetically pleasing render.	The diorama demonstrated a very good visual standard. Bespoke geometry, materials and shaders were well developed and consistent across assets. Composition, lighting, and camera work were strong, producing an engaging and aesthetically pleasing render.	The visual quality of the submitted 3D diorama was impressive. An extremely high visual standard of geometry, bespoke material creation and shader development was achieved for all assets. An excellent standard of composition, lighting, and camera work was achieved to create a beautiful final render.
<b>Technical Implementation</b>	80 The technical quality of the 3D assets was unacceptable. Geometry, materials, and shaders were largely absent or non-functional. Models contained significant technical flaws, and no optimisation was evident.	The technical quality of the assets was very poor. Geometry, materials, and shaders were basic or incomplete, with noticeable technical errors. Optimisation was minimal and largely ineffective.	The assets demonstrated a struggle to meet the required technical standards. Geometry, materials, and shaders functioned at a simple level but lacked adequate refinement. Optimisation was attempted in places, though inconsistently.	The assets demonstrated a suitable technical standard. Bespoke geometry, materials, and shaders were completely functional and showed some development, but errors and inefficiencies remained. Optimisation was evident, though	The assets demonstrated a good technical standard, but some room for improvement remains. Bespoke geometry, materials and shaders were well executed, with models showing good technical quality. Optimisation was consistently	The technical quality of the submitted 3D assets was impressive. An extremely high technical standard of bespoke geometry, material creation and shader development was achieved for all assets. An impressively	
			and with limited effect.	applied in places but not consistently across the work.	not always applied effectively.	applied, but efficiency could be still improved.	optimised body of work was produced

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## Summative Submission: Artbook

Criterion	% 0-29	30-39	40-49	50-59	60-69	70-84	85+
<b>Quality of Analysis</b>	80 Analysis of learning, chosen production methods and outcomes has been overlooked in many areas or missed entirely.	The analysis and justification of learning, chosen production methods and outcomes require major improvements to meet the minimum standards.	The analysis and justification of learning, chosen production methods and outcomes require minor improvements to meet the minimum standards.	The analysis and justification of learning, chosen production methods and outcomes is suitable yet unclear in places.	A clear analysis and justification of learning, chosen production methods and outcomes have been achieved.	A detailed analysis and an understandable justification of learning, chosen production methods and outcomes have been achieved, but there may be opportunity for further clarity.	A highly detailed analysis and an unquestionable justification of learning, chosen production methods and outcomes have been achieved.
<b>Quality of Supporting Imagery</b>	20 Supporting imagery is overlooked for the most part, or it may struggle with relevancy.	Supporting imagery is provided sparingly, or it may rarely illustrate methods, process or outcomes sufficiently.	The supporting imagery provided misses opportunities to illustrate methods, process or outcomes appropriately.	The supporting imagery illustrates methods, process and outcomes sufficiently. Some images struggle to augment with the text. Annotations and draw-overs are typically overlooked.	The supporting imagery illustrates methods, process and outcomes well, but significantly more impact could be achieved. Images typically augment well with text, but further care is needed. There are some annotations and draw-overs, but perhaps too few to make consistent impact.	The supporting imagery illustrates methods, process and outcomes clearly, but more impact could be achieved. Images frequently augment well with text. Some annotations and draw-overs are used intermittently.	The supporting imagery illustrates methods, process and outcomes excellently. Images always augment well with text and consistently make use of annotations and draw-overs.
<b>Quality of Professional Practice</b>	20 The quality of formatting, spelling, grammar and	The quality of formatting, spelling, grammar and	The quality of formatting, spelling, grammar and	The standard of formatting, spelling, grammar and	The standard of formatting, spelling, grammar and	The standard of formatting, spelling, grammar and	The standard of formatting, spelling, grammar and
	aesthetic appearance requires significant attention to meet minimum standards or has not been considered at all.	aesthetic appearance requires significant attention to meet minimum standards or has not been considered at all.	aesthetic appearance meets minimum expectations.	aesthetic appearance is suitable, but major improvements are required.	aesthetic appearance is good but improvements are required to deliver impact.	aesthetic appearance is generally great, but minor improvements would deliver more impact.	aesthetic appearance is excellent.

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# Assesment Documents

## The Assignment:

### Overview

In this assignment, you are tasked with creating either a 3D diorama using Unreal Engine or a series of keyframes, where your goal is to visually encapsulate one of the 'Seven Deadly Sins'. This project serves as both a creative and technical challenge, allowing you to delve into narrative design and artistic expression through a scene that not only looks compelling but also tells a story and evokes the intended feeling. Your submission will be uploaded to the Digital Academy Uploads server for scrutiny.

The Seven Deadly Sins are a group of vices, often used to illustrate human weaknesses and moral failings. Each sin represents a different aspect of human behaviour that can lead to ethical and personal downfall. Here's a brief overview of each sin:

- **Pride** is often considered the root of all other sins. Pride involves an excessive belief in one's own abilities or superiority. In your scene, this could be depicted through grandiose or self-important imagery, such as a towering statue of a self-glorifying figure or an opulent throne room that emphasizes arrogance and self-importance.
- **Greed** is an insatiable desire for material wealth or possessions. To visualize Greed, you might create a scene overflowing with treasures, gold, and luxury items, illustrating the overwhelming and destructive nature of excessive wealth and desire.
- **Lust** involves an uncontrollable craving for sexual pleasure. This could be represented in your scene through sensual, opulent environments or suggestive details, capturing the allure and potential moral consequences of uncontrolled desires.
- **Envy** is characterized by a resentful longing for what others possess or enjoy. A scene depicting Envy might feature characters in a state of jealousy or contrast between the envied and the envious, highlighting the emotional and relational conflict inherent in this sin.
- **Gluttony** signifies overindulgence and overconsumption of food and drink. Your scene could include lavish banquets or grotesque scenes of excessive eating, illustrating the physical and moral consequences of overindulgence.
- **Wrath** is extreme anger or hatred that often leads to violence and destruction. For Wrath, consider depicting scenes of chaos, fury, or conflict, such as a burning city or a fierce battle, capturing the intensity and destructiveness of uncontrolled rage.
- **Sloth** represents a failure to act or a tendency toward laziness and avoidance of work. A scene for Sloth might include a dimly lit, neglected environment with characters or elements that symbolize inactivity and apathy, emphasizing the stagnation and consequences of laziness.

You are required to ideate before developing your scenes, then refine your outcomes both technically and aesthetically throughout the process, ultimately producing a polished final result. During your development you should post updates of your work to your Digital Academy forum thread for the module, including a title and description of your methodology to demonstrate your engagement and in preparation assessment 2 of the module as a draft.

Those who choose to create a 3D Diorama as their chosen output are expected to create and present their assets appropriately within a game engine project with alongside a 4k beauty shot (2160 x 3840 pixels) that best illustrates their scene to the Digital Academy Uploads server for inspection.

### Submission Components:

Component	Weighting
Aesthetic Quality	40%
Technical Implementation	60%

### Submission Requirements:

The table below shows the location and file formats of each element of evidence that you are required to submit. All files should have your student number at the start of the filename and the listed lowercase suffix from the table:

Element	Location	File Format	Example File Name
Unreal Project	Digital Academy Uploads	.zip	Forename_Surname_Greed.zip
Keyframes	Digital Academy Uploads	.PDF	Forename_Surname_Greed.pdf

# Assesment Documents

## The Assignment:

### Overview

For this assignment, you will create a digital Artbook that analyses and justifies the development pipeline of either your 3D Diorama or series of Keyframes. For this task you are expected to create an in-depth document that reflects succinctly on the processes and outcomes of your development, culminating in a closing summary. Your submission should include the following:

- Aesthetically pleasing formatting.
- Appropriate titles and labels for each phase of development e.g. Preproduction, development, implementation etc.
- Reflect upon your research, learning and experimentation and how it relates to project.
- Description of, and justification for production methods and design choices e.g. composition, lighting, camera settings etc.
- High-quality, low memory Illustrative imagery e.g. development screenshots, renders, progress reels, sketches, annotated draw-overs etc.
- Succinct annotations that accompany imagery which highlight nuances of your work.
- Reflection on the strengths and weaknesses of your work.
- Comparison between your work and industry counterparts.
- Discussion on feedback, from tutors, peers and industry.
- Outline your next steps in production, development and further learning opportunities.

You should continually draft your artbook within your Digital Academy Forum thread for the module, then refine it to improve your final submission. Once complete, your artbook will be submitted as a .PDF file to the module's blackboard submission point.

## Submission Components:

Component	Weighting
Quality of Analysis	60%
Quality of Supporting Imagery	20%
Quality of Professional Practice	20%

## Submission Requirements:

The table below shows the location and file formats of each element of evidence that you are required to submit. All files should have your student number at the start of the filename and the listed lowercase suffix from the table:

Element	Location	File Format	Example File Name
Artbook	Blackboard	.pdf	Forname_Surname_Artbook

# Research

The first stage of the research started with exploring what the seven deadly sins truly meant, and its origins within the Catholic Church. This helps to set a base understanding of what the original meanings of the words are.

Once understanding what each sin represented, research into artworks related to the themes commenced.



(Le, 2023)



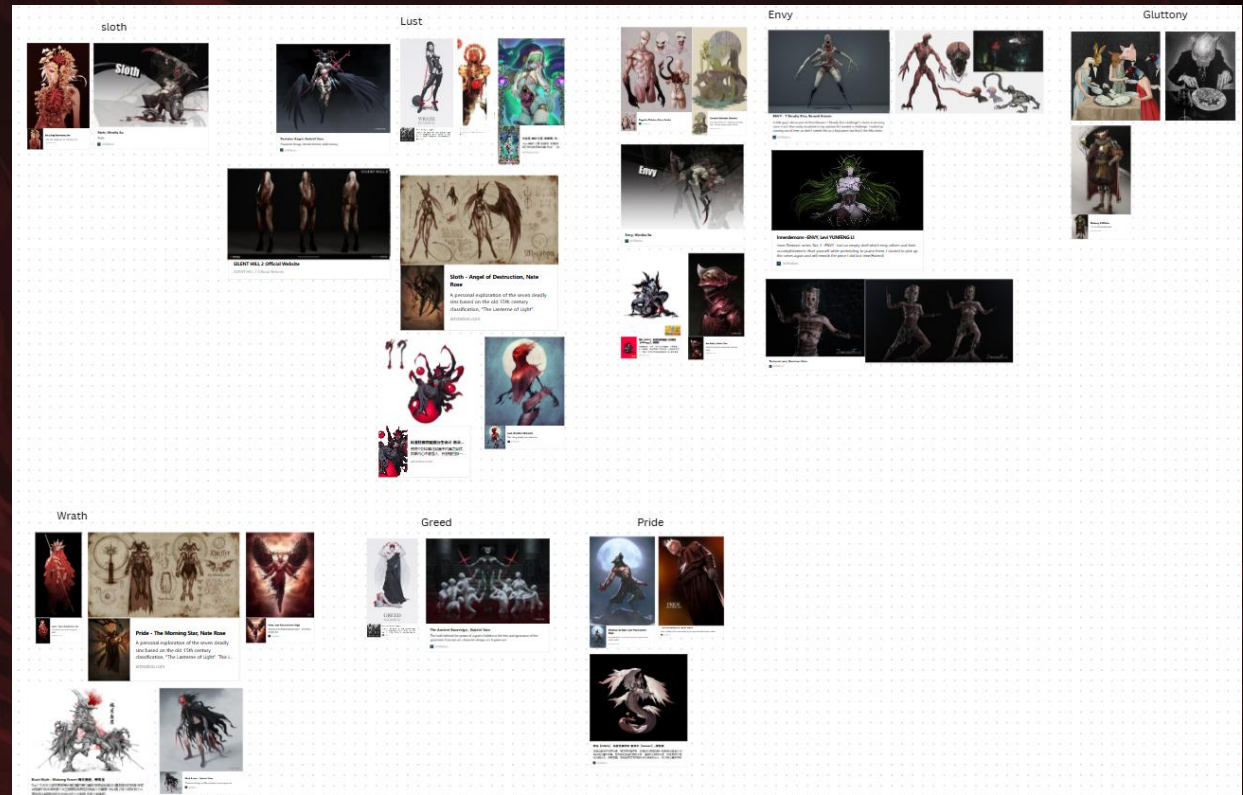
Smith, 2019)

# Research

I decided to explore all the seven sins to see which I found the most intriguing to do. I particularly enjoyed lust and envy, with lust being focused on sadomasochistic ideas and paraphilia and envy explored the use of big mouths and long tongues.

I collated my research on the forums into these topics.

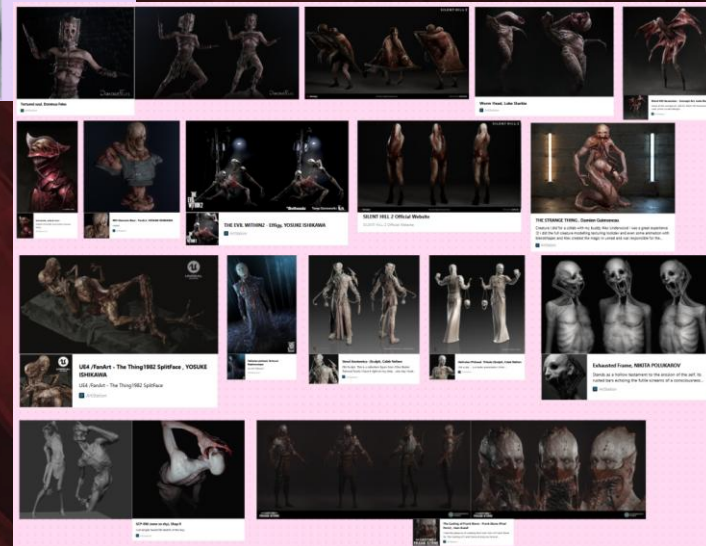
I came to the decision to pursue the lust theme.



# Research

I came across a figurine set that Clive Barker created called 'Tortured Souls'. This was a creation of 5 figures that each had a different pain and torture, which you can relate to the sins.

I then explored this further and thought about how these can be related to Silent Hill, how the monsters are manifestations of the negative feelings/things felt by the human characters (E.g James Sunderland's monsters are a manifestation of his guilt, Angela Orosco's monsters are a manifestation of her trauma)



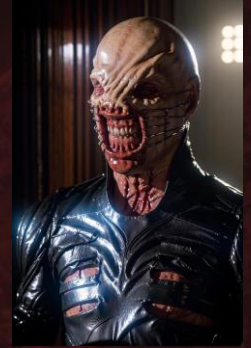
# Research

I decided to explore more into Clive Barker's portrayal of paraphilia, hedonism and sadomasochism in his characters. Pinhead and the other Cenobites seen in Hellraiser are dressed in clothing that can be related to the BDSM community, such as leather and bondage gear(chains, ropes, blindfolds, gags, etc). This was paired with blood and gore from injuries or metal objects piercing the skin. Sadomasochism details using pain to bring sexual gratification, which could explain the 'injuries' seen on these characters.

"The Cenobites all have horrific mutilations and/or body piercings, and wear fetishistic black leather clothing that often resembles butchery garments or religious vestments. The clothing also serves to support their piercings and tools."

"Barker drew inspiration for the cenobite designs from punk fashion, Catholicism (the overall design is a modified cassock, the traditional garment of a Catholic priest until the sixties) and by the visits he took to S & M clubs in New York and Amsterdam."

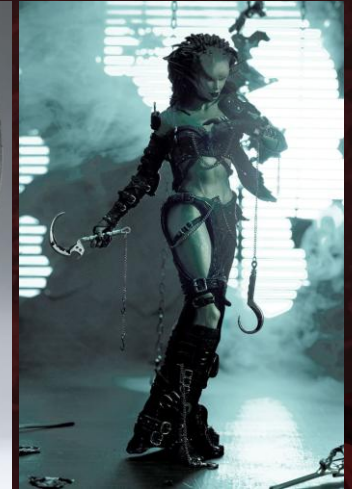
Hellraiser 1987 starts with the main character Frank trying to solve the Lament Configuration, said to grant him sexual gratification. He is then met by the Cenobites who subjected him to "extreme sadomasochism".



# Research

The name of the female Cenobite stands out, with the links to sexual activity I spoke about before. It is also interesting that the female cenobite has the overtly sexual name, whereas the others didn't, although they were all visibly sexual in nature. The wound on her throat is yonic and resembling a vulva, which is pulled open relating to the sadomasochism and bdsm themes.

Speaking about Clive Barker's creations, he also created a line of figurines called "The Tortured Souls". Both of the female presenting characters have their back sliced open and have been impaled in one way or another. Both are also wearing bondage-inspired clothing. The one on the left, Camille Noire, is supposed to be a visage of an angel, with her back skin stretched out into wings and a buzz saw in the skull as a halo. The one on the right, Lucidique, is supposed to be portrayed as a siren, where she looks beautiful and intriguing, but from the back you can see that her hair is actually rubber tendrils and her back has been shaved away to the bone.



# Research

Relating this to Silent Hill 2, the creatures seen by James Sunderland are manifestations of his guilt and lust. The Lying figure can be seen with what looks like platform boots, similar to heels worn by pole dancers like Pleasers. The legs are also the main focal point of the creature, which can be related to the male gaze.

“Creature designer Masahiro Ito was inspired by BDSM fashion and the movements of a co-worker in a hoodie when creating the monster.”

Another form of his lust is the bubble head nurses in Silent Hill 2. These are believed to be the manifestations of James’ lust towards the nurses that were in the hospital where his wife(Mary) was dying, and/or a combination of a healthy desirable Mary and decaying Mary, skewed by the images of nurses in the hospital. Once again a heeled shoe and focus on the legs, with stockings.

“The Bubble Head Nurse appears in Bloober Team’s Silent Hill 2. Returning concept artist Masahiro Ito redesigned them to wear colored stockings, because he felt the original showed too much skin and he wanted to demonstrate that this was a new interpretation of the story. The design is also tied to the gameplay.”

“The liquid-trapped mask gives the head a swollen appearance reminiscent of Mary’s swollen head during her illness and hospitalization...The red squares covering the mouths symbolize “shrieking insanity,” particularly Mary’s anger and verbal abuse against James.”



# Research

I wanted to quickly mention H.R. Giger, as I believe he was very influential figure. His nightmarish and biomechanical style was mixed with phallic and sexual imagery. This was a huge influence for games and movies to come. I would say his art was also influential in the BDSM scene, especially the clothing.

There are some correlations to the game Scorn, with the imagery being very inspired by H.R. Giger. The tubing and phallic imagery matches that with Giger's work and fits in with paraphilia.

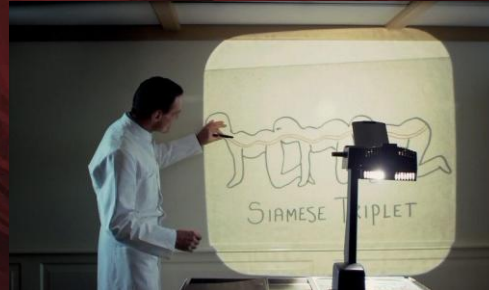


# Research

I wanted to relate this to another movie, and I thought of Saw 1. One of the main characters is Dr Lawrence Gordon, who has been kidnapped due to his affair. John Kramer wanted to punish Gordon for his disrespect to his own family and wife. This is relatable to Hellraiser as the main character is being punished for their lust.

Still within the Saw franchise, Saw 4 saw a trap called "Bedroom Trap" which was a bed with BDSM-style contraptions built into it. Each corner had a metal column with restraints, and the headboard had a vice. This device was used to hurt a serial rapist, symbolically putting him in a similar situation that he put his victims in.

The film The Human Centipede (First Sequence) is a sadomasochistic film where a deranged surgeon joins 3 people together surgically for his pleasure and entertainment. This conjoinment gives a unusual silhouette, a creature with 12 limbs filled with pain which could have influenced different media and the creation of sadistic and hedonistic creatures.



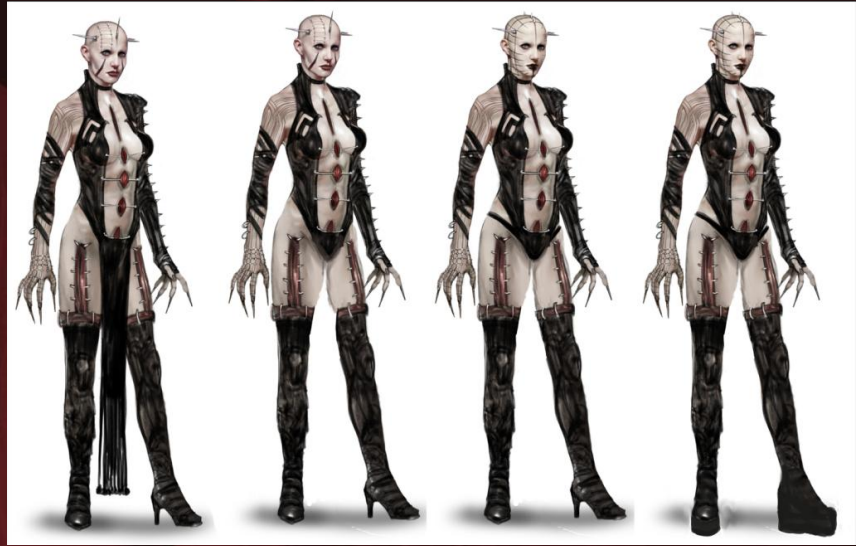
# Concept

I found some concepts by Alex Tuis on artstation that I could base my work from. Each concept looked very visually interesting and had different parts which I thought about photo bashing.



# Concept

I wanted to explore the concepts further so I took a particular interest in this design as I feel like the gore imagery on her torso reflects that of Open/Deep Throat in the Hellraiser series, this then links in with the Lust sin. I wanted to do a few simple drawovers/photobashes as I do struggle with making skirts, or in this case a loincloth, looking and acting realistic in engine. This did affect the silhouette unfortunately.



# Concept

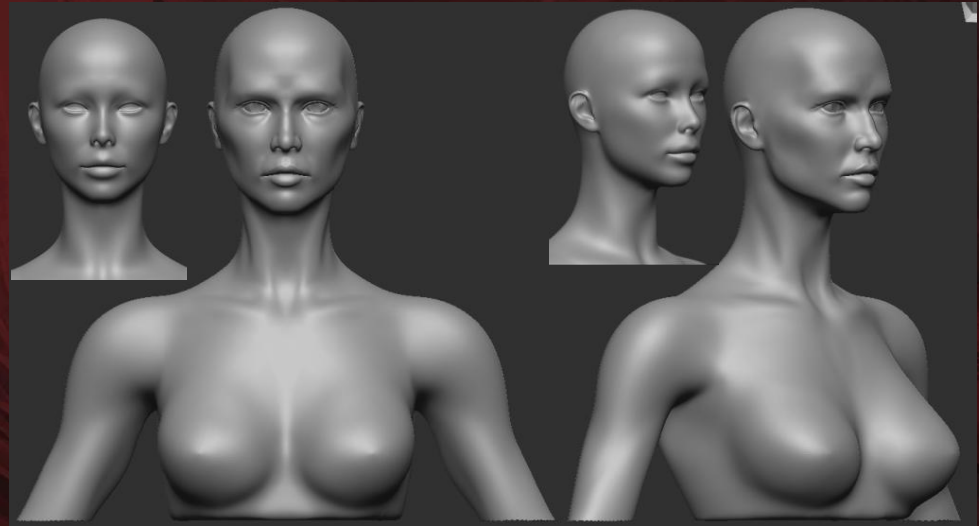
I would be making my model in a realistic style so I found some real world examples of clothing and accessories that would help with texturing and modelling.

I found a stylist called Hu Sheguang that mixes high fashion with nightmarish themes which look cool. I collated my clothing ideas into a mood board.



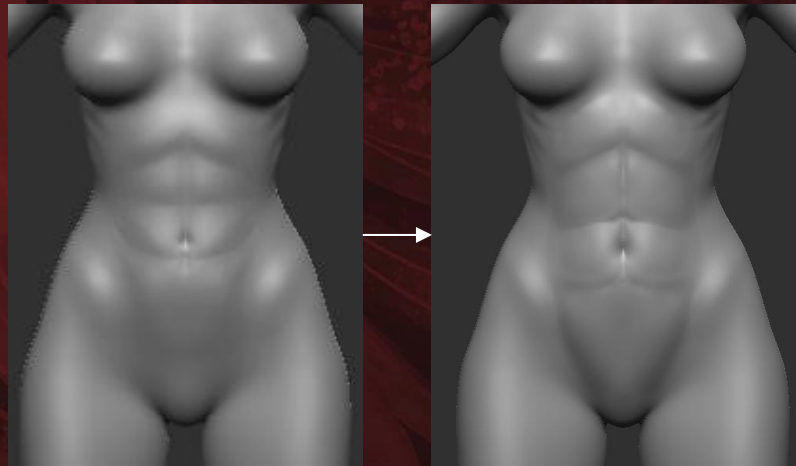
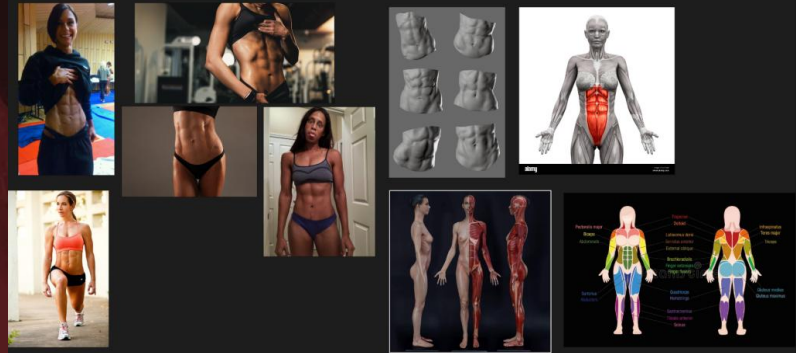
# Blockout

For this project I started with the female\_zbrush base mesh. I started my sculpt by using Grace Kirby, the actress that played Open/Deep Throat, as a loose reference. I wanted to capture the bony landmarks and then emphasise them like they are on the reference with particular interest in the supraorbital margin and zygomatic bone.



# Blockout

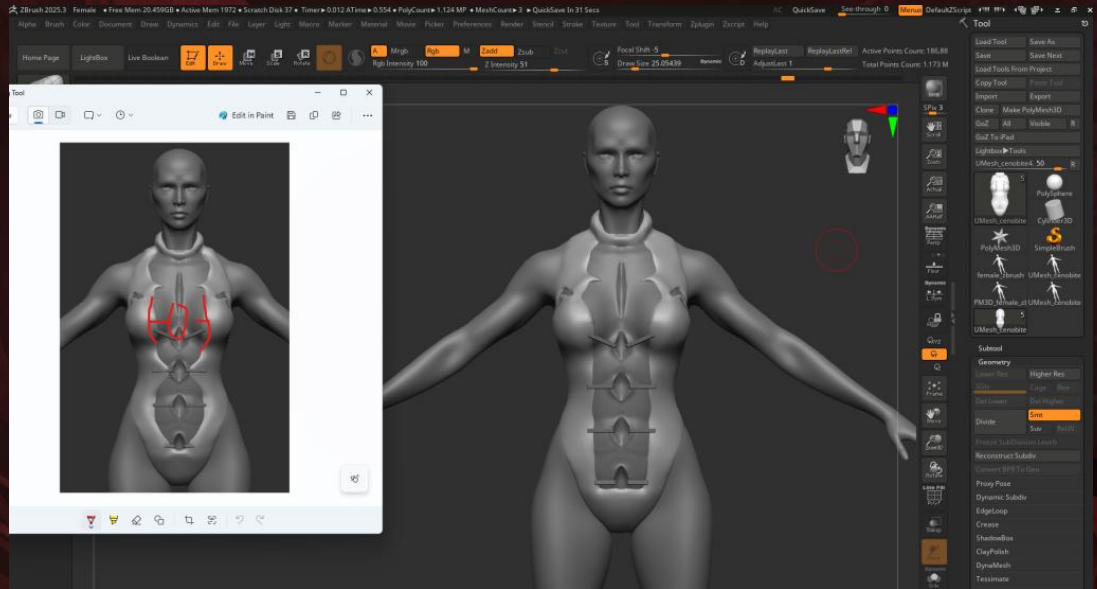
Whilst sculpting the abdominal muscles I gathered some references as I wanted the character to look in shape. This emphasised the storytelling that this is a woman that is very active, as she would be in the Hellraiser universe.



# Blockout

I received some feedback from my lecturer on how to accentuate the figure, we decided that by pulling the cloth into the waist area and the groin area, it accentuates the hips and thus the curves for the lust theming.

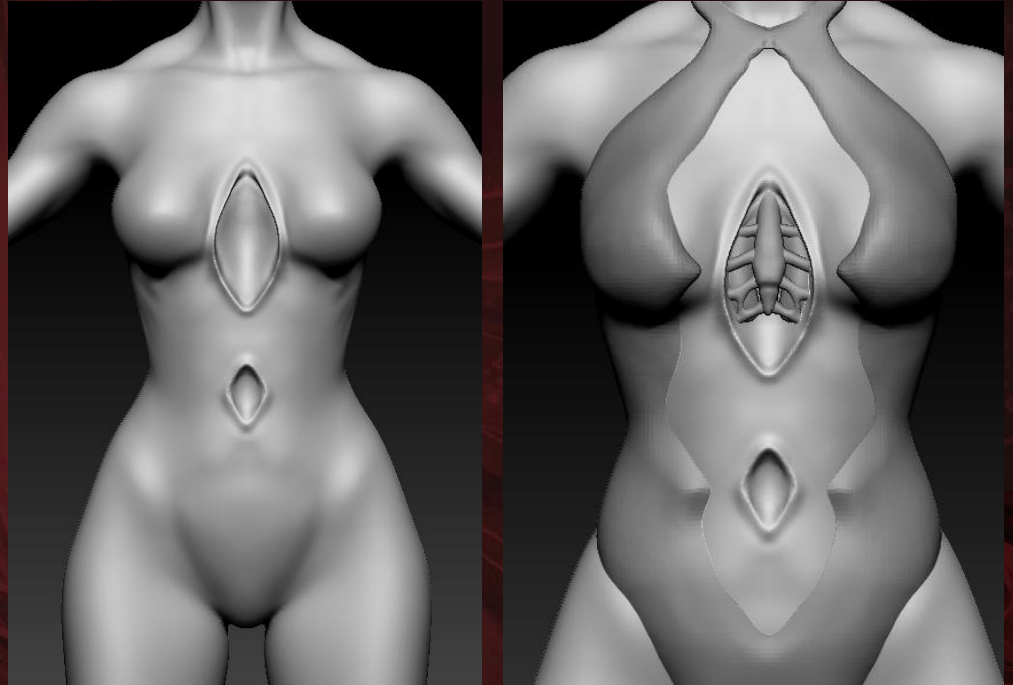
Another idea that was discussed was instead of following the concept directly, combine a few so that there would be two large wounds on the torso instead of five small ones. By having a large wound in the middle of the breasts it creates a juxtaposition, as where the eyes are drawn for lust, lies a large vulva shaped wound.



# Blockout

Here is the initial blockout for the torso and wounds. I played around with the idea of having the rib cage showing but decided in the end it looked too gimmicky.

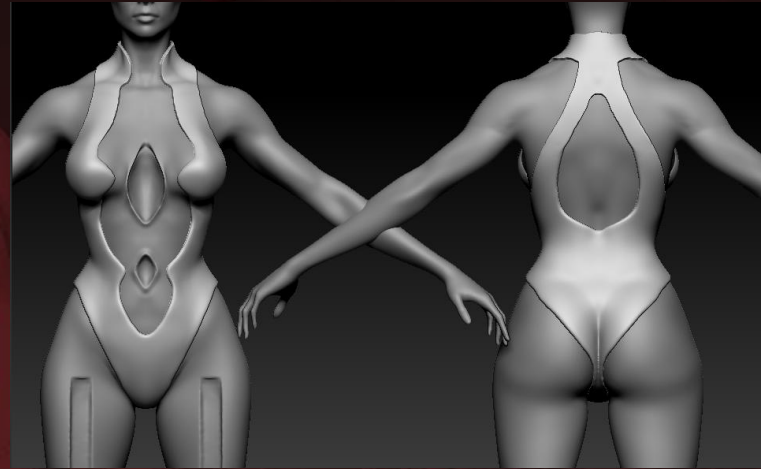
This is also the blockout for the new leotard style. The neck/choker part looked very strange, so I thought of another way to try it out.



# Blockout

The actual leotard was an extraction from the body via masking. I took inspiration from the concept art by having a collar and then fabric connecting it in the middle and it made the outfit look less like a costume and more thought out. I added sinching and shaping to the hips, under breast and buttocks to continue pushing the lust theming. The clothing was periodically clay polished for smoothness.

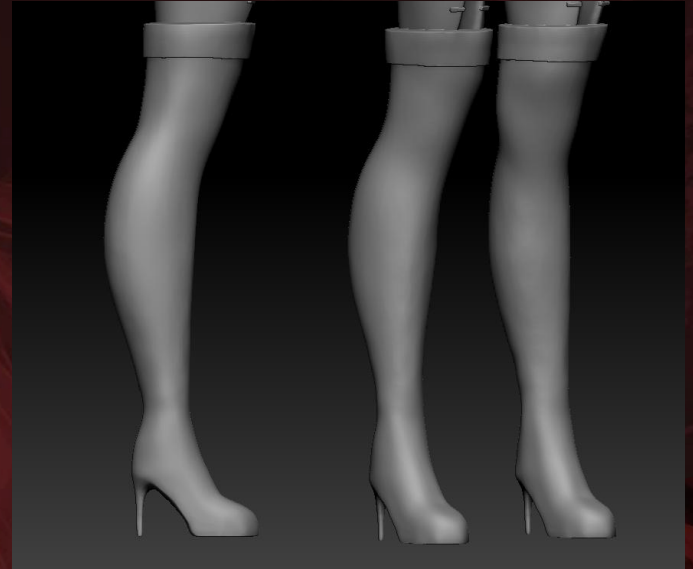
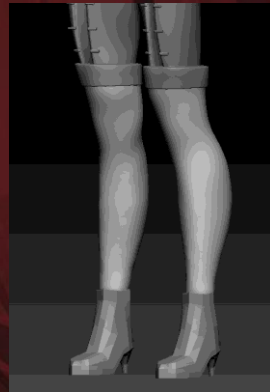
I thought that the gap on the sternum area was a bit bland, so used a chain brush I created to connect the fabric. This was also the moment when the locations of the hooks were blocked out.



# Blockout

For the shoes, I started the model inside of blender so that I could get nice sharp angles. I brought this into zbrush and created the calf and thigh part of the boot by extruding from the leg and the top section by extruding the top of the boot, however this was removed soon after.

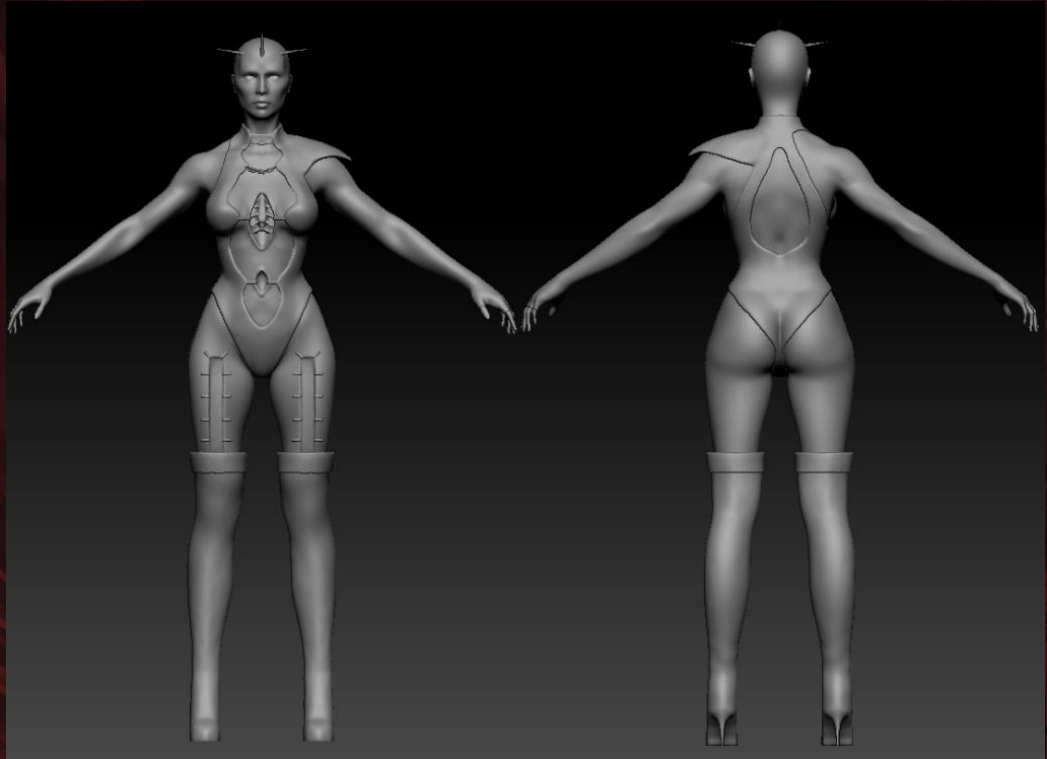
Inside of zbrush, the shoe part was adjusted dramatically from the blockout, with the length of the heel increased and curvature of the toe section.



# Blockout

Finally, for the blockout I added in the horns by appending a cone and shaping it to match the reference and created the left arm sleeve glove by extruding from the arm.

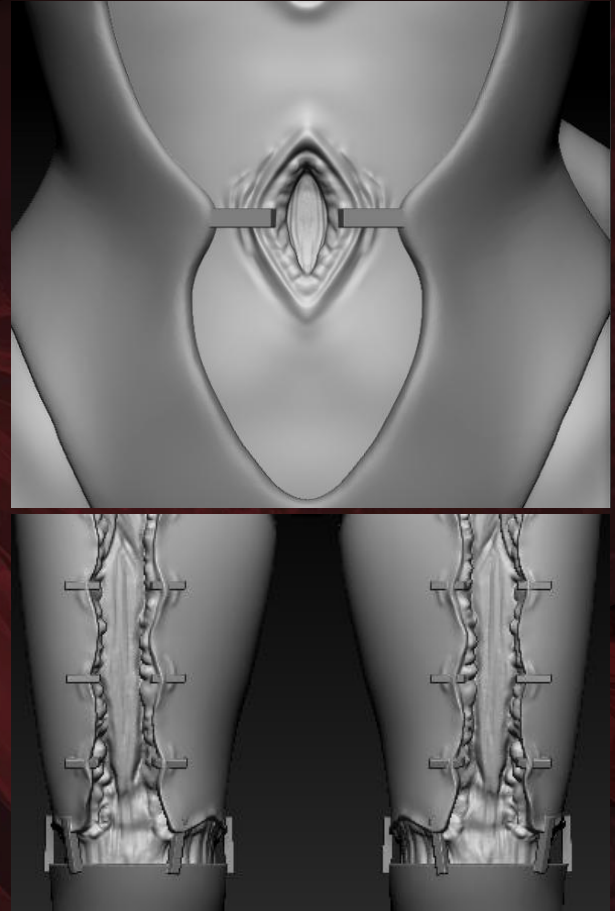
This is the completed blockout.



# Wound Creation

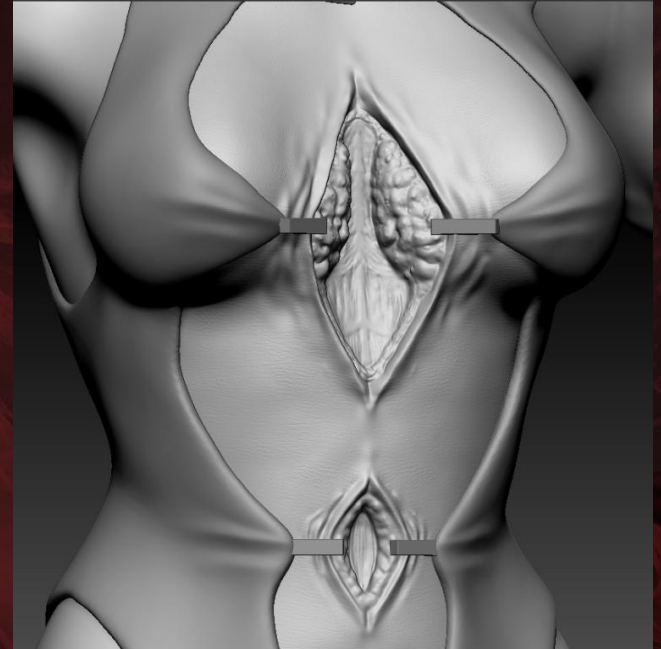
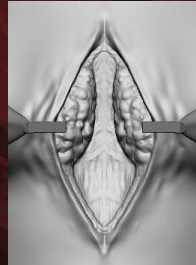
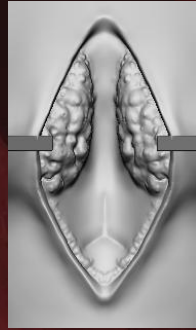
I wanted to create the layers of skin within the wounds on the body, this meant indicating the dermis, hypodermis and muscle. I took inspiration from Farzin's anatomy sculpt as reference for muscle and fat deposit. I started by using dam standard to create muscle striations and using the blob and clay buildup brushes for the dermis and hypodermis. To make it look like the fat layer is in front of the muscle I masked the are and brought it forward whilst also flattening the muscle area. Finally, I added wrinkling to the edges of the wound where the stretching is manipulating the skin.

The same procedure was applied to the wound creation on the legs.



# Wound Creation

The same procedure was also applied to the wound on the chest; however, I wanted accurate fat deposit so I took note on how fat sits in a female chest. This reinforced realism and the uncomfortable feeling of looking at the breasts.



# Tertiary forms

As I believed that the primary and secondary forms were complete, I started working on the tertiary forms in the skin. I paid close attention to how the different areas of the skin had different pores, wrinkles and texture, and applied this knowledge to my model.

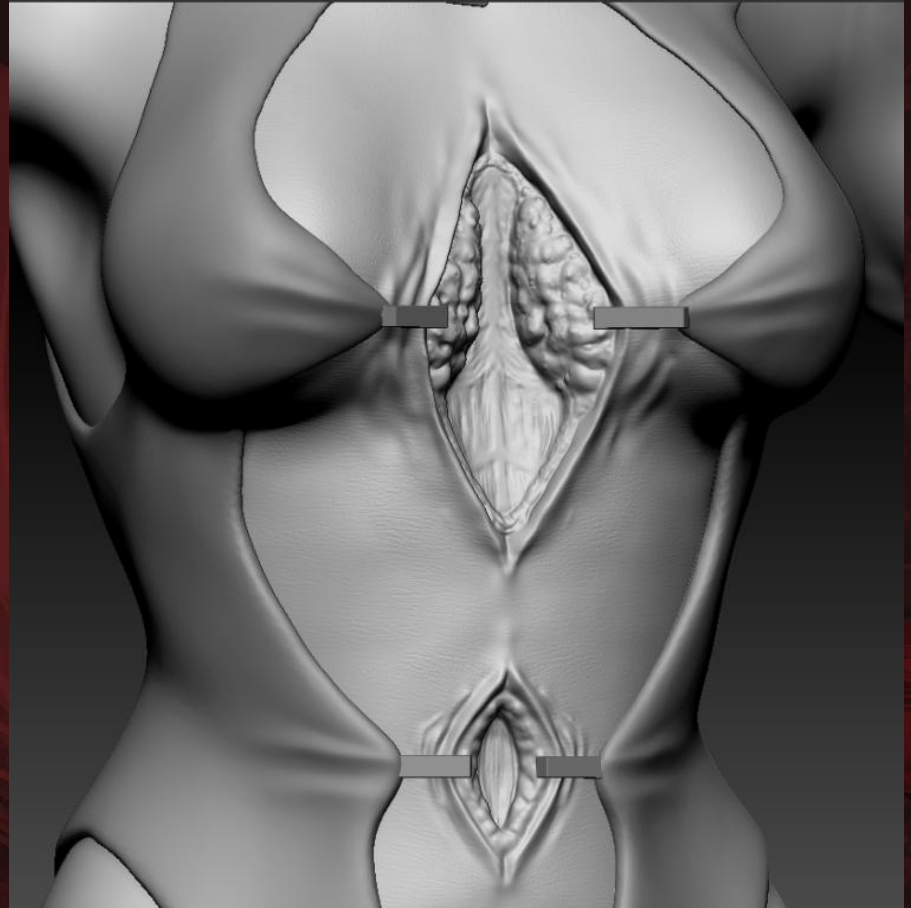
I used a mixture of skin alphas and dam standard for this procedure.



# Tertiary forms

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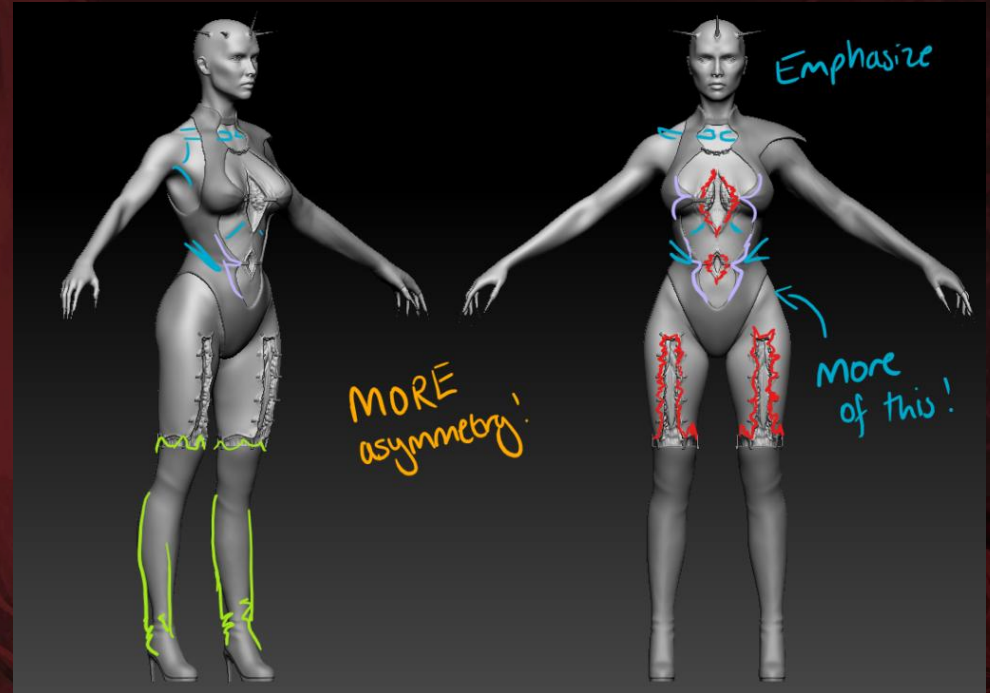
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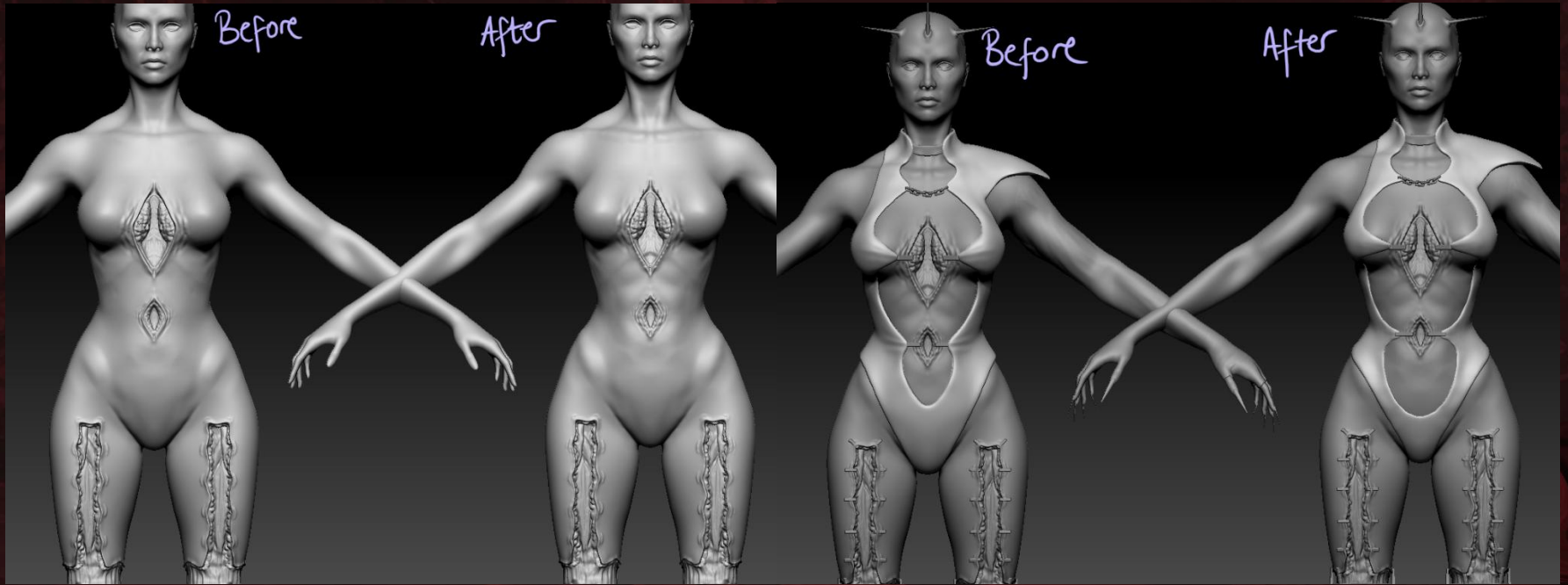
# Refinement

At this point in production, I requested some feedback from my lecturer. We decided that there was more I could do to push my realism, starting by shredding up the edges of the wounds as they would not have been perfectly clean cuts. I should also emphasise some areas of the body further to move away from the Zbrush\_FemaleBase model. He also wanted to see more pinching in the fabric where the hooks are, and the boots should slightly sag if they are just held up by some hooks.

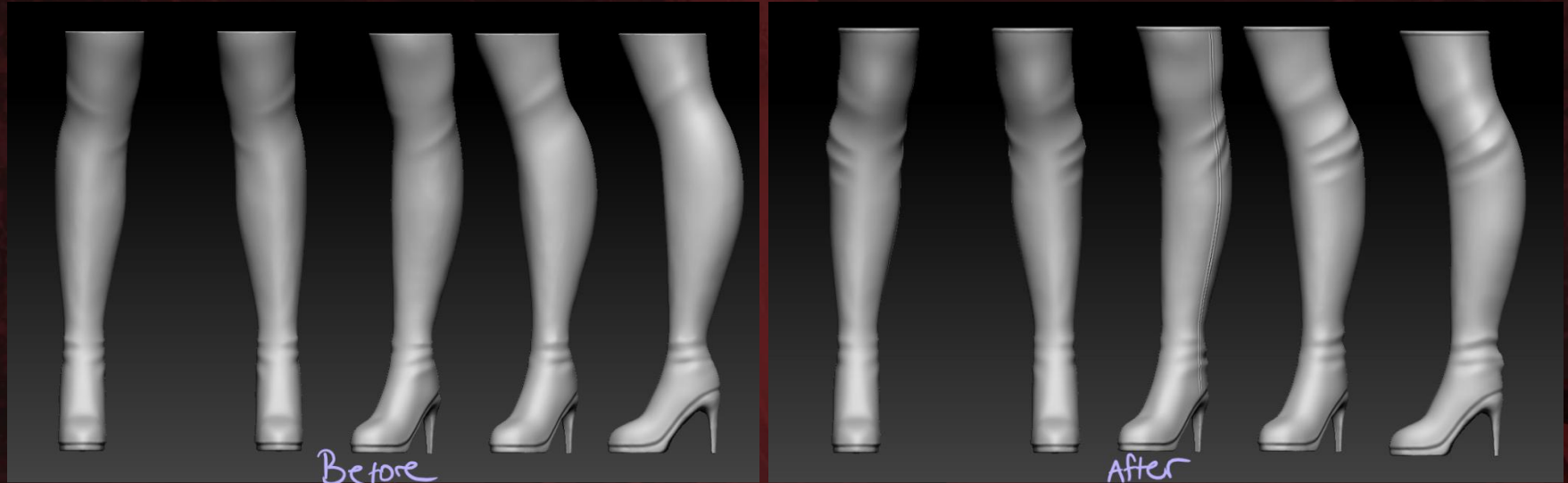
On the next two pages my changes are shown.



# Refinement

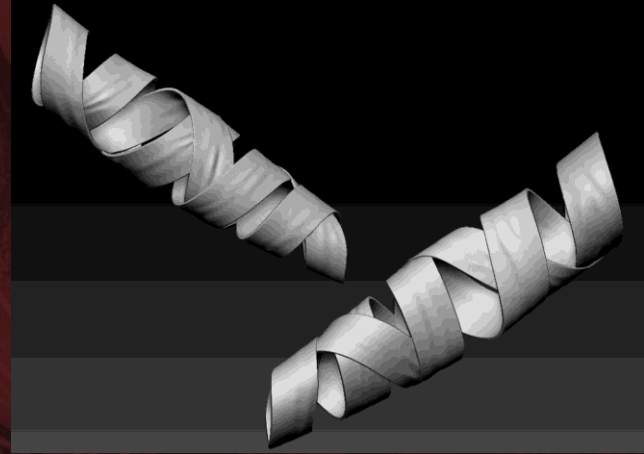
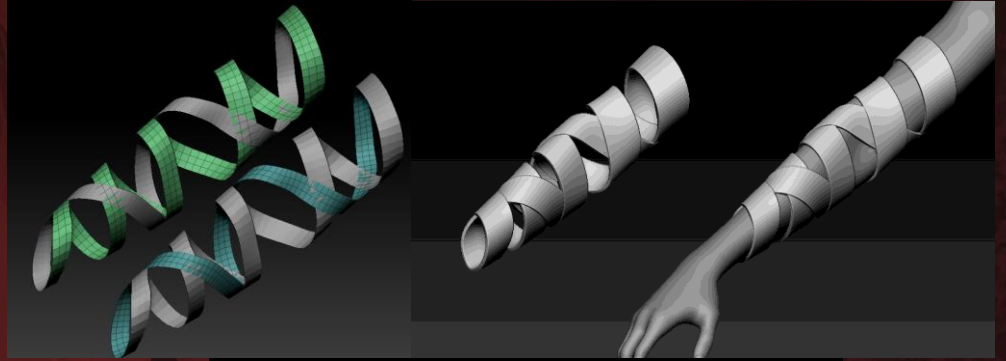


# Refinement



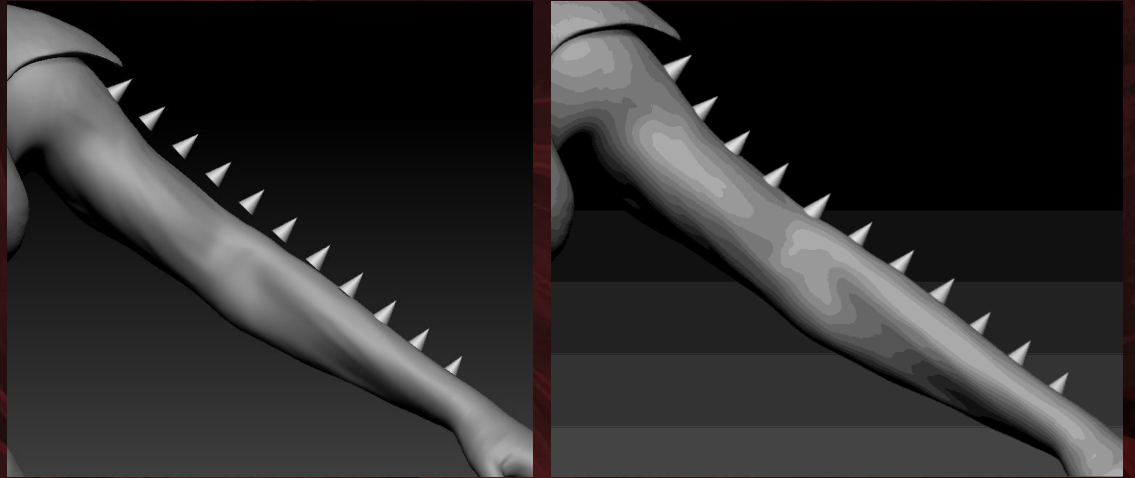
# Clothing Creation

For the bandages I masked out two shapes and zremeshed them until they were low poly. Next, I used polish by crisp edges to clean up the edges and topology further. I merged the straps and used zmodeler to bridge the two straps, then auto grouped the bridged area to the purple polygroup. I then decided to extrude the edge of the bandages as they were quite thin. I masked off each polygroup and adjusted the bandage until they laid correctly above and below each other. After, I added in edges in zmodeler so that the bandages were sharper and sculpted in tension folds. Finally, I used the surface modifier to add noise using a leather alpha that I had.



# Clothing Creation

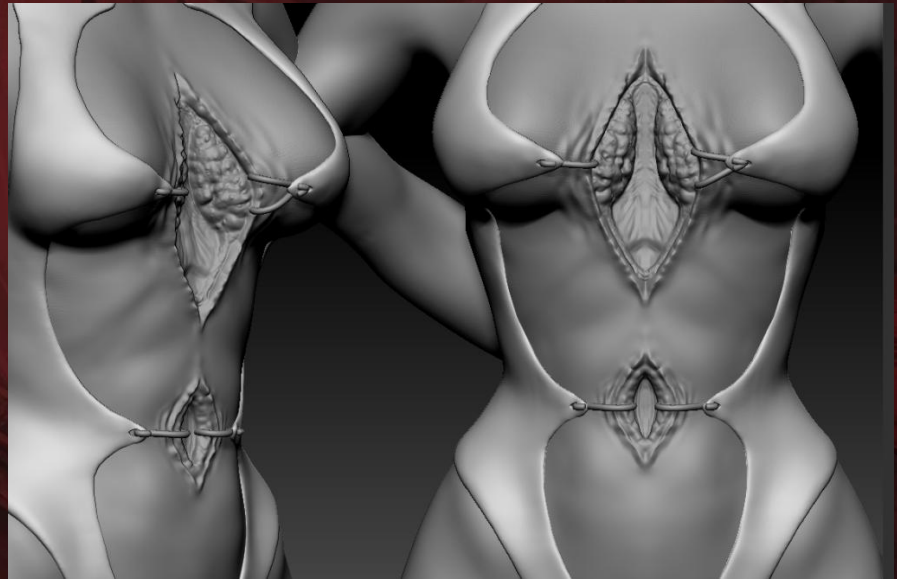
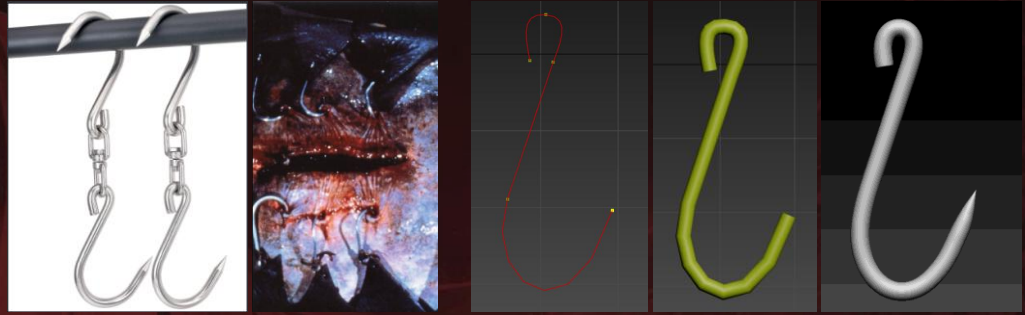
For the spikes on the arm, I appended a cone and shaped it until it was the correct shape I wanted. I then used the arraymesh modifier to get the basic array down, then moved each spike one by one to place on the arm so they were correctly in line. I used the same surface noise on this sleeve and the leotard as the bandage.



# Hook Creation

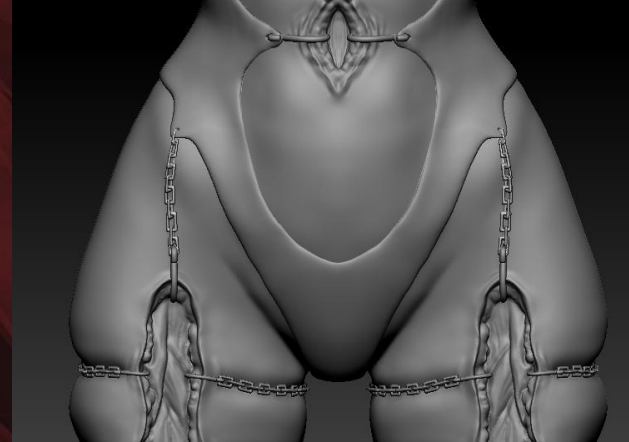
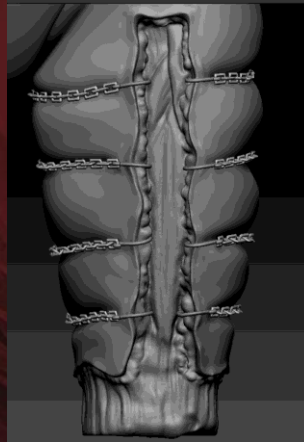
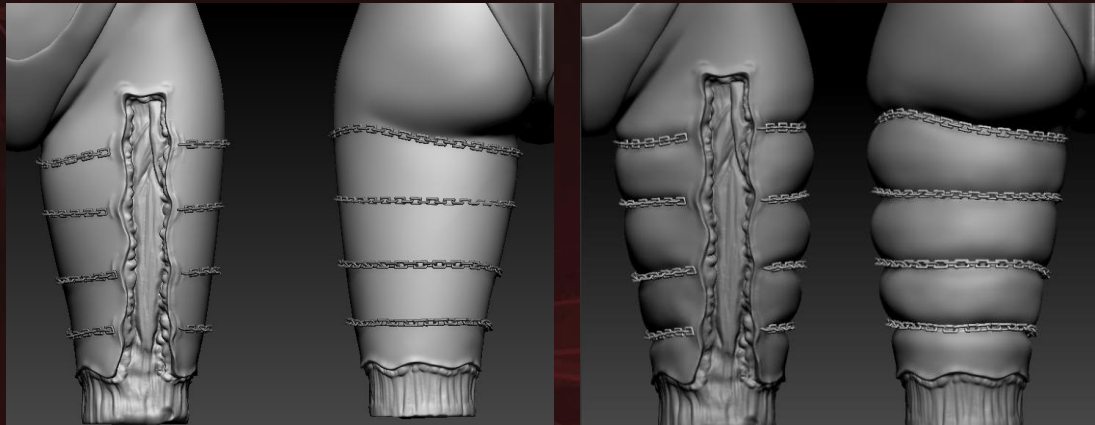
The reference for the hooks was meat hooks that you would find in an abattoir, like the ones seen on the Cenobite Butterball's stomach. I started the creation of the hook by making a spline in 3dsmax and using the sweep modifier to get a mesh. I then brought it into zbrush and smoothed it out using the deformation tab and zremesher and gave it a sharp tip, even though the tip is not seen.

I used a cylinder with the Boolean function to create holes in the leotard for the hooks to go in.



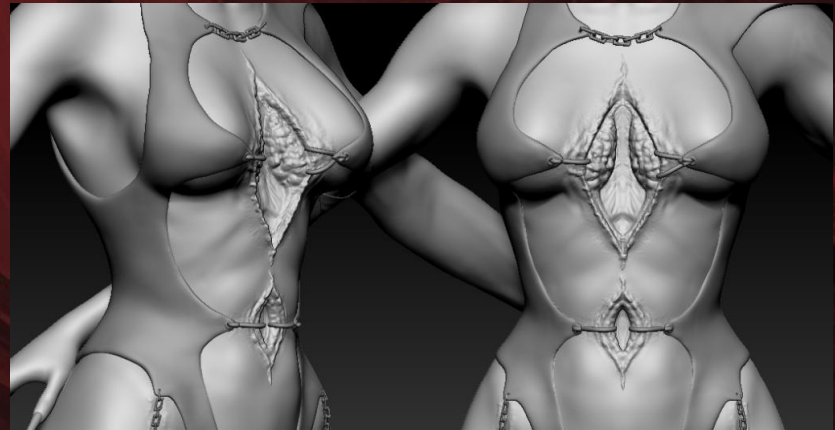
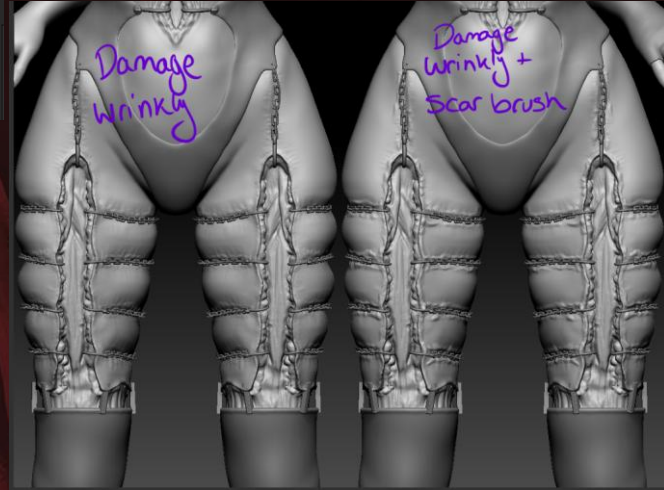
# Chains

I wondered how to attach the hooks to the legs, and I produced an idea of having the hooks be attached to chains, inspired by the Chatterer Cenobite. The chains went around the back of the thighs and attached in the front with the hooks. I used a chain brush I made in third year. I also made sure the legs were squishing and puckering to show the tightness and painfulness of the chains. For the top hooks I decided to go with a garter-type chain with the chain attaching to the leotard itself for more lust theming.

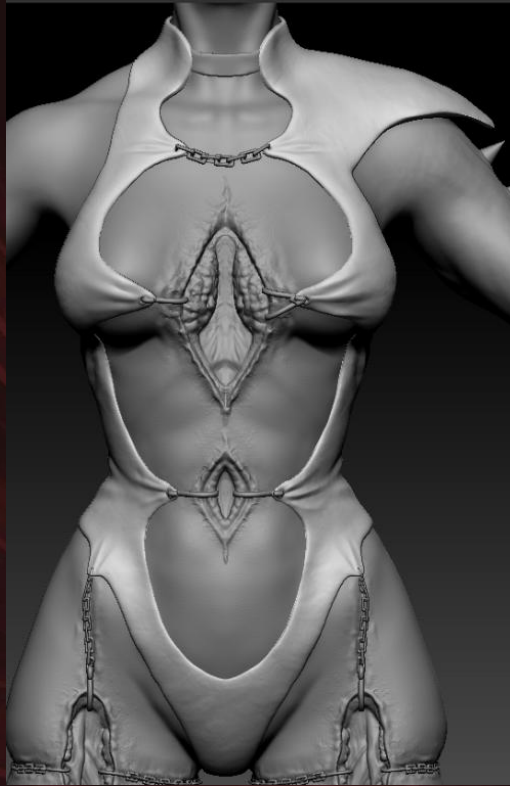


# Wound Refinement

I stumbled upon these brushes by Pablander that gave a perfect wrinkly, weak skin look that was great for the wounds. I applied this all around the wounds on the model.

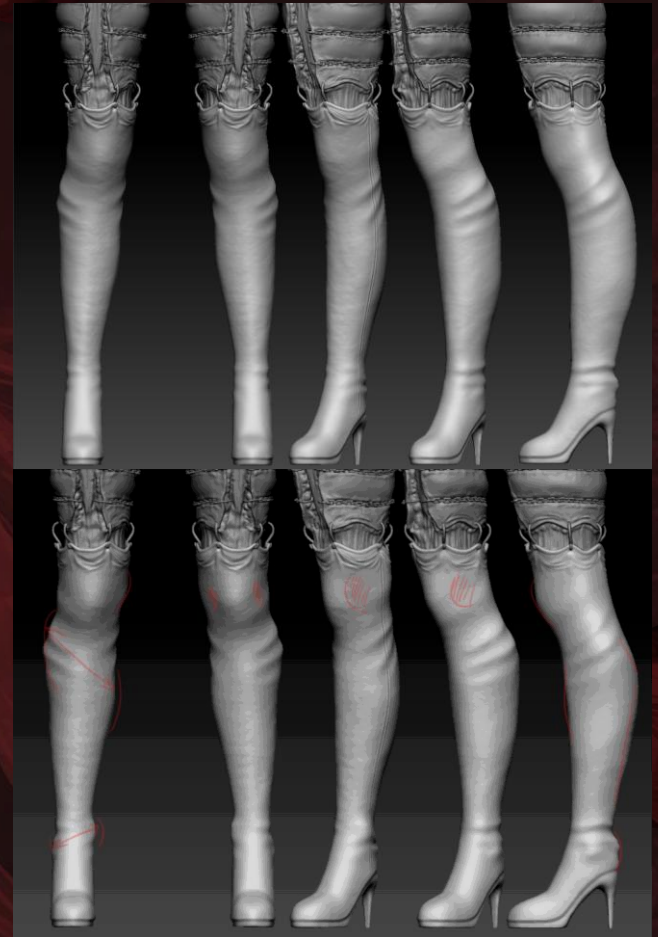


# HP Complete



# Feedback

Before finishing the highpoly, I had some feedback on the shoes, which was that the toe area was too short and the boots should be slightly tighter. I used reference from the Anatomy For Sculptors book to accurately capture the leg, the top image is the before and bottom is after. The faint markings show the main areas I adjusted, with reference to the book.



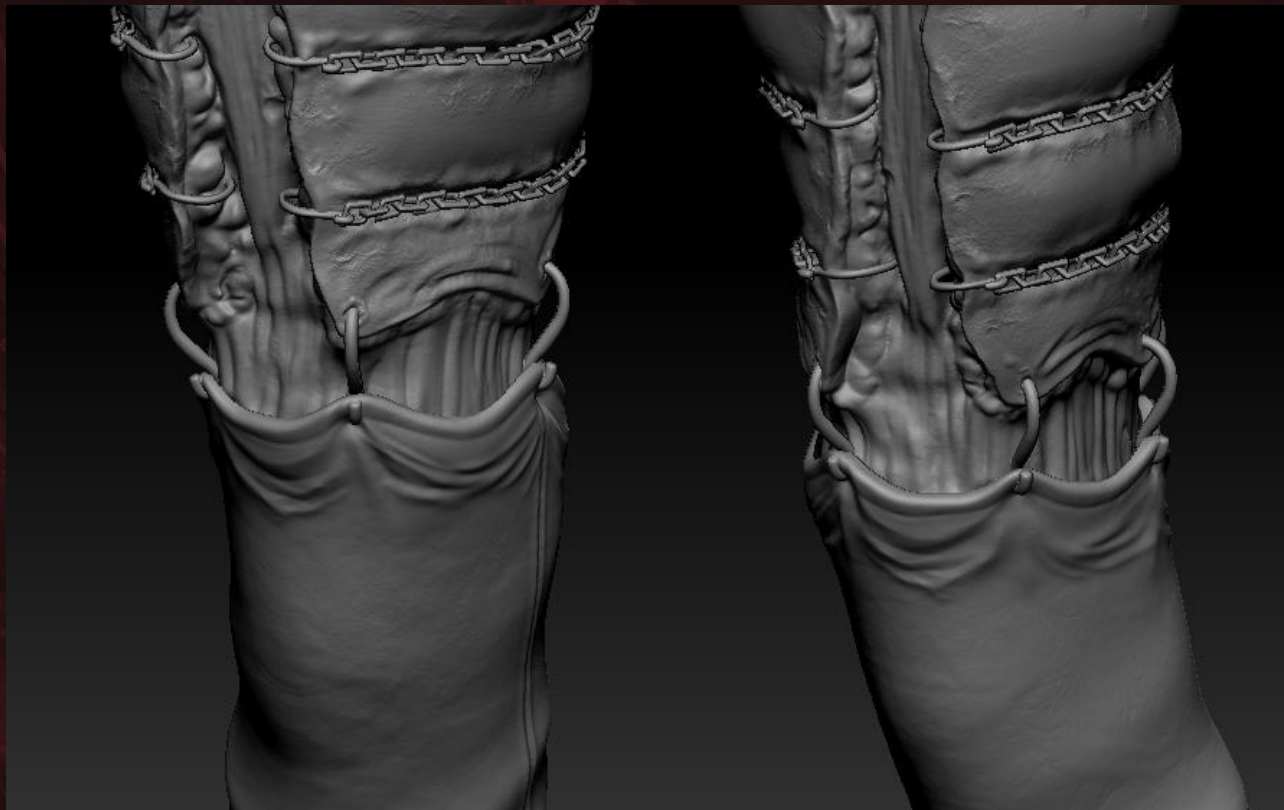
# HP Complete



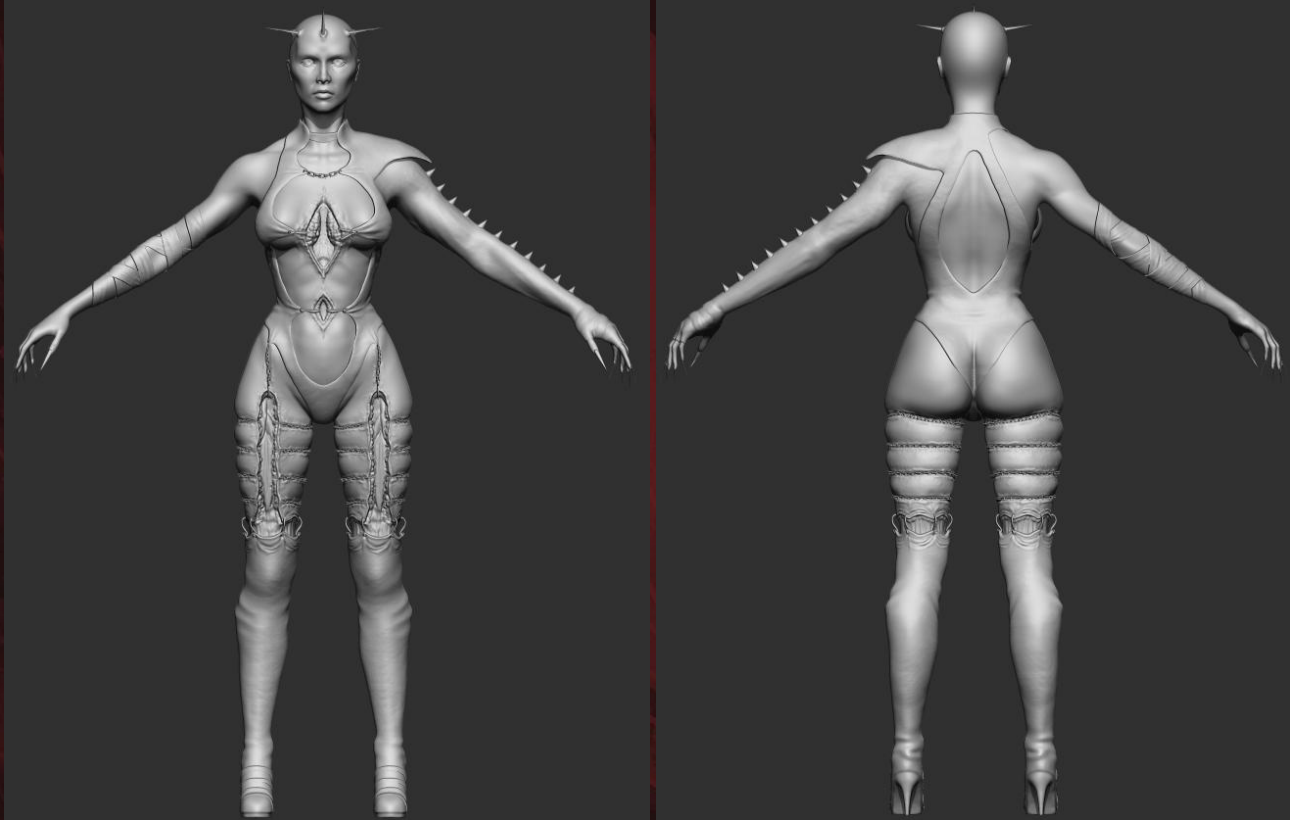
# HP Complete



# HP Complete



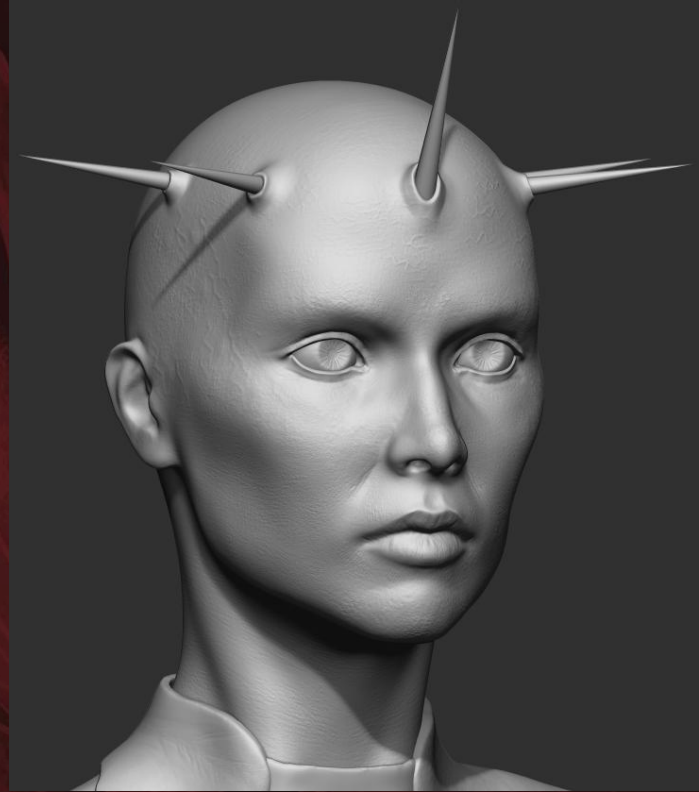
# HP Renders



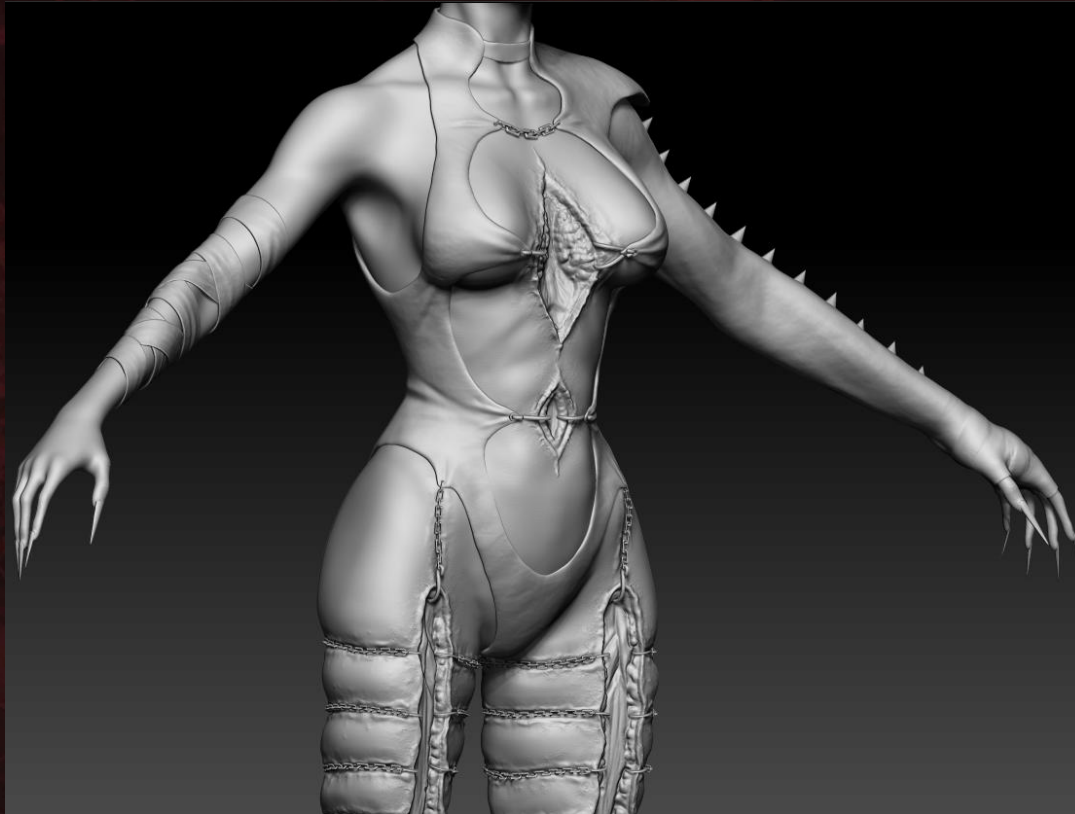
# HP Renders



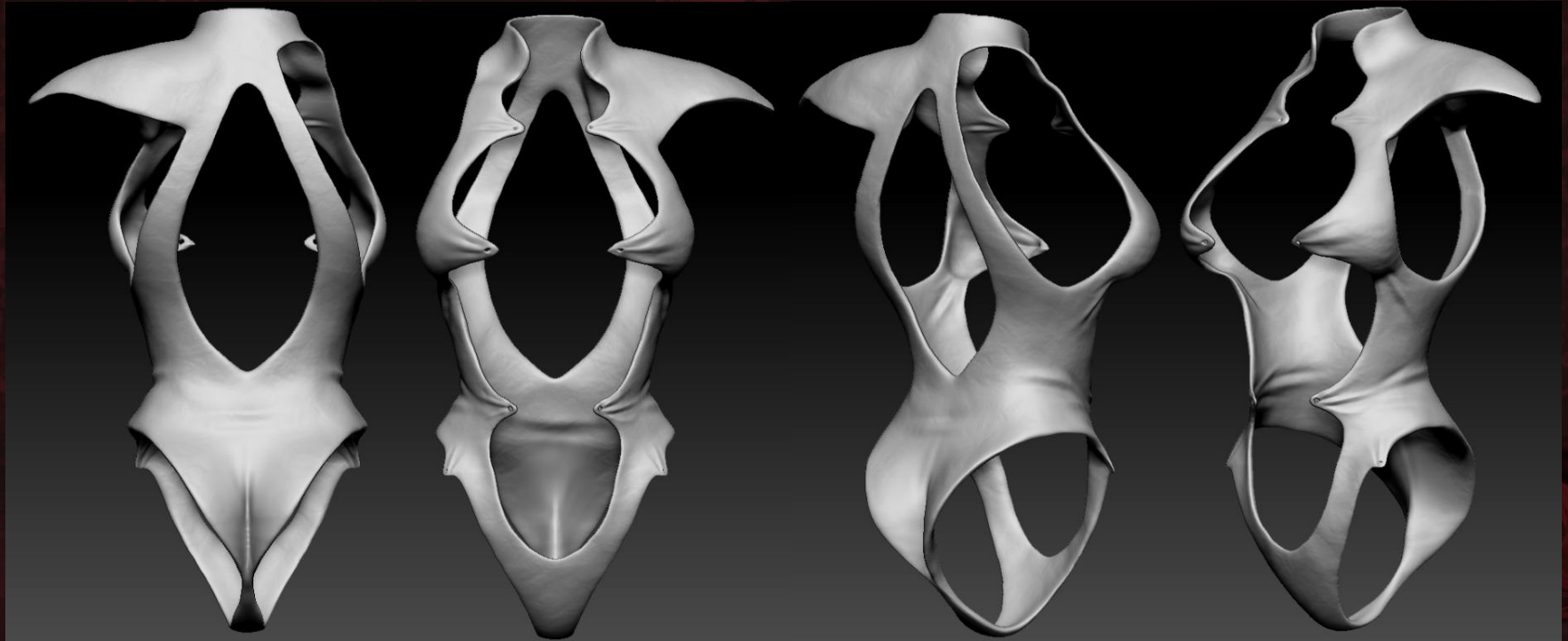
# HP Renders



# HP Renders



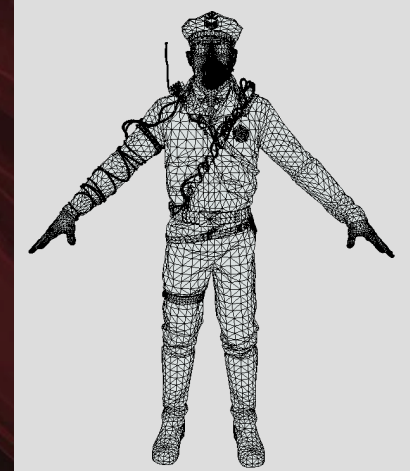
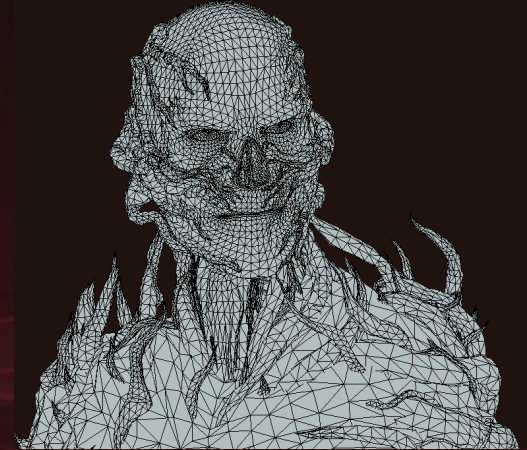
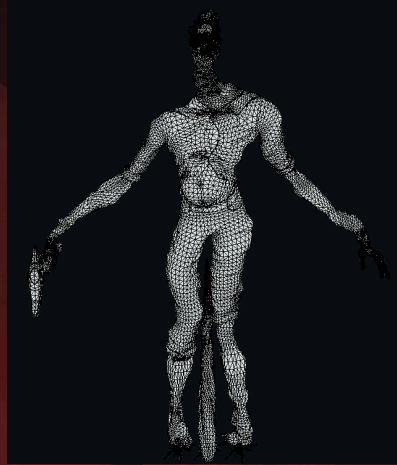
# HP Renders



# Retop

I conducted some research into what tri count I should be aiming for. I looked into games with the horror genre, as that is what I think my model would be in. I looked into Dead by Daylight and Outlast Trials.

After some discussions with my lecturer, we decided on roughly 80K tris



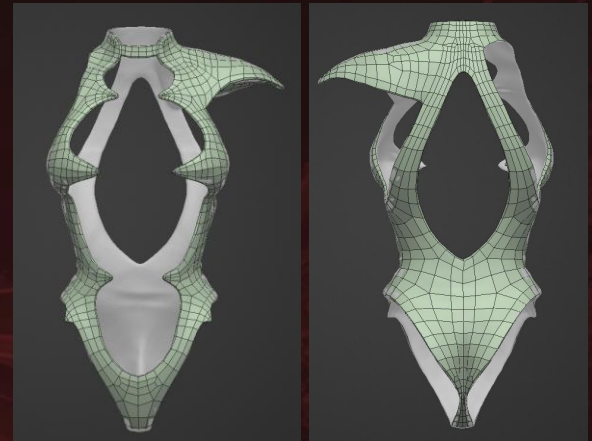
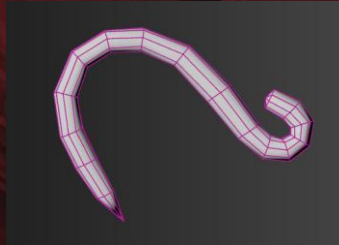
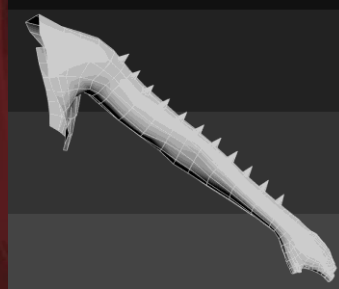
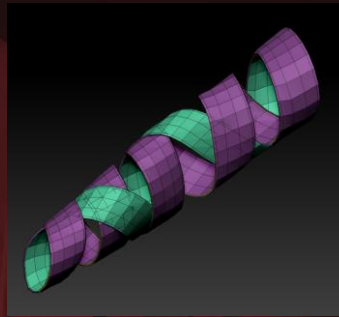
# Retop

The retop took place inside 3dcoat for the majority, with only the bandage being inside of zbrush. This was because I already had the lowpoly version of the bandage due to a low to high workflow with it.

Poly flow reduction was used where it could, and animation loops were reinforced where they needed to be.

For the chains, I baked them down onto singular planes to reduce poly count.

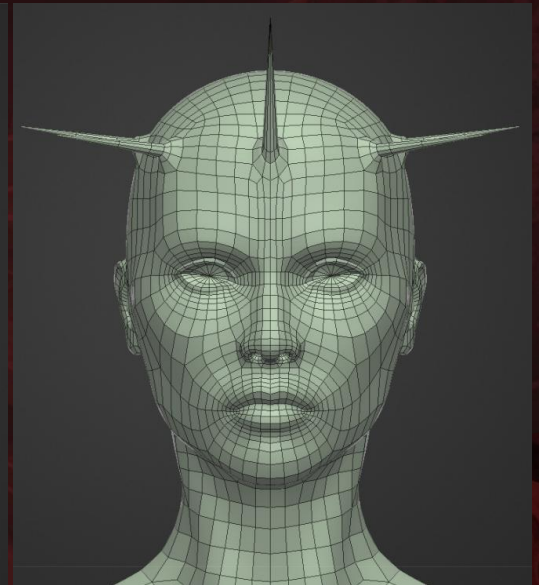
After each retop, I did a test bake inside Substance Painter to make sure there were no issues.



# Retop

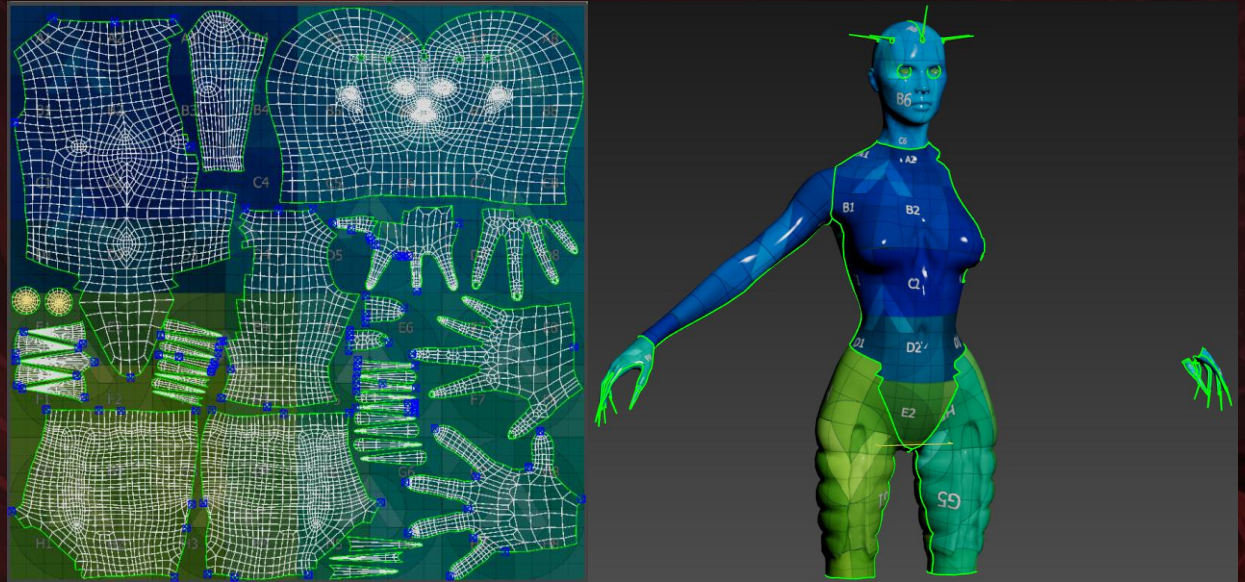
With the body and head I made sure to place in all the animation loops first. Good poly flow reduction has been used so that there is no wasted polys.

The overall tri count came to 35.326.



# Unwrap

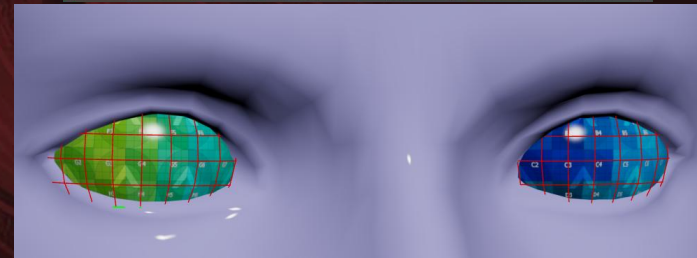
For the unwrap I kept the body and eyes on one 4K map. I completed it with texel density in mind and filled the grid out nicely. I also used the pinning method to get straighter edges on certain edges.



# Unwrap

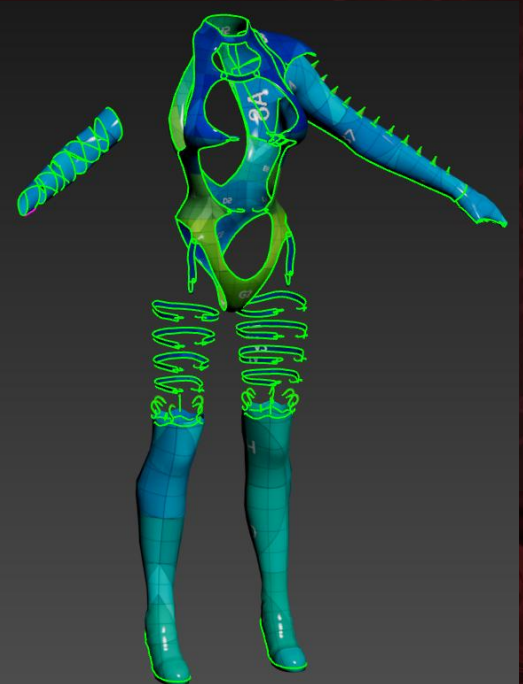
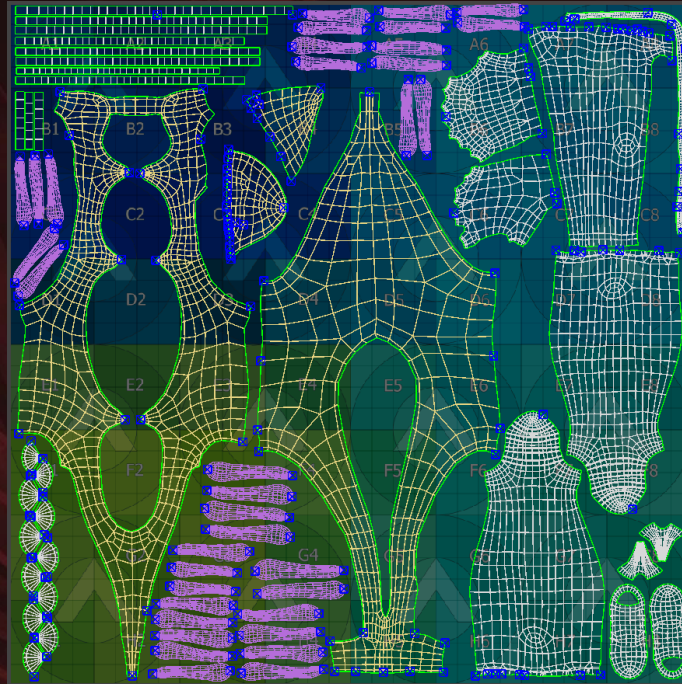
I added an outer dome for the eyes so I can make an eye shader in unreal. This will also have its own texture sheet so that the shader can work nicely. I cut the spheres into halves so that there were no unused polys.

This was a simple unwrap which I flattened to take up all the UV space



# Unwrap

The other 4K map contained all the clothing and accessories. This was completed with texel density in mind and filled the grid out nicely. I also used the pinning method to get straighter edges on certain edges for this map too.



# Bake

This is the lowpoly inside of substance painter before being baked.



# Bake

This is the lowpoly inside of substance painter after being baked by mesh name, antialiasing 8x8 and with the opacity map turned on so the chains would work.



# Texturing

I set a base material for each object, with simple roughness and metallic values to match that of the object that its on.



# Texturing

For the skin, I started by creating a subsurface layer working with the baked thickness map. I next used a fractal sum noise for skin breakup and painted some red on the eyelids for realistic blood pooling.



# Texturing

The next step was to create the colour zones on the face and body. At first, I only used the bottom three colours but decided to layer it with different shades of the same colours, this gave depth and blended out the zones nicely. The blues were used in areas of shadow and contours, the yellows were used in bony landmarks and areas with thin skin and the reds used in areas with concentrated blood flow .



# Texturing

Next up I used a curvature generator with red to emphasis the crevices, bigger ones like the neck and smaller ones such as pores. I also used the texture Marble Veins to create the small visible veining on the body. The lighter lips layer just adds different roughness to the lips so it highlights the wetter areas and edges.

Both the AO and second crevices layers are there to deepen the shadows and crevices again. The skin pores are an overlaid texture of small pores on the face.



# Texturing

I hand painted in the purple and blue layers to choose precisely where I wanted the hollow areas to stand out. The veins layer was a hand painted layer also, where I painted around the horns to show veins popping out due to the skin trauma. The freckles layer is just a couple of dots on the face across the nose and cheeks for realism. For the tear duct and waterline I created two layers; eyes and eyes 2, and the skin pinkness layer was a layer added for the reinforcement of the lust theme. Pink was painted on the breasts, pubic area and buttocks to show heightened blood flow.



# Texturing

The final skin layers consisted of creating the roughness variation all over the skin and concentrated roughness in the T-zone on the face. I then used two fill layers to highlight bony landmarks on the model. I used a texture called Grunge Spots to paint the body with moles randomly. I added a paint layer to this so that I could erase the dots from areas that I didn't want.

Finally I painted on wrinkles using a normal brush and then another layer using a wrinkle alpha especially for the forehead.



# Texturing

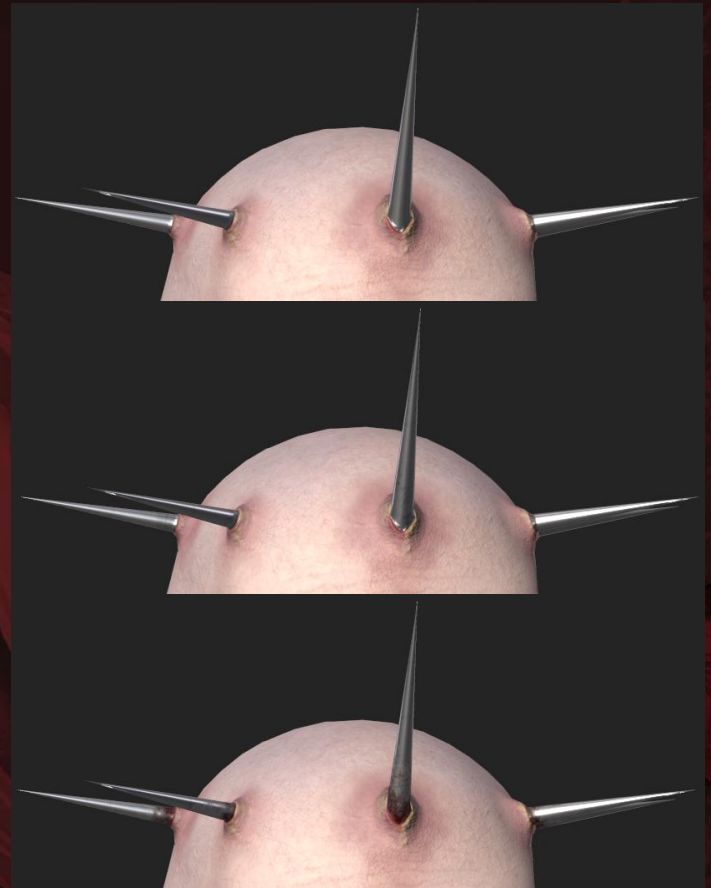
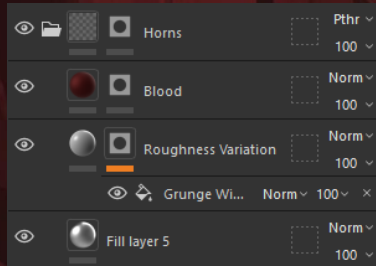
For the makeup, I created folders for the lips and eyes with multiple layers to complement each other. To add to the storytelling, I painted the eye makeup to have been smudged with tears. A separate roughness layer was used to show the tears.

I created a layer for the eyebrows using a dot brush and sharpening them to look like stubble, this was the same for the hair on the head too.



# Texturing

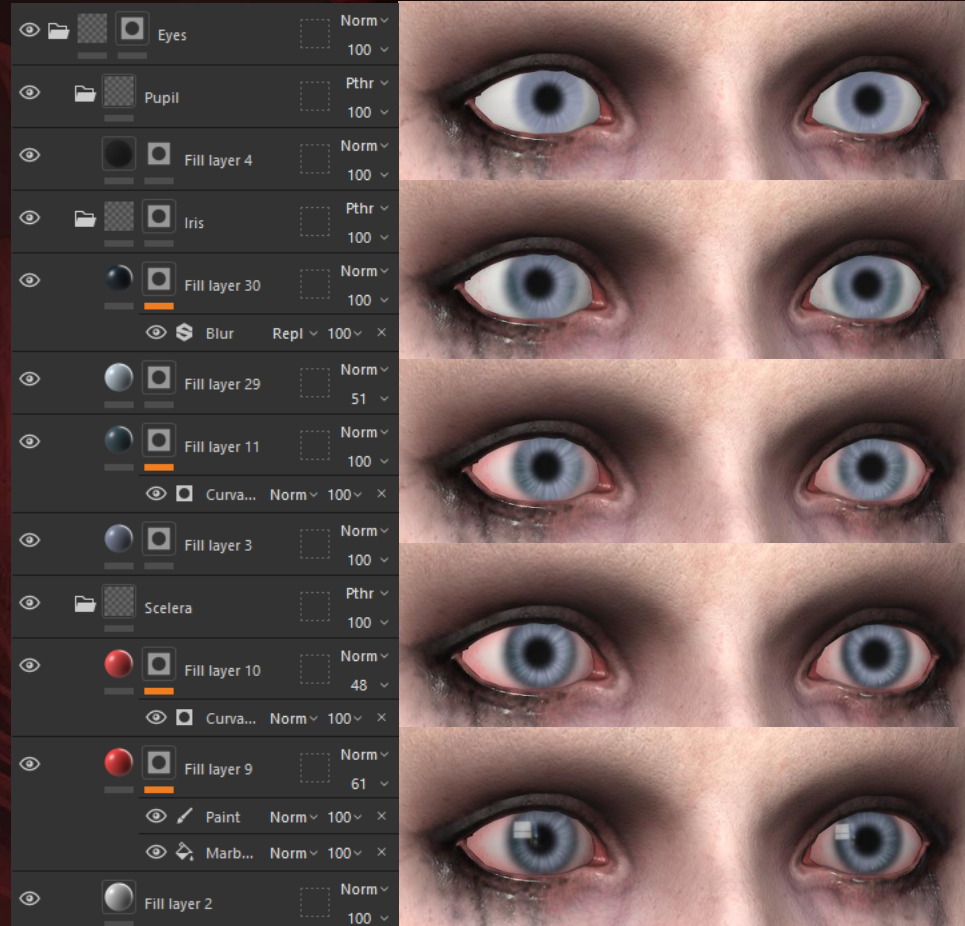
With the horns on the head, I wanted to make them look like they were painfully growing out of the skull unnaturally. First I set the metal base layer with a bit of roughness variation, then I painted dried blood onto the base.



# Texturing

The eyes were split into 3 folders; sclera, iris and pupil. For the sclera I made the edges look bloodshot with veining, to show the irritation from crying. The iris was made by layering a few colours and using a curvature generator to get into the deep crevices. Finally, the pupil was just a black dot.

The outer eye was created with a grey fill layer with metallic, roughness and opacity adjusted until it gave a realistic look.



# Texturing

I bought a tattoo tool in second year and wanted to use it on this model as the back seemed like it was missing something. The symbol makes it seem like she is part of a cult and that was the mark of initiation.



Tattoo Master Tool \_ Substance Painter

by Ehsan Kiani · [Seller Information](#)

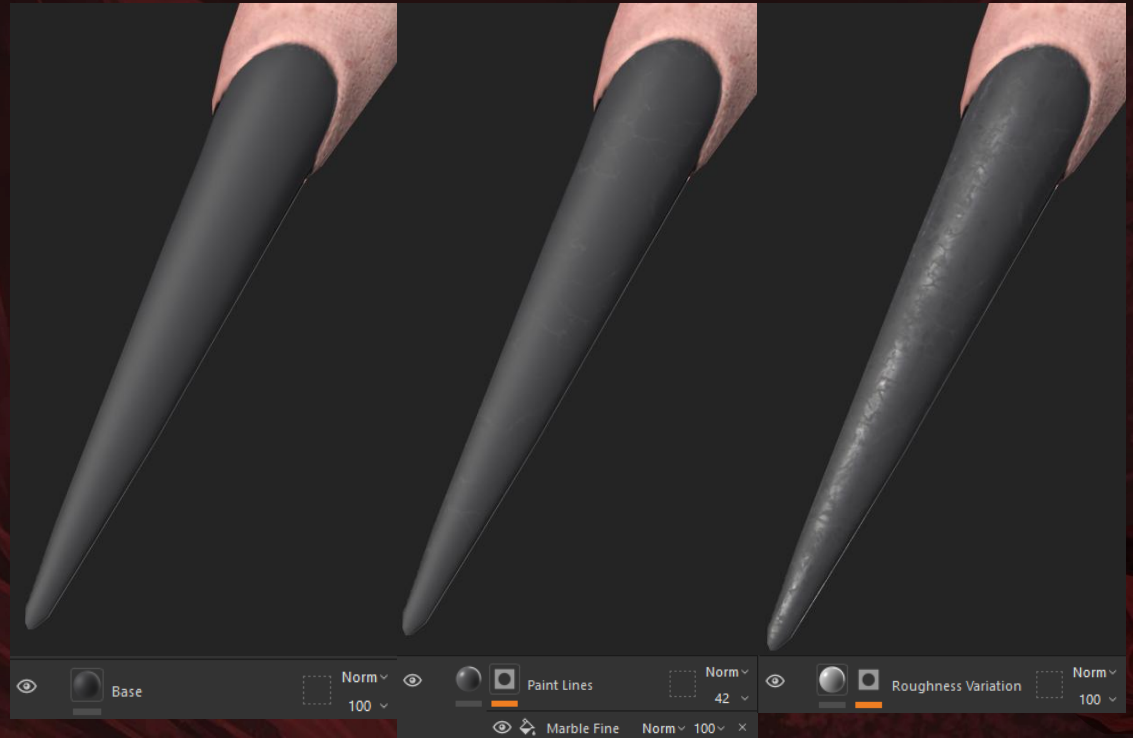
# Texturing

I took particular interest in the hands as this is usually an area that I forget when making a model. I ensured that the same amount of time for the face and body was taken for making details on the hands.



# Texturing

In addition to the hands, I wanted the nails to have character especially as the theming is lust.



# Bruising progression

This is my progression for the bruising. I started by marking out the areas that would have bruises, such as around the areas of trauma. I then applied the different colours that you can see within a bruise to blend the colours.



# Bruising progression

Here you can see that I deepen the crevices and add in darker, fresh bruising, especially around the areas that moving parts like the hooks and chains. Finally for the bruising I made a layer of purple and painted in with a dots brush to paint small blood blisters around the wounds.



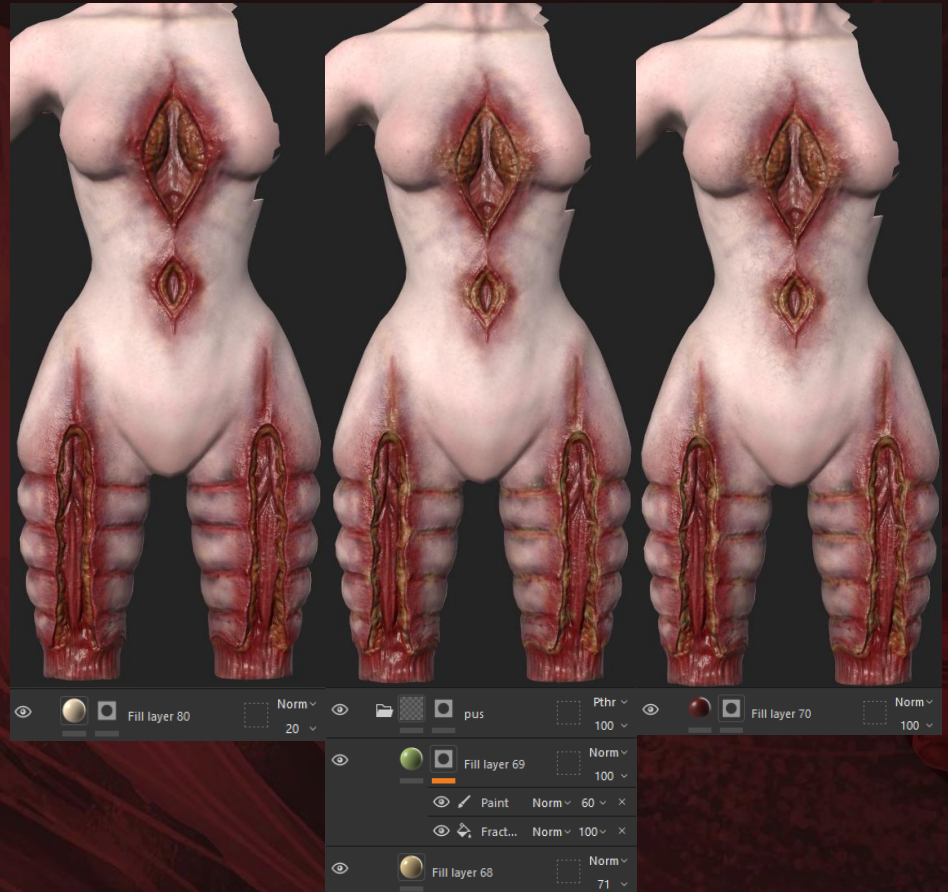
# Gore progression

With the gore, I started by making a base soreness colour around the opening of the wounds. Next, I made a layer to enhance the soreness but focused on adding redness inside the wounds and around them. I then used a subtle pink layer to highlight muscle striations, and a deep maroon with roughness for the blood.



# Gore progression

I emphasised the ribs with an off-white colour, to make the muscles look a little transparent and then created a folder for the creation of pus. I thought this added a realistic touch, at the cost of being quite gross. Finally for the gore I painted in more veining around the wounds to look like the skin is tense and bulging due to the trauma.



# Gore Close Ups



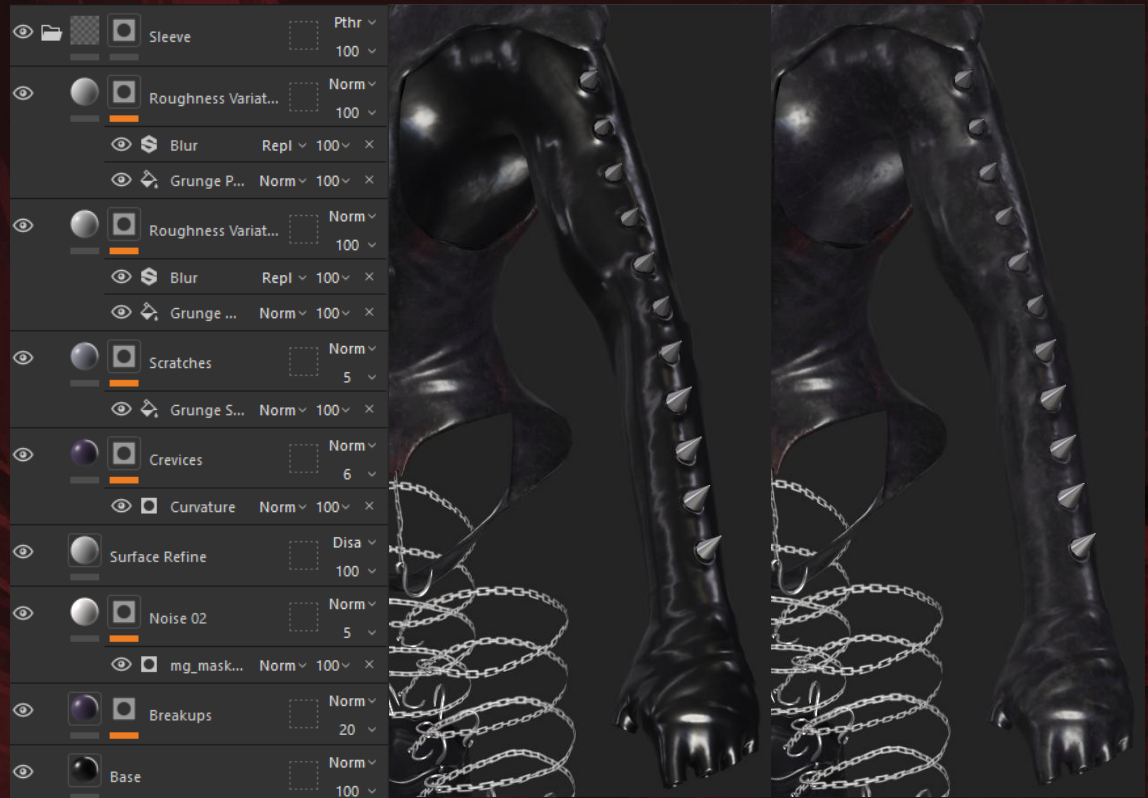
# Clothing progression

The leotard was slightly harder to get realistic. I used multiple purple layers to emphasise the crevices and stretching. Two noise layers were used with white and low opacity to create splotches; this was backed up with two roughness variation layers for more breakups. Finally, a dried blood layer was created around the hooks.



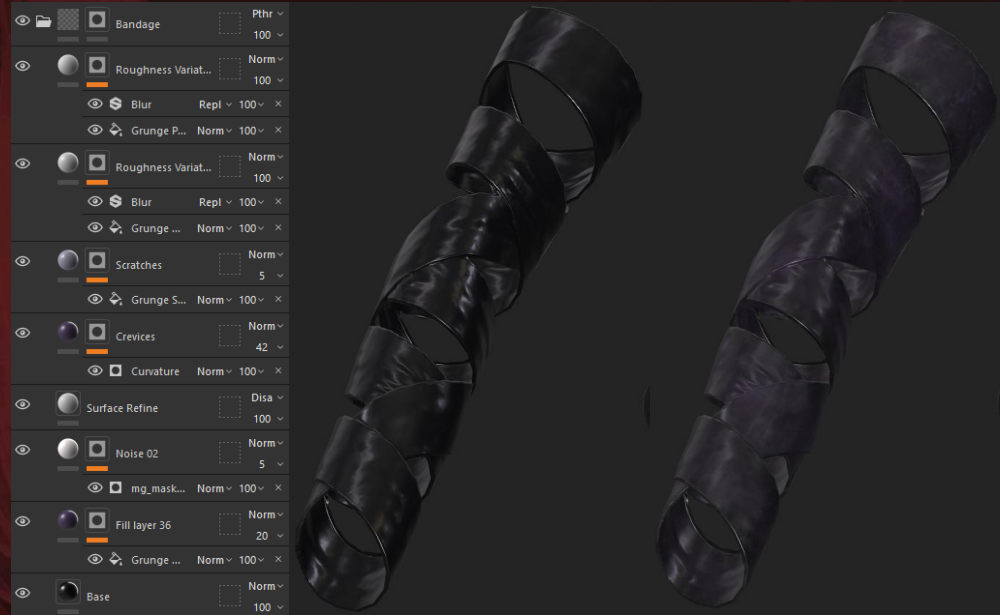
# Clothing progression

The same process was taken for the sleeve but without the blood layer.



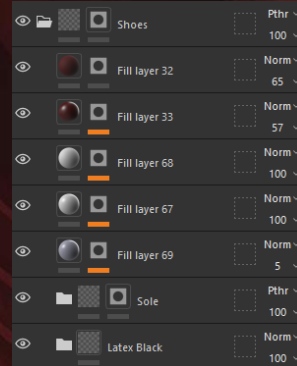
# Clothing progression

The same process was taken for the bandage but without the blood layer.



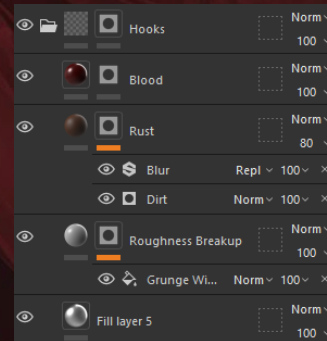
# Clothing progression

The same process was taken for the boots but an added blood layer to the soles was created.



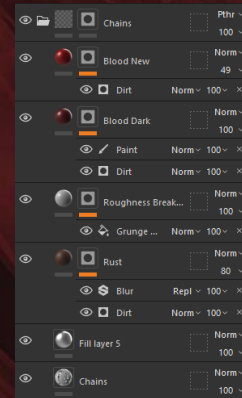
# Hook progression

The hooks were textured first with a roughness breakup for variation and then a rust layer using a dirt generator. This emphasises the pus further. Finally, a blood layer was added to where the hook is inside the body.



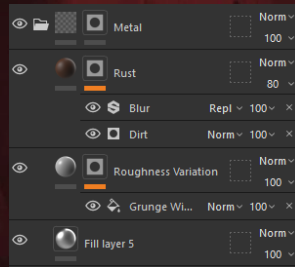
# Chain progression

For the chains, I applied the opacity texture so that the plane was now see through. I did the same procedure as the hooks but added another layer of blood for colour variation.

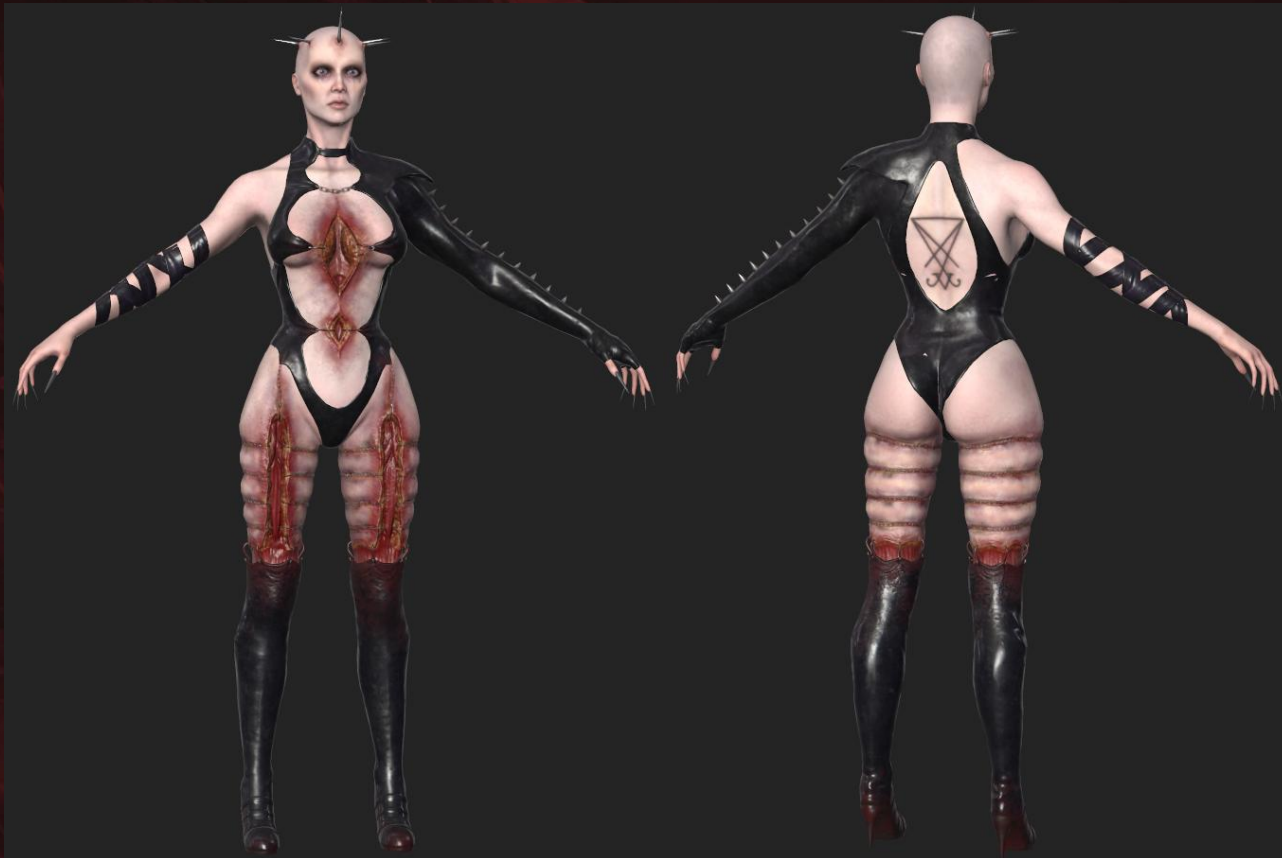


# Metal progression

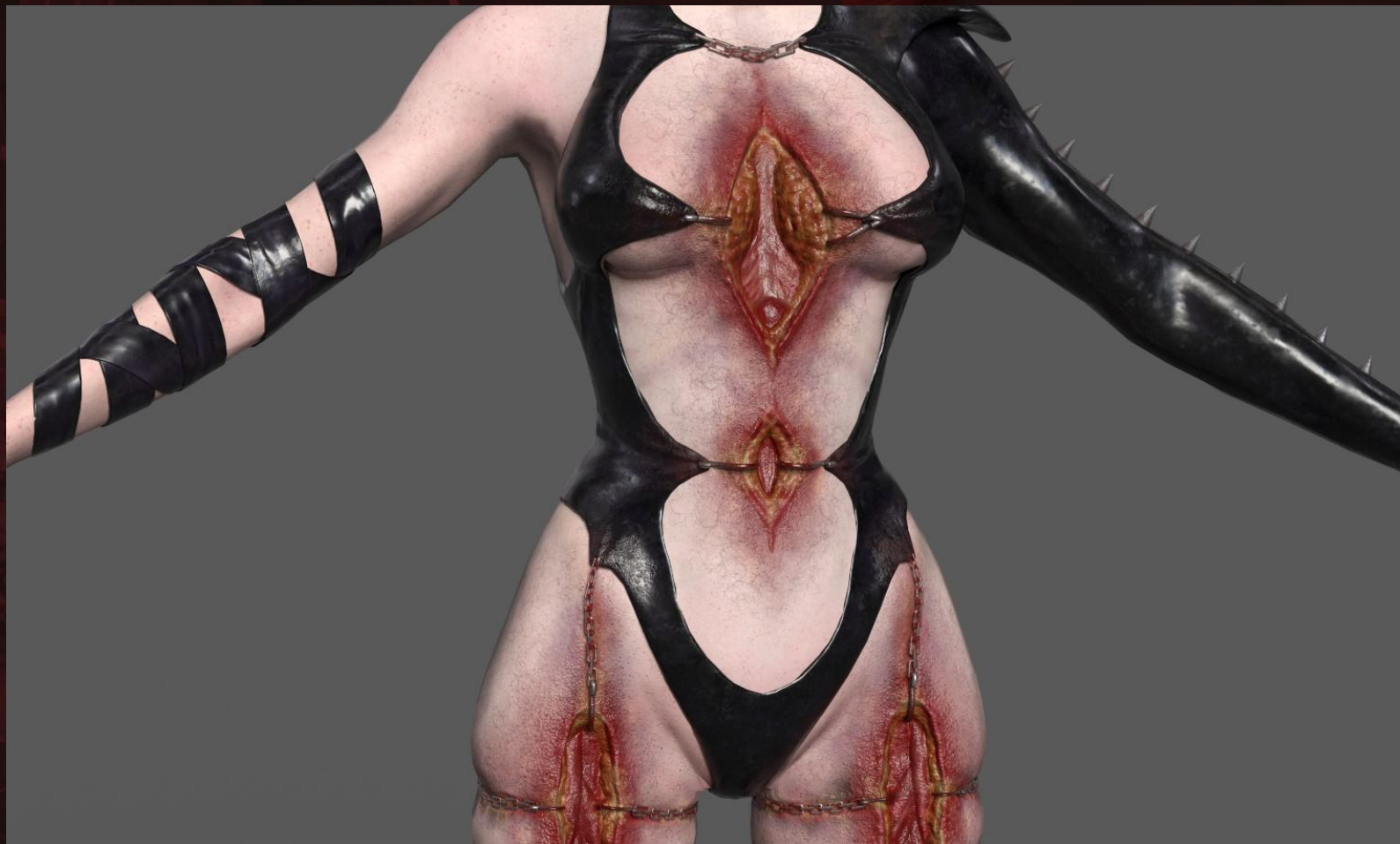
The metal studs on the sleeve were textured in the same way as the hooks, minus the blood.



# Texture Complete

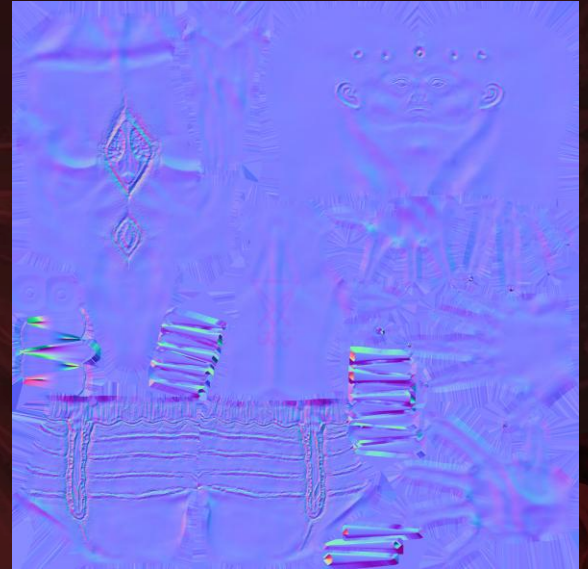




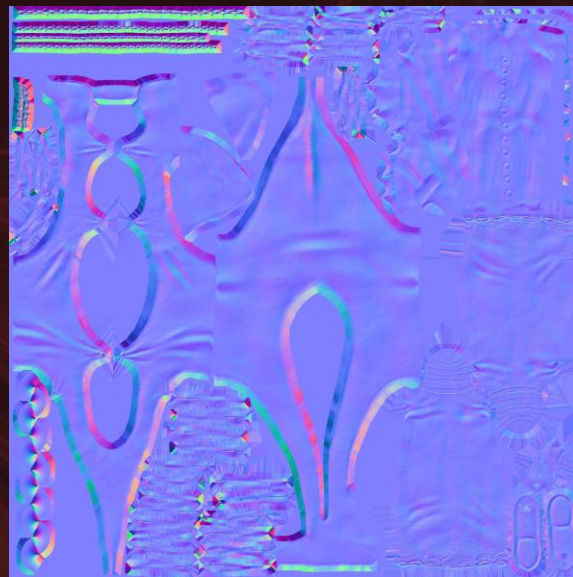
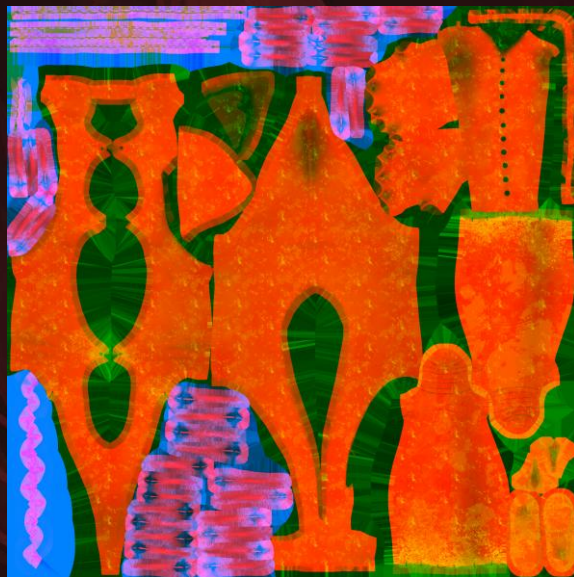




# Body Textures



# Clothing and Metal Textures



# Eyelash Creation

To add to the theme of lust and to reinforce realism I created eyelashes in blender using the hair particle system. This was much easier than using Xgen in Maya. My first attempt wasn't too good so I retried and got a nicer result with the eyelashes fanning off to the outside like fake lashes.

At this point I also fixed the clipping issue that is on the back of the model, where the skin clips through the leotard.



# Morph Targets

I wanted to either rig the face or use morph targets to convey the theme with a lusty expression. I decided on morph targets as I am more experienced with them. I set a basis and then two blend shapes, one for just the eyes and one for just the mouth, this way I can control both simultaneously.



<input checked="" type="checkbox"/>	Basis		<input checked="" type="checkbox"/>	<input type="lock"/>
<input checked="" type="checkbox"/>	Sultry Eyes	0.000	<input checked="" type="checkbox"/>	<input type="lock"/>
<input checked="" type="checkbox"/>	Sultry Mouth	0.000	<input checked="" type="checkbox"/>	<input type="lock"/>

# Posing

I decided to use mixamo for the rigging as I knew I would struggle with making the rig myself. I found a base pose to work with and changed it up slightly so that it wasn't a complete copy from there. However, after some feedback we both agreed that the posing was slightly off and she looked as if she was about to fall.



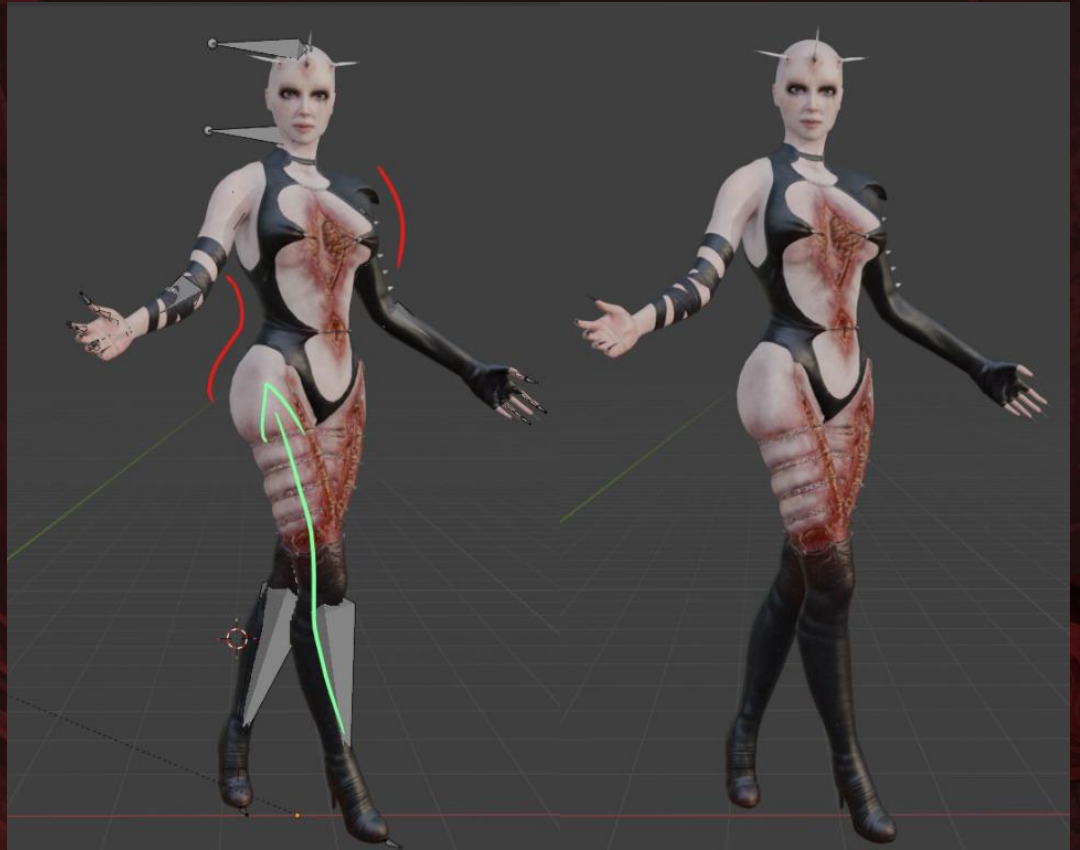
# Posing

I still wanted to convey the cenobite theming whilst mixing in the module theme of lust so I researched into how female cenobites portray themselves. Many images I found show them with their arms out wide and head at an angle. I think that they still look quite lustful, with their breast pushed out and open body language so I decided to recreate this.



# Posing

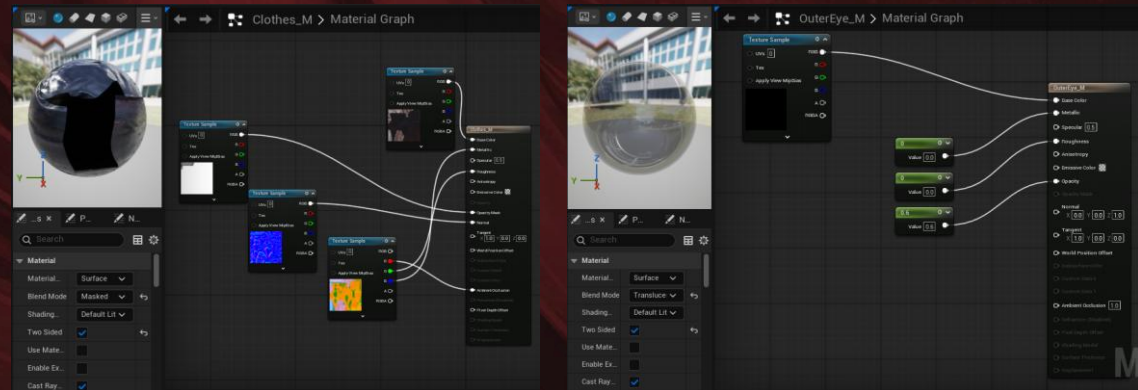
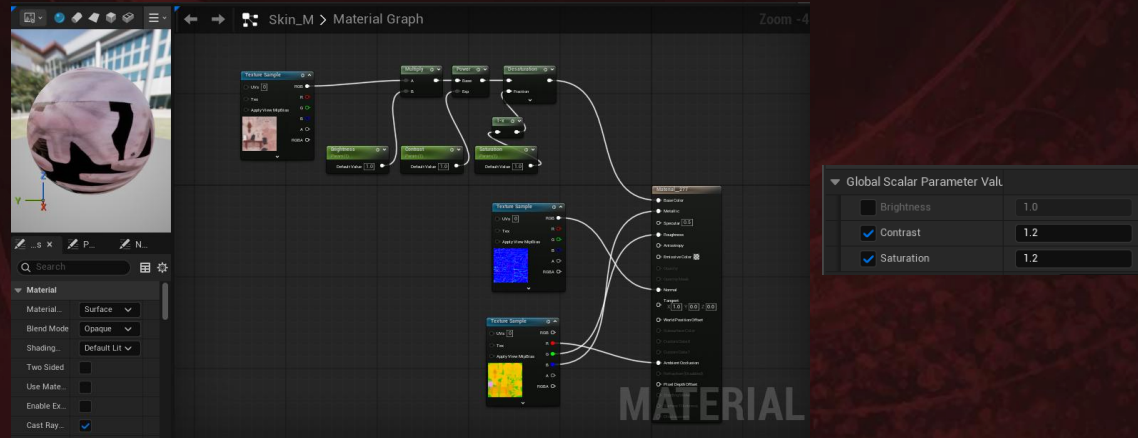
By keeping the legs at a crossed position, it allowed the buttocks to be pushed out, highlighting the lustful curves. The legs and arms also provide leading lines to the breasts and buttocks which I thought was good composition.



# Unreal Implementation

When importing the textures into unreal I decided to make the skin a material instance so that I can adjust the brightness, contrast and saturation in the scene. This gave me more control on how my model looked.

The clothing was a simple material setup with opacity, and the outer eye material was a translucent material which I could control the metallic, roughness and opacity.



# Unreal Implementation

The scene setup was just a maroon cube used as a background. The lighting was setup using channels so that the backdrop was on a different channel to the model. The lighting was influenced by the image at the bottom by Rafael Melo.

The lighting setup was a combination of Rembrandt lighting and three point lighting. The Rembrandt was used on the face to get nice composition on the face, with strong shadows.

The post process volume was used to add vignette, sharpness and adjustments to the slope and toe.



- ▶ Cameras
- ▼ Fill lights
  - SpotLight9
  - SpotLight11
  - SpotLight13
- ▼ Key lights
  - SpotLight3
  - SpotLight10
- ▼ Rim lights
  - SpotLight
  - SpotLight4
- Background light
- Cube
- EyelashesBLEND SHAPE2
- HellraiserPosefbx
- PostProcessVolume
- Rembrandt light

# Lighting breakdown



# Unreal Implementation

Here is my final render using a level sequence.



# Unreal Implementation

Here is an additional render using a level sequence.



# Feedback That Was Actioned in this Project

## ***Rob feedback:***

- Skin stretches and rips, rip the edges more, make them jagged-y

- Don't worry about mouthbag for this module (yippee)

Emphasise forms on body and clothing more - make it less zbrush female base

- Maybe reinforce the ribs?

- Asymmetry on the clothing

- Make the boots less tight, folds around the bottom of the calf

- More pinching on the fabric

- Suggestive pose

## Feedback from Rob

- Tri count nowadays is from 40K - 400K. My Tri count should be somewhere around 80K.

- Chains to be baked down onto planes with opacity

- Feet are too small

- Adjust the boots to be slightly tighter, and see the muscle forms underneath.

## Feedback from Human

Maybe think about adding pitted veins around the damaged areas? Makes the damaged areas look more fresh.

## Feedback from Emma Fallows:

Add some blueish tones to the edges of the wounds - like bruising

Emphasise veins around wounds and in other areas such as the neck

Make the face colour zones more prominent

Research how the body would realistically react to wounds such as this

if you can get some more colour into the back/shoulder blades too, that would help keep everything consistent

## Feedback from Rob:

Adjust the pose slightly, turn the hip, move the leg so she looks like she is appropriately holding herself

Either fix the skinning issue with the elbow or change pose slightly so it is hidden

Add more colour variation to skin, push different tones of red and deepen cervices

Bring warmth to the lips

Show hair follicles on head, eyebrows and armpits and/or darken those areas

Add a subtle white or yellow to the chest wound to emphasise ribs

Add yellow around the horns for grossness

Add black bruising to the chain areas

Add shading/bruising around the buttocks and hips to emphasise musculature

Deepen ear canal.

# Industry Comparisons

When comparing my work to that of Giancarlo Sevilla who worked on the Chatterer for Dead by Daylight, there is a clear disparity between the leather work. Sevilla's work is much more detailed, with inspirations to that of Giger's work with tubing. To increase my realism, I should work on adding more larger patches of breakups and heightening my roughness so that it is not so smooth.

Another area of improvement would be to have larger details on the skin, especially on the face so that it can be seen from further away.



# Industry Comparisons

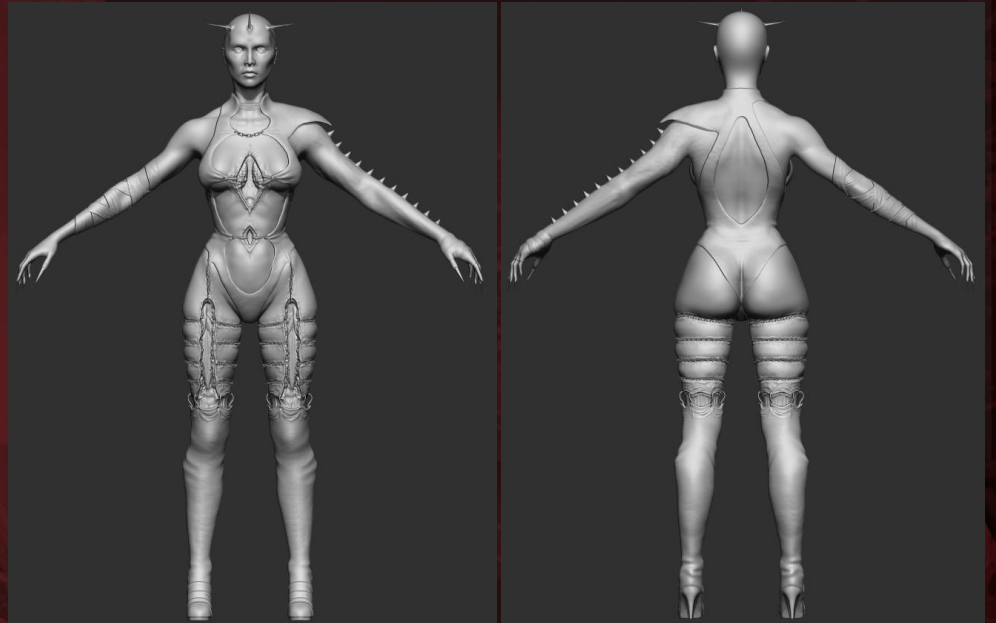
When comparing my work to that of Daniel Moudatsos, there is more emphasis on the curves and breasts with the lighting, By having the lighting at a top-down angle, these areas are highlighted. This could be something for me to explore. Moudatsos uses a soft red along the edges of the body to evoke erotica and lust which is something I could have created on my model, I did try this with the boots but maybe choosing a different colour light would bring it back to the lust theme.



# Reflection - HP

The highpoly does a good job at containing all the details that you would want to be baked down, however these could have been emphasised further. The tertiary skin details got slightly washed out in the baking, and by accentuating them further, less time would have been taken on the texturing.

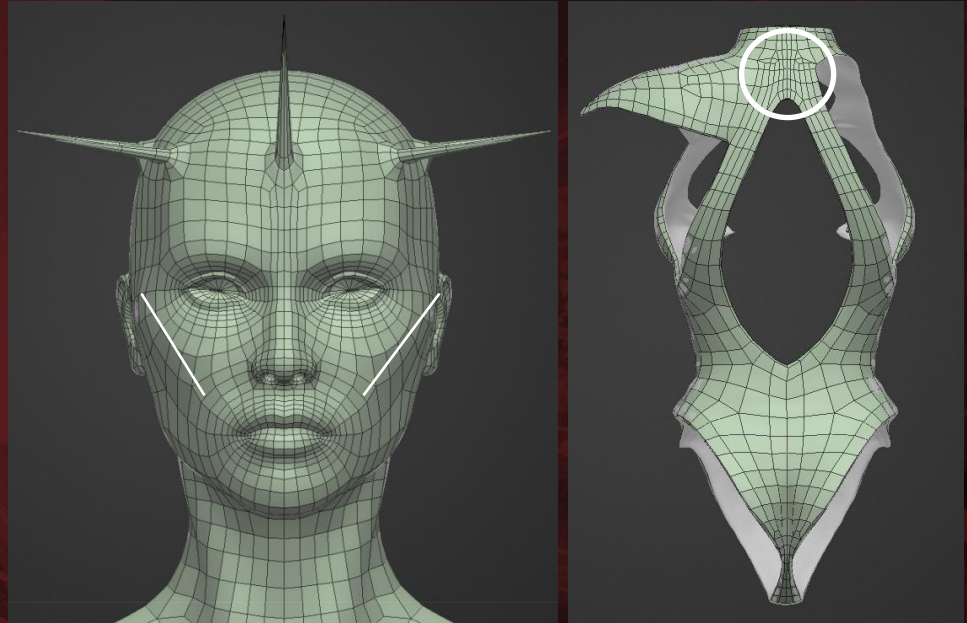
There could have been a lot more detail on the clothing. It is clear that more time was taken on the wounds than the tertiary details on the clothes. By adding seams or selvages the realism would've been reinforced.



# Reflection - Retop

The retop produced nice results and was well under the tri count cap. However this then meant that the model had sharp edges, where a few extra polys could have been used to soften the silhouette.

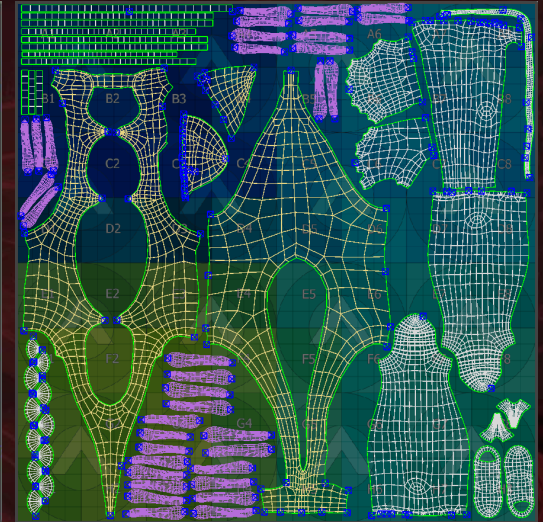
There are some areas that could have had less polys, good planning ahead would have solved this.



# Reflection - Unwrap

A lot more care could have been taken when it came to completing the unwrap. There was no warping and the pinning helped to ensure straighter seams, however certain areas such as the nails and hooks could have all been one island, with all the data coming from one instead of everyone laid out like it is now.

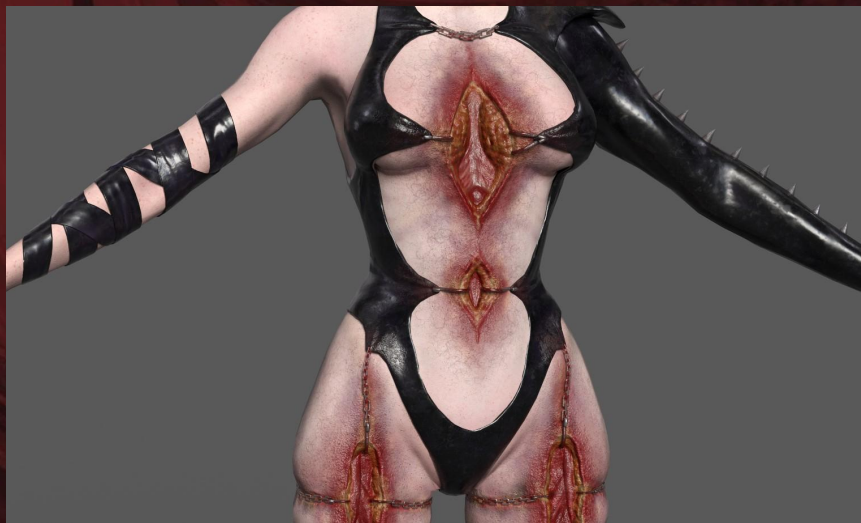
The actual face didn't have much texel density when compared to the back of the head. I wanted to make the face area larger, so the detail was crisp, however I didn't really know how and there wasn't much information online on how to do this, apart from splitting the face from the rest of the head. That would have been okay if the seams could have been hidden by hair.



# Reflection - Texture

The texture work was approached with a lot of research for the skin, and it paid off nicely. The skin detailing is at a higher skill than what I have performed before. The gore aspect is also nicely done, provoking a gross reaction from many who I have asked for feedback, which is good!

The clothing is what lets the model down however, similar to the high poly, if more detail was used like height on areas that have seams might have added a bit more realism. The main part that should be changed is the roughness values, and to add bigger and more noticeable areas of breakups, scratches and dirt.



# Reflection – Posing and Eyelashes

The hair production of the eyelashes went well, understanding a new software and its groom process wasn't too difficult. It produced a nice outcome, however more time practicing this method would produce nicer, more wispy lashes.



The posing was quite difficult as the skin for the mixamo rig was uncomfortable and caused pinching at the bends, it was hard to produce a pose with the arms above the head without seeing the pinch. I attempted to fix the weight painting, but it did not go well. A fix for this would be to try out rigging in a different software, I usually rig in blender using the Riggify addon but in recent times it has been giving me a lot of issues, so I went with mixamo for this.



# Reflection – Unreal Scene

The unreal scene was a very simple setup, if I wasn't following a reference, it could have been more detailed instead of just a backdrop.

The lighting could have emphasised lust more, with tones of red however this might have washed the texture out.

