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MDES Exegesis

CHILDHOOD'S END ADAPTATION

The Control of Technology

Abstract

Concept design can communicate a cinematic allegory that enables an audience to understand a visual representation of the Faustian bargain, as technological advancement. This visualisation demonstrates how advanced technology can bestow power, at the cost of our free will.

Humans have an instinctive need to explore and solve everyday challenges and we often do this through technology. It is a pivotal aspect to our purpose in life, defining our humanness and a crucial reason for why we are perceived as the dominant species on the planet. Yet in contemporary society we are so heavily dependent on technology we often don't ask who is really in control?

Using Childhood's End, by Arthur C. Clark as a narrative precedent, this research will explore the Faustian bargain through a series of key-scene designs. The research results in an adaptation for a hypothetical feature film, that intends to use key-scene design to warn audiences that the price of technological advancement is often the abdication of control.
The final designs are informed by principals of futurology, technocracy and astronomy, as an advocate of the adaptation of the novel's story with core themes as the author intended. This research intends to enable the visual design of a narrative which informs and provokes technological thought in audiences but also respects the source material.

Characters, props and environments are used to demonstrate how to design content that challenges our role as the dominant sentient species, both through how we relinquish our ability to explore new frontiers, and how advanced alien technology is represented.

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1.0 Introduction

After my very first viewing of Star Wars : The Empire Strikes Back (1980), I was hooked on Science Fiction films. I would consume these futuristic, adventure packed films one after another. However, when I watched 2001: A Space Odyssey (1968) my expectations of Science Fiction films were subverted because it breached a dire but fascinating destiny for mankind and technology. Compelled to watch it again, it constantly led me to think about its core message. Something was different in its story.

Its story tells a concise message about technological evolution. Mankind's journey to discover an extraterrestrial presence leads to creating thinking machines which challenge and aid us to reach transcendence. As a concept designer I wish to gain a deeper understanding of how the creators of 2001: A Space Odyssey, mastered the process of explaining their pivotal message, simultaneously provoking audience curiosity in sentient and technological evolution and helping them to better understand astrology.
In a conceptual design role for production, my objective as a designer is to provide a design solution which will communicate a core message about futurism within a science fiction story. Science-Fiction narratives have the ability to use allegory to teach us about the future. Specifically the allegorical representation of man and machines relationship and who is truly in control, a subject which has been seen widely through cinema and literature already. Yet today our reliance and symbiosis with technology has become so prevalent, that on average we touch our phones 2,617 times per day (Dalton-Bridges, D, 2019) This creates a burgeoning concern to retell and warn audiences that technological dependency is controlling our lives.
Our perceived dependence on technology is core to my research, and can be explored through a sensitive adaptation of a novel that exhibits the relationship and struggle of control between man and machines. Arthur C. Clarke (2002) author of Childhood's End describes Science Fiction as "something that could happen and often we don't wish it" (p.5) The narrative has a core message warning us that ultimately technology has a price, as it can usurp our control. This is a core reason as to why I have chosen this narrative to influence my design.

The story of Childhood's End is about a race of highly advanced aliens, known as Overlords. They arrive on Earth in vast ships offering mankind the means to achieve a global utopia through their advanced technology, but with a catch. They request we cease space exploration and not question their hidden appearance from mankind. If we accept their bargain they promise to reveal themselves once we have assimilated their technology. Mankind agrees and the Overlords keep their promise in revealing themselves. They appear as unworldly inner dimensional beings, but with the hallmarks of demonic creatures, sporting horns, barbed wings and red bodies able to transform and move anywhere. Before their unsettling appearance can be addressed, the new generation of humans begin to realise the technological supremacy they

have gained has come at the cost of humanities free will. Only a scant few question and seek answers to the Overlords' true agenda, only to find it is too late. Mankind has been set upon a path of transcendence regardless of our choice.

In order to adapt Clarke's story, it is necessary to engage with research that focuses on how technological advancement challenges our free will. An analysis of historical examples of Technocracy and contemporary effects of Technopoly, generates an understanding of the author's goal behind the novel's core message. Technocracy may be defined as specific technological inventions or period of technology that attacks or subverts an established culture unintentionally (Postman, 1993). This is compared to Technopoly, described as a technologically advanced culture whose moral, social or political operations are dictated by the technology or scientism they advocate (Postman, 1993).
Core to my research is an exploration into the Faustian bargain within technology by examining Artificial Intelligence (AI), how we can't control it and its demonology. The Faustian Bargain refers to a deal to gain power through a subject often contextualised as the devil, in return for giving up a metaphorical soul, often representing free will. Free will referring to one's ability to decide their future instead of a situation of determinism (Hawking, S. 1993). In regards to technological advancement the inherent Faustian bargain challenges aspects of our free will. For example our smart-phones and hand-held devices grant the ability to recall esoteric formulas or remember capital cities around the world. But to perform these tasks they determine us to keep software updated, accept the terms, conditions and even create a verified partial version of yourself online. (Musk, E. 2017).
Also relevant to this project is research that focuses on futurology, extraterrestrial intelligence technology, transcendence, and theological deities, to provide an understanding and advance designs for the technology, modus operandi and culture of the Overlords. Futurology plays a large part in Clarke's writings . He states to predict a possible futures one has to invent ideas so fantastically they seem unbelievable in the present (1964). Futurology opens research into how mankind might transcend due to technology. In this sense transcendence is referring to the evolution of our consciousness.

This cinematic adaptation presents a design opportunity to re-imagine a technology for a world set in an alien influenced future, and the design for an antagonist character who personifies technology and its unforeseeable nature. My designs are also informed by anthropomorphic phenomena (Persson, P. 2000) in regards to robotics, alien designs and case studies that visually demonstrate enriched character interactions which advance story narratives. Lastly, focusing on the conceptual and technical design process of five Key-scene designs that communicate examples of Technocracy and Technoploy and the Faustian bargain.

2.0 Literature Review

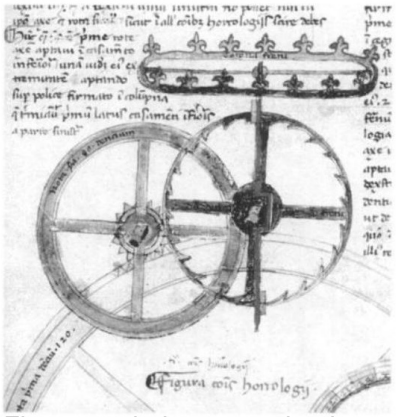
1.1 - Free Will and How Technology Changes Culture

-Technocracy

According to Postman (1993) tools that don't integrate with their culture but attack and change it, will bid to become the new cultural. Elon Musk (2017) stated cellphones have superseded their original purpose and redefined the culture of communication, replacing physical communication with digital. Fundamentally, the technologies and their creators vied for control of culture they reside in, an effect known as Technocracy. However the origins of technocracy are profoundly interesting because it flourished from a counterculture of tradition and theology, the Catholic Church. Postman (1993) describes the event as:

> *The Paradox, the surprise, and wonder are that the clock was invented by men who wanted to devote themselves more rigorously to God; it ended as the technology of greatest use to men who wished to devote themselves to the accumulation of money.* (p.15)

The "verge escapement system" invented by 14th century European Monasteries signified hours of the day for worship. Its refinement and application evolved into pendulum technology. It evolved into a standardised production time system which benefited the labour and merchant classes over the religious, it's initial benefactors.
Postman (1993, p.28) surmised that the invention of the mechanical clock, telescope and printing press, culminated with technology turning into an entity with the ability to bypass individual control over culture.


First recorded verge technology Giovanni di Dondi circa 1364.

Simon Cooper questions whether Technocracy truly is the nature of technology today. (2002) He has an ambivalent perspective, debating whether we are in the service of the machine or are dependant on it. Without technology we couldn't claim to control factors of society, and in certain respects technology grants us control.
He argues that the answer to 'who' serves between society and machine is an inconclusive verdict (2002). This is best summarised in his opinion of the internet. He states the internet and extended cyberculture is hostile in vying to change and control a user's reality but also gives a subjective freedom by transcending material limitation to the virtual (2002). It's important to be aware that many modern relationships between technology, politics and culture have ambivalent outcomes. Not all technology changes a culture for the worse, it could be argued that the effects of the Overlords on human characters

are morally ambiguous. A visualisation of technocracy being performed by Clarke's Overlord aliens would provide a deeper modus operandi to their characters communicating the very nature we should forewarn. This will be explored further within my key scene design.

-Technopoly -The Reveal

ARPANET, first 'infected' computer

My perspective of technopoly aligns with Postman's theory of technology corruption, in that it evokes a comparable runaway effect to the Overlords actions, when they strike a Faustian bargain with the humans. The 'soul' signed away to the devil in Childhood's End represents our free will. In the novel this results in our loss of control over our species prosperity, which ultimately affects our children. This effect of losing free-will to technology is known as Technopoly. Postman (1993) states technopoly is evident through our use of language of computing systems 'it corrupted, its lagged or caught a virus and crashed.' In this bargain, the 'agentic shift,' we sell away our responsibility and relinquish control, stating that our language has absorbed the machine as human metaphor. The term "worm" is a program designed to disable computers was first coined during the ARPANET network outage. Postman states (1993) the incorrect term 'virus' stuck because of mass media reporting the event using the more catchy 'human connected' familiar term. This gave way to 'infected', 'virulent, contagious and quarantine' being associated with computer technology, all previously natural and human characteristics. Such language given to inanimate technology is not just a picturesque anthropomorphism but a profound shift in our perception of the relationship between humans and technology. As Postman (1993) argues, *"control is surrendered when we see and associate a technology like the computer has a responsibility"* (p.114) However Postman doesn't address an important mode of technological change - the 'Gestell'

Simon Cooper (2002) explains 'Gestell'. A term created by Martin Heidegger who theorised that technology reveals and reconstitutes the phenomena for the world. Cooper (2002) states that technology drives us towards an irrevocable future of pessimism or utopianism and concedes that technology will always reveal unforeseen outcomes. Gestell and Technopoly are both effects created through the Overlords' actions towards societies of mankind within Childhood's End. This research supports combining these two facets of technology into the second act to the novel plays out similarly in the Overlords reveal in true nature and a human compliant reaction.

-Faustian Bargain -AI's demonology

The Faustian bargain (McNeill, B. 2002), refers to Faust, who sold his soul to the devil for unlimited knowledge. The allegory has been used in popular media to illustrate obtaining power, knowledge or benefit at the expense of moral, ethical, or spiritual values or free will. Postman (1996) states that important technologies are Faustian bargains, in that they can be both 'giving and taking' sometimes in equal measure or drastically one-sided (p.40). But what is most shocking is our language of such 'technology', in that we often describe them as blessings, placing an almost religious faith in them.


Faust and Mephisto, The Pact (1840) by Julius Nisle

It is argued the defining technology of the next century will be AI and without a doubt it will present a Faustian bargain (Russell, S. 2015). The boon given will be self aware cognitive machines able to solve problems and complete tasks that our biology can't. The 'soul' we are trading away is our ability to control AI, once we are no longer thinking for it, the possibility it obeys us becomes probable. Yet tech giants in Silicon Valley such as Google continue to develop it, justifying that the gift can be controlled (Cook, J. 2018)

> *With artificial intelligence we're summoning the demon. You know those stories where there's the guy with the pentagram, and the holy water, and he's like — Yeah, he's sure he can control the demon? Doesn't work out*. (as cited in Cook J. 2019)

A real world example of losing control has already happened in primitive forms of artificial intelligence with Amazon's Alexa crossing boundaries by recording people's conversations and spreading that information without permission (Chokshi, N 2018). Films such as Ex Machina (2014) are an extreme example of machine learning AI rebelling and ceasing to be controlled by human characters. Yet the characters before their hubris backfires, are given a choice whether or not to pursue the Faustian Bargain. Likewise, Amazon's Alexa (2019) creators and recipients had that same choice before entering the Faustian bargain.

In regard to Childhood's End, the Faustian Bargain between humans and AI can be compared to that betweenthe humans and Overlords at the point of entering the bargain. Accepting Overlord technology will be beneficial at present but the unaware long-term consequences could spell doom for humanity's soul, in the sense that they become reliant on Overlord technology, thus fall under the alien's desire and control. Illustrating this narrative of choice in the designs will reinforce the core message that new emerging technology can undermine our free will, potentially controlling us.

1.2 - Futurology - The 4th Dimension

- Reaction to Alien Technology - Fermi paradox - Kaku's prediction

Our quest to know whether we are alone in space results in a future potential of interesting design ideas. Interplanetary travel, Terraforming Mars, Transcendence and even Bio-mechanical Immortality, are some of the insightful technologies and futuristic predictions by Michio Kaku. With his understanding of physics and cosmology, he reveals the future identity of mankind, but also extraterrestrial beings. Kaku (2018) explains "What happens if they are millions of years ahead of us? A million years is nothing but the blink of an eye in cosmic terms" (p.274) That such an advanced extraterrestrial technology as he proposes, would be so beyond our understanding that it would appear as a state of magic. It would most likely surpass our capacity to detect it. This is referred to as the "Fermi paradox"(p.295) which proposes that if intelligent life is out there, why haven't we found it? A species so advanced would exceed our state of dimensional principles and abilities to detect. Unless we evolve to meet it. Kaku confirms should we achieve the feats of interstellar travel, our present appearance would greatly evolve.

Human-kind is a "type zero" civilization on the Kardashev scale (Kaku, 2018). This scale is based on energy consumption levels, where an interstellar species which can traverse the universe in search of life would be a type four civilisation, and would actually use the energy of an entire universe. Kaku surmises that in our future we could become a type one civilisation. Harnessing the power of our sun through a Dyson Sphere would enable us to discover far more of our current galaxy, the Milky Way. This could enable a higher possibility of contact with extraterrestrial beings, and forming an understanding of an alien design. Shermer (2002) explains how an Extra Terrestrial entity achieves such a status when measuring the scale of biological to technological evolution. Darwinian evolution requires tens of thousands of generations compared to the exponential growth in technology. It took 100,000 years from the dawn of civilisation to the aeroplane, but only 66 years from the aeroplane to man landing on the moon. In my design this provides a challenge to compare and contrast human technology against the advanced alien technology of the Overlords.

-Cosmology - Alien Deities and 4D

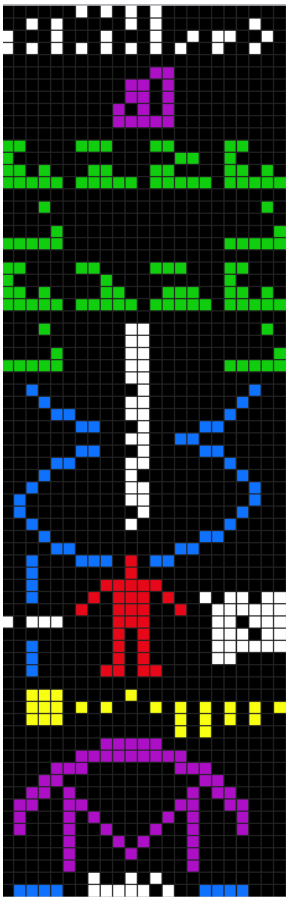
Sagan (1980) suggests that *"If a fourth-dimensional creature existed it could, in our three-dimensional universe, appear and dematerialise at will, change shape remarkably, pluck us out of locked rooms and make us appear from nowhere."* (p.173)

He describes the nature of the universe as an environment of endless nebular where galaxies collide and space time possibilities wrapping realities. This

produces constant discoveries which surpass all expectations, only to be snubbed from existence with super blackholes, but which is neither benign nor hostile. If extraterrestrials could reach out to us through such a chaotic cosmo, they would have mastered the ability to traverse dimensions beyond ours.

In his chapter Flatland (1980), Sagan explains the visual representation of such a being from the fourth dimension. To humans who are bound by the third dimension, this extraterrestrial would appear to us as a three dimensional shadow of its fourth dimensional state.
Sagan introduces the reader to the 4D shadow through what is known as a “Tesseract” Vertex extruding at a ‘w’ axis form a four-dimensional hypercube or tesseract, having the ability to change its geometric shape to form unique interesting patterns and fractal depictions of spacetime. This provides a unique design challenge to represent Clarke’s Overlord’s in this nature. Creatures with changing, 4D fractal bodies which could explain their omnipresent abilities from the story in a practical stand-point, leading to a design methodology to discover shape types that constitute non-terrestrial creatures.

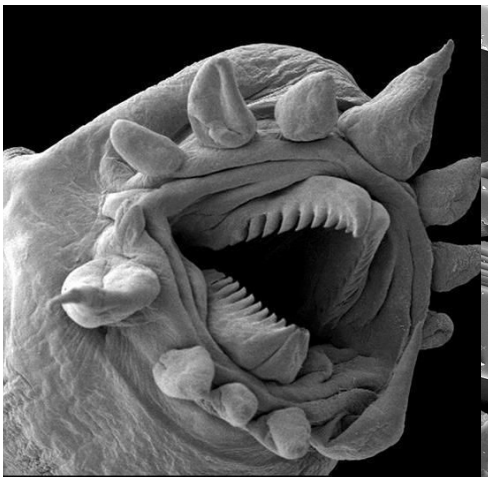
Steven Spielberg explored the possibilities of benign extraterrestrials through the character designs within ET (1982) and Close Encounters of the Third Kind (1977). However, they did not deviate far from a variation of our humanoid structure. This is counter to evolutionary records, which suggest that an alien would be very different from us.
The crucial factor Film-makers tend to frame aliens as not very smart, whereas evidence suggests alien lifeform will be far more advanced than us (1985). Anything less capable than us wouldn’t receive or respond to our radio telescope messages. In a Scientific American article, Shermer (2002) states his last law, ‘Any sufficiently advanced extraterrestrial intelligence is indistinguishable from God’ (Shermer, M. 2002, p.33) Meaning that the abilities of a god, the omniscient and omnipotent would be indistinguishable from that of extraterrestrial intelligence (ETI). It seems even technological creations from an ETI would appear as deities to us. With relation to the project, a visualisation of Shermer’s statement in Overlords demeanour and the humans reaction to ETI’s would enhance the important theme in the story. When the Overlords first arrive they are aware their presence has the effect of Shermer’s Last Law. Yet they do not explain their advanced esoteric technology to mankind nor entirely deny their divinity. Through these actions mankind’s surrender of free will and acceptance of Overlord technology is significantly hastened.
In Studs Terkel’s interview, Sagan (1985) also addresses the process of “searching for” and “sending messages” could unlock an understanding as to the identity of

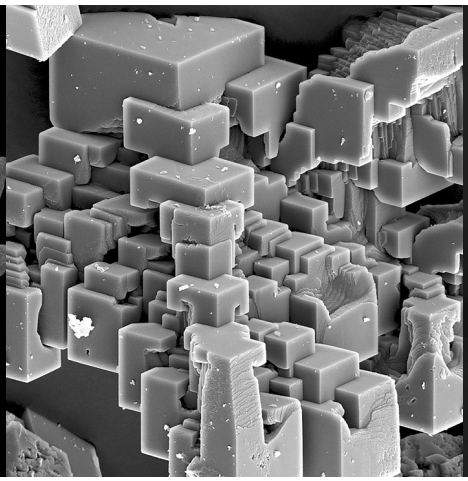

Abecibo Message, 1974

extraterrestrial beings. Sagan and Frank Drake invented the Arecibo Message (1974), as a first real attempt to make contact with alien life forms, using what looks like a galactic business card. Deciphered from its 1,679 binary digits it forms a graphic image, giving extraterrestrials a pictorial opportunity to reply in kind. In Childhood's End the Overlords are the 3D message in a cosmic herald form, a far more complex "pictorial" cyphed into a communication tool to serve a 4D sender, the Overmind.

-Fear of the Unknown - Label of Magic and the Demon

The association of 'demonic and possessive' labelling to emerging esoteric technology is investigated by Phillip Ball (2013) starting with Antonie van Leeuwenhoek's discovery of microbes in a drop of pond water. Explaining the discovery of invisible creatures began to challenge the theological and scientific culture of the time. In 1722, Daniel Defoe anthropomorphised these microbial discoveries as "There might living creatures be seen by a microscope of strange, monstrous and frightful Shapes, such as Dragons, Snakes, Serpents and Devils, horrible to behold…Here be dragons" (p.69). These demonic and devilish descriptions were widespread throughout the developing world, being used by the academic community up until 1867. James Clerk Maxwell's 'demon', invented as a response to 'cosmic heat death' in thermodynamics, before disproven by william Thomson, were counter theories created for the inexplicable workings of invisible universes, as an opposing force to the known good. (2013)


Worm, 2011


Calcium Carbonate Crystals, 2011


Phantom midge larva, 2016

Arthur C. Clarke (1962) states in his third law, *'Any sufficiently advanced technology is indistinguishable from magic'.*(p.344) Reasoning we are predisposed to creating a fictional explanation to something that is yet scientifically comprehend. When the Overlords arrive, it would be natural for us to imbue them with demonic and angelic characteristics, simply because they are unknown entities, and not only their outward appearance. In Childhood's End the Overlords do not reveal themselves until the second act, this further affirms a contributing factor to their demonic description even

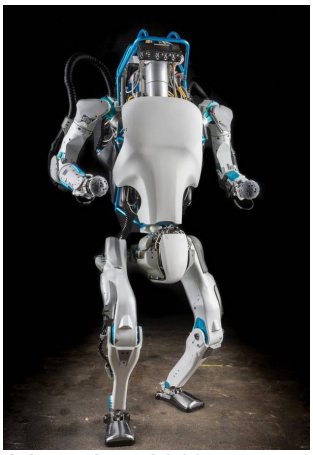
before they take the form of a devil.

I have used this information to provide a guide to the visual research for the Overlord technology. In my research I looked at electronic microscopic photography of microbes and insects and the relationship between their unique abstract shapes and what is perceived as alien design. Designs which appear complex and esoteric replicate the same effect described by Ball in his essay on demonic and malevolent perception.

1.3 - Anthropomorphism

- Anthropomorphic Robots

Persson (2000) describes “Visual appearance of a creature or object seems to be a fundamental trigger of anthropomorphic thinking” (p.2) When attributing human characteristics, cognitive and emotional states to an inanimate object or animal, based on our observation of human physical likeness. Anthropomorphism of robot, or obviously non-human characters is problematic. Duffy (2002) describes the practical application of a humanoid form isn’t always ideal in robotics though utilised objectively, a humanoid form helps us interact with the robot, because our inherent nature to assign anthropomorphic qualities.


Atlas robot, 2013.

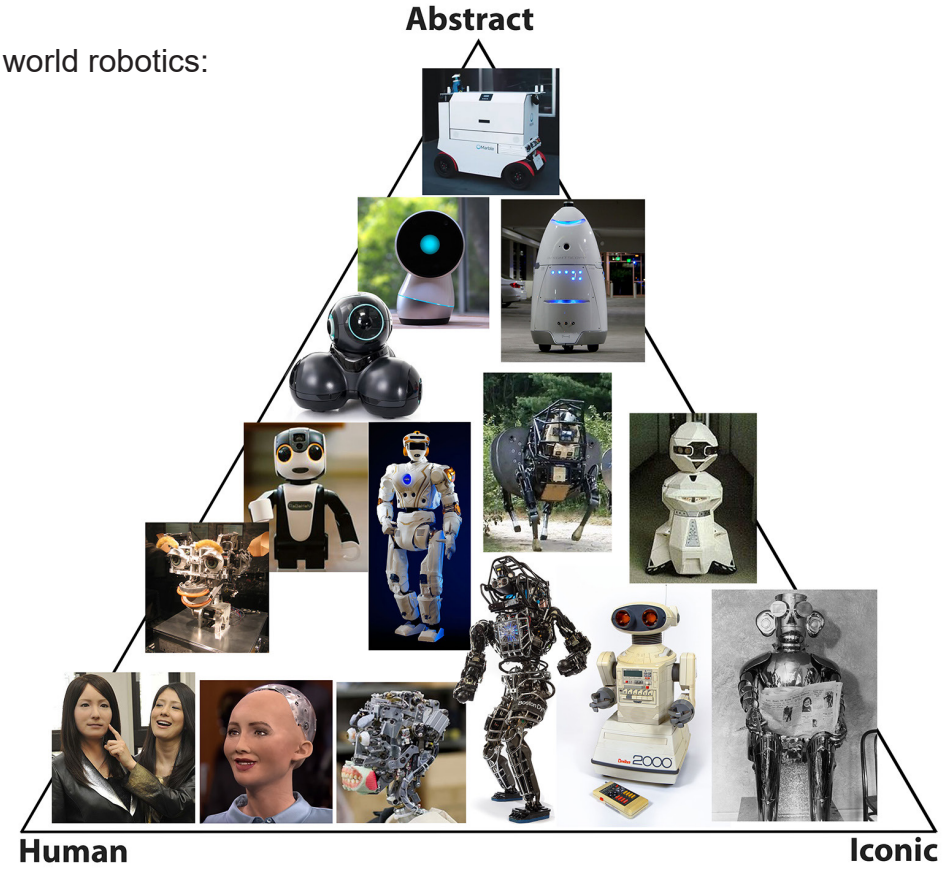

Bigdog robot, 2005.


Geminiod robot, 2010.

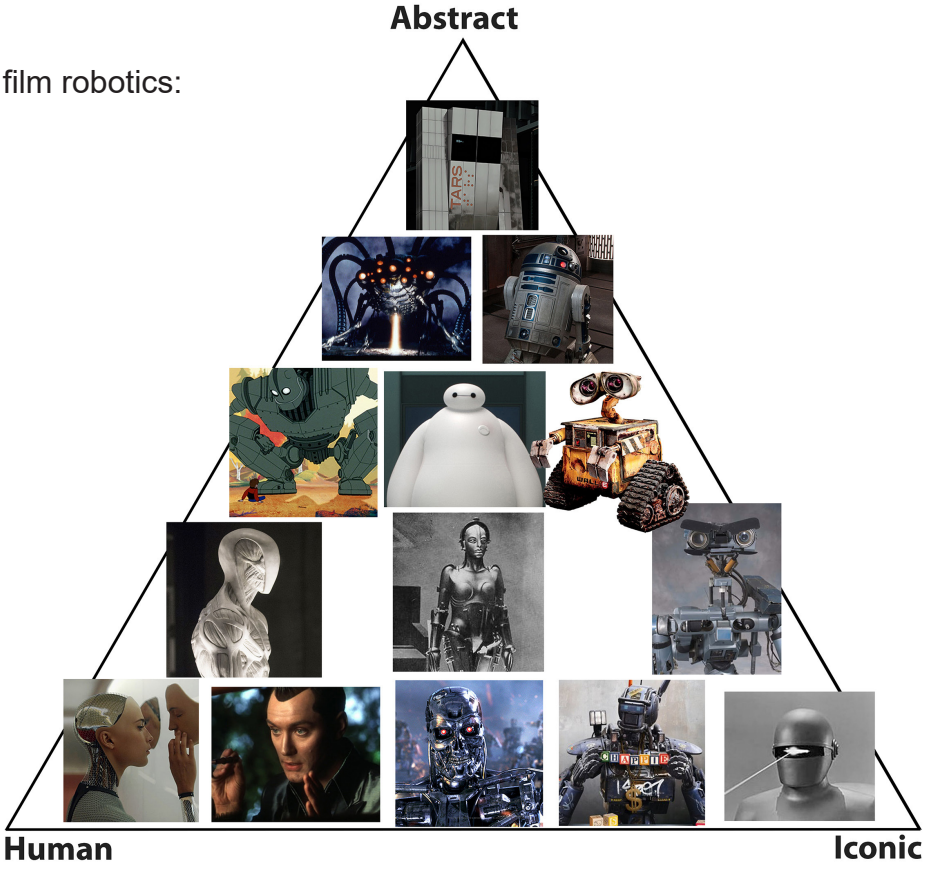
This is visible when comparing the robots Atlas (2013) to Bigdog (2005) from Boston Dynamics. Plummer (2016) describes Atlas as a tolerant and forgiving natured robot. On the other hand Bigdog receives an eerie reception due to its abstract quadrupedal body and noise. It lacks anthropomorphic design and even a recognisable head but succeeds in practical military application. Although excessive physical anthropomorphic features can lead to the negative effect. Becker (2010) explains the research by Hiroshi Ishiguro’s Geminiods robots have the effect of creating ‘a sense of aversion in humans’. The designs fall into what robotics professor Masahiro Mori (1970) metaphorically termed the uncanny valley, an observer’s reactionary feeling of uncomfort or creepiness when recognising an unsuccessful attempt to mimic human likeness. An effect I wish to avoid by using a stylized robotic design retaining animism through subtle anthropomorphic features.
The goal of the Overlord design is to establish anthropomorphic qualities through human-

ness, instead of a physical object made humanlike. Exploring various anthropomorphised robots in film has enabled me to develop a guide to the stylisation the Overlord design requires. The following examples are categorized using the Scott McCloud (1993) picture plane between the aspects of human, abstract and iconic.

Real world robotics:

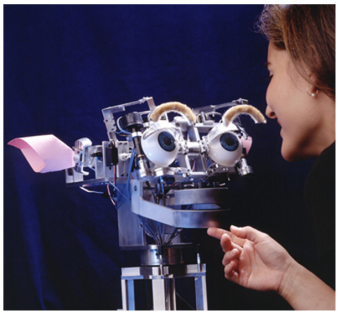


Sci-Fi film robotics:



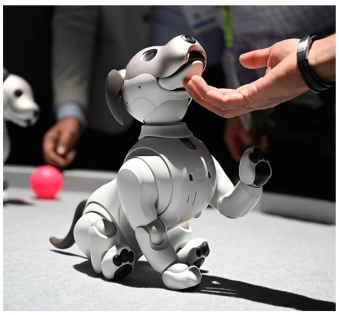
-Anthropomorphic Systems - Interaction

Persson(2000) states ‘Anthropomorphism is an experience’ (p.1) that designs are not just by the nature of appearance but more so by the interaction or reaction we have with them in what he describes as “an understanding of complex – not necessarily human – patterns of behaviour in the world” (p.1). There are various interactions that contribute to an anthropomorphic connection between a system and its user. The main interactions are;



Primitive Psychology
Expressed through sounds, gestures or facial expressions seen in the from Kismet robot when interacting with its observer.

Folk-psychology
Folk-model of a mind we perceive on a subject. Assigning beliefs, goals, intentions to that subject, seen in the OZ project where users conveyed these qualities toward an AI interactive media.



Social Stereotypes
Assumptions created by our impression of the subjects social category. Persson states there a few examples of this anthropomorphic reaction used in computer systems but many in phsyical form.

Persson(2000) discusses the impact of interaction with artificial emotional anthropomorphism. This act of interaction is relevant because it is escalating in today’s primitive AI technology, especially in the interactions between voice assisted devices such as the Amazon Alexa. Interaction can result in perceived emotion towards such technology by their users. Bland(2018) found that users personified Alexa once her jokes simulated genuine laughter and an emotional connection.

A crucial aspect that needs to be portrayed in the Overlords design is their anthropomorphic quality. Because they are significantly indistinguishable alien forms, the observational anthropomorphic qualities are limited. Through human interaction similar to the ones we have with computer systems and technology, anthropomorphism can be integrated into the design of such a creature. Through the method of artificial emotional anthropomorphism, the idea of a living technology that inherits human qualities can develop from simple inert geometric forms, to a complex humanoid one. Portraying a transformation which enriches the Overlords character and propels the overall story and core message.

-Anthropomorphism in ETI's

Mimic, Edge of Tomorrow, 2014

VFX supervisor Jonathan Fawkner created a non anthropomorphic quadruped creature called the Mimic, with an extravagantly animated tentacle body. He says of the design (2018) "The challenge is, if it doesn't follow the laws (Anthropomorphism) it's harder to sell it as something real or tangible" This subverted anthropomorphic traits but achieving audiences interests through a primordial fear of the unknown, courtesy of an alien representation not distinguishable to something teresial. (Sanford, K. 2014) Alien creature designs which are ambiguous to our anthropomorphic understanding such as The Abyss (1989), Cloverfield (2008) and Arrival (2016) follow this tenant. Dr Sandford affirms that their function is understood, yet their motive can remain ambiguous. This does not subtract from their realism, instead it adds interest.

above: Na'vi, Avatar, 2009. ET,1982

Robots or aliens that are anthropomorphised can also be perceived to have animism thus are able to socially interact with human characters. (Vidal, D. 2007) This trait is commonly seen in children's toys and cartoons characters having more popular appeal due to their stylistic anthropomorphism. Two interesting film examples that stand out are ET (1982) and the Na'vi from Avatar (2008). In both films the villains or antagonists are humans, thus aiding the audience to side with the aliens. Though this choice is perpetuated by the aid of stylised anthropomorphic traits such as big eyes and dwarf like props for ET and elven and feline features for Na'vi, both familiar features. Johnston (2011) mentions the strong social connection in ET with audiences is because of the friendship journey between a child and an alien, though the empathy given to ET is grounded and sustained through their friendly terrestrial attributes. Hollywood has dramatized our subconscious beliefs of the alien visage, essentially we want aliens to look like us so we can learn more about them, their intellect and technology (Purkayastha 2014).

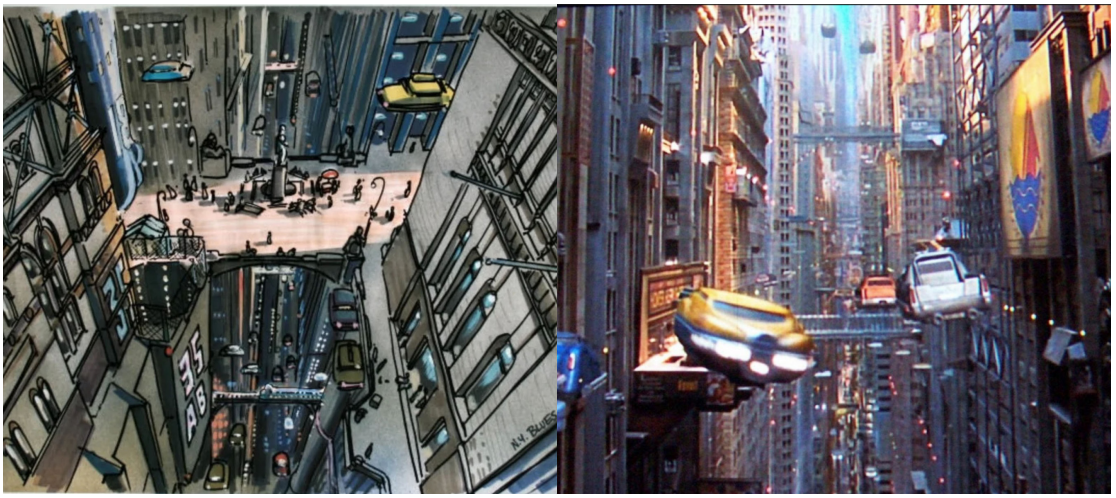
1.4 Adaptation

-Adapting the Novels Core Message for Science Fiction Film

Ted Chiang (2017) explains “science fiction is not about special effects, it’s about using speculative scenarios as a lens to examine the human condition” (Arrival, special features). The success behind the adaptation of his short story, Story of Your Life (1998) into the feature film Arrival (2016) was due the understanding and continuation of his stories core message, “humanity and compassion will unlock the future” (2017).
H.G. Wells (1987) The War of the Worlds novel was the revolutionary blueprint for alien invasion narrative, but also communicated a warning of mankind’s hubris and that power retention is still subject to the effects of fate (Johnston, K. 2011) This theme was lost in the 2005 The War of the Worlds adaptation, Although the story still depicts human helplessness in an alien invasion and still takes cues from the original film adaptation, it is a refraction and not a reflection of the original core message that even those in privilege are pawns to predetermined dominance by advanced species. Childhood’s End is a complex narrative, and as a concept designer I needed to be mindful of the ideas behind the author’s core message in order to understand what is important to take or leave behind within my design decisions for adaption.

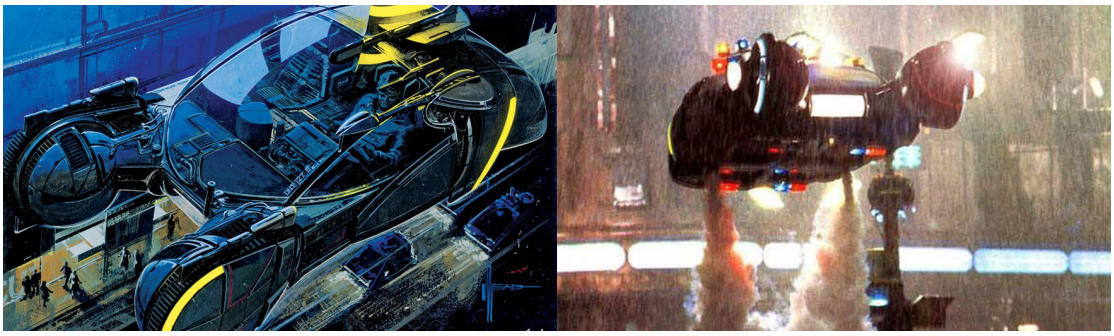
-Role of Production Designer

The role of production designer in adaptation is to develop a narrative into visual ideas. With the help of the Art department, Conceptual design can aid the adaptation of elements such as mood, character and themes. If a book element is redesigned in adaptation it needs to be justified. “Creating a design with the idea in mind, is it rationale to the narrative” (LoBrutto, V. 2002) Although The Fifth Element (1997) wasn’t a direct adaptation from a novel, Dan Weil the production designer discusses the design process established for the art department in order to create a believable world the audience will comprehend.. He says “I wanted to make the design colloquial and ensure that we didn’t entirely lose touch with reality; if you feature a flying car, the audience want to understand how it works.” (Ettedgui.P, 2000)



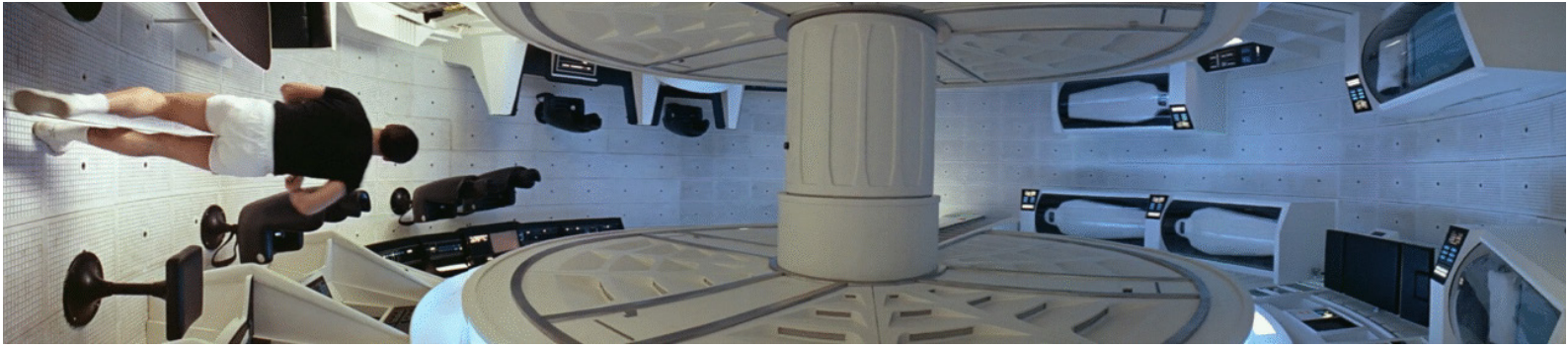
Jean Giraud, (Moebius) City Design. The Fifth Element, 1997

Weil and Luc Besson wanted to avoid the sci fi cliché of exaggerated hypermodernity as seen in the old Flash Gordon (1980). Traditional design was retained in the flying taxis and police cars. This approach was also utilized within set design. Manhattan streets and avenues retained the traditional grid and then “futurized” to an appropriate level of technology (LoBrutto.V, 2002).



Syd Mead, Spinner design. Blade Runner, 1982

Weil was influenced by Blade Runner (1982). The film heavily adapted Philip K Dick’s source material, Do Androids Dream of Electric Sheep? (Landon, B. 1997) The vision of the film was a collaborative effort between David People’s screenplay, production designer Lawrence G. Paull and the conceptual design of Syd Mead, resulting in a visually distinctive film yet remained true to the core of the novel. One example of this adaptation process was the vehicle designs. Lightman (2018) explained the process of Ridley Scott commissioning Syd Mead to design five or six vehicle types based on his experience as a vehicle designer. The designs then aided Scott in his adaptation of the world. He used this vision to form a framework that tasked the production designer with producing the world.
This research informs the design process in the role as a production designer, for the development of the general visualisation of the adaption. By using a catalyst, such as the Overlord creature design first will then anchor and influence designs the world around it.

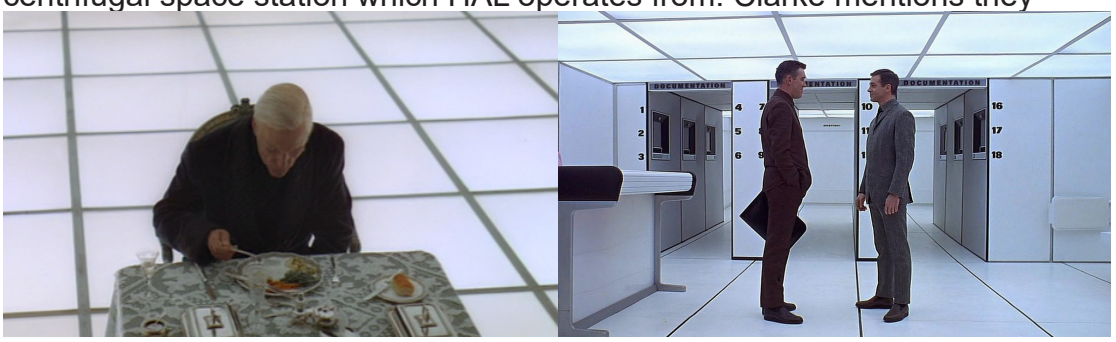


2001: A Space Odyssey, Centrifuge. 1968

3.0 Case Studies

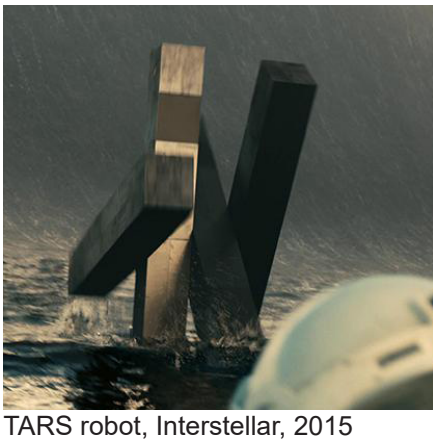
1.1 - 2001: A Space Odyssey, Interstellar and Black Mirror

Baxter states (2007) Stanley Kubrick aimed to make a believable story by creating a consistency across his envisioned future. By showing within his films trivial pursuits such as daily meals, purchasing new clothing, using transportation or an apparatus to communicate with friends and family, a believability was established. Even though his optimistic futurology didn't come to pass, it felt like a credible future because it was grounded in commonplace scenarios that we inhabit today.
His film 2001: A Space Odyssey (1968) came close to demonstrating that reality. Rob Coleman (2007) ILM animation director said the movie holds up because he (Kubrick) was realistic about materials, design, and what it's like to be in a futuristic environment. Kubrick and Clarke went to NASA to research and conceptualise a realistic aesthetic for the ship's equipment and spacesuits, which led to the effectiveness of the overarching design integrity. A primary example being the design decisions and generation of the circular centrifugal space station which HAL operates from. Clarke mentions they



2001: A Space Odyssey, 1968

approached NASA for help to conceive an idea for a futuristic space station that needed artificial gravity. With the scientists and engineers, models and diagrams were made representing the wheel station. Kubrick would then decide or alter the design aesthetic to make it more cinematically interesting.



TARS robot, Interstellar, 2015

In Interstellar (2015), the minimalist and modernist design in the robot breaks from

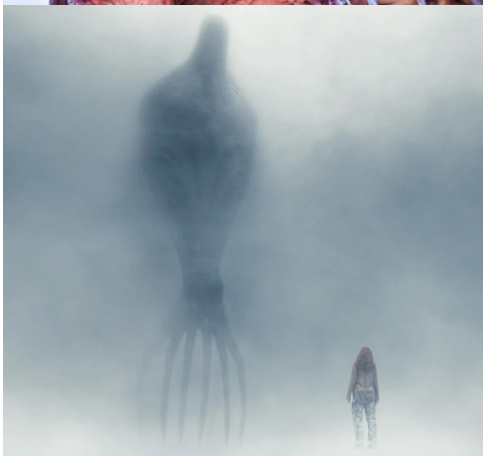
our traditional perceptions as to what a robot is, through a stylized technological anthropomorphism. Although a drastically different appearance, the TARS robot retains functionality and humanistic quality through its interaction with its human characters. The audience sees its primary role as a robotic calculating navigator, elegant and modernist but robust and slow.

Black Mirror, Arkangel chip, 2017

Only later when it unfolds with more humanoid appendages, to selflessly saving its fellow crew do we give the robot a new anthropomorphic quality as a heroic protective companion.

The Black Mirror, Arkangel (2017) episode portrays the Faustian bargain we make when a technology we believe is beneficial to improving our lives takes something from us that we once controlled. In this instance a mother decides to implant her child with nano-chip that censors the child from the disturbing aspects in our reality and tracks her location.

However, the side effects of the technology eventually circumvent the mother's control when the child is no longer aware of what harm looks like or how to react appropriately to a situation of emergency, resulting in inflicted harm upon herself and others. The exchange of a Faustian Bargain commences when mother is given a positive demonstration of the technology on the daughter. In a moment between parent and doctor agreement we see a rendition of the signing of his soul to the devil. Similarly the character Stormgren in Childhood's End enters in an exchange with the Overlords.



Above: Overlord, Childhood's End. 2015
Below: Heptapod, Arrival. 2016

1.2 -Childhood's End, 2015 mini series

Although an appealing adaptation, this series has a significantly altered story-line from the original in prioritising the argument between religion and science, rather than our relationship with technology. In doing so the adaptation lacks two main aspects which are crucial to the novel.

The first is the Overlords, their superiority, and use of technology. Neither are explored to a great extent given further intrigue after their demonic reveal.

The second is the lack of focus on the technological control of humanity and whether it can result in a utopia, which is a key theme of character evolution

within the books. The fundamental problem with this adaption is the lack of development of an alien culture technology and ecology for the Overlords. Unlike the Prawns from District 9 (2009), or the time manipulating aliens from Arrival (2016), who both have unique origins, languages and cultural attributes surrounding their habitats, the Overlords are framed simply as visual devils with few other characteristics.

The design of the technology doesn't need to explain how it physically works but does need to demonstrate how it interacts with the human society, especially the human reaction to such alien technology, culture and ecology. The series focuses more toward a story of Christian religion being bested by science, and the loss of faith and the resulting apocalypse for mankind. When I read Childhood's End I saw our struggle with technology, transcendence and rebirth of the human species as a more interesting adaptation option.

1.3 -Religious Paintings

Incorporating religious references into Childhood's End can be beneficial to the story, as the Overlords and their actions make reference to divine or demonic connotations. However my exploration of classical painting of biblical events has also provided an enhancement to the composition, lighting, colour and theme of my designs, improving the visual narrative accordingly. For example, Elijah taken up in a chariot of fire by Giuseppe Angeli (1755), shows a heavenly omnipotent power, similar to the Overlords mothership. The chariot of fire influences the design of the mothership's fiery entry to Earth's atmosphere.

Elijah taken up in a chariot of fire, 1755

The Ascension, 1774

The core themes these paintings represent have influenced my designs as collectively they suggest a relationship between the Overlord technology mirroring the nature of religion. Followers of unquestioning faith is shown in The Ascension by John Singleton (1774). The painting shows Christ rising to become omnipresence, this echos the scene where the Overlord's reveal themselves to the world simultaneously everywhere. The technological act is perceived as magical by most human populace, which establishes belief that the Overlords are god-like.

The Temptation of Christ, 1734

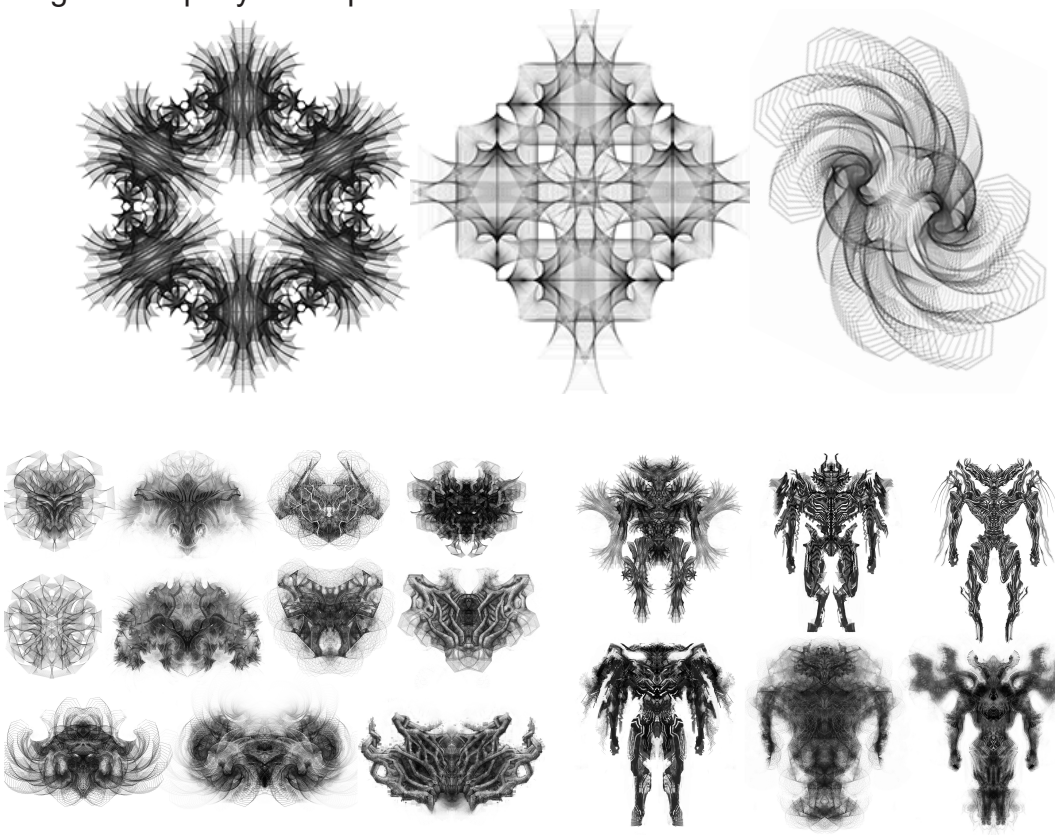
My study of The Temptation of Christ in

the Wilderness by Sebastiano Ricci (1734) suggests the beginnings of a Faustian Bargain. Although Christ refuses the devil, the gesture of an offer is visibly akin to that of the Overlord towards the human, Stormgren. Further studies were made into The Great Day of His Wrath by John Martin (1853) representing judgement, destruction and rebirth and have informed the design of the transcendence key scene. Supper Party and The Adoration of the Shepherds by Gerrit Van Honthorst (1622) were used in scenes of interaction between the Overlords and humans.

4.0 Design for Adaptation

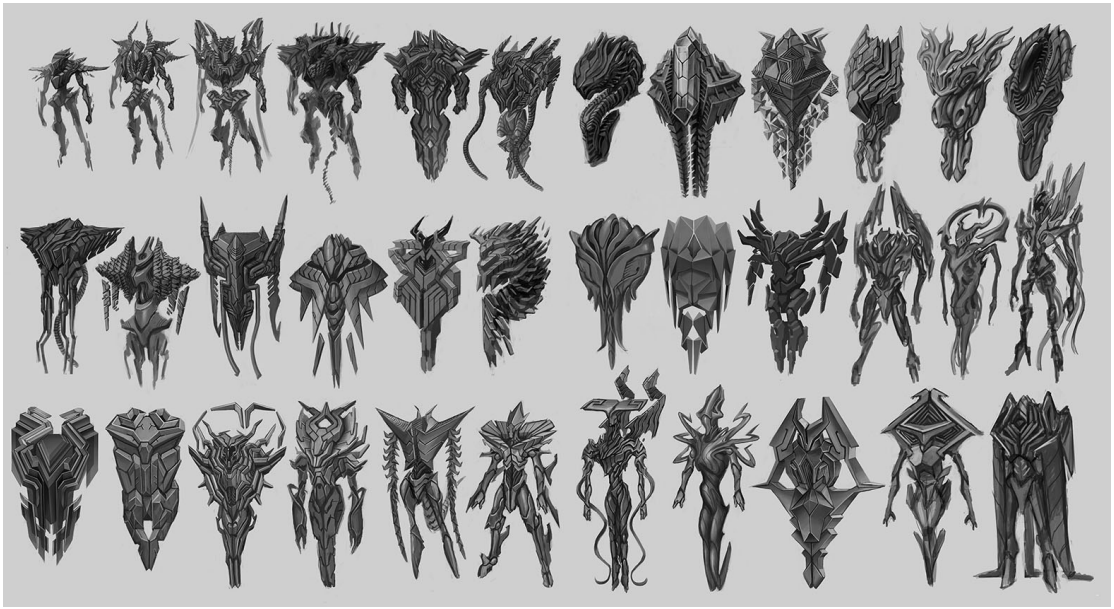
1.1 - Design methodology

The design process for this research began with an exploration of the visual language for the Overlord's appearance through preliminary sketches resulted in demonic and predictable bipedal aliens. Seeking a more innovative approach, I turned to my initial research of the tesseract and fractal geometry associated with the fourth dimension. I used a Mandelbrot fractal generator (2019) to replicate similar geometry. Generated random patterns were used to influence self-similarity shape types for a non-terrestrial anatomy. I used this design process to focus on head design for the Overlord first, this process was continued over to full body designs. This enabled me to develop a broad range of unique yet complicated ideas that could flourish into more

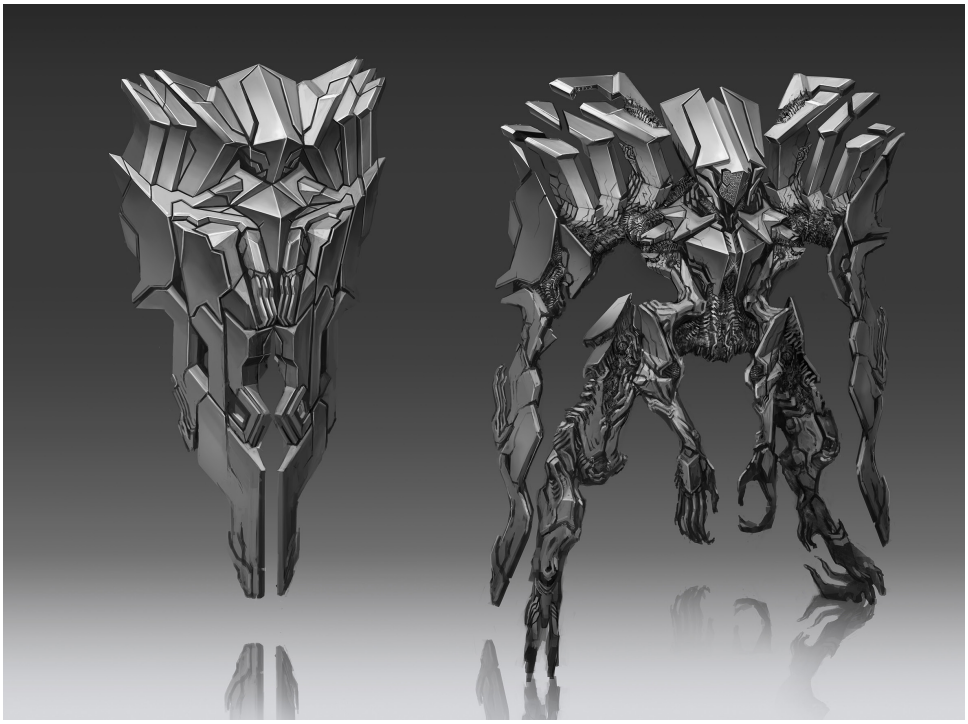


identifiable designs.

For the Overlord design, I created 35 rough thumbnails, each differently recognizable which encompassed abstract obelisks, curved angelic creatures, through to more complex demonic forms. From the 35 roughs, four designs were chosen and developed further with mood boards containing fractal materials and visual research of electron microscope imagery such as microbes, insects, sodium and metallic crystals and snowflakes.
The boards also contained reference of insects with distinct horns and devil like features such as the Emperor caterpillar and Atlas beetle.



Finally selective robotic designs were added to the boards to develop a touchstone guide. From those four concepts one was elevated to a more prominent prototype of the final Overlord. It stood apart from the others because I had designed it with transformative stages from the abstract obelisk form to an anthropomorphised biped form together. The transformative body design aided in portraying the hidden secretive nature these aliens pose as they shift through the Faustian bargain. The second true form comprising devil and angelic features unfolds, and is revealed once humans have become dependant on its technology. Milestones for the Overlord design were, creating a personification of technology.
Signifying the demon and celestial characteristic and consideration of a preternatural demonic sensation when given colour and texture.Creating a universal aesthetic, continued to the design of the mothership and it’s technology.



This Overlord concept was used to explore scenarios of the story. This was to help envision a final design product that could communicate the core message of the allegorical tale and demonstrate the best representation for film adaptation.

Using Key-scene designs as a method to offer a cinematic vision for visual storytelling, the core message from the novel was portrayed by important character interactions and specific design features of the Overlords transformation.
The design process for all Key-scenes began with quick thumbnail sketches guided by notes that explored important story elements. Thumbnails then progressed into more detailed black and white mockups, whose purpose was to explore different ways to communicate conceptual ideas from my research. Once satisfied with the compositions, I began modelling the scenes up in 3D, Foundry Modo to establish correct light sources and perspectives. The 3D process allowed the scene to framed with a camera angle that best suited the composition in terms of both cinematic feel, and allowed a shot that could exhibit a specific design. For example, complex components such as the Overlord Quantum printer prop. The last technical execution involved rendering the digitally in 2D into complete Key-scene concepts. This also included a fluid process of redesign and free form decisions to improve elements whilst painting to complete a scene.

Milestones for the Key-scene designs included creating a collective solution that communicates to a director how to visually adapt the novels cautionary tale. Showing the Faustian Bargain between humans and aliens, and the portrayal of the loss of moral control through human populist entrenched in Overlord bias. And finally the loss of physical control through the children’s transcendence.

The five key scenes represented:

1. An arrival of the aliens.

2. A bargain between mankind and the aliens.

3. The reveal of the aliens true form and humanity celebrating that coexistence.

4. Interaction between characters and aliens, rebelling against the aliens.

5. The conclusion of the Overlords agenda and the children's ascension.

1 - The Arrival Key Scene

-Conceptual Process

For this Key-scene, I referenced the painting, Elijah taken up in a chariot of fire by Giuseppe Angeli for inspiration, specifically its portrayal of motion encompassing a static body, and the general atmosphere of surprise. The left character is kneeling with his arms raised in awe is reflected in the space shuttle launch pad and gantries pointing like arms in futile defense. The sunlight lights the wings of the alien mothership framing the shuttle in front, referencing the alien mothership as a metaphor for a divine cosmic vehicle. When comparing the technologies between alien and human, I sought inspiration in the relationship of real world reference in nature, provided in a predator/prey scenario. This theme inspired the idea to assign different materials and textures to the respective technologies. The human buildings, and technology in the image have a recognisable and curved design with smooth surfaces. This is in contrast to the hard and sharp geometry of the mothership and its complex fractal-like patterned texture. Demonology of the unknown was represented in the design of the alien mothership, using the visual language of electron microscope photographed metals, salt

crystals and snowflakes, provided ideas for repetitive alien shape patterns and textures. This can be seen in the hexagonal geometry bleeding off the mothership from entering our dimension. Technocracy was demonstrated through mankind's space race culture being overshadowed by the arrival of the Overlords, a visual metaphor for blockade.

-Technical execution

I explored a variety of compositions with varying perspective angles. Momentum and Direction was used to create a visual hook. This was accomplished through the flow of compositional elements. The roads, flying helicopters, angle of light source and even the mothership design leads the eye into a zone of tension between a predator and its prey. The particular composition used demonstrates an abrupt entrance by the mothership as an overbearing presence that places the composition with a dutch tilt. Portraying a feeling of instability adds to the tension at the intersection of the human space shuttle and Overlord Mothership.
Hierarchy through scale portrays the epicness of the arrival of the mothership. Using a wide shot and low angle composition for the flat landscape, enables the small scale human elements, contrast with the scale of the elements in the air. Placing the human elements, including the foreground aircraft lower in hierarchy than the mothership. In contrast the mothership which is one large element dominating the sky, compositionally there is nothing higher than the mothership and looking up at the underside of its beak gives a foreboding presence communicating dominance. In this state of emergency, tiny human military helicopters move towards the mother ship in order to investigate and try to perform a vain attempt to comprehend the situation.
Those who can't do anything such as the family in the foreground are relegated to the role of bystander to this momentous encounter.

2 - The Bargain Key Scene

-Conceptual Decisions

This key-scene was influenced by The Temptation of Christ in the Wilderness by Sebastiano Ricci, to portray the Faustian bargain. The devil, disguised as a beggar amongst a forest, inspired my adaptation by hiding the Overlord in plain sight. The character Stormgren wrongly believes the Overlords are behind the mirror, but the truth actually surrounds him hidden in the dark. Ricci's painting shows a dual character reflection both good and evil. This was referenced in the reflection of Stormgren, however I wanted to keep an ambiguity of who is evil. The red cloth of the leather chair can also signify the Devil. Stormgren's hand offering the bonsai tree represents the Devil tempting Christ, yet this can also be a signifier of peace and mankind's soul being offered over.

A blue sky illuminates the Overlord technology emerging from the mirror, and drawing the eye to the technological prop a 'quantum printer'. The device is opening slightly to represent both the power within and the gamble of unforeseeable consequences. This Key-scene is intended to be more intimate and personal in a juxtapose to the arrival scene, and avoiding the trope scene typical of a mothership opening to present aliens. Instead we have a dark and claustrophobic scene with minimal action so as to not reveal who is in control of this alien technology, thus adding more mystery to their agenda. Finally the background pillars of the ship setup the narrative that the Overlords are assessing us and assimilating themselves for a form befitting humans. Their true identity and agenda is revealed after the bargain scene, once mankind has taken the bait they claim will reform the world in peace.

-Technical Design

Symmetrical composition was used to reinforce this is a deal between the two parties. This also adds to the technological nature of the Overlords being orderly and structured. The slight camera angle upwards aided to encompass the Overlord's ship interior and continue the dwarfing of the human character

elements with a room built for larger dominating beings.
Lightning was used sparingly in the scene, placed only on the character, the chair and tree to draw the eye to what is important but also give an effect that they are under scrutiny by the Overlords. The underlit face, and background pillars was intended to achieve an eerie suspicious feeling, as if a dramatic secret is about to be foretold. Colour emotion was defined by mechanical blue emanating from the overlord quantum printer entering through the mirror, aiming to portray that mood of secrecy and drama in an undisclosed location of shadows. Repetition was used in the background and the mirrored elements to signify that we have stepped into the heart of technology. In this heart the Faustian bargain resides, represented by mathematical and repetitive architecture that originates from the binary aspect of technology. Finally scene materials provide contrast between the red leather chair against the cold metallic ship interior, showing us there is an effort to accommodate and comfort Stormgren's human-ness through the deal. The tree, a familiar organic element we can relate to is contrast with Overlord quantum printer, a technically esoteric element, unknown, therefore not to be trusted.

3 - Reveal Key Scene

-Conceptual Decisions

The Ascension by John Singleton (1774) was used as technical and conceptual reference for the reveal key scene. In particular the placement and pose of Christ was referenced for the alien and adapted for decent. The reversal of tones comprised by a backlit light source, casts the alien in shade. The lowering of the feet to the stage and the direction of the wings and arms downwards denotes an entered decent.

In this Key-scene I wanted to establish a transformation sequence between three Overlords, from their obelisk like form to their anthropomorphic terrestrial form. Subtly they resemble demonic and angelic entities that subvert the crowds prior conception, that these aliens serve us. The sense of a celebration and spectacle was portrayed through the mass crowds

surrounding a stage within a stadium that televises the simultaneous Overlord reveals holographically. Reference for this idea came from imagery of game and tech conventions such as the Electronic Entertainment Expo where a cultural group gathers for the entertainment in the reveal and judgement of new technology and consumer product.
This reference was laced with imagery of the social festival Burning Man(2012) In both gatherings, the masses offer up a subject for entertainment be it effigies or a consumer product. I wanted this to be portrayed in the Key-scene through the children being on stage, as a symbolism of an altar. The visualisation of technopoly is portrayed through the majority of the crowd not questioning the Overlords appearance. Instead they display their allegiance for the Overlords through a logo they have fashioned, and the passive expressions on their faces. Technopoly is also hinted at within the wider stadium now resembling the wings of the mothership as a symbol that mankind has adopted the Overlord technology. Together the elements resemble a culture that has put its faith into advanced Overlord technology soon to be followed by responsibility and finally morality.

-Technical Design

Compositional proximity was used to frame and draw the eye to the important story elements. The setting of the stadium and its circular top creates a visual barrier between lead Overlord and the humans below, continuing the idea the aliens are above and beyond mankind's dimension. The foot of the Overlord, just about to make contact with the stage is meant to build tension and anxiety to the moment of touchdown.
Hierarchy, size and placement of the Overlord's form a triangle, showing the importance of them first, the reaction of the crowds and finally the perspective of the children. Focus is defined from the stadium towers and light beams leading the eye down through the Overlords and into the crowds. The foreground crowd are then pointing back up at the Overlords. Secondary direction is established with the holographic beams pointing towards the stage, coupled with a shadow cast across the brightly lit stage, this delivers more direction towards the children. The red sky was used to indicate an auspicious event and is followed subtly through the crowd. Although its strongest use is to surround the lead Overlord, giving a hint these aliens have assimilated to a demonic visage. The children are lit in a blue glow, giving a feeling of innocents and under inspection. The blue glow is also a hint to the psychic transcendence awaiting in the future. Lastly curiosity in detail was added to tell a larger story holistically when viewed over the five key scenes. The wings and collars of the Overlords are fractalizing away, bleeding as they unfold, its symbolic of an angels' feathers but in actuality it is their bodies reaction to our sunlight for the first time. Another minor detail is in the holograms showing the Overlords descending on other locations, one of which is the Vatican.

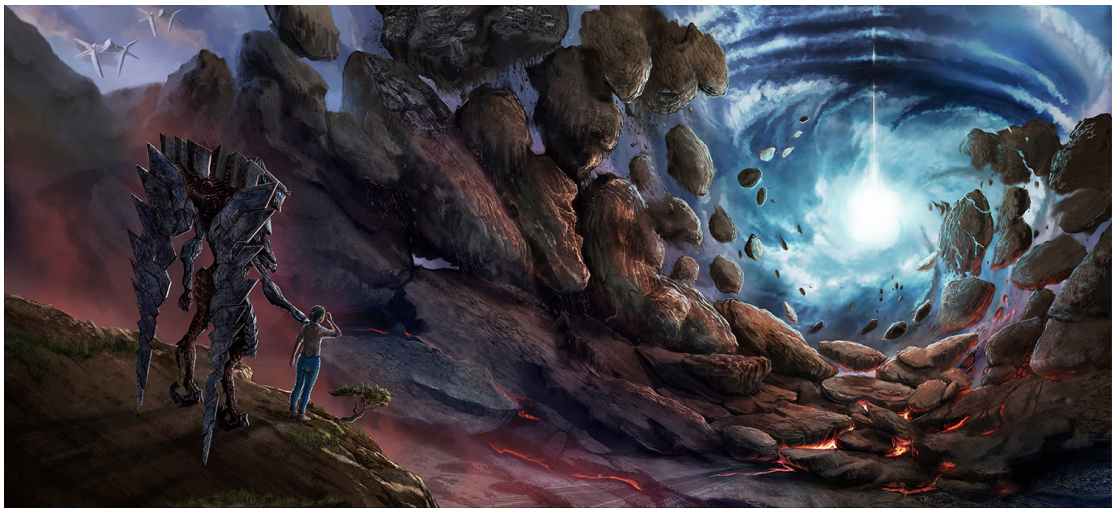
4 - Illumination Key Scene

-Conceptual Decisions

The fourth key scene had to communicate the social interaction relationship between an Overlord and the younger generation. In the story the girls, Jane and Jean have decided to retreat from a party into the library where they find an Overlord investigating the occult, which leads to them using the ouija board to pry into the alien's activities. This next phase of the story demonstrates rebellion to technology, which heralds a psionic awakening in children. It also shows a comfortable harmonious relationship has developed between mankind and the Overlords. The paintings Supper Party and The Adoration of the Shepherds by Gerrit Van Honthorst (1622), were used as case studies as references in constructing a scene with similar lighting, mood and composition of characters. The warm colour from candlelight and the deep shadows cast on figures from Gerrit's Supper Party was replicated into the fireplace for my key-sene which illuminates the girls, to create a defined contrast between their expressions as they unlock the secret of the Overlords as a clear rebellion against the Overlord's Technopoly culture, where technology and scientism dictate the answers to life. Compared to the Overlord who is cast mostly in shadow giving off a mysterious and unsettling presence. It has compacted itself down in a meditative gargoyle like pose, content in studying the library for its own purpose, however its presence contrasts with its surroundings, making the domesticated scene feel unnatural. The Overlord is shown nearly at our level, equal to humans. In the story the character Jean Morrel is pregnant, although unaware her child possesses psychic powers, which animate the ouija board. Ideation for this characters pose and aesthetic was influenced by The Adoration of the Shepherds painting, with the composition of the foreground figure and colour palette of Mary and her child. Seen in the warm lit pink hoodie, blue jeans and head framed by the light coming from the background door, draws attention and creates an innocent and pure natured character who shows joy in seeing the ouija board begin to communicate.

-Technical Design

Initial conceptual roughs focused on portraying the girls in a brighter daylight and the Overlord in shadows. I found the mood didn't reflect mystery. With the introduction of the fire and library setting the mood of the scene started to demonstrate a harmonious social interaction in opposition to the bargain Key-scene. Lastly the materials of the library gave an aged, handmade human aesthetic, which contrasts with dark reflective metallic Overlords. This is a reflection of the bargain scene, but with Overlord in reverse, instead under the scrutiny of the girls questioning. The composition used over the shoulder cinematic shot to show the two human characters in interactive dialogue. This camera angle also demonstrates the shot would pan to the Overlord, a forewarning for the next scene. Direction and flow was utilised in the light source coming from the background door leading horizontally right toward the Overlord but also lighting a globe, signifying the world will be affected by the Overlords secrets. The pose and legs of the Overlord points forwards to the character Jane who creates another tangent connection to the ouija board. Likewise the structure of the door leads the eye vertically towards the character Jean who in turn redirects us to the ouija board.
The environment in general invokes a safe and familiar mood, with the exception of the Overlord, creating an unsuspected subversion for the next scene to follow. The placement of characters in environment also reinforces their nature. The girls are situated on a decorative oriental rug referenced from a Persian magic carpet, they are seated in a relaxed and casual manor, a subtle reference indicating freedom. Compared to the Overlord, who is placed on the masonic floor symbolizing structure and their binary view on mankind, either evil or good.



5 - Ascension Key Scene

-Conceptual Decisions

The conceptualisation of the last Key-scene needed to show a cyclic narrative of consequence, as mankind reaps by letting technology take control of our lives. In the story Jane finds the planet of the Overlords, and stows

away aboard their ship in order to find answers. Once on the Overlords planet she is discovered and returned to Earth, but not before she learns of the Overlords agenda for Earth.
Once back on Earth her warning is too late, as mankind has become extinct. The only remaining humans are children, who have evolved into a hive consciousness of immense destructive power. The reference of John Martin's (1853) The Great Day of His Wrath aided in the ideation for a rapture and end of days scenario. I utilised the conceptual aspects of judgement, death, destruction and rebirth from Martin's painting for the subject matter of my design. The judgement and salvation was reflected in the Overlords ships using a similar position and tone to Martin's heavenly clouds. Both being the furthest away from the dark tones or red colours of the destruction. Likewise, Jane and the Overlord are positioned just below the ships in relative safety, in contrast to the chaotic destruction of the background landscape.
The landscape is shattered and swept up in a wave of destruction. It hints in subtle indications at death, portrayed in the city ruins and the barren desert. Lastly rebirth is portrayed by the transcendence of the children with the vertical beam rising from the ball of psychic power.
I wanted to portray total loss of control resulting in an unstoppable, runaway surge of power. An inevitable event, where the characters have no control. Observing how scenes from Akira (1988) and Star Wars: Rogue One (2016) utilised dynamic destructive landscape build a feeling of trappement, in contrast to the shape and color of the children's psychic coalescence into a new entity.

-Technical Design

Martin's painting also influenced the composition for the ascension sense. The circular 'wave' shape of the landscape and its twisted perspective was crossed over. Combined with a dutch tilt, a dynamic composition invokes a feeling of instability as everything leads to a single point. The direction and flow of the scene follows the curve of the golden ratio (Dunlap, R. A. 1997), beginning just in front of the Overlord and Jane, and spiralling off to the right. This is emphasized by the large shadows and highlights of the broken landscape, coupled with red cracks of lava flow and finally derby and cloud sweeping in the direction of the vortex's centre. The placement and proximity of the Overlord, Jane and the tree at the edge of the cliff signifies the end of humanity, and the idea of going no further. Mankind's journey has reached the end of the road, and the departure of the Overlords and the children, will leave Jane vulnerable to this dimension, in an echo to the arrival scene.
I wanted to create a scene reminiscent of a supernova or aurora. The colours utilised needed to create and unworldly phenomena. The luminescent blue of the children's psychic ball was referenced within the Overlords eyes. The colours also assisted in establishing contrasts between order and chaos. Areas which are blue and bright denote order, life and departure, darker tones surrounded by reds signify chaos and a fate of doom and abandon.
Lastly this scene aligns with the third and first scenes. All three show different landscapes and skies which represent a mood of technology. Arrival is its

positive bright dawn of possibility. Reveal is technologies forewarning of a nature that ensnare us in spectacle only to usurp our responsibilities. Ascension, the third shows us technology can take what we cherish most and leave us behind if we don’t respect or understand its nature.

5.0 Conclusion

The original research aim was to understand how 2001: A Space Odyssey stimulated audience curiosity in issues humankind faces through our relationship with technology. The key-scenes I designed for my adaptation of Childhood's End I believe portray an authentic and considered visualisation of technology within Arthur C Clarke's story, specifically notions of technocracy, a Faustian bargain, Technopoly and Transcendence.
The creature design successfully acted as a design catalyst to inspire and guide the development of key scene concepts. A process made successful due to the knowledge gained from researching Clarke's themes of futurology and cosmology.

This research demonstrates that if these theories are visually considered within the development of concept for a feature film, audiences will better understand the power-play of technology, even if they do not grasp the specifics and subtleties of these ideas straight away.
If the production of this adaptation were to continue, the next step would be the design of further key-scenes situated between the primary five. This would provide further context for the explanation of the cautionary tale, and also show more subtle features of the Overlords, specifically their planet of origin, their intended glitch mission, and who they serve - the Overmind.
Further Key-scenes would enable me to show the other human characters who were more vigilant and skeptical of the Overlords mission.

In summary, I feel the final design serves its two intended purposes. Firstly, it gives a technologically appropriate design idea to a director so that they can visualize Childhood's End with emphasis of the novel's core message. Secondly, the designs provide a speculative adaptation that warns technology dependant audiences the perils we may face when adopting technological advancement. Were this project's designs to be made into a feature film, I believe they could enable the audience to consider the effects of technology control within their lives. Despite the overwhelming benefits provided through technology, there will always be the need for Science Fiction stories to ask us to look critically at what technology is doing to humanity. If we don't acknowledge these effects, technology could quietly change us, and subvert aspects of control within our lives , running the risk of altogether become tools of our tools. At the very least I hope my designs remind us we always have the choice to take back control.

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