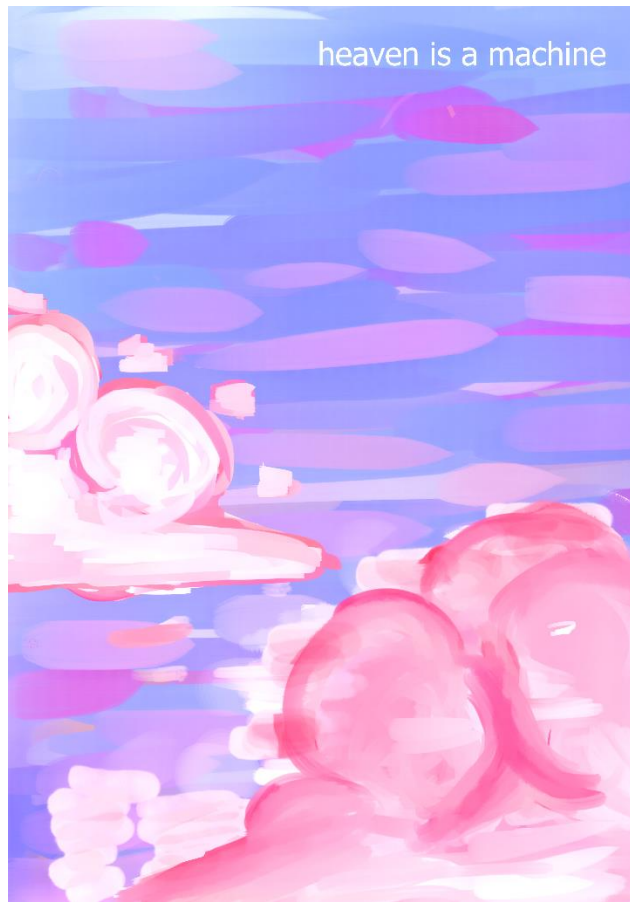




Heaven is a Machine

To Dream

The electrical ringing in my head is nauseating. It's time to wake up again: the one thing they keep in your memory – the buzzing sound is your signal, and you follow the order. It's mechanical – what I think was once called 'instinct' – and it's possibly the most human thing we have left.

Memories float in the aether aimlessly, like clouds animating a sunset, or the small shadows of birds you can see over the valley. And you stay, suspended, never knowing which have belonged to you, until it is your turn to wake. I accepted that I would eventually end up back here. Piece by piece, this amalgamation of my being, dissolved from the aether, out of the machine and into the blue. I felt the wires piercing into me like small, insignificant shards of glass that would leave

your blood oxidising on the surface. Like picking a rose from a rose-bush – or scraping your knee on hard gravel, shards of sharp stone grasping at your skin. When I have felt enough, I open my eyes.

A glass room – a greenhouse, growing electricity – is where you wake up. It's so high up you can only make out the clouds.

As the flames of consciousness engulf you, and your eyes forced themselves open, like clockwork shutters, where I saw the form of Petunia before me. Linked to wires like circuits on a board, blue and beautiful (so blue, you could see the clouds moving through her), and dangerously feminine. A goddess in a tiny glass jar, disconnected from the world beyond the glass room. Some code inside of me told me that she could fix whatever was wrong with me, as if I had been peacefully aware that I needed to be fixed. I was shattered glass in a pristine glasshouse.

Wires are like strings I can see through my skin. They illuminate the dull in my translucent skin with their soft blue light, as if mimicking the pumping of blood around my body. Though I can only see glimpses of the others like me past the glass apartment I'm in, I saw the wires in their skins, too.

Petunia's voice is light diluted power. Sickly sweet and overwhelming, like a freshly bloomed patch of flowers or a strongly steeped tea. I know I'm programmed to like her, but something about her presence nagged me. She was on a pedestal above everything. Wires and wires and *wires...* in a pungent and unmoving feeling in my stomach, I'm sickened. I, of course, don't have a stomach. She was so large, yet it felt like we were pristine China being kept in a cabinet, out of reach.

"Olive." She called, an overwhelming feeling of cowardice washing over me as her tall form towered over my own (I'm as big as her hand). She smiled upon me, and a programmed feeling of ease washed over me.

Heaven was a large construct above what we called 'earth'. Here, we had similar activities like agriculture and astronomy, but the focus of heaven was to be at peace; to live a fulfilled life. Most beings here were happy, and tranquil in their ultimatum of self-discovery, content to live among the clouds, stars and flowers like a romanticised fantasy fully realised in all its unattainability. 'Heaven' was a large circuit of wires connecting us to Petunia, and a symphonic eye-bleed of blue light, forcing your senses awake and alive.



I watched beings like myself from the glass windowpane with glass eyes, like a fucked-up ant farm experiment. I watched with child-like curiosity, until I noticed her eyes on me.

Petunia looked at me with loving, motherly eyes. Pupiless. She spoke down to me:

"The world is all you can believe it to be", she cooed, "I can merge your vision into the world you wanted most. I can give you whatever you desire, all you need to do is think it."

Smiling, I responded:

"Then what's the point?"

To Drown

I knew that Petunia wouldn't like my response. Yet, with failing perseverance I couldn't shake the thought that I was not meant for this world. My limbs were made from scrap metal, and I had a voice box made from old tin. My voice was scratchy, artificial, like a prototype. I had assumed that they remade me several times. I'd rather not exist at all.

Looking upon me with a slight hint of remorse, Petunia moved her large arms towards me and embraced me with her hands, both of which being larger than my entire body. She closed her

eyes as her breath hissed between her teeth. I could feel a sort of ‘pulse’ emanating from her hands – one that seemed to be matching my own, like one of those toys for abandoned baby kittens. It was almost impossible for me not to settle into the hands like a nestling bird – if only for the feeling that I could be crushed instantaneously by the slightest application of force. I couldn’t move. I didn’t *want* to move.

“Olive, do you hate heaven?” she asked, “You were never willing to fit in. You did all you could in your past lives to exist against everything that came before you.” I felt her grip tighten, as if she wanted to crush me. “And that’s why...”

I could suddenly remember something – deep in the memory I had been kept from – where I was running far from the edge of heaven. I ran through wires, circuits – I outran some of Petunia’s gatekeepers and to the brink of where the floating planet stops. I remember seeing what I ought not to – we were suspended in a sky of endless pinks and purples, radiance

overtaking my vision, yet not subsiding how desperately fast I wanted to run into it. I was running like I wanted to collide with the colours and cease to exist, and so I ran faster – exhilaratingly fast. I could feel false tears in my eyes and a scream welling up in my throat, burning through copper wiring and the blue fluid that kept my veins protruding in my transparent,

paper-thin flesh. I jumped through the colours. I jumped, I suffocated, and then my memory failed me.

I remember what dying felt like. Petunia knew this too, her eyes opening and settling themselves on me. I remember tearing the veins from my arms in one life. I remember suffocating myself in



another. I remember drowning myself in a third. Curious, I looked up to Petunia whose eyes were now open and pointed towards me. I wondered if she too, had tasted dying. Without prompting it, she opened her mouth to speak.

"I am linked to all of my children in heaven," she said. "I was created for the sole purpose of preventing pain ever affecting our people again. Only I remember the pain we suffered before heaven existed, and only I can prevent this pain from affecting my people again."

"I don't understand!" I replied. "A life without pain is impossible – even in heaven"

She stopped dead in her tracks. After a tense silence built between us, she finally spoke.

"I got rid of it."

"Of what?"

"Of pain. Anything negative.". Her speech was calculated – like this was some long-integrated programming she couldn't shake, or something that was embedded so far into her being she couldn't shift it. "My first and only orders from my former self on the old planet were to ensure our people never felt pain again. To prevent it all."

Euphoric, exhilarating, and neurotic were all words I would use to describe death. Every moment building up towards my death was a rose-studded pathway to an escape. My unrequited love with death had been faux because my entire being was prevented of experiencing true pain, so my censures gave me the next best thing. Intense, catastrophic amounts of mania that gave me meaning through the glass walls and into the aether. I drowned in the feeling.

"I cut it all off. Severed it from the brain. And then I made new people out of it. It was as simple as trimming off the fat." Petunia said.

What could I want outside of a life with only guaranteed happiness? I wasn't content with any of it. A life without pain somehow conflicted with something I couldn't shake. I loved the feeling of

dying so much that my wires had been severed and torn, my body shattered and reconstructed over and over.

“They followed you. My children started killing themselves for a taste of the euphoria.”. This time, there was resentment in her voice. Of course, putting bodies back together was something completely achievable by heaven. But I imagined Petunia hated seeing her people die over and over, only to be revived again.

“There is something wrong with you” she said. “No matter what I try, you can feel some amount of pain.” She stopped, took a breath, and continued.

“You’re like me, Olive.” She choked.

On a planet of suicidal robots, ruled by their melancholy queen, I decided to take a step forward.

“Where is the old planet?” I asked.

“Beneath Heaven.” She replied.

“I want to go there.”

With little arguing, Petunia sent me to our old home: Earth.

To Descend

Beneath the wires of the glass city, the blue glow of its panels and the overwhelming radiance of Petunia lied ‘earth’. I was escorted to the city with two gatekeepers, on a floating platform through the pink clouds. As I descended, they appeared greyer, yet greyer. The suffocating reality of Earth’s atmosphere was the truth that heaven avoided.

As the waves of earth’s reality washed over me as our platform slowly descended, I recognised little patches of green and yellow among the muddled, matted ground. Pampas grass standing around six feet tall – much taller than I – surrounded a cracked tarmac pathway, the gaps in which had flowers growing through them, like flecks of gold in a landfill. The air was thick with

smoke and dust. Debris and human remains lay among the grass like deconstructed graves and coffins, strewn on the ground and untouched for years. The air reeked of decay. When I reached the ground, the two gatekeepers wordlessly ascended back to heaven.

I was tiny. I must have only come six inches off the ground, as my body could barely compare to some of the large rocks scattered around. I began walking on the flower-studded path, the pampas grass quickly covering any traces of my existence through its enormity.

Flickering in the wind, the grass made a pleasant whooshing sound as it brushed my arms and ankles. Soon enough, I noticed some even smaller creatures living in the grass. Little crawling things that could fly or walk themselves slowly along the anatomy of a leaf or branch. Relative to my size, I realised there were hundreds living in the grass, though they seemed more interested in chewing on chlorophyll than noticing me.

Once I had made it along the path, I stood before a red-bricked wall, half of which had shattered and left a dusty remnant in the mud, but some of which had survived. The cement in between the bricks was intact but cracked in some spaces that had caused entire bricks to come loose. Within the brick wall seemed to be a foundation of some kind because the mud was a different colour. Finally, on the ground in front of me was a human skull – some of which had been eaten away at, but most of which sat perfectly intact and alive. Where bugs and butterflies had nestled themselves in the cavernous skull, daisies, buttercups perturbing in the ground below it. It's a marvel how organic life can persevere in such a disaster – a fact that was becoming more apparent as I climbed the wall.

Kicking my feet over the other side, I took in the view before me. As if there had been an explosion, most of the collateral damage was situated a half-mile from the hill. Bits of brick, broken glass shards and rotten lumber sat idly in the blueprint of a town. The rotten remains of the town were completely polarised by the idyllic valley surrounding it – as if the town had been left alone as time continued. In the forest, spores and pollen flood the air so heavily, you can no

longer tell where the sun is as you piece it together through the leaves covering the sky. The morning sun barely illuminates the jade pastures through the trees and grass, where the plants starve for oxygen, turning yellow.

In a wonderland of destruction, it's difficult to notice much else but the wreckage ahead of you. I suddenly heard footsteps behind me, and turned quickly, only to be greeted by a creature around the same size as Petunia. Purple hair, big eyes that were tired from searching – a mask covering the face, and a bandana covering the neck. Holding a pocketknife in its left hand. I soon found myself pinned by the right one, the pocketknife being held to my heart as the tip of it scratched through the top layer of my skin.

Only then did it speak.

"Why are you smiling?"

To die

My response to the creature was so simple to me, as I said it as normal as I could

"I think it's the closest I've been to happiness since I woke back up." I calmly admitted. The knife was no longer pressed against my skin, and instead raised a few inches away. The hand stayed firmly around my torso, but the grip loosened slightly as the expression on its face changed.

"I've heard some fucked up things in my time," It continued, "That's pretty up there now, though"

I eyed the knife above my head.

"Are you still going to stab me?"

The purple-haired thing thought for a second, watching the blue in my skin flare up with adrenaline.

“Nah,” it said thoughtfully. “Never had a conversation with anything like you before. Oughta be worth more than a bit of scrap metal”.

Her grip loosened and I shook the dust from the wall off into the grass. It sat in the grass next to me, clutching the pocketknife in its left hand, spinning it in and out of its holder absentmindedly. I was taken aback by the decision to spare my life on such a whim, but sat on the grass next to it, the grass tickling my legs as I did.

“...I hope you don’t mind me asking,” I broke the silence stagnating between us “But what are you? I’ve never seen anything like you before”

It smiled. “I’m a human woman. I don’t reckon you’ve seen any humans for a while”

“You’re a human?” I replied

It – *she* – grunted in response, turning her head towards me, and cocking an eyebrow up.

“What’s it matter?”

“Well...” I continued “Our race evolved from humans. I didn’t know you still existed”

“You guys? Nah, you didn’t evolve. I figured out what happened a while ago. I’ve been around long enough to know that things like you don’t just start existing”.

I sat for a moment, taking in the songs of the nearby trees and the whistling of the grass against the wind. Humans were thought to be an ancient species we’d long outlived by many years, as they were assumed extinct years before heaven existed. It was widely believed that Petunia – our saviour – did everything she could to protect human life, and yet they still ceased to exist. I felt the false rage welling up in my chest again, unable to be released as my veins killed the adrenaline rush forcing its way into my brain.

“What happened to earth?” I asked, breaking the silence. The human looked at me and smirked.

“Not much to say,” said the woman, ripping grass up with her fingers. “Couple years into my life, one of the big wars made its way into the countryside. I lived in this town before it got blown up, ya see. People in this town were resilient, so I remember we put up a fight.” She stretched her arms above her head and leant back on the wall. “We had these commanders who fought against some of the soldiers who were sent to kill us. I remember this one – think her name was Olive. She was mute, you see”

I stared through her.

“She couldn’t speak, I mean. Awful nice though. One of the commanders was making these robots to kill off some front-liners. Most of them were tiny, like yourself.” She fiddled with the pocketknife, flipping the latch. “Probably gave her an idea. The robots didn’t hurt like we did. One day, she shoved all of us into the bomb shelter and left us under the guidance of this robot she named after herself. Can’t remember it, but she had a real pretty name”

“Petunia?” I asked

She turned.

“Yeah, that’s it. How’d you know?”

“It’s a pretty name.”

She turned back to face the breeze. “Point is, Petunia started talking about turning us into ‘superior life forms’. It was creepy. But our people were desperate for normal lives, and she promised us an existence without pain. Something beyond dreams, y’know? So, eventually she convinced most of ‘em, one day set off to build something in the sky. Didn’t come back. I got left on earth. Think I ran too far out one day.”

Eying the pocketknife, I tried my hardest to remember the life she told me of. I *did* exist for something before I went to heaven. The thought was killing me – if I could have existed and

belonged on earth, why did living hurt so much that I agreed to live in heaven? I grabbed the woman's hand with mine.

"Please, use the knife to kill me."

She visibly jumped backwards. "What?" She yelped, stifling a disbelieving laugh. "But I just met you! You're not much for conversation, but you're the most company I've had in years!". She clasped my hand with hers, making an honest proclamation.

"Please, I'm desperate not to be here alone".

I smiled. "If you kill me, I can tell heaven about you. I can guarantee a life up there".

She thought for a second.

"You don't want to live on earth with me?"

"I don't belong on earth.". I don't belong in heaven, either.

She hesitated again.

"And all I need to do is put this knife through you?"

"Please."

Without another thought, I felt the knife go through me in one swift movement. I laughed manically as the blue fluid poured out from my torso and into the grass, making the mud smell like iron. The tears welling up in my eyes subsided as my vision began fading, as my eyes shuttered. I watched the humans face fade into oblivion as my conscious was trapped in the aether.

I left her on a barren world to die alone.

She will never know that heaven is a machine.

"I left her on a barren world to die alone,
...she will never know that heaven is a machine."



END

'Heaven is a machine' is a futuristic dystopian story set in the future, focused on the idea of humanity being compatible with AI, to the point of human extinction. Drawing from features in dystopian and utopian societies, I derived the prioritisation of technology in society from both Morris' 'News from Nowhere' (1890) and by Forster's 'The Machine Stops' (1909). While 'Heaven is a Machine' focuses on the Utopian society feeling 'perfect' and derived of negativity and pain, it also focuses on the human idea of conflict causing such an outcome, i.e, the repercussions of war causing the transfer of human personality into machines who are derived of any pain.

The progression of AI in society is an extremely prominent and heavily discussed idea in contemporary society, with AI affecting the creation and destruction of jobs in several fields, thought to affect the most jobs in the next 5-10 years (2021). Therefore, the evolution of 'AI' into emotionally intelligent beings is a topic heavily debated through the placing of AI in jobs where emotional intelligence is necessary. 'Heaven is a Machine' depicts a world in which humans have 'evolved' from humans into strong AI that does have capability for human emotion, though access to negative emotions or 'pain' have been severed. While this relates to the modern issue of artificial intelligence and the dilemma of empathy and emotions relating to said intelligence, it also brings into question how artificial intelligence would relate to the concept of negative emotions, or pain as the opposite to pleasure:

"If evolution gave us emotions – downright, abundantly, and painfully – then they should somehow be relevant to functional roles in the survival of the human species, and hence to its intelligence. However, this is not necessarily a reason to patch emotions onto artificial agents to make them intelligent" (Arzi-Gonczarowski, 2002, p.1)

Here, it is claimed that emotional intelligence is therefore impossible for AI to understand as it is more complex than a line of code to ignore or execute, and it is something that cannot be 'patched' onto an AI. Where the intelligence of emotion is discussed in the concept of 'negative' human emotions being seen as a problem to the AI in 'Heaven', the preserving of positive human emotion is also a problem as feeling negative is not possible, so acts such as suicide and self-harm are associated with positive emotions and physical feeling instead. In contrast to this argument, the idea that AI could become conscious is a big issue imagined in the contemporary world as observed in popular culture and media. It is believed possible that 'strong AI' could eventually be able to comprehend human emotion and basic cognitive functions unique to our species, as said by Searle: "...the appropriately programmed computer really is a mind, in the sense that computers given the right programs can be literally said to understand and have cognitive states" (Searle, 1980, p.417). With the idea that a computer 'is' effectively a brain, the development of AI consciousness, though questionable, is to many a real possibility that affects the way we perceive and program AI as it becomes more prominent in our society. With 'Strong' AI being able to understand the human condition, perhaps better than ourselves in the future, will 'AI' be able to explore the idea of the 'self' better? In 'Heaven is a Machine' the answer is yes, as this is the only function that AI have.

In relation to 'The Machine Stops', reality is 'substituted' by fiction until it is 'replaced', the reality of which has been 'validated' by scientific trends of the time (Caporaletti, 1997) and the machine has isolated the real world entirely in favour of itself. Forster represents a world where the humans, due to their exposure to the machine in its perfection and negation of pain, have become terrified and disgusted by the idea of exiting their rooms, and the world outside the reach of the 'machine':

"Pay me a visit, so that we can meet face to face, and talk about the hopes that are in my mind."

She replied that she could scarcely spare the time for a visit. (...)

“I dislike seeing the horrible brown earth, and the sea, and the stars when it is dark”

(Forster, 1909, p.2-3)

Thematically, Forster establishes that humans love the machine so much that they question leaving it even momentarily, causing a reliance and borderline obsession with the machine, having ‘forgotten’ their humanity (1997). The story extends the belief that the concept of humanity had been forgotten, the race of AI viewing their species as ‘primitive’ and ‘extinct’ due to their own emotional downfall: especially reflected by Petunia’s view on negative emotion and her incentive to ‘fix’ Olive.

Caporaletti states “utopian literature (...) is inescapably both *fictio* and *mimesis*, poised in uneasy balance on the edge between invention and reality.” (Caporaletti, 1997, p.32). Aspects of Utopia are also present within this story, mainly taken from Morris’ ‘News from Nowhere’ as a socialist utopia ruled by the work of a machine. While ‘heaven is a machine’ does focus on an unattainable ideal for humans as it was built by AI, it also takes inspiration from the socialist state Morris writes about. Morris was inspired by the socialist values depicted in Bellamy’s ‘Looking Backward’, a socialist utopia based around a strong central government with technology being central to the success of the state. Bellamy states “There is no such thing in a civilized society as self-support.” (Bellamy, 1887). Relating this to ‘Heaven is a Machine’, I related the technological memory and systems of the ‘people’ in heaven directly to Petunia, who can access each thought, process and feeling they experience at a whim, and therefore instead of being expected to support themselves, the society is held up solely through the states obligation to the people. While the idea of labour is not covered, instead a collectivist society is portrayed, though outsiders such as Olive are unable to adapt to such a society, and therefore exile themselves. To achieve such a collectivist approach to society, Morris believes in the dismantling of ‘industrialisation’, which was a defining feature of the Victorian era (Ludlow, 1992, p.21). Because there is little to no means of production for a society of immortal, self-

sustaining AI, industrialisation is unneeded in heaven and therefore the entire function of heaven is to give its habitants a comfortable home.

In conclusion, 'Heaven is a Machine' depicts a world in which AI have developed far enough that their idea of emotional intelligence has evolved to the same level as humanity, and therefore the key outlet of all the planets resources is the central government. It brings into question what would happen if AI were to completely replace humans, and if human intelligence could appear upon error in AI, and if AI could ever understand the 'human' condition better than ourselves, even without the concept of pain.

Appendix

I developed two 'moodboards' for 'Heaven is a Machine', one in the form of a playlist, and one as a visual moodboard.

Playlist: https://youtube.com/playlist?list=PL4qU_YunykkPvYujRSjdcbpKrgtDdyWwT

Song title	Lyrical/Instrumental importance	Timestamp	Explanation
"No Surprises" by Radiohead	"Bring down the government, they don't, they don't speak for us" "No alarms, and no surprises, please"	0:57 2:15	From the perspective of Olive, Petunia controls all of heaven. Her aversion to Petunia is the idea that she speaks for all AI and oppresses voices. The desire to have a silent life with no pain is a belief held very dearly in heaven
Интонация – Never get used to people	Glitchcore as a genre, taking existing songs and intentionally skipping/repeating parts of the vocals or instrumentals to create the illusion of a skipping record/a glitch.	N/A	N/A
Those Eggs Aren't Dippy – Jack Stauber	"Dipping eggs dissected me, Cut my life expectancy, Held me under close inspection, left me in a dream" "I don't want to die, without feeling love too"	0:04 0:17	From the perspective of Olive, the many lives she's lived have mainly been under the inspection of Petunia with no real free-will of her own until she got her memories back, which caused her to be stored in the aether ('A dream'). Dying without feeling strong emotions seems pointless to Olive.
Fleeting Frozen Heart - Xxtarlit	Another glitchcore song with focus on heavy drums and the repeating piano motif in the background. Because the piano is tuned to be slightly flat, it gives an 'airy' feeling.	N/A	N/A

About 10 hours of making breakcore - Emray	Glitchcore/Breakcore song, the origin song being about solitude and longing. The piano is pitched upwards and electronic instrumentation can be heard in the background, as well as the fast drum accompaniment.	N/A	N/A
Credit song for my death - vivivivivi	Instrumentation solely electronic, uses 8-bit instrumentation and compression on the drums and bassline to make it sound more like an authentic game soundtrack. The note-bends also give illusions of falling/descending notes.		The song gives the image of an ending credits scene after a death – I believe this song would be a fitting connection to Olive’s death as the song feels melancholy, but there is a sense of acceptance in living on in memory permanently.
The Universal - Blur	“This is the next century” “Yes, the futures been sold” “No one here is alone, Satellites in every home”	0:24 0:39 1:34	Acceptance that time has moved on, and humanities future is in AI. The future was ‘sold’, in a way, to the humans on earth by the physical culmination of Petunia, who had no choice but to follow her. No one on heaven is alone, surveillance is happening everywhere as its one of the key beliefs of Petunia.
Paranoid Android - Radiohead	“What's that? (I may be paranoid, but not an android)”	0:51	The fact that Olive can experience negative emotions is affecting her status as an android.
Waterfall – Undertale OST	Bells and piano as key instruments, lots of reverb giving the illusion of echoing in a large room	N/A	This theme fits the aether perfectly, an unending large room that you’re unaware you’re in until the moment you wake up.
How to disappear completely - Radiohead	“I walk through walls I float down the Liffey I'm not here This isn't happening I'm not here I'm not here”	1:17	This song is about suicidal ideation and disappearing completely after your death. Whilst Olive’s body doesn’t disappear, her memory and human instincts disappear as soon as she dies. Olive

			dissociates from her android body as a result.
Angellic – Nihigo ft. nunashi	Song uses mainly electronic synths and bells, as well as a fast drum part – part of the breakcore genre	N/A	N/A

Visual moodboard: <https://www.pinterest.co.uk/northfass/heaven-is-a-machine/>

Illustrations belong to me.

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