STRATUS

BY DOMINIC WANG

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MY MESSAGE PART I

I was lucky to survive that booster launch failure, the Kosmos - 6M was on its last push to take us onto the land of Alpha Centauri. It failed, 4 of us were killed, and I am here, writing the story of what I witnessed.

It started after I woke up in this space. I remember it was this blue that emerged from a deep darkness, and I was utterly immersed in it. I was floating, no gravitational pull, nothing, I felt as light as a feather. It almost felt like I was not in my body, but I was just being there, floating, and it seemed time had stopped and become nonexistent. I couldn't feel my hands, my feet, nothing. Everything was gone, I lost my body. Weirdly I could still breathe, or at least I thought I was because otherwise I would *feel* different.

I didn't know if I had landed somewhere, or I was still drifting in space. (It could be a Jovian planet) But on the thought of I was here alone by myself made me panic, there was no one else but myself. I started to yell, not because I wanted help or that was ever possible at that moment, but because I wanted to prove to myself that *I* still exist, then I soon realized I couldn't make a sound. I guess I either lost my voice in the accident or simply because there was no media inside the space to pass it on. That made me feel worse then I started to try to move my limbs so that at least I could do something, and eventually I did, but not through walking or climbing, but to simply use my mind. I had to think of the direction that I wanted to go very specifically, and then I started to move towards that direction, and what was even more unexplainable was that I could move in all 3 axis like a bird, I could fly up, and like a fish, I could dive deep down. All of what had happened made me devastated and had lost my last hope of returning to earth. I was practically a ghost, a piece of mind drifting in outer space. What a thought.

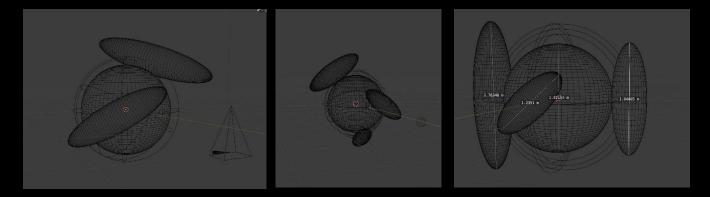
Then, I saw this thing, a probe looking object emerged from the dark blue. It was moving on its own. Three ovals that constantly rotating and revolving around a ball like they were one.

BLUE AXIS DEVELOPMENT

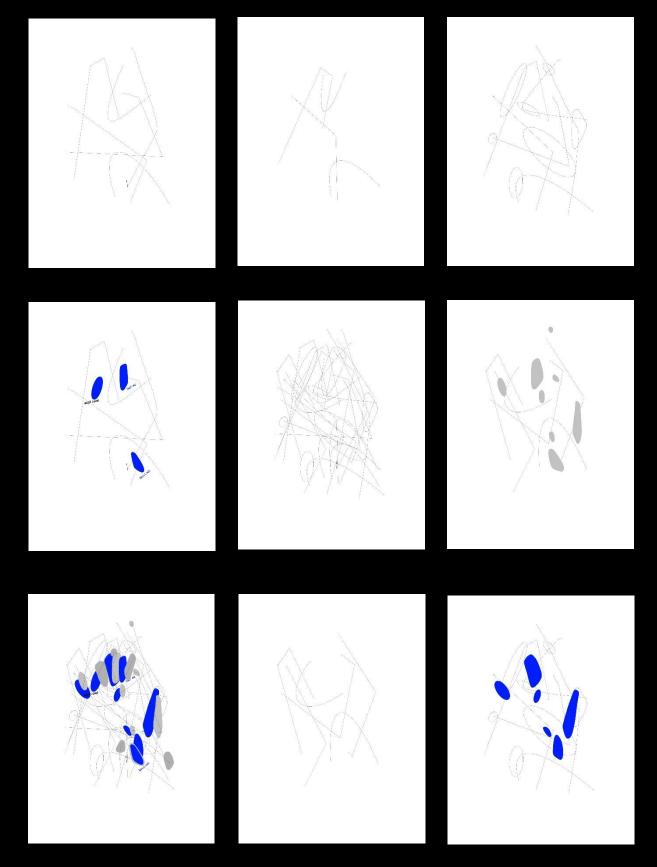
The development of the Spectator probe started by getting inspired by the idea of symbolism from Ravel's music from the early 20th century. His impressionist style of work sets me with the idea of the movement of this probe. Particularly from his piece Jeux D'eau, the smooth and flowing tune really sticks with me when I was creating this artefact. I Also took inspiration from the Yves Klein Blue, and the film Blue by Derek Jarman which are all about freedom and seeing hope, going into a new era of world, a transcendental place of oneself, which I see it as us moving into the age of the metaverse. There are endless of potentials and possibilities.

These sketches are drawn from the very simple idea of a circle. Circle in geometry is a very unique shape, it is a smooth shape without sharp edges and its movement is almost pre-defined by its look, wheeling and organic. Thus, I want to give the object that kind of feeling, so when an audience is watching it, the same feeling of the circle should be projected to the viewer.

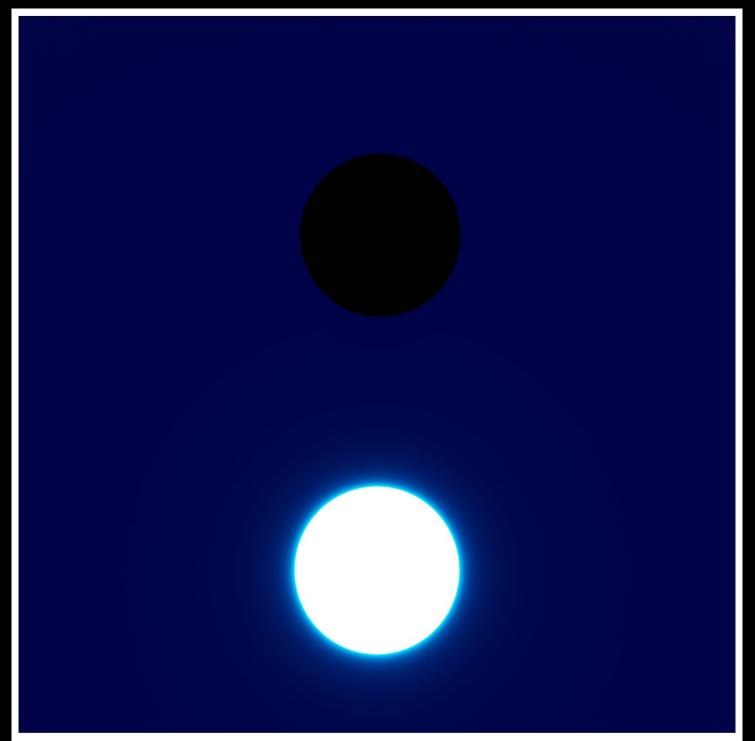




I drew these 2D sculptural shapes to explore the possibilities of this Spectator probe in terms of structure, movement, anatomy, and form. It is a poetic process from music inspired ideas to these geometric sketches.



SCENE INSPIRED POSTERS, STUDY OF LIGHTS AND COMPOSITION.





FIRST PRESENTED IN DECEMBER 2021 BY ZHEKUN WANG



ONE VR EXPERIENCE THAT RETELLS THE STORY OF HUMAN BODY

A WORK OF IMPRESSIONISM, SCIENCE FICTION AND POETRY. TAKING EMOTIONS AND FEELINGS INTO THE WORLD OF MATHMATICS AND PHYSICS

Scene one – The Spectator model, A perpetually rotating probe launched by humans in to the world of Stratus on the $4^{\rm th}$ of July 2479



STRATUS



STRATUS

MY MESSAGE PART II

After I entered the black hole, everything went dark for a moment. The lights started fading out of my sight. What emerged in front of my eyes was this piercing scarlet, felt deep and foggy. I couldn't see that far, but vaguely I saw a dark cloud-like thingy and there were things moving around it. Looked like an orbit, and it was shimmering on its surface and a diamond right under the sun. I could still swim, so I swam towards the black cloud I saw. When I got closer and closer, I was amazed by what it actually was, and the things that are swimming around like me were giant aliens that I had never seen in my life before...

I heard this music or sound getting stronger and louder as I moved towards the black mass. I heard more things as I moved towards it actually. It was not like a common piece of music, it was trying to say something, until today I still don't understand what it was trying to say. I had nothing to record the sound after the accident, all I could do was just to listen closely. I saw the giant aliens swam in front of me, and there was one below me and I was once sandwiched by two. I heard a sharp sound while I was in between them, they were talking?! But not to me. To each other? I doubt so, because they don't seem to react to any sounds in this space. They were just swimming and sweeping the zone like soldiers on guard, no one can interrupt them.

Today, I am still trying to understand how all of this started , when it started, how long has it been existing. If it wasn't because of the accident, can we ever discover them?

THE BLACK POOL



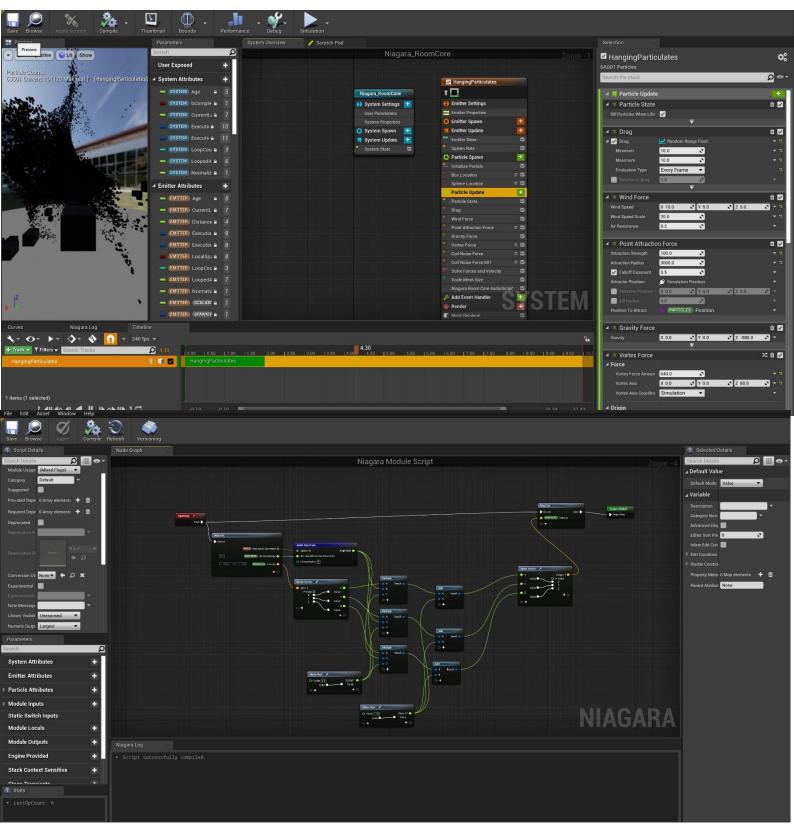
Scene2 - The Black Pool, A mysterious could morphing its shapes in correspondence the environmental sound around it, scientists discovered that the particles are the consciousness of the sweepers stored within each one of them.

STRATUS



STRATUS

Snapshots of the blue print used in Unreal Engine 4.27. The Niagara Particle System with different forces, and create a sound reactive actor Blue Print to connect to the Niagara Particle System I created before, so that these particles react to sound and changes its shape with the audio output.



A DARK MESS THAT IS CONSTANTLY MOVING AND ROTATING, PERPETUALLY EMMITING DARK PARTICLES TO ITS SURROUNDINGS.

WE CALL IT **THE BLACK POOL**, IT IS LOCATED IN THE CENTER OF THE RED ZONE, EVERYTHING REVOLVES AROUND IT.... EVERYTHING.

WE DIDN'T FIND ANY SIGN OF LIFE IN THE POOL, BUT IT IS MOVING ON ITS OWN. NO ONE KNOWS WHAT IS TRIGGERING IT TO MOVE. SOME SAY IT MIGHT BE THE SOUND, AS IT BRINGS NEW FORMS TO THE POOL, BUT WHAT IS MAKING THAT SAD TUNE? AND IF YOU MAKE A SOUND, IT SEEMS TO TRACK IT DOWN.

THE

BLA

POOT

THE SPACE DIAGRAM PORTRAITS THE INTERIOR DESIGN OF THE SOUND TEXTURE WITHIN EACH BOX, IT CONTAINS A SPECIFIC SOUJD THAT FOLLOWS THE RULE OF THE HARMONIC SERIES. AS YOU PROCEED INTO EACH BOX'S RANGE, AND TOWARDS THE CENTRE, THE SOUND TEXTURE LAYERS ON TOP OF EACH OTHER. EVENTUALLY IT CREATES A SYMPHONY OF THE SOUND THAT IS INTENDED TO BE ORCHESTRATED/DEVELOPED.

IMMERSION IS ACHIEVED BY PGYSICALLY BRINGING THE BODY INTO THE ENVIRONMENT, CONNTCTS THE BODY TO THE ENVIRONMENT BY USING SOUND TRIGGERING INTERACTION. IMMERSION OCCURS INVOLUNTARILY.

" THE EXPERIENCE OF BEING TRANSPORTED TO AN ELABORATELY SIMULATED PLACE IS PLEASURABLE IN ITSLEF, REGARDLESS OF THE FANTASY CONTENT. WE REFER TO THIS EXPERIENCE AS IMMERSION. IMMERSION IS A METAPHORICAL TERM DERIVED FROM THE **PHYBICAL EXPEREINCE** OF BEING SUBMERGED IN WATER. WE SEEK THE SAME FEELING FROM A PSYCHOLOGICALLY IMMERSIVE EXPERIENCE THAT WE DO FROM A PLUNGE IN THE OCEAN OR SWIMMING POOL. THE SENSATION OF BEING SURROUNDED BY A COMPLETELY OTHER REALITY, AS DIFFERENT AS WATER IS FROM AIR, THAT TAKES OVER ALL OF OUR ATTENTION, OUR WHOLE FERCEPTUAL APPARATUS ... IN A PARTICIPATORY MEDIUM, IMMERSION IMPLIES LEARNING TO SWIM, TO DO THE THINGS THAT THE NEW ENVIROMENT MAKES FOSSIBLE... THE ENVIRONMENT OF IMMERSIOIN AS A PARTICIPATORY ACTIVITY." (MURRAY, J. 1997)

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SOUND PROGRESSION

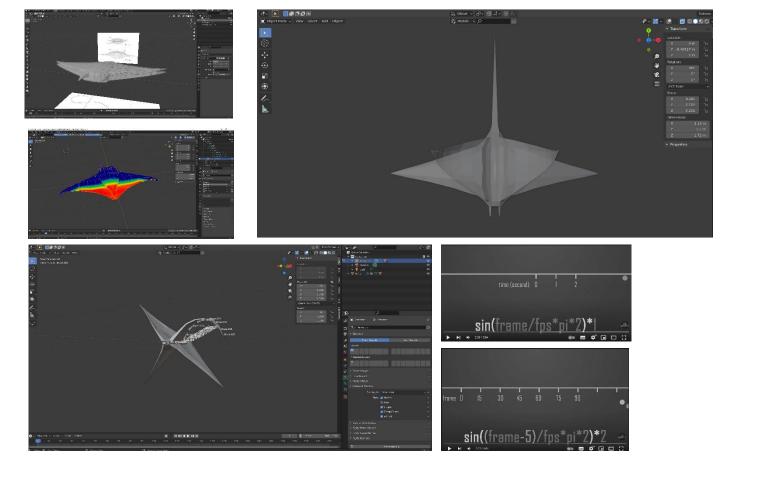
THE MOVING DIAGRAM DIAGRAMO.03 FOR DRAFT PURPOSE DOMINIC WANG MOVEMENT INFLUENCES TH TEXTURE OF THE SOUND

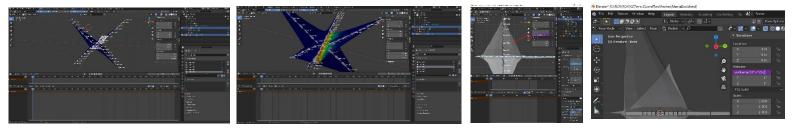
SWEEPERS

SEERERS

HIGHT: 1.40m - 2.57m LENGTH: 6.19m - 10.577m WIDTH: 3.879m - 5.618m WEIGHT (ON EARTH REF GRAVITY): 65.45kg - 112.58kg WEIGHT (ON RED ZONE): 2.70kg - 4.65kg GRAVITY ON RED ZONE (G/24.24) SOUNDWAVES PRODUCED: 5.5 - 10.675 HerTZ

MOVING LIKE A MANTA, THEY SWEEP ON ALL DIMENSIONS WITH THEIR HUGE EINGD AND ELOGATED AND TAILED BODY. UNKNOWN TO HUMAN OF THEIR EXISTSNCE, HOW THEY COMMUNICATE, AND WHAT THEY FEED ON. THEY FEED ON. THEY MAKE SOUNDS TAHT HAVE NO IMPACT OR RELATION TO THEIR BEHAVIORS, IT REMAINS STILL A MYSTERY IF THEY COMMUNICATE BETWEEN EACH OTHER. THE SPACE THEY OCCUPY HAS ITS CORE, AND THEY EXIST AND THEIVE A ROUND IT The challenge for designing the sweepers was the movement of this creature. The inspiration of this design was taken from the deep sea fish manta rays. The wings and the long tails and its unique movement mechanism were fascinating to me. I wanted to make this experience to convey the same mood, and movement is the key. Movement of everything entity in this experience matters, because if one thing moves too quick or jumps out from the others too much, it will disturb the audience's feeling, which I hope, throughout, would be smooth, peaceful, and fluid.









MOOD & SOUND RESEARCH





IT SHOULD BE A CONVERSATION WITHOUT WORDS, AND IT IS UNDERSTOOD BETWEEN ALL OF US.

THE SOUND PLAYGROUND

GRADUAL SOUND LAYERING

BLOCK

TEXTURE

ANOTHER. CHORD

CHIRDS

ORGANISED IN CHORDS, INSTEAD OF BLOCK CHORDS, YOU

BLOCK CHORDS, YOU HAVE NOTES BROKEN UP FROM THR CHORDS. COMMON IN MOZART LEFT HAND BROKEN CHORDS HARMONY

ARPEGGIATED HOMOPHONIC TEXTURE

USING ARPEGGIOS RUN THROUGH THE ACCOMPANIMENT

PROPORTION DRAFTED AT 1:5 HOW SOUND IS ORGANIZED

THICK / THIN / HIGH/ LOW/ SPACED / COMPOUND HOMOPHONIC: MUSIC IS ORGANISED VERTICALLY; CHORDS ARE ARRANGED WITH A MELODY AT THE TOP NOTE POLYPHONIC TEXTURE: MUSIC IS GOING HORIZONTALLY AND ANOTHER LINE JOINING IT ALSO HORIZONTALLY (OR MORE LINES JOINING HORIZONTALLY). ONE LINE IMITATING ANOTHER LINE AND FADING IN AND OUT FROM RIGHT HAND TO LEFT HAND, MAYBE COPIED EXCATLY OR LOOSELY. (EG.BACH)

THE MOVING DIAGRAM

DIAGRAM 0.01 FOR DRAFT PURPOSE DOMINIC WANG 2022 MOVEMENT INFLUENCES THE SPECTATOR TEXTURE OF THE SOUND

THE MOVING DIAGRAM DIAGRAM 0.02 FOR DRAFT PURPOSE DOMINIC WANG 2022 MOVEMENT INFLUENCES THE TEXTURE OF THE SOUND

THE HARMONIC SERIES

CONSIDER THE SERIES 1 + 1/2 + 1/3 + 1/4 + 1/5 + 1/6 + 1/7 + 1/8 ...



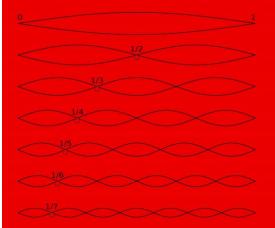
THE HARMON

(OVERTONE SERIES) THE HARMONIC SERIES IS AN ARITHMETIC PROGRESSION THE SEQUENCE OF FREQUENCIES. MUSICAL TONES, OR PURE TONES IN WHICH EACH FRENQUENCY IS AN INTEGER MULTIPLE OF A FUNDAMENTAL. IN TERMS OF FRENQUENCY (MEASURED IN CYCKES PER SECOND, OR HERTZ, WHERE I IS THE FUNDAMENTAL FRENQUENCY), THE DIFFRENCE BETWEEN CONSECUTIVE HARMONICS IS THEREFORE CONSTANT AND EQUAL TO THE FUNDAMENTAL. BUT BECASUE HUMAN EARS RESPOND TO SOUND NONLINEARLY, HIGHER HARMONICS ARE PERCEIVED AS "CLOSER TOGEHTER" THA. LOWER ONES. ON THE OTHER HAND, THE OCTAVE SERIES IS A

(2f, 4f, 6f, 8f, 16f ...), AND PEOPLE PERCIEVE THESE DISTANCES AS "THE SMAE" IN THE SENSE OF MUSICAL INTERVAL. IN TERMS OF WHAT ONE HEARS, EACH OCTAVE IN THE HARMONIC SERIES IS DIVIDED INTO INCREASINGLY "SMALLER" AND MORE NUMEROUS INTERVALS.

THE SECOND HARMONIC, WHOSE FRENQUENCY IS TWICE THE FUNDAMENTAL, SOUNDS AN OCTAVE HIGHER, THE THIRD HARMONIC, THREE TIMES THE FRENQUENCY OF THE FUNDAMENTAL, SOUNDS A PERFECT FIFTH ABOVE THE SECOND HARMONIC. THE FOURTH HARMONIC THE FOURTH HARMONIC VIBBATES AT FOUR TIMES THE FRENQUENCY OF THE FUNDAMENTAL AND SOUNDS A PERFECT FOURTH ABOVE THE THIRD HARMONIC (TWO OCTAVES ABOVE THE FUNDAMENTAL). DOUBLE THE HARMONIC NUMBER MEANS DOUBLE THE FRENQUENCY (WHICH SOUNDS AN OCTAVE HIGHER)

THE GRADIENT OF THE CIRCLE VISUALISES THE QUALITY OF THE HARMONICS FRENQUENCIES, THE DARKER SHADE INDICATES THE LOWER HARMONICS AND THE LIGHTER INDICATES THE HIGHER HARMONICS



PARALUS

DEEP INTO THE CLOUDS OF ALPHA CENTAURI, YOU ARE SEEN. SCIFI VR SENSORY EXPERIENCE BY DOMINIC WANG ZACHARIAS WOLFE

UNMANNED SHIP

I WASTLICKY ENOUGH THE ADDORATINE ADDORATINE LAUNCH FAILURE, THE ROMAN SOM WAS ON TEST AST PUSH TO DE UNITED AND THE DANIE OF ALPHA CENTAURI.

THE BRAIN OF STRATUS YOU ARE THE SUM PRAND PHE WISTOR IN HERE WITTENESSING THE LAND OF STRATUS

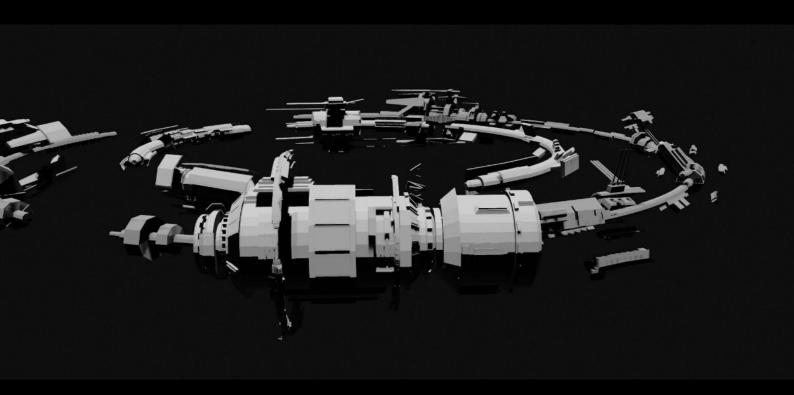
"MUSIC, I FEEL, MUST BE EMOTIONAL FIRST AND INTELLECTUAL SECOND." MAURICE RAVEL

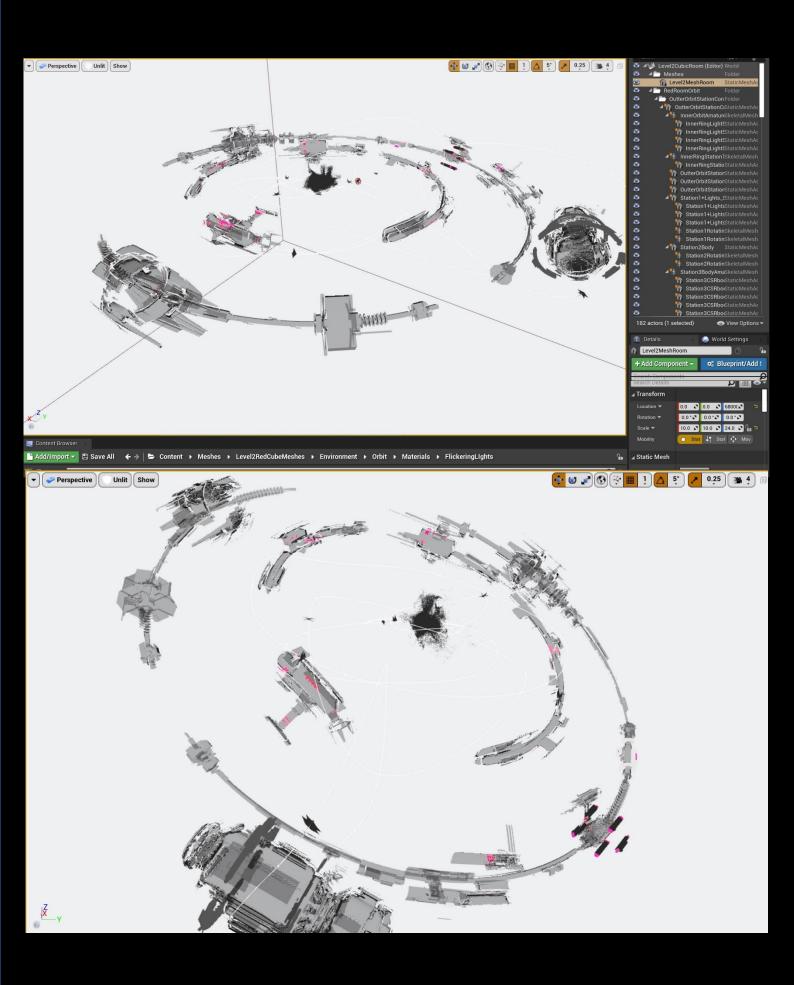
Paralus – Messenger Ship UNMANNED

The inspiration of Paralus came from my internal crave of a very hard core sci-fi looking thing. The ship's job is to communicate what is happening in Stratus live to earth 24/7. The ship is divided into 7 different parts, and each part has its own functionalities. Along with the power stations, they are the only man made artefacts in this world, and this is where you can see a sense of humanness even though this is a very artificial looking object.



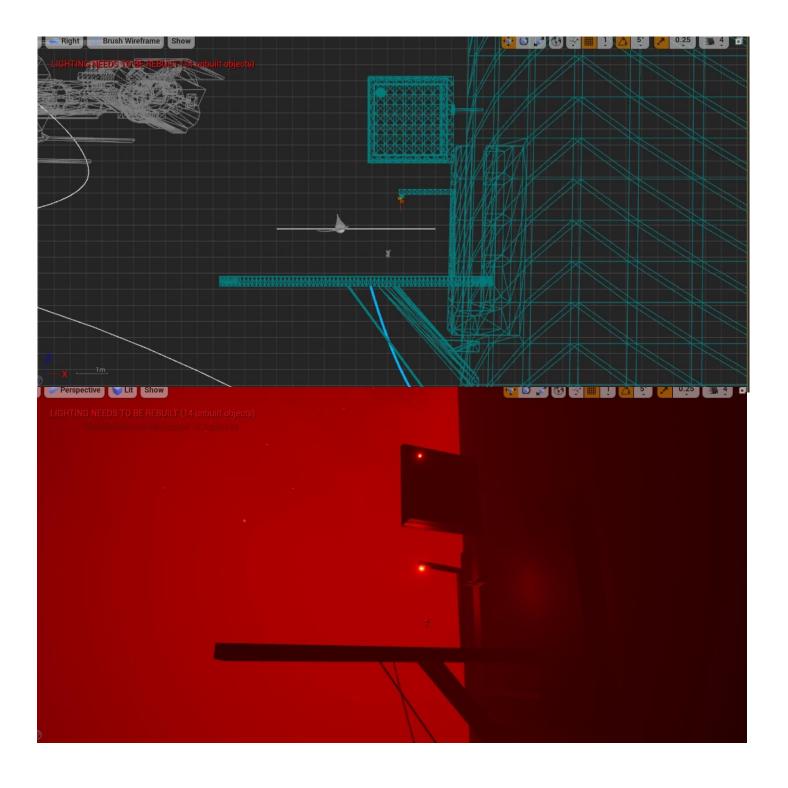
Snapshots of modelling Paralus

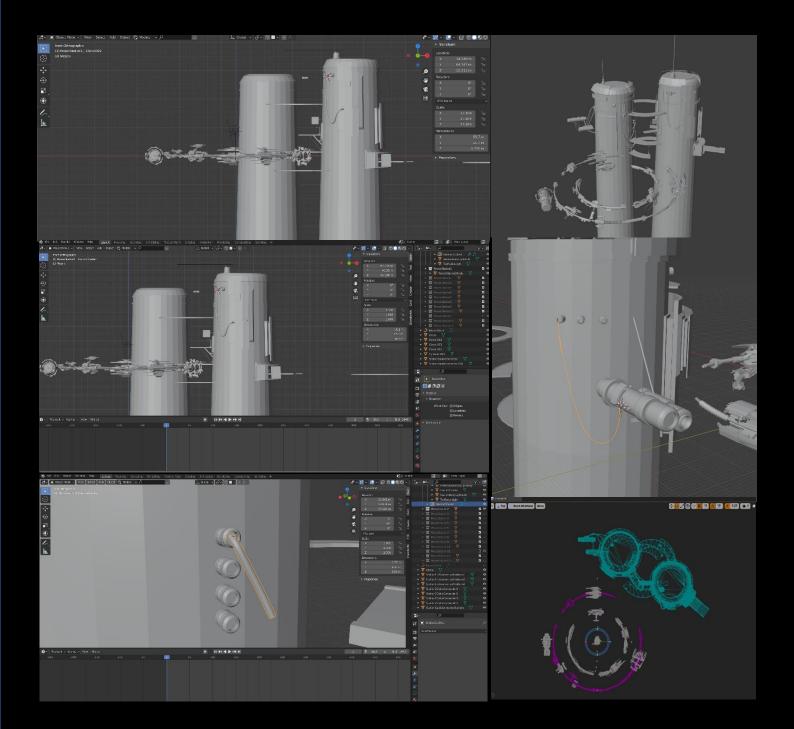




Power Station Modelling

In the narrative, the power stations gather resources from stratus and provide for Paralus to operate.







STRATUS



STRATUS



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C



RESEARCH FILES

"The experience of being transported to an elaborately simulated place is pleasurable in itself, regardless of the fantasy content. We refer to this experience as immersion. Immersion is a metaphorical term derived from the physical experience of being submerged in water. We seek the same feeling from a psychologically immersive experience that we do from a plunge in the ocean or swimming pool: the sensation of being surrounded by a completely other reality, as different as water is from air, that takes over all of our attention, our whole perceptual apparatus . . . in a participatory medium, immersion implies learning to swim, to do the things that the new environment makes possible . . . the enjoyment of immersion as a participatory activity.¹" (Murray, J. 1997)

"Liquid architecture is an architecture that breathes, pulses, leaps as one form and lands as another. Liquid architecture is an architecture whose form is contingent on the interests of the beholders; it is an architecture that opens to welcome me and closes to defend me; it is an architecture without doors and hallways, where the next room is always where I need it to be and what I need it tobe."

(Novak, M. 1991)

"In summery, the evidence from multiple research studies confirms the speed and complexity of the kind of information processing that nonconscious cognition performs. They reveal nonconscious cognition as a powerful means of finding patterns in complex information, drawing inferences based on these patterns, and extrapolating the learned correlations to new information, thus becoming a source for intuition, creativity, aesthetic preferences, and social interactions. Recalling that subjects were entirely unable to consciously identify patterns that they had already learned nonconsciously, we can appreciate the authors' conclusion that nonconscious cognition is "incomparably more able to process formally complex knowledge structures, faster, and 'smarter' overall than our ability to think and identify meanings of stimuli in a consciously controlled manner" (10). The conclusion underscores on of the major points of my overarching argument: the growing awareness that consciousness is not the whole of cognition, and that nonconscious cognition is especially important in environment rich in complex information stimuli."

(Hayles, K. 2017)

¹ 'Hamlet on the Holodeck: The Future of Narrative in Cyberspace' by Janet Murray. Published in 1997.

² 'Liquid Architectures in Cyberspace' by Marcos Novak. Published in 1991.

³ 'Unthought: The Power of Cognitive Nonconscious' by Katherine Hayles in 2017.

INSPIRATION LINKS:

LIQUID ARCHITECTURE BY MARCOS NOVAK 1991 https://www.evl.uic.edu/datsoupi/coding/readings/1991_Novak_Liquid.pdf

TATE MODERN – YVES KLEIN IKB79 1959 https://www.tate.org.uk/art/artworks/klein-ikb-79-t01513

KATHERINE HAYLES: RETHINKING THE MIND OF ARCHITECTURE

https://www.youtube.com/watch?v=4p0bXPdZoAA&t=786s

DAVID JARMAN FILM- BLUE https://www.youtube.com/watch?v=Yo5BBifhS6M&t=505s

TARKOVSKY – STALKER MONOLOGUE: https://www.youtube.com/watch?v=gORBHwzykJM

MANTA RAY MOVEMENT:

https://www.youtube.com/watch?v=dCfBQfBiovA

PEDRO ALMODOVAR TALKS ABOUT THE COLOURS HE USED, PARTICULARLY RED

https://www.youtube.com/watch?v=Me5fIuquqfQ