Hsin-Tze Wang

Draft #3

Working Title of Thesis: “GENESIS”

30 October 2019

Thesis Instructor: Sharita Towne

Advisor Selections (list 3 in order of preference):

Teagan Smiley Wolfe, Chuck Lukacs, Laura Heit

For my thesis project, I am examining the relationship between Transhumanism and modern media depictions of cyborgs and androids. With most of scientific advancement funded by militarism and capitalism, is it possible for that technology to break away from its corrupt origins and become its own independent being? Can that being, created for and from violence, reclaim their humanity? Or will they be doomed to continue the violent path set forth by their creators? With my research, I am going to create a concept art package that includes character concept art, 3D character models, and test animations.

Science fiction, technology, and Transhumanism evolve alongside each other. With the rapid evolution of technology, people are becoming more and more anxious as to what it could become, and what it could make us. In my thesis, I will be creating three characters, using each character as an exploration of their relationship to an aspect of Transhumanism. For example, Lilith is a customizable service android created for the pleasure of others. She takes control of her body and uses her shapeshifting ability to escape. She weaponizes her body by freely changing her appearance, using her own body to challenge gender and race binaries in a cis-het and white dominant world. This blurring of gender binaries is tied to Donna Haraway's "A Cyborg Manifesto," where she describes the cyborg as "a creature in a postgender world."

The main inspirations for the project itself are the video games *Metal Gear Rising: Revengeance* and *Nier:Automata,* both developed by the game studio PlatinumGames. Both have a unique semi-realistic visual style, exciting gameplay, and plots that revolve heavily around Transhumanism. As for the content of my project, I'm taking inspiration from video game concept artists such as Ben Zhang, a senior concept artist at Blizzard Entertainment, and Shinkawa Yoji, the character and mech concept artist for many of the *Metal Gear* video game titles. The visual style of the models themselves are also inspired by *Overwatch* and the *Metal Gear* series, as well as the aforementioned PlatinumGames titles. I am taking visual inspiration from both the futuristic sci-fi and retro sci-fi mech designs the games present, as well as their storylines.

My proposed project will be a concept art package for a potential video game titled "GENESIS." The visual components will consist of character concept art, fully textured and rigged character models, and animation tests for the character models such as walk cycles and

idle animations. Written components like character backstories will be integrated into the concept art. The package at the end will be compiled onto an online portfolio page on my website. This page can then be used as portfolio material for future job applications to video game studios or animation studios.

The pipeline process for creating 3D models starts with visual references like concept art and orthographic view turnarounds. It then moves into the realm of 3D. Steps of the 3D modeling process include: sculpting, retopology, texturing, and finally, rigging. The rigged model can then be posed and animated. I plan to include the finished products, such as polished concept art and 3D models, in the final package.

I have the concept art completed for all three characters I plan to model, in addition to some other background characters. I plan to create all three models and animate them next semester. I will be working with my mentor on streamlining and fixing the models as needed. The end goal for this experience is to use the most of my skill set and create content that I am not only satisfied with as the creator, but also enjoy as a consumer and fan of sci-fi content.

There are other popular examples of Transhumanism in modern media, such as movies like *Ghost in the Shell* and video games like *SOMA*. These examples, as well as other scholarly materials on Transhumanism like Donna Haraway's "A Cyborg Manifesto" and Hugh Herr's TEDTalks, will inform my thesis, which is an exploration of Transhumanism and cyborg and android representation in pop culture through character and 3D modeling.

Bibliography

Academic Resources

Baily, Doug. (and others). “Transhumanist Declaration.” Humanity+. 1998. (it has been updated since) Accessed 8 September 2019. https://humanityplus.org/philosophy/transhumanist-declaration/

Written by the group behind the Transhumanism movement, this document states their values and their philosophy of using technology to “broaden human potential,” “preserve life and death,” and “alleviate grave suffering.” This resource is mainly for me to understand what the Transhumanist movement values at its core.

Corridor. “New Robot Makes Soldiers Obsolete (by Corridor Digital).” Filmed [October 2019]. YouTube video, 4:12. Posted [October 2019]. https://www.youtube.com/watch?v=y3RIHnK0_NE

Perfectly encapsulates the anxiety of rapidly evolving technology. Posted by the YouTube channel Corridor, this is a mock Boston Dynamics video which showcases a robot that shoots targets with deadly precision as it’s being pushed around. The robot is entirely CGI, but it still doesn’t help console the fear that one day this might come true.

Haraway, Donna J. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs and Women: The Reinvention of Nature.* New York, New York: Routledge, Chapman and Hall, inc., 1991. 149-181.

Haraway’s manifesto of how becoming a cyborg is not necessarily a bad thing. Her definitions of cyborg comes from a feminist standpoint, but it includes some good points such as: the cyborg is undefinable, unfaithful, and comes from corruption, but able to use that to their advantage. A cyborg is: “a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction.” This paper provides 1) the definitions of cyborgs, 2) their ability to be undefinable by others except themselves, 3) their ability to be unfaithful to their corrupted origins, and 4) for feminists to utilize technology in their cause. Also to use these technologies to help others, especially those in poverty.

Herr, Hugh. “The new bionics that let us run, climb and dance.” Filmed March 2014 in Vancouver, BC. TED video, 18:57. https://www.ted.com/talks/hugh_herr_the_new_bionics_that_let_us_run_climb_and_dance?referrer=playlist-11_must_see_ted_talks

Hugh Herr is building the next generation of bionic limbs, robotic prosthetics inspired by nature's own designs. Herr lost both legs in a climbing accident 30 years ago; now, as the head of the MIT Media Lab's Biomechatronics group, he shows his incredible technology in a talk that's both technical and deeply

personal — with the help of ballroom dancer Adrianne Haslet-Davis, who lost her left leg in the 2013 Boston Marathon bombing, and performs again for the first time on the TED stage.

Herr, Hugh. "How we'll become cyborgs and extend human potential." Filmed April 2018 in Vancouver, BC. TED video, 15:14. https://www.ted.com/talks/hugh_herr_how_we_ll_become_cyborgs_and_extend_human_potential

Humans will soon have new bodies that forever blur the line between the natural and synthetic worlds, says bionics designer Hugh Herr. In an unforgettable talk, he details "NeuroEmbodied Design," a methodology for creating cyborg function that he's developing at the MIT Media Lab, and shows us a future where we've augmented our bodies in a way that will redefine human potential -- and, maybe, turn us into superheroes. "During the twilight years of this century, I believe humans will be unrecognizable in morphology and dynamics from what we are today," Herr says. "Humanity will take flight and soar."

Philbeck, Thomas D. "Post- and Transhumanist Ontology." In *Post- And Transhumanism An Introduction,* edited by Robert Ranisch and Stefan Lorenz Sorgner. Peter Lang Gmbh, Internationaler Verlag Der Wissenschaften, 2015.

The article looks at the differences between Transhumanism and posthumanist definitions and objectives, and their relations to the material and immaterial. Transhumanism sees progress as the primary goal, using science and technology to "extend human opportunities" and "overcome natural human limitations" both physically and mentally, guiding the evolution of humans via technology, and so enforces the dualism of mind and body, material and immaterial. The "posthuman" in posthumanism is a being that is "beyond our understanding," a completely different being that is removed from human ethics, and so makes posthumanism more philosophical and abstract than Transhumanism.

Media

Blizzard Entertainment. *Overwatch.* Directed by Jeff Kaplan. 2016; America: Blizzard Entertainment, 2016. Video game.

"*Overwatch* is a team-based multiplayer first-person shooter developed and published by Blizzard Entertainment. Described as a "hero shooter," *Overwatch* assigns players into two teams of six, with each player selecting from a roster of over 30 characters, known as "heroes," each with a unique style of play that is divided into three general roles that fit their purpose." Character and setting design inspiration.

PlatinumGames. *Metal Gear Rising: Revengeance.* Directed by Kenji Saito. 2013; Japan: Konami Digital Entertainment, 2013. Video game.

"In the game, players control Raiden, a cyborg who confronts the private military company Desperado Enforcement, with the gameplay focusing on fighting enemies using a sword and other

weapons to perform combos and counterattacks." Action hack-and-slash. Critiques the American militarism complex and cyborg politics.

PlatinumGames. *Nier: Automata.* Directed by Yoko Taro. 2017; Japan: Square Enix, 2017. Video game.

"Set in the midst of a proxy war between machines created by otherworldly invaders and the remnants of humanity, the story follows the battles of a combat android, her companion, and a fugitive prototype." Action hack-and-slash. Presents the android experience, the Posthuman, and artificial intelligence and life.

Frictional Games. *SOMA.* Directed by Thomas Grip. 2015; Sweden: Frictional Games, 2015. Video game.

"SOMA takes place in a remote underwater research facility with machinery that begin to take on human characteristics. Simon Jarrett, a fish-out-of-water protagonist, finds himself at the facility under mysterious circumstances and is inadvertently forced into uncovering its past, while trying to make sense of his predicament and potential future."

Wilson, Dave, dir. *Love, Death & Robots.* Season 1, episode 1, "Sonnie's Edge." March 15th, 2019, Blur Studio (producer), Netflix.

"In dystopian London, a young woman named Sonnie with teammates Wes and Ivrina participate in underground "Beastie" fights: Remotely controlled bio-engineered gladiator beast battles."

Thomas, Oliver, dir. *Love, Death & Robots.* Season 1, episode 8, "Good Hunting." March 15th, 2019, Red Dog Culture House (producer), Netflix.

"In early 20th century China, Liang accompanies his father in hunting a shape-shifting Huli jing named Tsiao-Jung. His father kills her, and Liang becomes friends with her now orphaned child, Yan. Moving to Hong-Kong, Liang works as a train engineer, and one night sees Yan, now permanently human after magic left the world, which was now occupied by machines and polluted by smoke and coal."

Valley, Robert, dir. *Love, Death & Robots.* Season 1, episode 14, "Zima Blue." March 15th, 2019, Passion Animation Studios (producer), Netflix.

"Journalist Claire Markham is invited to interview reclusive artist Zima Blue, who wishes to tell his story before unveiling his final work."

(proposal rewrite)

For my thesis project, I am creating a portfolio of three high resolution 3D character models that I can use to apply to a job when I get out of this school. Since I'm graduating with thousands of dollars in debt, I'd rather take the time I have left at this institution to actively work towards a good application portfolio than waste it.

For my thesis, I have created three characters, which I will be modelling for personal reasons. I have been constantly altering the characters' designs for years already, and since I already know them so well, I would prefer to use this cast of characters rather than make generic models off of prompts. Lilith is a customizable service android who has the ability to shapeshift and mimic other humanoids. To show this aspect of their character, I will make at least two distinct forms for them. Genesis is an older military cyborg who has a more mechanical body and design. Yashcheritsa is a reptilian humanoid cyborg monster who can shift between bipedal and quadruped mode. Both Genesis and Yashcheritsa will both prove to be challenging because of their intricate and mechanical designs.

The main inspirations for the project itself are the video games *Metal Gear Rising: Revengeance* and *Nier:Automata,* both developed by the game studio PlatinumGames. Both have a unique semi-realistic visual style, exciting gameplay, and plots that revolve heavily around Transhumanism, war, and AI consciousness. The movie *Ghost in the Shell* and the videogame *SOMA* are also influences for my characters, as they present the concept of housing the human consciousness in a robotic body. As for the content of my project, I'm taking inspiration from video game concept artists such as Ben Zhang, a senior concept artist at Blizzard Entertainment, and Shinkawa Yoji, the character and mech concept artist for many of the *Metal Gear* video game titles. The visual style of the models themselves are also inspired by *Overwatch* and the *Metal Gear* series, as well as the aforementioned PlatinumGames titles. I am taking visual inspiration from both the futuristic sci-fi and retro sci-fi mech designs the games present, as well as their storylines.

My proposed project, titled "GENESIS," will feature 3 characters: Lilith, Yashcheritsa, and Genesis. The visual components will consist of character concept art, character story snippets, orthographic view drawings, fully textured high resolution character models, and

renders of the models that show off the technical and aesthetic quality of the models. There will be some rigging and posing of the models for the final renders to show the edge flow and mesh deformations. I intend to present the 3D models along with other process artwork such as character concept art, orthographic drawings, etc. as well as UV unwrapped models to show the quality of the model itself and the textures. The package at the end will be compiled onto an online portfolio page on my website. The plan is to make high quality models that can then be rigged for animation or baked down to a lower resolution for in-game use.

The pipeline process for creating 3D models starts with visual references like concept art and orthographic view turnarounds. It then moves into the realm of 3D. Steps of the 3D modeling process include: sculpting, box modeling, retopology, texturing, and finally, rigging. The rigged model can then be posed and animated.

I have concept art completed for all three characters I plan to model, as well as orthographic drawings. I will be working with my mentor to create the best models that I can in this span on time, as well as streamlining and fixing the models as needed. The end goal for this experience is to use the most of my skill set and create content that I am not only satisfied with as the creator, but also enjoy as a consumer and fan of sci-fi content and Transhumanist theory.

In conclusion, “GENESIS” will be a concept art package and portfolio of high quality 3D character models that I can then use as application material for animation or game studios.

Hsin-Tze “Trin” Wang
SP20 Thesis - COVID19 Edition
Title of Project: GENESIS Archive

Project Overview

Intent of Project:

The intent of my thesis is to create a diverse character portfolio that can be used to apply to positions in character design, 3D modeling, etc. in the animation, gaming, and/or vfx industry. I chose to take the design from concept to final high-resolution model so that I would have a range of steps within the process to use as portfolio material.

The characters I designed are inspired by sci-fi popular media, such as the video games *Overwatch* and the *Metal Gear* series. My hope is that one day I can use the completed models for a video game.

I was not very affected by COVID, but rather by burnout and tech malfunction. I was not able to create anything for over a month because my laptop stopped functioning. But what I have done are all online on my website and on Sketchfab, and I will continue to update those sites as I continue working. I will not however be submitting new work for my thesis after the presentation, but just for my own purposes.

Website: https://www.rhodart.com/genesisarchive

Sketchfab: https://sketchfab.com/rhodartarts/collections/thesis

What the final project will include / Project Status:

- Concept art (complete for all characters)
- Character sheets that include some information about the characters (Genesis and Lilith #2 (green) needs to be redone according to redesign)
- Orthographic drawings, sketches, process work (complete)
- 4-5 high resolution 3D models that I have taken through sculpting/box modeling, retopologizing, texturing, and unwrapping, plus rigging to pose the models for renders.
    - Lilith models (Pink: clothes need to be retopologized to proceed, Green: clothes in-progress)

    - Genesis model (modeling in-progress)
    - Yashi model (modeling in-progress)
- Animated turnarounds (not started)
- Renders/screenshots/images showing the quality of the models (wireframe, material renders, unwraps, etc.) (non started, placeholders have been included)
- Organized portfolio with all of the materials (in-progress)

How do you intend to present this at the end? What will the final presentation look like?

- Online portfolio(s) (different portfolios for different steps of the process/different job applications) (website, Sketchfab, pdfs)

Research / Artists / Creative Professionals you are looking at:

- Supergiant Games (Jen Zee, Paige Carter)
- Blizzard Entertainment / Overwatch (Ben Zhang)
- Kojima Productions, Shinkawa Yoji

Feedback you are interested in:

- Quality of the in-progress models
- Legibility: ideas of how to make this understandable to others who may not have a background/understanding of 3D
- Presentability: website format, Sketchfab, etc.