

Art....is real sorcery

Research/Production Diary

For my project the environment I decided to design, and model is the secret lair of the DC Comics superhero, Batman, often referred to as the Batcave. The extract I decided to have inspired my interpretation of the Batcave is from an interview with Matt Reeves, the director of the latest Batman film.

“The new Batcave is based on a secret underground railway that still exists in New York,” explained Reeves. “The idea being that some of these wealthy industrialist families had private train cars at the turn of the century. So, the Batcave is actually in the foundation of this tower. It was [another] way of saying, ‘How can we root all these things in things that feel real, but also extraordinary?’”[6]

This in combination with another extract I found describing this reinvention of the Batcave is what inspired my take on the environment.

“The space appears to be located inside of a repurposed Beaux Arts–style train station, with a limestone staircase on each side of the main platform, where computers are perched atop inactive train tracks. The action (and the computing) all takes place in the beautiful yet rundown station—definitely a worthy backdrop for the cosmopolitan superhero.”[5]

Concept Stage/Modelling stage

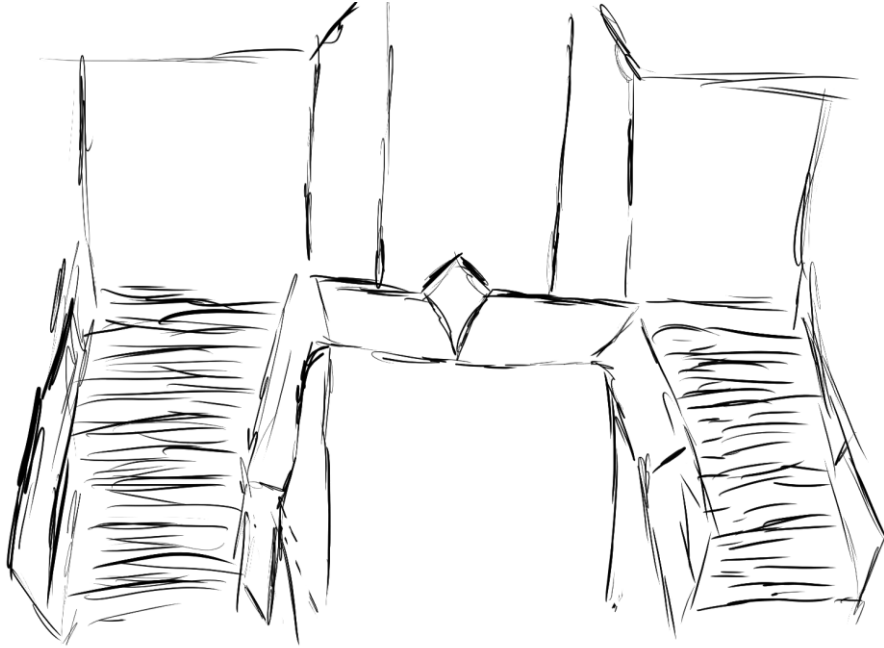
The main two aspects of the cave we can infer from these extracts are that it is based within an abandoned train station and that on either side of the entrance is a staircase remaining from when the station was in use. The extracts specifically mention “Beaux-arts.” This is a form of architecture originating in Paris from the 1830s to the early 1900s. The style utilizes marble/limestone with columns, balconies, and cornices being commonly used throughout their designs.

Staircase

To evoke this style the staircase would need to be textured with a similar material and the architecture would also have to include the same fundamentals. Below are the reference images I used.[9]

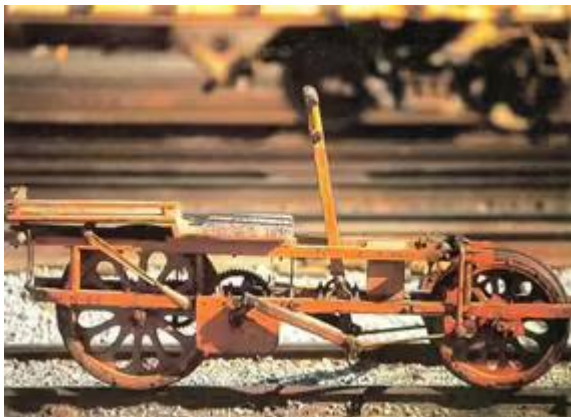


Next, I did some preliminary sketches to see If I could replicate this style for the entrance to see what Ideas I preferred. I eventually settled on this sketch below with a diamond centre piece at the top of the stairs and more beaux arts architecture at the back. I have not drawn out the architecture at the back as I feel it will be easier to improvise and experiment with it within Maya.



Train Tracks

The extract also mentions “where computers are perched atop inactive train tracks,” because of this it seemed obvious to me that I should have train tracks leading up to the entrance of the lair. The idea behinds these tracks are that they were there from the “turn of the century” meaning the early 1900s. I infer from this that the tracks will be very old-fashioned in their design utilising wood and steel. Train tracks become electronically powered in the 1890s so it would be possible to include hints towards them being charged.[1]

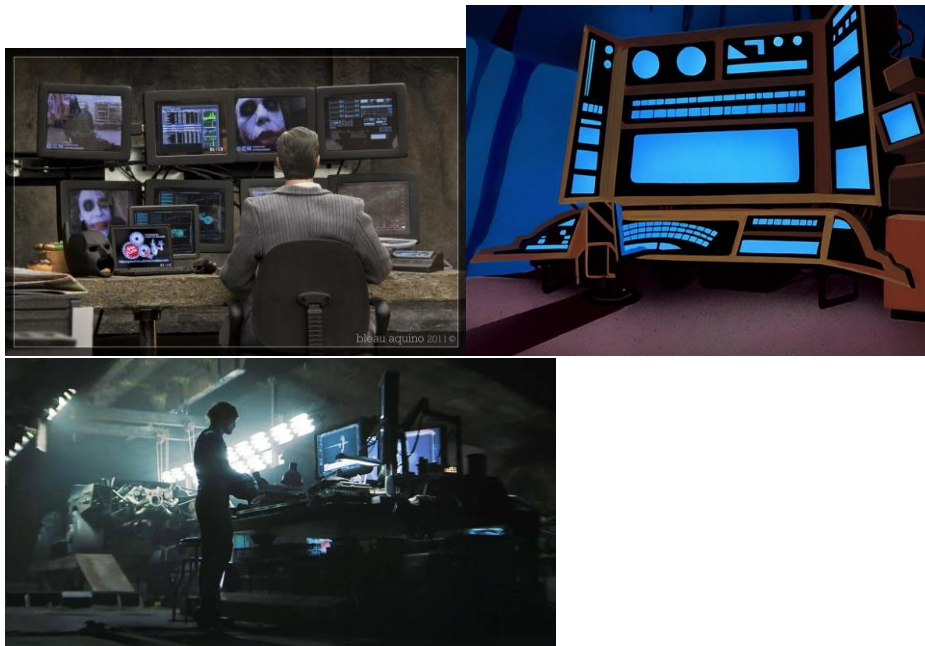


To incorporate these ideas into the design I elected to make the rails quite simple in design using simple wood and steels textures, straying away from any modern-day advancements made to train tracks.

Instead of having computers/ desks laying upon the tracks I want them to lead smoothly into the entrance of the cave where a vehicle could be positioned at the end.

Computer

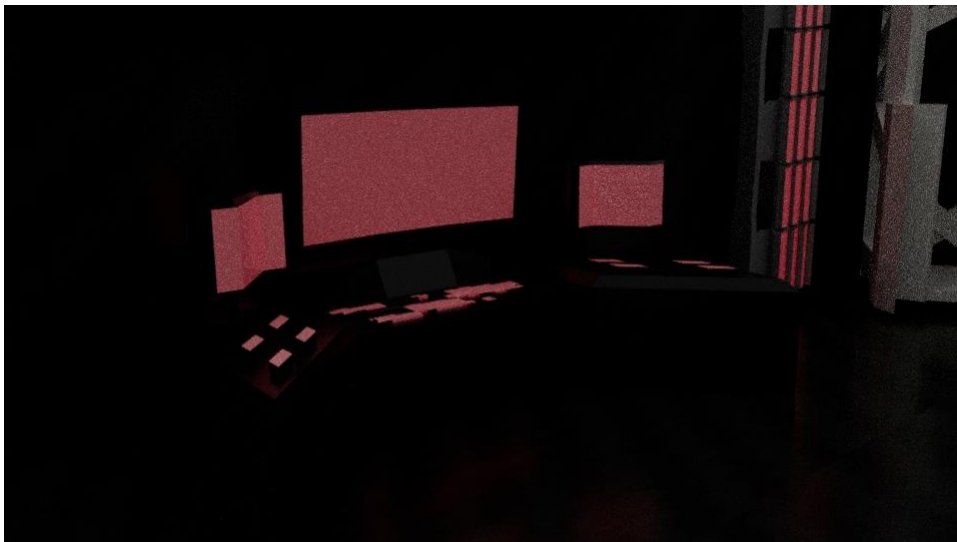
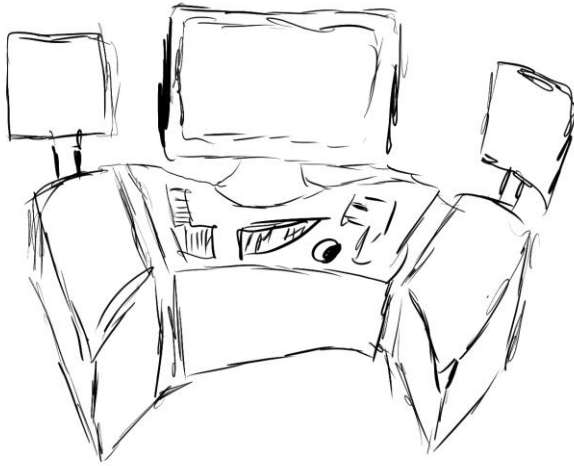
When thinking about how I could construct a unit of computers to use within the cave I stayed away from hints within these extracts and instead looked towards other Batman media and how they approached the design of a “Bat computer.” I have linked more famous example below:



These examples are from: The Dark Knight [2], Batman: The Animated Series [4] and The Batman [3].

As you can see, they each evoke a unique style and interpretation of what Batman would be using. The dark knight goes for realism whilst maintaining cleanliness, the animated one goes for style over substance and the one from “The Batman” again goes for realism but keeps it untidy, scattered and more “DIY”

I decided that I wanted mine to be a combination of the “The Dark Knight” and animated computers making it a clean, semi-realistic design that maintains a certain style to it. To Do this I kept the One-piece aspect of the animated one, meaning the computer is one big unit where the monitors are built into the body, but make it more believable I reduced the amount monitors to 3.



Above is a render of the result, you can see I also modelled in keyboards/buttons on the unit below the monitors and had them illuminated red so that you could see them clearly within the render. Red lights are a constant throughout the environment as they are less comforting than ordinary white lights and present a darker emotion and feels to the scene. The also highlight the more modernised technologies used within the cave itself.

I wanted there to be a disconnect between the outside and inside of the cave where the outside would have maintained its old architecture from when it was first constructed whilst the inside utilises modern and expensive technology.

Batmobile

Another aspect I wanted to include in this scene was a Batmobile sitting atop of a rack as if it is being worked on by Batman and constantly updated and altered. To have this idea come across within the scene, I want the vehicle to be covered in a tarp or leather sheet to show its

being worked on and is not fully complete yet. I will use nClothe simulations to have the fabric bend around and hang off the vehicle.

I intend to keep the lights of the vehicle showing so I can add some more dynamic lighting to the scene. I get some creative/good looking renders with it.

My model of the vehicle will be more like the one in “The Batman” as this version is more sinister in its design. It differs from other iterations as it is much more like that of an ordinary muscle car that has been “beefed” up with armour and bigger engine, whilst the others have completely original designs unlike any other vehicle to exist.

Left to right: The Batman[3], Dark Knight[2], Animated[4]



As I was influenced heavily by the concepts from “The Batman” as that is my favourite interpretation of batman, I investigated the concept artist, James Fields opinions on his bat mobile and the ideas around. “It was the little tidbits that I loved - like the inspiration of Stephen King’s *Christine* on the Batmobile, or the specific comics that informed this incarnation of Batman,” [7] He mentions the Stephen king movie “Christine” which is the story of a vehicle being possessed and going on a killing spree. I can see this being inspiration for the Batmobile as it makes it more of character itself, it being based of a movie “Monster” it gives it its own life and personality, making it seem like an unstoppable force of nature when chasing down criminals. They lean into these moments into the film with shots where it’s lurking in the darkness, its engine roaring and lights beaming, making it look a predator waiting.

To give the sinister feel of the car I will have the headlights bright red and beaming, the intention being to have the lights seem like eyes in the night.

Elevator

Often within Batman media the Batcave will also have an elevator leading from the tower/manor above that leads directly down to the cave. Therefore, I decided to model an elevator shaft into the corner of the scene. There are multiple styles I could go for:

- 1) Modern, high technological look

2) Old shaft, been there a while

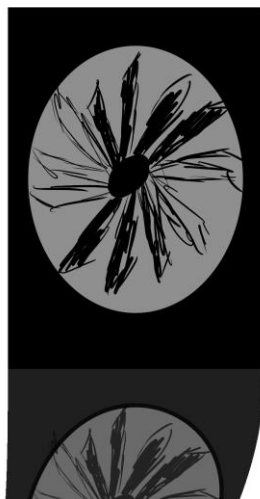
For me having a dated elevator shaft that has been there for years would not make sense within the context of the cave, as there are already stairs that lead down to the tracks, the existence of the elevator would make the stairs irrelevant.

A modern take on the elevator leads towards the narrative, that Batman has it installed as an access point from Wayne Tower, and would use the train tracks when accessing the cave from the streets of Gotham.

My initial concept would incorporate A few cross beams, with the shaft itself being very bear with a lot of gaps between cross beams making it seem like it was designed with function in mind, and not comfort.

Extractor Fan

To incorporate an animation into the scene I have decided to include an extractor fan at the far end of the cave which will be continuously rotating at a constant speed throughout the render. I could potentially include a light behind the blades giving it a silhouette effect with it being backlit entirely.



In the actual render I would have it backlit with Red to add to the atmosphere and harsh contrast to the scene. When texturing the Fan, I will keep it pitch as I tend for it to be silhouetted against the red light.



This was the result once added the backlight and made the inside edges emit red light. I decided to give some more angles and shape to the surroundings of the fan instead keeping blocky and boring. The animation was simple to do, I used two key frames, one at frame 1 and one at frame 30, and then looped them using the graph editor. To loop them I switched the tangent to spline, and the post infinity to linear. This looped the animation for every existing frame

Lighting

As I stated earlier, I intend for red lighting to be a constant throughout the scene with most of them being red. A couple of exceptions being the lighting rig around the car and the inclusion of orange lights along either side of the tracks giving the scene some dynamic lighting.

Red lighting is inspired by “The Batman”[3] as the film utilises red and black lighting throughout its scenes and even the marketing material. Examples below:

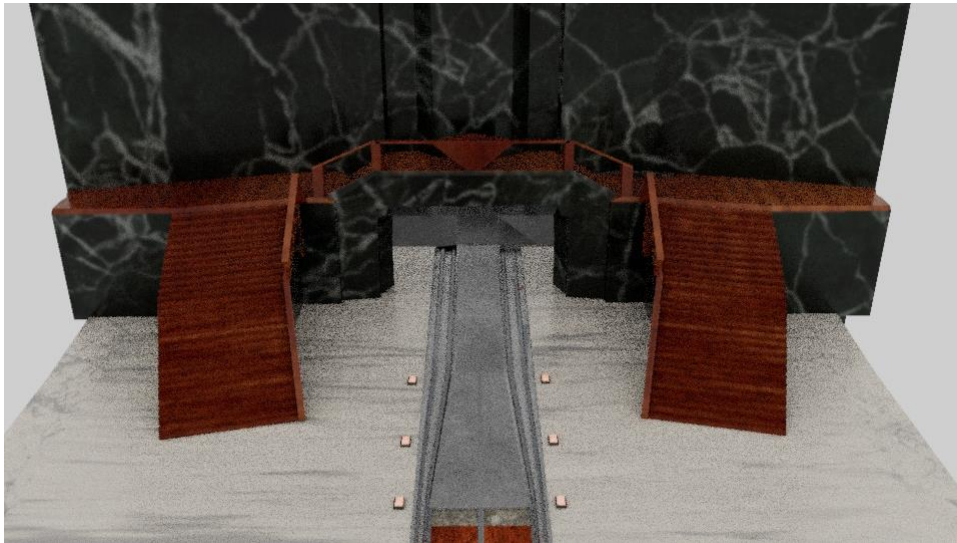


The colour red is often associated with danger, anger and alerts, this can all be associated with Batman, with him even referring to himself as “Vengeance”. The red lighting makes the environment more ominous bringing the tone to darker state.

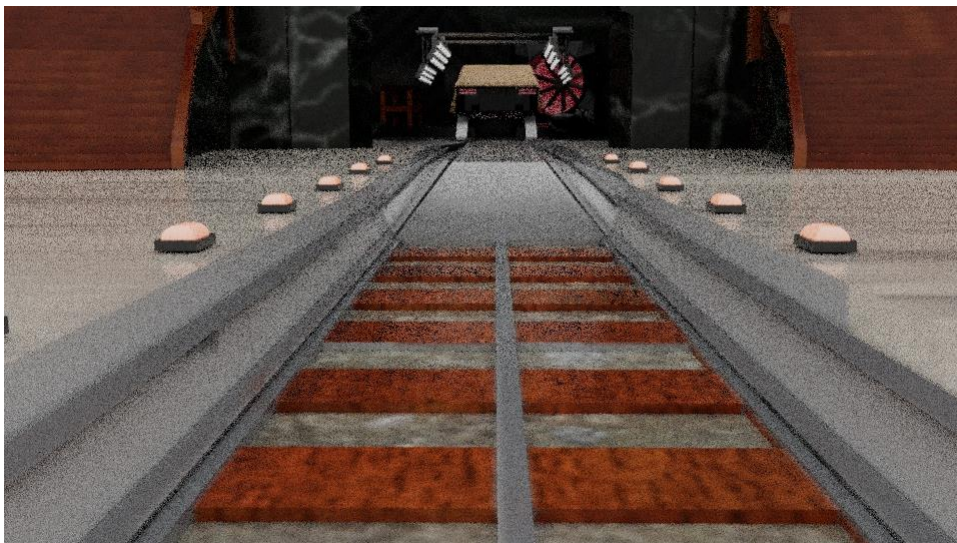
Texturizing Stage

For all my texturizing I exported models into OBJ files and brought them into substance painter to get more detailed textures on them.

When doing the textures for the entrance into the cave I elected to use a dark marble material for architecture and foundations whilst assigning the baluster and staircase an aged wooden look. I did this make it more interesting to look at. If the entire structure had been coated the marble colour, the render would lack detail and depth, the wood also helps to direct attention towards the entrance as it surrounds in wood contrasting the dark marble around it. The wood differs from what we saw the in the movie, but I personally feel like it ages the architecture more and gives it more life.



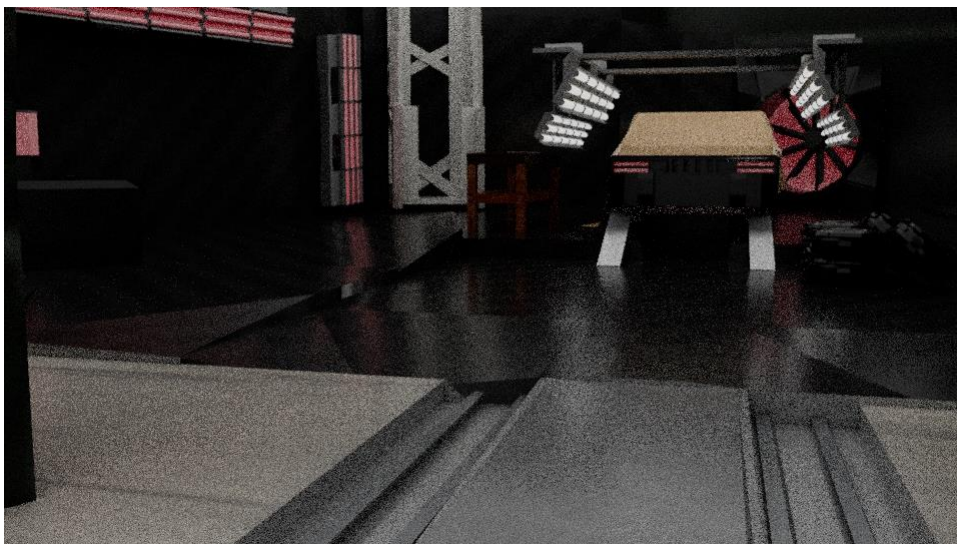
For the tracks I gave the wooden planks an aged wooden look, made the metal bars a slightly rusted steel and then gave the ground around a rough marble texture. The rust/worn affect was to show the aging of the steel, even though it has not been used for a while the steel is still being corroded over the decades.



The Batmobile itself did not need a lot of texturing as most of it would be covered up by the fabric. I simply made headlights illuminated bright red and gave the rest of the body a black, carbon look. The texture of the fabric over it is described as a coarse leather.



For the walls and floor of the cave, I went for a carbon fibre look as it is a very modern, sleek material that gives the cave the more modernised look I wanted it to have compared to the outside. Another detail I decided to add was having part of the walls of the cave be the dark marble that was used on the outside. I like this because it gives across the idea that Batman could not get rid of that wall as it is a vital part of the architecture/foundation and makes the transfer between materials less harsh and more realistic.



After these textures were complete, I decided that the scene seemed a bit empty and needed to add a couple more objects and detail. The first thing I decided to add was a group of tyres. Once I had them modelled, by simply using a torus and manipulating it to my liking, I used substance painter again. I gave them a simple black rubber material and took them back into maya. I also added a worktable with a couple tools on there. I included these to reinforce the idea that the car is being worked on constantly.



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[3]

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[4]

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[5]

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[8]

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[9]

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