

HYPERVOLITION

Our Sacrifice of Choice

by Jevonne Peters (Jevi)

A thesis exhibition presented to OCAD University in partial fulfillment of the requirements for the

Master of Fine Art
in
Digital Futures

H.I.V.E, Toronto, ON, May 2021

Toronto, Ontario, Canada.

May 2021

Jevonne Peters (Jevi) 2021

Advanced segmentation and customisation (called hyper-personalisation) are often touted as the future of experiential marketing, and comes in the form of personalised experiences, tailored search results, and recommendations on what to do based on past behaviour and traits. The personalisation is achieved through the deployment of algorithms that observe us and extract scraped information to abstract what it deems to be relevant. Byung Chul Han describes what we are experiencing as an “aperspectival panopticon,” in that the surveillance is no longer from a central location, but is omnipresent. Issues of interest include what is considered normal and who determines it, the effects of the mass adoption of these technologies, the corruption of algorithms by capital, and the subtle control on the various levels of collectivism within societies.

abstract

This research critically examines the evolution of discipline and governance within society, our relationship with technology, our desires and how we influence them and how they can be influenced, our tendencies to customise experiences for ourselves, the proliferation of the use of algorithms in our everyday lives, and introduces a new term, hypervolution, which is defined as inability of consciousness to distinguish our true desires and choices, from our algorithmically deduced and imposed desires and choices. I define the Jevinian Orders and Phases related to the term, which extends Foucault’s concept of disciplinary power, and Han’s ideas on the neuronal within the framework of Jean Baudrillard’s hyperreal, and creatively express the concepts through the art works “My.o.T,” “Inter Alia,” “In Plain Sight,” and “The Resistance”.

2021
JEVONNE PETERS

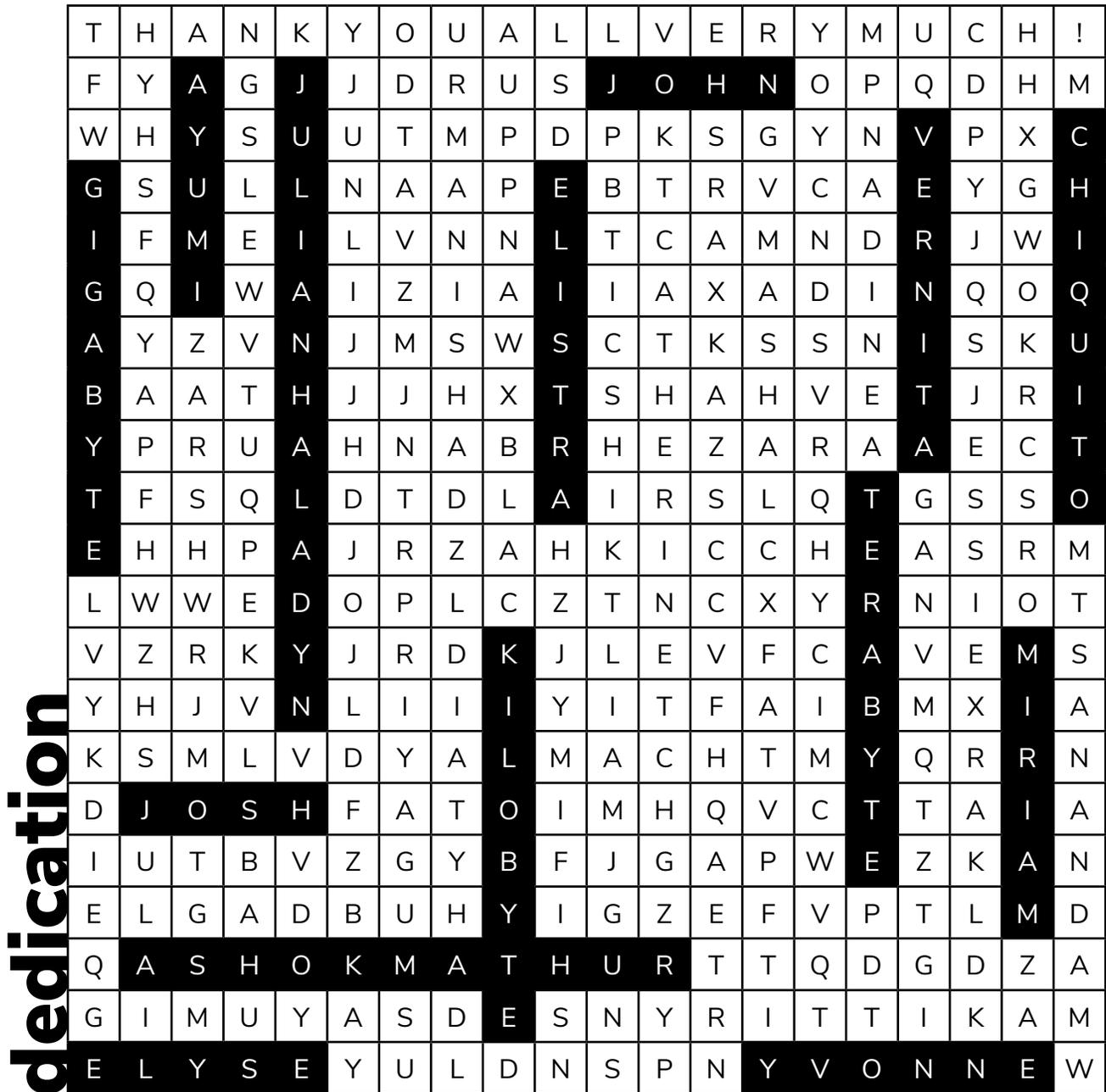


<http://hypervolution.study>



<https://hypervolution.study/mfa/ar>

THIS DOCUMENT FEATURES AUGMENTED REALITY COMPONENTS.
USE A SMART DEVICE'S CAMERA TO SCAN THE QR CODE.
USE ON IMAGES AND FIGURES.

**FAMILY**

ELISTRA
JOHN
JOSH
VERNITA

FRIENDS

ELYSE
YVONNE

R.A.I.D.

CHIQUITO
GIGABYTE
KILOBYTE
TERABYTE

SUPPORTERS

MIRIAM JORDAN-HALADYN
AYUMI GOTO

DEFENCE COMMITTEE

JULIAN HALADYN
ASHOK MATHUR
ALEXIS MORRIS

Special thanks to my Primary Advisor, Dr. Julian Haladyn for the overwhelming support in the development of these ideas. This thesis would not be possible without it.

Special Thanks

Dr. JULIAN HALADYN

**Modern science says: The sun is the past, the earth is the present,
the moon is the future. From an incandescent mass we have
originated, and into a frozen mass we shall turn. Merciless is the
law of nature, and rapidly and irresistibly we are drawn to our doom.**

- NIKOLA TESLA, 1990

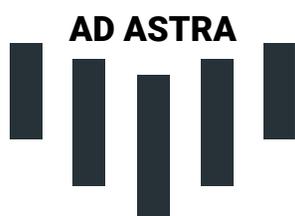


TABLE OF CONTENTS

| | |
|--------------------------|-----|
| Abstract | ii |
| Author Declaration | iii |
| Dedication | v |
| Epigraph | vi |
| Preface | x |

Hypervolution: Our Sacrifice of Choice

| | |
|---|-----|
| - CHAPTER ZERO | |
| Introduction | 2 |
| -§ 0.1: Hyper- | 3 |
| -§ 0.2: Inception | 10 |
| -§ 0.3: Vocabulary | 14 |
| -§ 0.4: Execution | 18 |
| - CHAPTER ONE | |
| Theory | 32 |
| -§ 1.0: Hypercorrection | 33 |
| -§ 1.1: Hypernudge | 50 |
| -§ 1.2: Hyperlibido | 54 |
| -§ 1.3: Hyperpersonalisation | 64 |
| -§ 1.4: Hyper- Practices & Algorithms | 72 |
| -§ 1.5: Hypervolution | 78 |
| - CHAPTER TWO | |
| Art | 94 |
| -§ 2.0: Art as Research | 95 |
| -§ 2.1: Research-Creation Goals | 97 |
| -§ 2.2: My.o.T. | 109 |
| -§ 2.3: Inter Alia | 110 |
| -§ 2.4: In Plain Sight | 112 |
| -§ 2.5: The Resistance | 120 |
| Bibliography | 122 |
| Appendices | 132 |

FIGURES

CHAPTER ZERO

| | |
|--|----|
| Figure 0-1 Lecture Handout by Theodor H. Nelson (1976) | 6 |
| Figure 0-2: Research Questions | 13 |
| Figure 0-3: Research DIKW Pyramid. | 16 |
| Figure 0-4: Research Methods. | 19 |
| Figure 0-5: Research Focus. | 20 |
| Figure 0-6: Research Five Whys. | 24 |
| Figure 0-7: Research Keywords Cloud. | 26 |
| Figure 0-8: Research Literary and Art Key Sources. | 27 |
| Figure 0-9: Research Landscape Analysis. | 29 |
| Figure 0-10: Thesis Organisation. | 31 |

CHAPTER ONE

| | |
|--|----|
| Figure 1-1: Jeremy Bentham's Panopticon Illustrated by Willey Reveley in 1791. | 37 |
| Figure 1-2: The Elaborated Intrusion Theory of Motivation Showing the Contribution of Triggers | 56 |
| Figure 1-3a: Categories of Theories of Desire (1) | 60 |
| Figure 1-3b: Categories of Theories of Desire (2) | 61 |

CHAPTER TWO

| | |
|---|-----|
| Figure 2-1: Art-Chapter Summary. | 96 |
| Figure 2-2: Research Horizon Scan. | 98 |
| Figure 2-3: Research Make Tools. | 100 |
| Figure 2-4: Personal Experience Logging - Smart Watch. | 102 |
| Figure 2-5: Rapid Prototyping Stage 1 Summary. | 104 |
| Figure 2-6: Rapid Prototyping Stage 2 Summary. | 105 |

PREFACE.

As a researcher, developer and emerging experimental inter-disciplinary artist, my research-creation practice explores our individual and societal relationships with technology, privacy, governance, immersion and speculative fiction.

My interests draw heavily from my educational background, and also from my work experience as an Ethical Hacker, Business Intelligence Analyst, and recently an employee in retail. In the Fall of 2020, I worked at Michael's as a seasonal team member for a few months. As a team member, I encouraged shoppers to sign up for the rewards program which tracked shopping habits, in exchange for in-store discounts. Based on my observations and research, and using what I believed could be the ideal consumer motivations for sacrificing this information, I earned a score of 71% reward-recruitment of customers I spoke to at the till. This was almost 30% above the store average at the time.

This role placed me on the front-line of information gathering, thereby closing the loop in the process of consumer data management. This loop began with gathering (Retail Team Member), to protecting (Ethical Hacker), and finally extracting and utilising the data to market to consumers, in order to influence their decisions (Business Intelligence Analyst), and to entice them back to the retail store.

Amongst several other roles, my mother is an Educator, and my father, a Civil Engineer. Growing up, one of the important lessons I learned was the true value of a solid foundation, both academically and in construction. Over the years, I have cultivated my experiences to build a foundation that will benefit my goals. Inspired in part by my parents, and also by polymaths like Leonardo da Vinci, my previous educational pursuits have been diverse. I studied Business Informatics (Commerce and Computer Science) at McMaster

University, Art and Design at George Brown College, Digital Media at OCAD University, Machine Learning & Artificial Intelligence at the Massachusetts Institute of Technology, and now an MFA in Digital Futures at OCAD University. All of these have shaped the ideas and approaches that I take within this research.

My experiences with my family have been very influential in my current path. One of my fondest memories is from 1999, sitting with my younger brother, watching the end credits of the newly released movie, *The Matrix*, scroll by in contemplative silence. I was around 11 years old at the time, and he, around 9, and we were processing the ideas in the science fiction's loose translation of Jean Baudrillard's *Simulacra and Simulation*. After a moment, the credits almost over, I turned to my brother and asked, "Do you want to watch it again?" He looked at me, with the same awe that I felt reflecting back, and nodded. We pressed rewind on the VHS player, and watched the movie again. This moment ignited my interests in the hyperreal, and the use of science fiction to share theoretical ideas. This was the beginning of hypervolution.

A handwritten signature in cursive script, reading "Jeei". The letters are fluid and connected, with a prominent loop on the 'J' and a trailing flourish on the 'i'.

INTENTIONALLY BLANK

HYPERVOLUTION: OUR SACRIFICE OF CHOICE

CHAPTER ZERO

Introduction

0.1 HYPER-

0.2 INCEPTION.

0.2.1 BACKGROUND.

0.2.2 CENTRAL THEMES OF THE RESEARCH.

0.3 VOCABULARY.

0.3.1 WORLDVIEW AND PHILOSOPHY OF THE RESEARCH.

0.3.2 SCOPE OF THE RESEARCH.

0.4 EXECUTION.

0.4.1 METHODOLOGIES.

0.4.2 DETERMINING ROOT MOTIVATION.

0.4.3 ASSESSING LITERARY AND ART CONTEXT.

0.4.4 COMPARING EXISTING RESEARCH.

0.4.5 ORGANISATION.

§0.1 HYPER-

The ascertaining of hypervolution begins with the rich history of the term “hyper” through time. As a prefix, it denotes “above,” “beyond,” or “excessive,” or something that “is, or exists in a space of more than three dimensions.” It can also mean bridging points within an entity non-sequentially.¹ The word itself predates the beginning of my life by over a millennium, stemming from the Greek “ὑπερ” meaning “over, beyond, over much, above measure”, and even further back in history, drawing from the Proto-Indo-European root “uper,” meaning “over.”²

A few of the original Greek words made their way into French and English, for example, hyperbole from 13th century in French,³ and 16th century in English.⁴ However, it was not until the 17th century that “hyper-” as a prefix in English began to be extensively used, taking on a life of its own, and being “freely prefixed to adjectives and substantives” like hypersceptical (1638), hyperdiabolical (1641), and hyper-angelical (1650).⁵ These three were found within religious contexts, like sermons, with the foremost found in a text by William Chillingworth, a progressive English theological controversialist, poet and skilled debater, who promoted the right of free enquiry, and wrote against the church’s monopoly of the truth.⁶ The latter two were found in transcribed sermons by Puritan but royalist, John Jackson, who was born in 1600 in England until his demise in 1648.⁷

1. “Hyper | Definition of Hyper by Merriam-Webster.” Accessed February 23, 2021. <https://www.merriam-webster.com/dictionary/hyper>.

2. Oxford English Dictionary. “‘hyper-, Prefix’.” Accessed February 26, 2021. <https://www.oed.com/view/Entry/90273?is-Advanced=false&result=4&rs-key=aZhZdX&>.

3. “Dictionnaire de l’Académie Française | 9e Édition | Hyperbole.” Accessed February 23, 2021. <https://www.dictionnaire-academie.fr/article/A9H1285>.

4. Oxford English Dictionary. “‘hyper-, Prefix’.”

5. Oxford English Dictionary. “‘hyper-, Prefix’.”

6. Cannon, John. “Chillingworth, William.” *The Oxford Companion to British History*. Encyclopedia.com. Accessed February 23, 2021. <https://www.encyclopedia.com/history/encyclopedias-almanacs-transcripts-and-maps/chillingworth-william>.

7. Oxford English Dictionary. “‘hyper-, Prefix’.”

8. Speake, Jennifer. *Literature of Travel and Exploration: An Encyclopedia*. New York: Routledge, 2003.

9. "Coryat's *Crudities* – *The Rosenbach*." Accessed February 25, 2021. <https://rosenbach.org/blog/coryats-crudities/>.

10. "Coryat's *Crudities* – *The Rosenbach*."

11. *Oxford English Dictionary*. "'hyper-, Prefix'

The earliest record of the hyphenated "hyper" found by the Oxford English Dictionary, is "hyperrhythmical," located within the text of 'Crudities.' This 1611 travelogue was written by Thomas Coryat, who is also credited with introducing the table fork to England, and the word 'umbrella' into English.⁸ In preparation for the publication of his book recounting his travels through Europe in 1608, Coryat requested verses in praise of the publication from his friends. They responded with a good-natured collaborative roasting of the eccentric Coryat in seven languages.⁹ The most outlandish of which, featured the aforementioned term, and also crowned Coryat the "[only] true travelling [Porcupine] of England."¹⁰ The word was later notably used by William Mitford, a historian on Ancient Greece, in his 1774 verbosely titled book, 'An Essay upon the Harmony of Language, Intended Principally to Illustrate that of the English Language.'¹¹

Within the colosseum of critical literature and philosophical discourse, the history of "hyper-" practices is marbled and adorned with innovative ideas and concepts. The definitions of these terms vary depending on the meaning of the prefix used.

12. Nelson, Theodor Holm. "Selected Papers, 1977 : Theodor Holm Nelson." Accessed March 4, 2021. <https://archive.org/details/SelectedPapers1977/>.

13. Nelson, Theodor Holm. "Selected Papers, 1977 : Theodor Holm Nelson."

"Hypertext" and "hypermedia" emerged from the 1960s through Theodor H. Nelson.¹² He defined the hypertext as a "non-sequential piece of writing" – text on the display of a computer or similar device, with references to other text that the reader can access. Hypermedia was a multimedia extension of hypertext, and was coined around the same time.¹³

Nelson clarified in a privately circulated note on January 23rd, 1967, that the 'hyper-' used in hypertext, and subsequently hypermedia, is "the mathematical sense of extension and generality (as in 'hyperspace,' 'hypercube'), rather than the medical sense of 'excessive' ('hyperactivity')." He further explained that there is no "implication about size" as a hypertext could contain as few as 500 words. Thus the "hyper-" refers to the structure, as opposed to size, and any structure is possible as it has no "true" form.¹⁴ In his illustrated lecture handout on hypertext (Figure 0-1), drawn up nine years later, he mused

*"HOW WILL WE, THE READERS AND WRITERS, PROCEED
TOWARD ENLIGHTENMENT?*

Same old way.

Authors will cite and quote others, but WITH WINDOWS TO THEM.

And the better authors will get read more."

(In this moment, if I may remind you, the reader, this document is AR-activated.)

The "hyperspace" that Nelson referred to, is a geometric term from 1867. It is a space of four or more dimensions.¹⁵ Almost 150 years later, in the book 'The Ecological Thought', Timothy Morton coined the "hyperobject." This was not a physical object within a four or more-dimensional space, but rather concepts that are massively distributed in time and space relative to humans.¹⁶ These hyperobjects possess specific features, which Morton outlined in his follow-up book 'Hyperobject.' He used this term to describe entities like climate change, race, and class.¹⁷

14. Nelson, Theodor Holm. "Selected Papers, 1977 : Theodor Holm Nelson."

15. Oxford English Dictionary. "'hyper-', Prefix"

16. Morton, Timothy. *The Ecological Thought*. Harvard University Press, 2012.

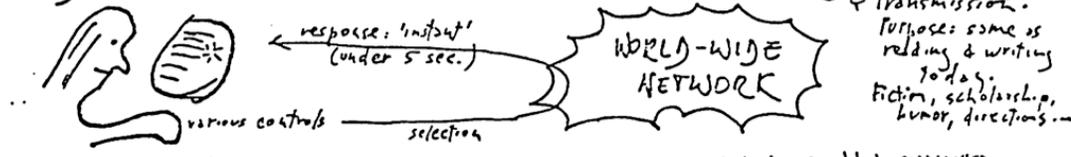
17. Morton, Timothy. *Hyperobjects: Philosophy and Ecology after the End of the World (Posthumanities)*. 1st ed. Univ Of Minnesota Press, 2013.

③

LECTURE HANDOUT: 'Electronic Literature and the Windowing Principle.' Theodor H. Nelson, 28 April 1976, 111-10

COMPETITIVE ECOSYS - next five or so years: CG 'PLATO'; RCA 'Fid'; IBM satellite/linked 4-pcs network; Xerox 'Office of the Future'; Xerox 'Dynabook'; Excelbart NLS; dreams of 'Information Retrieval', 'Computer-Assisted Instruction', 'Artificial Intelligence'; Video books; home computer with simulation games & graphics; Xanadu™ literary systems;

A PROPOSED ELECTRONIC LITERARY SYSTEM & NETWORK, using computer display & transmission.



Materials have three levels of accessibility: PRIVATE (others may not see); OPEN (not advertisement); PUBLISHED.

Every reader may actually become an author. The author may:
 . create text (writing) } link & write ('annotation')
 . link text
 . encase text (anthologizing).

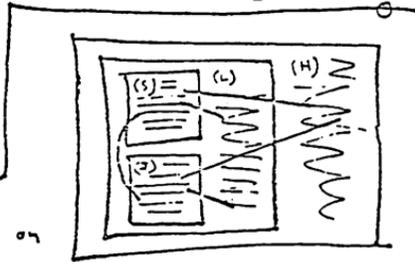
THE LINK MODES.

The heart of the proposal is in the exact nature of the link modes, which correspond to aspects of present-day writing. These modes also work between pictures, or between text and pictures.

1. The jump-link. Similar to footnote. Asterisk shows user that he may jump to other material. When done, he may jump back.

2. "Collateralization." (Multiple ties between texts.) Similar to marginal notes, comparisons. Visible lines (or broken arrows) indicate corresponding parts.

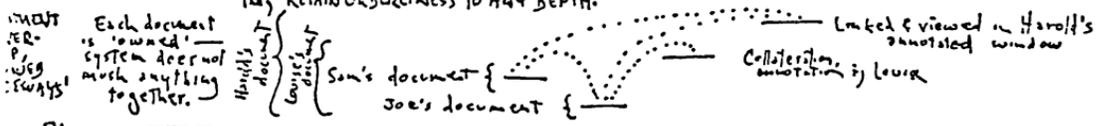
3. Quote-window. Allows jump to original source context of cited material. Similar to looking it up.



EXAMPLE OF COMPOUND WINDOWING: Sam and Joe have written documents. Louise has collateralized them with comments. Harold comments on all of these in a larger document. All may be moved rapidly in their respective windows, with the links adjusting.

WHY THESE STRUCTURES, which I tentatively propose?

- They are very powerful.
- They are RELATIVELY CLEAR, compared to most alternatives.
- They retain all the traditions of a pluralistic literary system — each author's work competes on its own merits.
- All existing literary structures can be mapped into this, and then some, like interactive animations.
- They are indefinitely extensible;
- They RETAIN ORDERLINESS TO ANY DEPTH.



A MORE FORMAL SIDWAYS VIEW.

Suppose 'A' is collateralized to a document containing B, and a document consisting of D, which has a quote-window to E.



HOW WILL WE, THE READERS & WRITERS, PROCEED TOWARD ENLIGHTENMENT?

Some old way. Authors will cite and quote others, but WITH WINDOWS TO THEM. And the better authors will get read more.

Figure 0-1 Lecture Handout by Theodor H. Nelson (1976).

Another “hyper-” practice of interest is Jean Baudrillard’s “hyperreal” of the 1980s, which is credited with opening a world of rhetoric within critical discourse. “Hyperreal” is used to refer to something marked with extraordinary vividness, and hyperrealism as an artistic style (“beyond true-to-life”) has long been of study of creators. In the late 1960s and early 1970s, there was a revival in sculptural renditions of figures, and the creation of highly detailed works, which is still popular today. In 2017, the National Gallery of Australia presented an exhibition titled ‘Hyper Real,’ celebrating modern works of sculpture, film and digital art that speak to the theme.¹⁸ Baudrillard’s definition and theory however, sought to simultaneously demark and blur the boundaries of true and false, real and imaginary. It has also been a catalyst for science fiction writers drawn to the proposed ideas, most famously the 1999 film ‘The Matrix’.

18. “Hyper Real.” Accessed March 4, 2020. <https://nga.gov.au/hyperreal/>.

In ‘The Precession of Simulacra’, he suggests that abstraction is “no longer that of a map, the double, the mirror, or the concept.” He states that the simulation is beyond that of a “territory, a referential being, or a substance.” He views it as the “generation by models of a real without an origin or reality,” which he calls a hyperreal (noun), where in the realm of the hyperreal, the distinction between real and simulation dissolve.¹⁹

19. Baudrillard, Jean. *Simulations 1st ed.* New York City, N.Y., U.S.A.: Semiotext(e), 1983.

A few chapters later, and while discussing the topic of holograms, he adds to the polysemous term, using it as an adjective to describe something possessing the qualities of a hyperreal entity.²⁰

20. Baudrillard, Jean. *Simulacra and Simulation (the Body, In Theory: Histories of Cultural Materialism).* 14th ed. Ann Arbor: University of Michigan Press, 1994.

Between 2006 and 2019 an interesting phenomenon occurred in the semantics of this term. On May 21st, 2006, just a little past midnight, a Canadian, possibly from Toronto based on their choice of newspaper, who goes by the alias Abscissa, and with interests in philosophy, religion, ethnobotany, and environmental science,²¹ updated the first paragraph of the online Wikipedia definition of hyperreal to read,

21. “User:Abscissa - Wikipedia.” Accessed March 4, 2021. <https://en.wikipedia.org/wiki/User:Abscissa>.

“... hyperreality is a way of characterising the way the consciousness interacts with ‘reality’. Specifically, when a consciousness loses its ability to distinguish reality from fantasy, and begins to engage with the latter without understanding what it is doing, it has shifted into the world of the hyperreal.”²²

22. “Hyperreality - Wikipedia.” Accessed February 25, 2021. <https://en.wikipedia.org/w/index.php?title=Hyperreality&direction=next&oldid=54304527>.

Around this time, it was not conventional on Wikipedia entries to cite and verify the inclusion of sources, and for all statements to be backed by a previously published source. Thus this definition entered into papers and books.

In the years to come, Wikipedia tighten its policies, requiring inline citations for any material that may be “challenged or likely to be challenge, and for all quotations, anywhere in article space.”²³ The statement went unchallenged for several years, and was modified to add “especially in technologically advanced postmodern cultures.” This was until November 12th, 2019, when another user credited this statement to the book ‘The Future of Post-Human Mass Media: A Preface to a New Theory of Communication’ published in 2009, three years after the initial edit by Abscissa.²⁴

23. “Wikipedia:Citing Sources - Wikipedia.” Accessed February 25, 2021. https://en.wikipedia.org/wiki/Wikipedia:Citing_sources.

24. “Hyperreality - Wikipedia.” Accessed February 24, 2021. <https://en.wikipedia.org/w/index.php?title=Hyperreality&oldid=925812654>.

It is on this definition with no original, this hyperreal definition of hyperreal, that I have based the semantic structure of hypervolution. However, naturally of course, with the meaning and history grounded in the source material. In my contribution to this history of the creation of "hyper-" terms, I utilise the interrelated members of the "hyper-" family. These serve as waypoints, or are woven into the fabric of the canvas of ideas that I have stitched together to define the term hypervolution, coined by Jevonne Peters, of the Caribbean, in 2020.

§0.2 INCEPTION.

0.2.1 BACKGROUND.

While observing the world around me, I noticed trends in advanced segmentation and customisation for consumers. This is hyperpersonalisation, which comes in the form of personalised experiences, tailored search results, and recommendations on what to do based on past behaviour and traits. The personalisation is achieved through the deployment of algorithms that observe and extract scraped information, which is then abstracted.

With the advancement of digital technologies, the underlying processes have become increasingly obfuscated. This is true in machine learning, where we know what the algorithm is doing, and how it is doing it, in theory. However, precisely what is going on and why, is often unclear. As these algorithms become applied to everyday life to assist and influence behaviour, many questions and issues arise. For example, who is really driving the decision making, what is considered normal and who determines it, the corruption of algorithms by capital, and customer hypernudging, which is nudging with the use of Big Data.²⁵

25. I explore these hyper-nudge concepts in Chapter 1, however, I do not dive extensively into nudge theory in this thesis. See the book 'Nudge' by Richard Thaler for a more expansive study of this within behavioural economics.

I noticed that the effects are often not easily realised or admitted, and so this research was born. It the evolution of discipline and governance within society, our relationship with technology, our desires and how we influence them and how

they can be influenced, our tendencies to customise experiences for ourselves, the proliferation of the use of algorithms in our everyday lives, and introduces a new term, hypervolution, which is defined as inability of consciousness to distinguish our true desires and choices, from our algorithmically deduced and imposed desires and choices. I define the Jevinian Orders and Phases related to the term, which extends Foucault's concept of disciplinary power, and Han's ideas on the neuronal within the framework of Jean Baudrillard's hyperreal, and creatively express the concepts through the art.

0.2.2 CENTRAL THEMES OF THE RESEARCH.

In my research, the concepts of desire, will, and choice play key roles. Desire has been a topic of interest for hundreds of years. It piqued the interest of Plato, David Hume, and Arthur Schopenhauer. Sigmund Freud wrote on the potential conflict and need to regulate desire.²⁶ In modern psychology, desire has been studied extensively in an attempt to understand the underlying causes, what drives it, its role in society, how it affects our brains, how it can be used within consumer research, and how it can be regulated. Several books have been devoted to the collection of works related to its basic processes, its applications, and the effect of desire.²⁷

Similarly, power structures and methods of governance have been topics of ongoing discourse. The written ideas date back millennia, and are the

26. To read more of Freud's research on desire see 'Civilization and Its Discontents' (The Standard Edition) and 'Introductory Lectures on Psychoanalysis' in *The American Journal of Psychology* (doi: 10.2307/1413593).

27. See Hofmann, Wilhelm, and Loran F. Nordgren. 'The Psychology of Desire'. New York, NY: The Guilford Press, 2015. Specific essays in this collection of interest include "Elaborated Intrusion Theory", "Old Desires, New Media", and "Desire and Desire Regulation."

reflections of the changes in societies and cultures of the era. These lead up to the present, which can be referred to as the Information Age, New Media Age, Digital Age, all terms reflecting an economy that is primarily based on information technology. Chapter 1 of this thesis serves as a walkthrough of a history of the ideas through the eras, framed around the concepts surrounding hypervolution.

My research adds to this literature, and to the understanding of human-computer relations. It seeks to answer some of the questions surrounding the topic of hypervolution through writing and creative expressions. Figure 0-2 shows an expanded array of questions originating from the central research topic.

It is important to mention that this research on hypervolution is not hypovolution, which would be the loss of volition. I am not making the case that people are no longer able to make choices, but rather that it has become difficult to differentiate whether the choices are truly ours, or are ones that have been influenced and imposed by the choice landscape developed by an algorithm.



Figure 0-2: Research Questions

§0.3 VOCABULARY.

0.3.1 WORLDVIEW AND PHILOSOPHY OF THE RESEARCH.

As implied by the questions that I am asking, this research project lies within a constructivist worldview, which is a subset of the interpretivist research philosophy. This means that my aim is to understand the multiple meanings of the concepts of our world, and attempt to generate theories based on the findings. I am not trying to offer solutions, or attempting to inspire change. Instead, this research on hypervolition seeks to understand our world and theorise on our world, and I am highly interested in the meanings various members of society hold, and the social and historical constructs at play.

This worldview affects the way the research is conducted, as there is a heavy reliance on qualitative methods of inquiry, literature reviews and the exploration of ideas through art creation. As expected with this worldview, and as outlined in Figure 0-2, the questions are broad and open-ended. My interpretations and responses to these questions are influenced by my experiences, and my background within technology and the arts.

Figure 0-3 shows the Data-Information-Knowledge-Wisdom pyramid, that illustrates the progression of thought throughout the creation of the theory, and levels of research that I considered when developing this thesis. It begins at the bottom with my observations and those of experts in the field, aided by studies

and statistics on the subject matter. This becomes conclusions, statements on the observations through works of art, other creative outputs, and theories when provided with the proper context. This is the "information" layer.

Given meaning, the next layer is the "knowledge" layer, and here I gathered critical reviews, books and essays by theorists and scholars. Throughout the research, I incorporated every layer, making my own upward steps within the pyramid, but also considering the steps (theories based on observations, books written on theories) that were made before me. Taking all of this into consideration, and given the proper insight, I gained the wisdom needed to develop hypervolution. This is not necessarily a linear process. I not only examined the wisdom, ideas, and the philosophy that I am generating, but also how I did so.

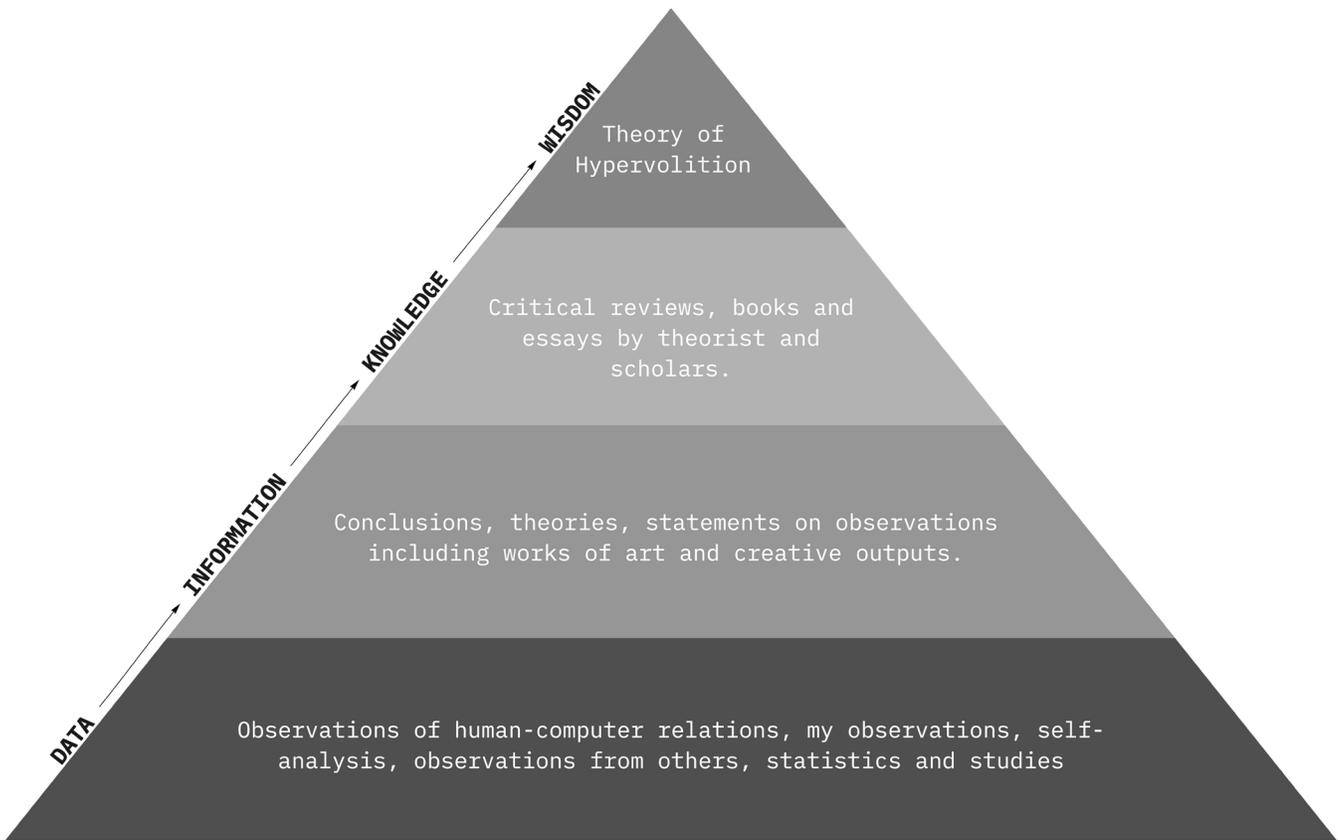


Figure 0-3: Research DIKW Pyramid.

0.3.2 SCOPE OF THE RESEARCH.

Despite engaging with broad questions, the theories and explorations are within the scope of, and framed by the topic of hypervolution. So, while the topic does seem large, only the relevant aspects of each are considered. A disadvantage of the interpretivist philosophy is which my research is based on, is the built-in bias of the researcher throughout the project. There are also practical limitations on how wide of a net I can cast in exploring the effect of hypervolution on society.

Since the intention was to use familiar concepts to allow the reader to then pick up on the idea of hypervolution, there is a heavy intertextuality with other works. The research includes references to other works of science fiction, theoretical, computational, and biological concepts, and to other forms of literature. While my own understanding influences the outputs written or otherwise, the meaning of this research inevitably resides in the mind of the reader, and the viewer of my works. The works merely serve as a canvas for the projection of the readers thoughts, ideas, and reactions.

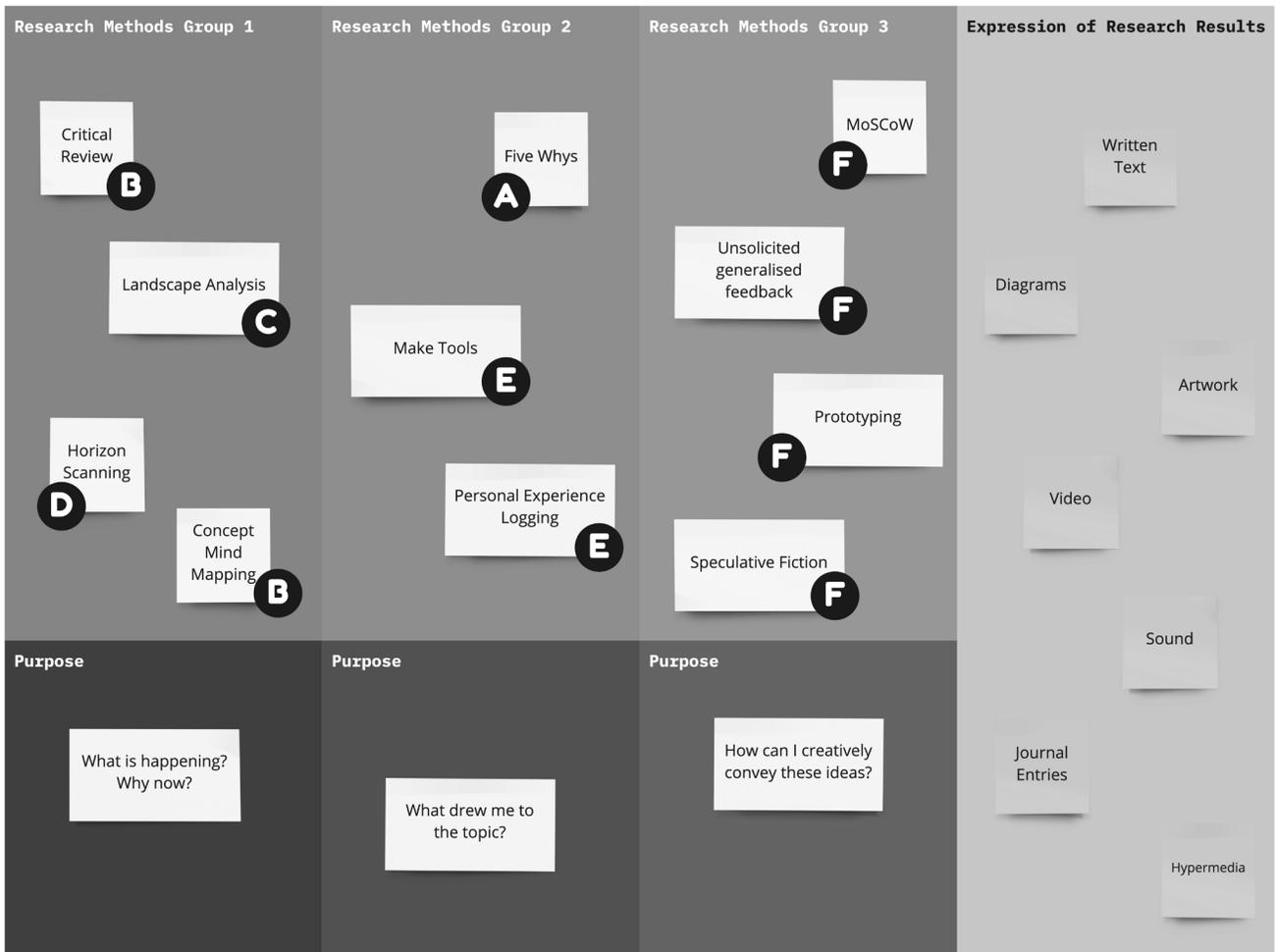
My view of the world may differ from that of others, and additionally, the interpretations of the works may differ as well. It is assumed that someone reading and consuming my work has had some interaction with algorithms within their daily lives, often through suggestions while shopping online, or consuming content online e.g., photo, video, purchase or follow recommendations.

§0.4 EXECUTION.

0.4.1 METHODOLOGIES.

The research methods I used can be organised into three groups, as shown in Figure 0-4. Each grouping attempts to answer a set of questions related to the research, and has a different combination of factors that it focuses on, Figure 0-5.

The first group aimed to answer “Why now? What is currently happening in the world that lends itself to the interest in the topic of hypervolution?” To do this, I did a historical and modern Critical Review, a Horizon Scan to identify and monitor changes in the contextual environment, a Landscape Analysis to compare and evaluate the existing and historical contextual environment, and a Concept Mind Mapping exercise to explore the questions and ideas surrounding this topic. The Critical Review and Landscape Analysis contributed heavily to the building of the theory of this research, and the Horizon Scan, discussed in Chapter 2, contributed to the creation of the work “Inter Alia.”



SUBGOALS

- A) determining the root motivation
- B) assessing literary and art context
- C) comparing existing research
- D) assessing world context
- E) expressing and evaluating the personal impacts to myself and others
- F) creatively conveying the ideas

Figure 0-4: Research Methods.

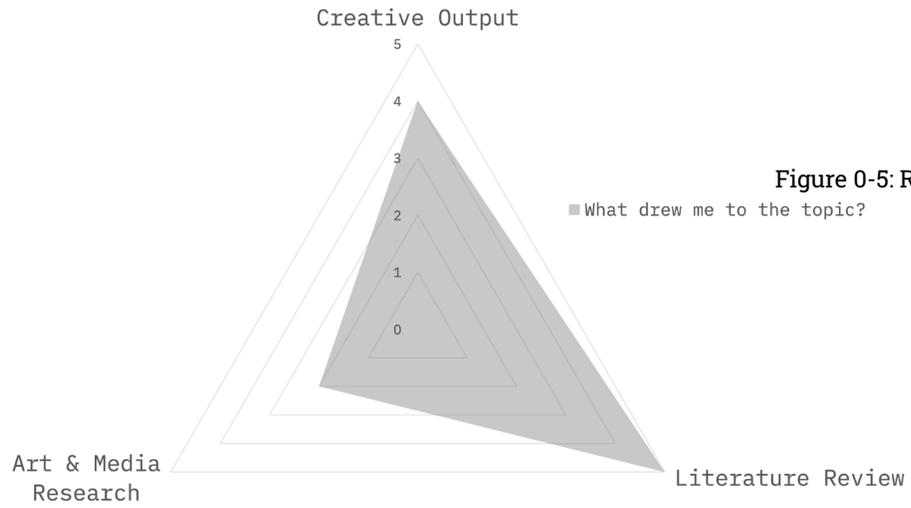
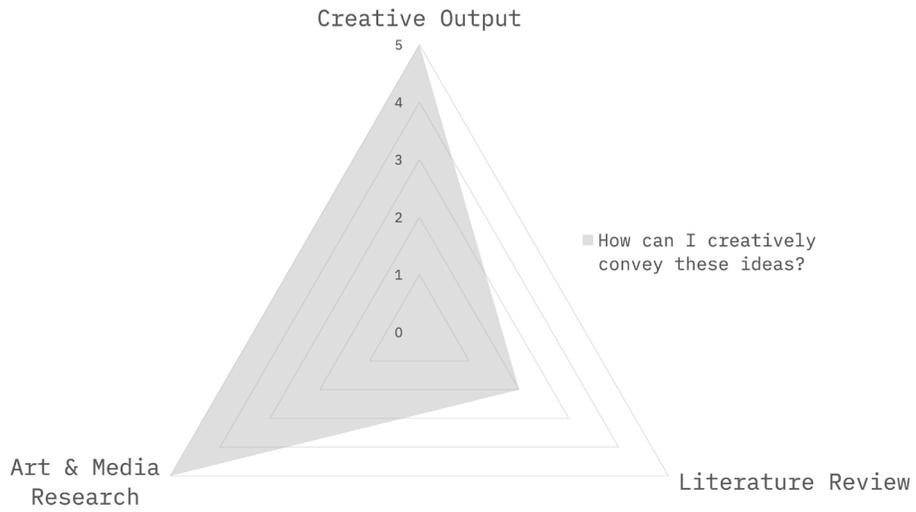


Figure 0-5: Research Focus.

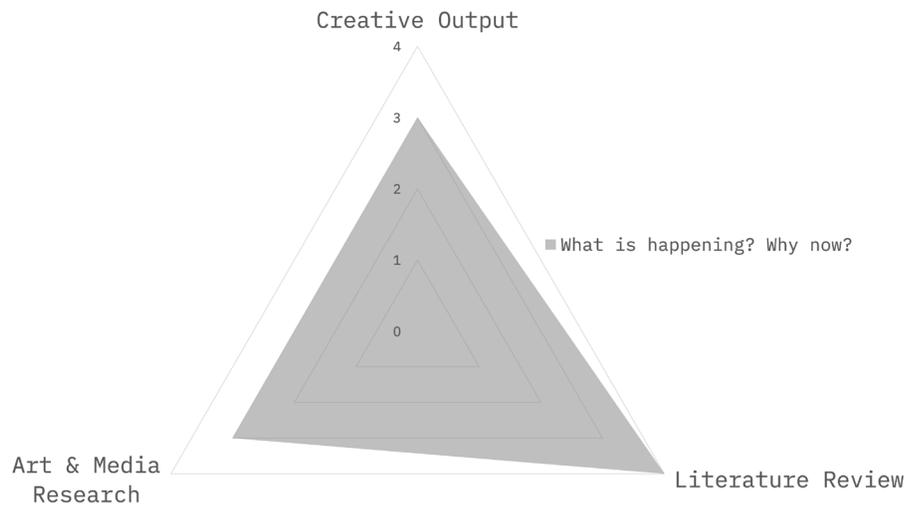


Figure 0-5: Research Focus.

The next group of methods looked at my own motivations - "What drew me to this topic?" I used the Five Whys tool described above to get at the root of my interests to understand what inspired me. I also held Make Tools co-design sessions with commissioned poets to reveal shared experiences and viewpoints, which I incorporated into my own Personal Experience Logging. Together, these two methods informed the creation of the work "My-o-T" described in detail in Chapter 2.

The final group examined how I could creatively convey the ideas, and included MoSCoW (which is an exercise in prioritisation based on Must, Should, Could, and Would), Prototyping, Unsolicited General Feedback, and the use of Speculative Fiction. These are discussed in Chapter 2 in detail, and aided the creation of all the works. I carried forward and incorporated the feedback from each iteration of the works into new creations and the writing of this thesis.

For each of the research methods in Figure 0-4, I utilised a similar five step process: 1) identify what I wanted to achieve with the method, 2) review existing literature, works and background information, 3) gather the results, 4) analyse the results, then 5) summarise the findings in the most suitable formats. Figure 0-4 also shows the many ways in which the research results were expressed.

From the methods, I was able to identify six subgoals that I was trying to achieve: a) determining the root motivation, b) assessing literary and art context, c) comparing existing research, d) assessing world context, e) expressing and evaluating the personal impacts to myself and others, and f) creatively conveying the ideas. The first three will be explained within this chapter, and the latter three, discussed in detail when I talk about the works in Chapter 2.

The purpose of these methods was less about determining the way things are, but rather a look into the implications of the perspectives. The results did not give a true picture of the world, as they were not conducted as a "spectator." They were utilised as someone actively experiencing it, reflecting through art or other mediums, and then sharing that experience. We learn best through this kind of reflection, and the true work of art is in what it does, and in the experience of it.

0.4.2 DETERMINING ROOT MOTIVATION.

Before diving into the development of the theory, I wanted to determine my root motivation for pursuing this research. I wanted to better understand why I was drawn to this topic. To do so, I utilised the Five Whys method of inquiry, which is a simple question-asking technique that explores the cause-effect relationship of an underlying problem.²⁸ In this particular technique, my initial starting point was the development of the theory. I then peeled away the layers that hid my real motivations.

28. “The Five Whys Technique | Asian Development Bank.” n.d. Accessed January 23, 2021. <https://www.adb.org/publications/five-whys-technique>.

I came to the realisation that my interest in the topic stemmed from my curiosity about our relationship with technology, which was due to my exposure within the tech industry. It exposed my ideas that the relationship may not always be a healthy one. Further probing brought to the surface that I have been heavily influenced by science fiction, and that my concern was regarding the issues of governance and control as we advanced technology.

Ultimately, the questions arrived at my true motivations: the concern that our will could be subverted due the black-box nature of the algorithms being applied. Each step revealed valuable information about my motives and viewpoints, which informed my research on hypervolution. Figure 0-6 demonstrates the stepwise progression of the questions and responses in detail.

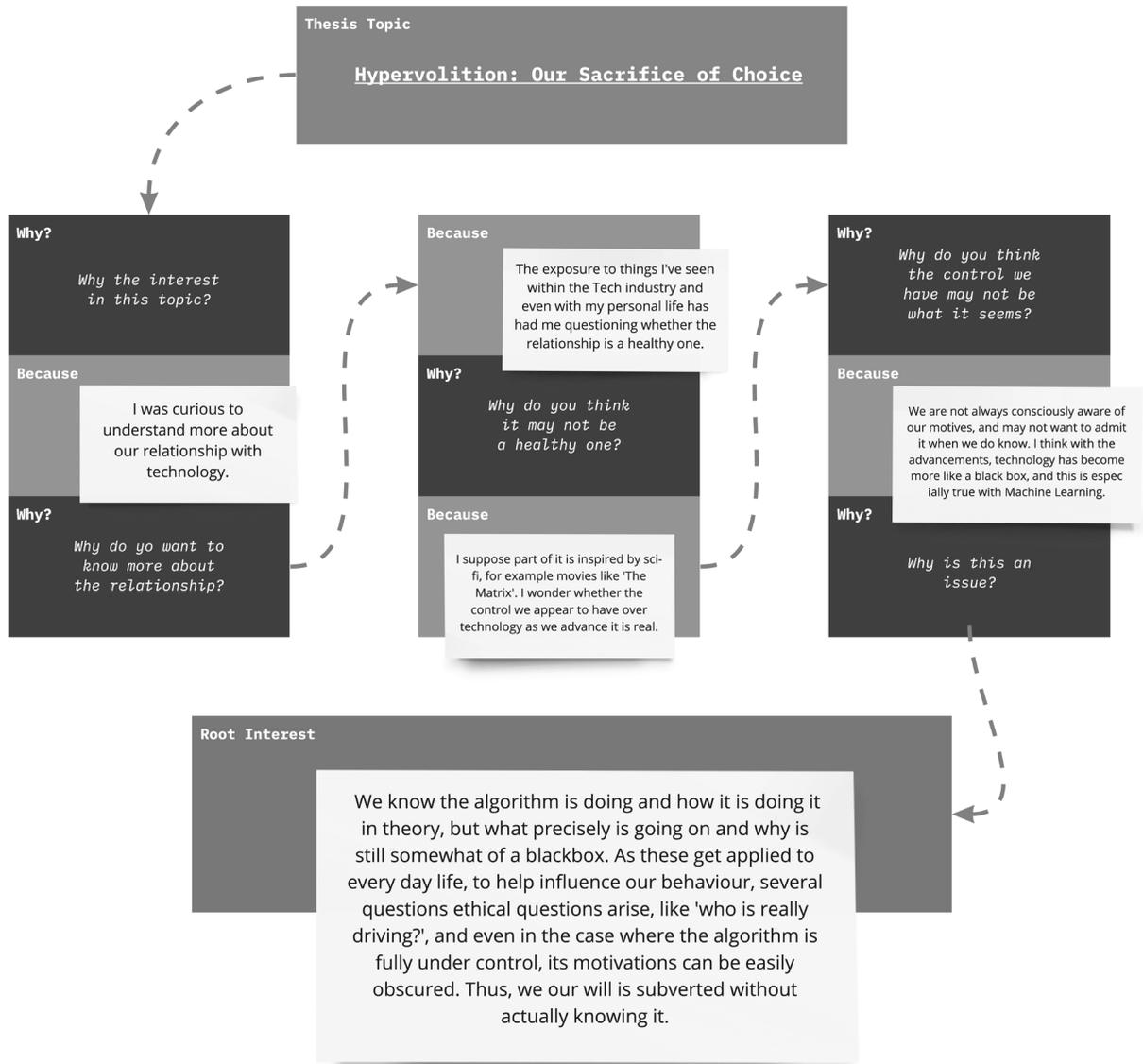


Figure 0-6: Research Five Whys.

0.4.3 ASSESSING LITERARY AND ART CONTEXT.

This research is on the term hypervolution, and several of the related concepts that provide background and context for the theory and art developed. I mapped these in Figure 0-7 which highlights some key terms and interrelated ideas, a subset of which have been examined more closely in this paper.

In my review of the literature, I found clusters of interest as shown in Figure 0-8. An interesting cluster was in the late 1970s, which I was able to attribute to the increase of consumer technology use. This was also the era of the first cell phone call, the first commercial bar code scan, email, the introduction of Apple computers as a consumer product, and the personal Sony Walkman.

Another cluster of interest was French postmodern and poststructural thought within the second half of the 20th century, with theorist like Jean Baudrillard, Jean-Francois Lyotard, Gilles Deleuze, and Michel Foucault to name a few. Their ideas revolve around the rejection of meta-narratives and scientific truth, and the examination of popular culture, micro-politics, and the relationship between power and knowledge. Concepts like “hyperreality” arose from this era, and other concepts sought to challenge the ideas of capitalism.

No. of References by Quinquennium After 1970.

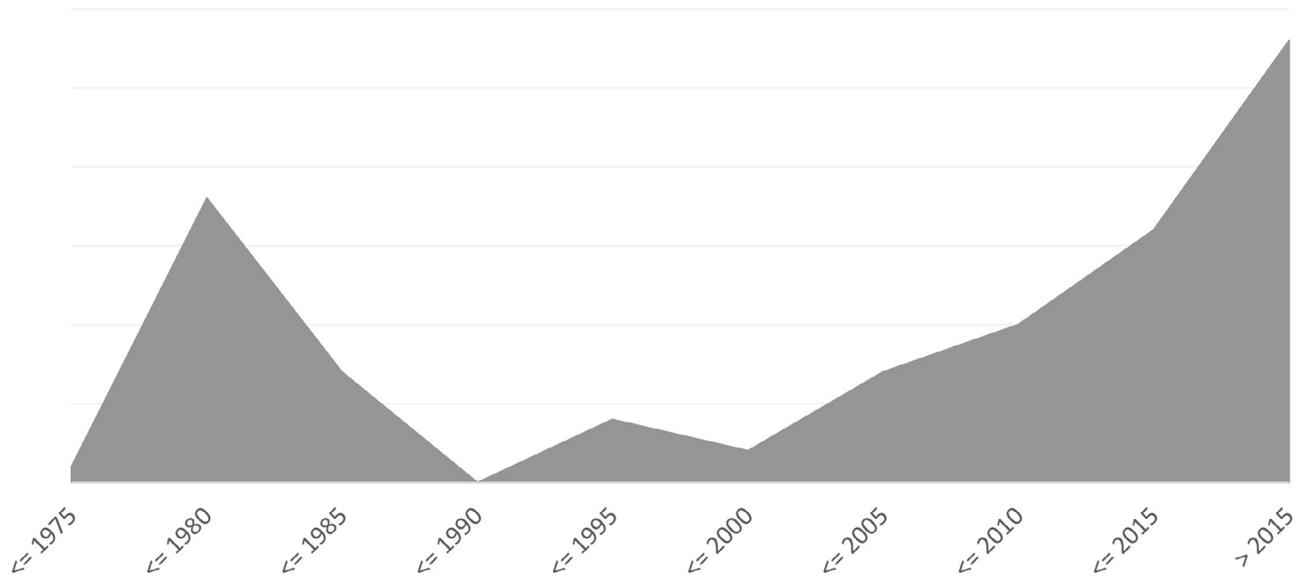


Figure 0-8: Research Literary and Art Key Sources.

0.4.4 COMPARING EXISTING RESEARCH.

I compared the existing research in a manner similar to that of a Landscape Analysis, also known as Competitive Landscape Analysis (CLA), or Competitive Landscape. In my research I repurposed this method to examine the development and delivery of other relevant and related theories that currently exist within academia. I identified related theories and studies. I assessed their strengths, and weakness in terms of thought and reason. I made notes on the way the concepts were delivered – was it easily understood, did they use graphs or art to aid with the explanations? How did they get the ideas across? I also looked to the opportunities that these ideas presented. Could I explain or answer a missing part of the theory? Could I build on it or use it to look at my own theory in a new way?

Finally, I assessed what ultimately set my theory apart from what is currently published. Using my own theory what can now be answered? The outcome of this research guided my writing and development of the theories and the findings are referenced throughout. Figure 0-9 outlines some of the areas of studies that were explored.

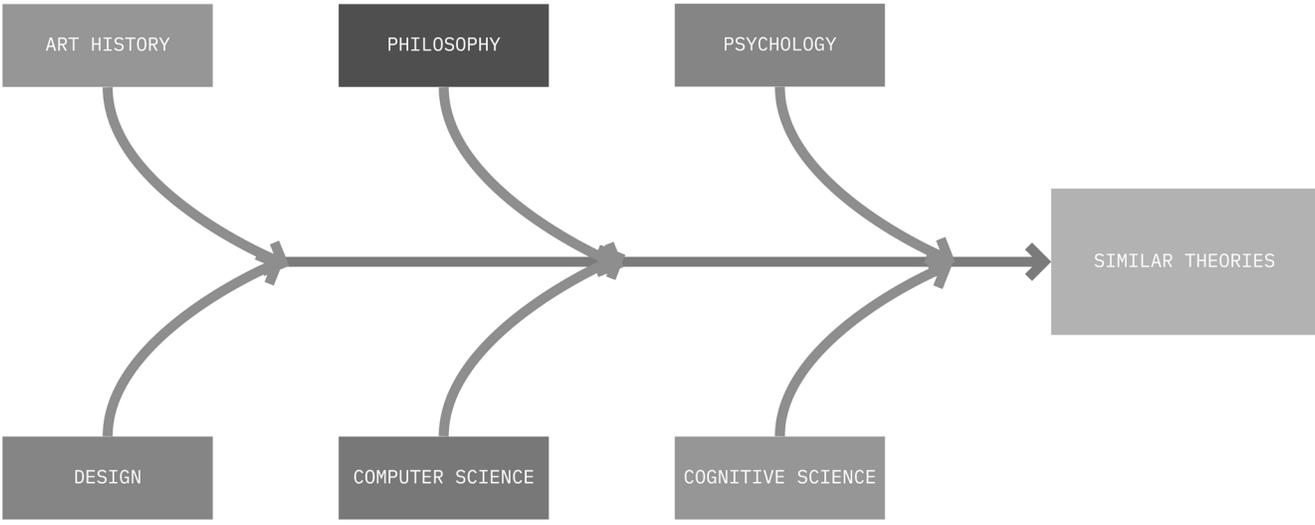


Figure 0-9: Research Landscape Analysis.

0.4.5 ORGANISATION.

This thesis contains text-chapters, and art-chapters. For the art-chapters, just as the name implies, instead of text explaining the contents of the chapter, a work is used to convey the research and ideas that would otherwise be written. The art-chapters are labelled, and accessible through AR or via hyperlinks.

This chapter introduces “hyper” as a prefix, and explained the inception, motivation, central themes, worldview, and scope of the research on hypervolution. In Chapter 1, I outline the theory of hypervolution by traversing its key concepts. Chapter 2 summarises the art-chapters, and gives some additional background on what the art conveys within the context of the thesis. The research concludes with H.I.V.E., the Hypervolution Interactive Virtual Experience, an exhibition which creatively summarises this thesis. This is available on the companion site <https://hypervolution.study>

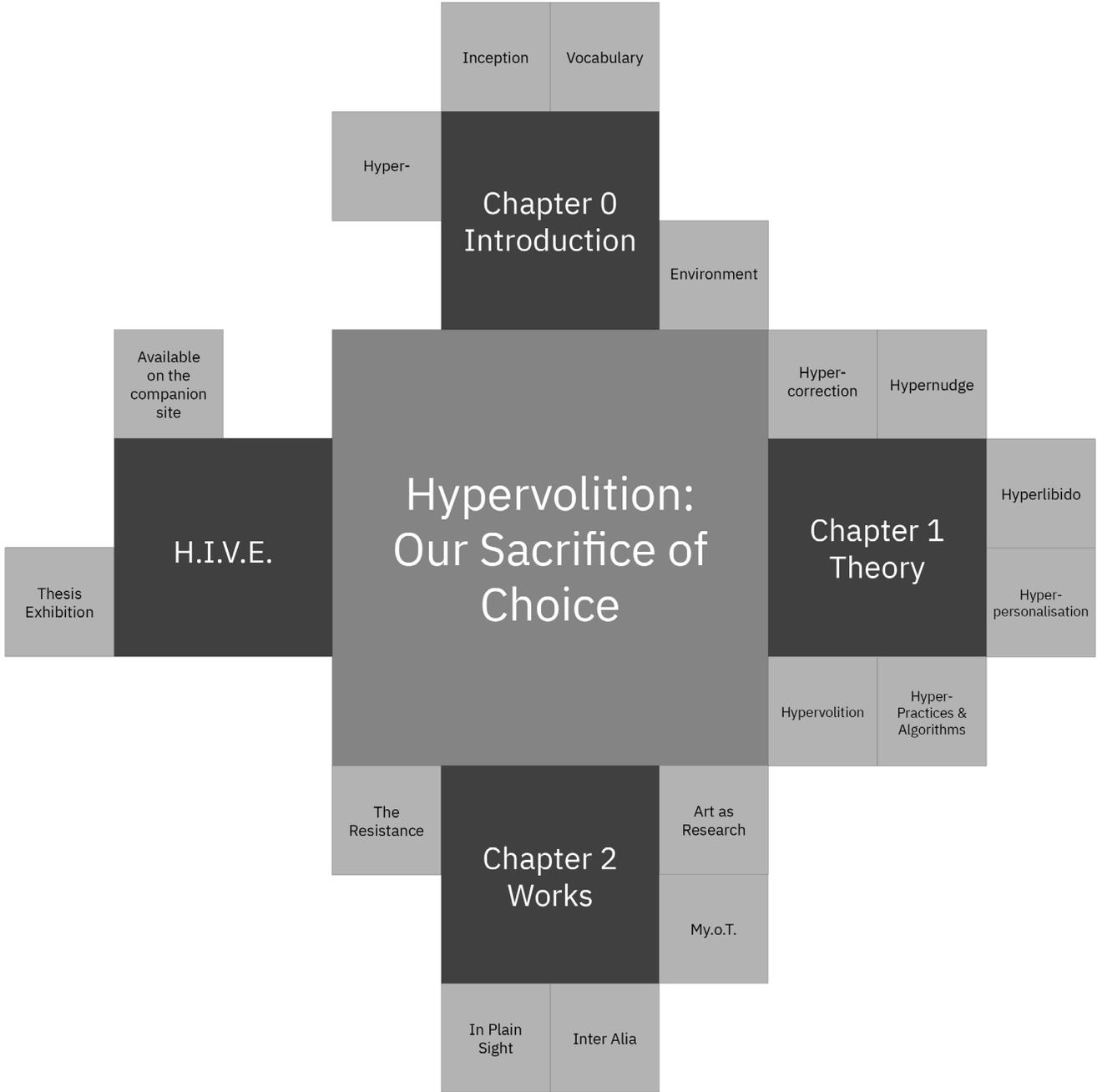


Figure 0-10: Thesis Organisation.

CHAPTER ONE

Theory

1.0 HYPERCORRECTION.

1.0.1 SOLUTION-CAUSED PROBLEMS.

1.0.2 PHYSICAL CONTROL TO PSYCHOLOGICAL CONTROL.

1.0.3 PRISONS TO OTHER ENCLOSURE SITES.

1.0.4 SITES TO SOCIETIES.

1.0.5 CONTROL AS AN ALL-ENCOMPASSING MIST.

1.0.6 WE THE GUARDS.

1.1 HYPERNUDGE.

1.1.1 BIG DATA AS DESIGN-BASED CONTROL.

1.1.2 NUDGE VS HYPERNUDGE VS HYPERVOLITION.

1.2 HYPERLIBIDO.

1.2.1 VOLITION.

1.2.2 ORIGIN OF DESIRE.

1.2.3 INFLUENCE OF DESIRE.

1.2.4 INFLUENCING DESIRE.

1.3 HYPERPERSONALISATION.

1.3.1 MINE.

1.3.2 DATA 'R US.

1.3.3 My.o.T.

1.3.4 OUR PERSONALISED TRAP.

1.4 HYPER- PRACTICES & ALGORITHMS.

1.4.1 HYPER- PRACTICES.

1.4.2 THE IMPINGEMENT OF ALGORITHMS AND IoT.

1.4.3 INTER ALIA.

1.5 HYPERVOLITION.

1.5.1 SIMULACRUM.

1.5.2 PRECESSION.

1.5.3 IN PLAIN SIGHT.

1.5.4 BAUDRILLARDIAN ORDERS & PHASES.

1.5.5 JEVINIAN ORDERS & PHASES.

1.5.6 POWER & SOCIETY.

1.5.7 OUR SACRIFICE OF CHOICE.

1.5.8 THE RESISTANCE.

§1.0 HYPERCORRECTION.

1.0.1 SOLUTION-CAUSED PROBLEMS.

On the path to hypervolution, one of the interrelated “hyper-” terms is hypercorrection, which I am using to frame the historical context that has brought us to our current state. In my use of hypercorrection here, I am casting aside both the sociolinguistics and psychology definitions of the word. I am redefining this to be the application of a solution that excessively attempts to correct a problem, thereby unveiling inherent pressing issues and concerns that were previously concealed, or overlooked in the initial problem or analysis of it.

What I am focusing on is the application, or reapplication, of solutions that may not properly fit the problem, or allow for other problems to creep in, i.e., solution-caused problems. Real life examples of solution-caused problems due to hypercorrection, appear within several modern industries, but in this paper, I am looking at hypercorrection applied to society. To better understand that complex example, let us consider simpler ones as retold by a senior consultant at the management consulting firm, Kepner-Tregoe, in a 2009 whitepaper:

A pharmaceutical company produced a compound using three ingredients. One of them, call it Substance A, had a tendency to stick to the machine that grinds it up, causing shut-downs and costing money for maintenance and clean-up. The producer decided that if Substance A was ground more finely, they could stop it from sticking. The change was within the process specifications, so they made it, and all their headaches went away. Shortly afterwards--at the sister facility that blends the three substances together--they opened the barrels of Substance A and found it caked solid, and only removable with a hammer and chisel. The finer grind solved the problem of sticking, but led to a new problem: caking.

When 'black specks' appeared in an ingredient, the manufacturer's analysis identified them as small pieces of shredded gasket material. These findings were sent to the supplier of the ingredient, who quickly responded that they had corrected the problem by inserting a 704 stainless steel mesh filter to separate out the black specks. The black specks disappeared, and everyone was happy. But a month later, the client began noticing 'shiny specks' in the same ingredient from the same supplier. When analysed, these shiny specks turned out to be 704 stainless steel.²⁹

29. "Kepner-Tregoe - Solution-Caused Problems and How to Prevent Them." Accessed March 2, 2021. <https://www.kepner-tregoe.com/knowledge-center/articles/problem-solving/solution-caused-problems-and-how-to-prevent-them/>.

The white-paper concludes by stating that these solution-caused problems are an indication of an incomplete approach to resolving issues, and/or misapplication of a solution. In some cases, as demonstrated in the examples above, a solution leads to the application of another solution to resolve the new problem. However, as with the first, this may be without success as (a) the root problem is not addressed, or (b) the problem has relocated, to resurface elsewhere as a result of the fix.

When applied to a hyperobject such as society, the effects ricochet through lives, and across time. For example, consider how a solution to labour and labour management issues in Russia in the late 1700s, has been reapplied, and possibly misapplied, to other situations within society revealing further inherent problems and issues. This example of a reapplication of a solution is the genesis of hypervolution, but we have to first understand the initial problem,

the initial solution, and explore how it evolved.

It began with Chizhova-born, Grigory Potemkin, who rose from the ranks of provincial gentry to be the lover, secret husband and partner of Catherine the Great, together ruling the Russian Empire. While today, his name is infamously tied with the apocryphal tale of Potemkin villages, in his time, he was renowned in politics and for it he was awarded with several estates.³⁰

30. Sebag Montefiore, Simon. *The Prince of Princes: The Life of Potemkin.* Weidenfeld Nicholson History, 2001.

In December of 1783, in need of talented engineers, shipbuilders, and entrepreneurs, Prince Potemkin summoned a young Englishman named Samuel Bentham to St Petersburg. Samuel stayed on the Potemkin estate, where he was tasked with managing the manufactories and building vessels at the port.³¹ He was joined by his brother Jeremy Bentham a few years later, to live on a farmhouse provided by Potemkin.³²

31. Sebag Montefiore, Simon. *The Prince of Princes: The Life of Potemkin.*

32. Bentham, Jeremy. *Correspondence of Jeremy Bentham, Volume 3: January 1781 to October 1788.* Edited by Ian R. Christie. UCL Press, 2017.

Amongst several other innovations, Samuel Bentham developed The Inspection House, a manufactory, "arranged around a central point, from where he could continuously inspect the activities of his workforce."³³ The manufacturing workforce was largely unskilled. Samuel had attempted to resolve the issue of unskilled workers by importing expertise from England, with the financial support of Potemkin. These experts were tasked with supervising the peasants' activities and training them.

33. Bentham, Jeremy. *Correspondence of Jeremy Bentham, Volume 3: January 1781 to October 1788.*

However, as noted in a publication in the Journal of Bentham Studies, "the establishment did provide a means for supervising the training of unskilled

34. Werrett, Simon. "Potemkin and the Panopticon: Samuel Bentham and the Architecture of Absolutism in Eighteenth Century Russia." *Bahasa dan Seni: Jurnal Bahasa, Sastra, Seni, dan Pengajarannya* (June 1, 1999).

35. Werrett, Simon. "Potemkin and the Panopticon: Samuel Bentham and the Architecture of Absolutism in Eighteenth Century Russia."

36. Semple, Janet. 'Bentham's Prison: A Study of the Panopticon Penitentiary.' Oxford: Clarendon Press, 1993.

37. Bentham, Jeremy, John Bowring, and J H Burton. 'The Works of Jeremy Bentham, Published under the Superintendence of His Executor, John Bowring'. British Library, Historical Print Editions, 2011.

peasants, but only to the extent that the trainer was able to see when he was required, before going to the worker in need of assistance."³⁴ Samuel believed he could resolve this by utilising this Inspection House, where the supervisors could easily see who needs help from the central point.

Jeremy Bentham became fascinated with this solution. He saw potential other uses of the structure. As it were, by the summer of 1786, the English supervisors had become difficult to control and lacked discipline. These two factors, unskilled workers and undisciplined supervisors, influenced Jeremy to create the Panopticon, which attempted to solve the question "quis cusodiet ipsos custodes?" ("who will guard the guards?"). It does this by creating structure around how the supervising was to be done.³⁵ Thus, ultimately the Panopticon was birthed from a solution to find ways to "ameliorate the lot of the poor"³⁶ and Jeremy's contribution was his attempts to make the Panopticon applicable to any establishment that required the supervision of people. This included schools, hospitals and prisons, and was in keeping with his philosophy of universality, and rejection of context-specific rules.³⁷

1.0.2 PHYSICAL CONTROL TO PSYCHOLOGICAL CONTROL.

This was only the beginning, and Jeremy Bentham was not very successful. However, Foucault saw the solution of the Panopticon in a different light, and noticed the potential for a different approach to the application of the ideas. In 1975, Foucault published 'Discipline and Punish,' in which he describes his view of the panopticon as a "diagram of mechanism of power reduced to its ideal form."³⁸ Bentham was attempting to make architecture that could function on its own, with the power relationship built-in, and this is what Foucault recognised. Foucault saw that discipline creates power, and that it is not always a negative experience. This interpretation is currently the dominating view of the Panopticon, which has inspired derivative works and theory.

38. Foucault, Michel. *Discipline & Punish: The Birth of the Prison.* New York: Vintage Books, 1995.

In 'Discipline and Punish,' Foucault begins the book with a description of two modes of punishment – one from 1757, and the other from 1837, just 80 years later. The first describes, in great detail, the public execution by the drawing and quartering of a man found guilty of regicide, and the second details the rules that a prisoner in a detention centre in Paris was expected to abide by while incarcerated.

Foucault contrasts these modern and pre-modern approaches, and marks the transition from punishing the crime to punishing the criminal; public displays to discrete applications of the law; the move to having experts like social workers, psychiatrists and parole officers decide how to implement sentences, which is separated from the judges who impose the penalties; and

the purpose of the punishment changing from being about retribution for justice or as a deterrent, but instead, about the reform and rehabilitation of the person committing the crime.

In this gentle way of punishment, the criminal becomes the property of the society, and is reformed and re-encoded making the punishments “a school rather than a festival.”³⁹ This method is a means to total control, and requires that the criminal undergoes an inner transformation psychologically and through behaviours deemed appropriate, before being returned and accepted back into society. It is subtle, but it is a control of the soul, and is more invasive than violent attacks upon the body, and more domineering, since the goal is to micro-manage the body’s behaviour, and attitudes.

39. Foucault, Michel. ‘Discipline & Punish: The Birth of the Prison.’

According to Foucault, this method works, as evident during the French revolution of 1848, which inspired rebellion across the country. During the rebellion, the inmates of Mettray Penal Colony, a private reformatory said to be without walls, were described to be “as calm as ever” when compared with the rest of the country.⁴⁰

40. Foucault, Michel. ‘Discipline & Punish: The Birth of the Prison.’

In the Mettray Penal Colony for young boys, the inmates were sorted into groups that functioned as families, and slept as a group in hammocks on the first floor of the building. They were supervised by a young man and his assistant who were also trained on the grounds, and although there were no perimeter walls, there were punishment cells concealed in the chapel, frequent rollcalls, and runaways were captured by local residents who were rewarded.

Sometimes escapees were killed. Inside the colony, the inmates were educated and taught various trades which prepared them for life in agriculture or the navy if they wish to do so upon departure.

This establishment was praised by many when it was run by Frédéric-Auguste Demetz, whose personal motto was “améliorer l’homme par la terre et la terre par l’homme, sous le regard de Dieu,” which translated means “improve man by the land and the land by man, under the watch of God.” He believed in the healing powers of nature, discipline, and that introducing a family structure helped with the rehabilitation of the boys. Demetz theorised that the failure of the boys’ own biological families was the cause of them being sent to the colony.

Foucault remarked that if he were to fix the date of the completion of the carceral system, that he would choose 22 January 1870, the official opening of Mettray. Or perhaps in 1952, when a child remarked that it was a pity that he had left the colony so soon. Mettray was “the disciplinary form at its most extreme, the model in which are concentrated all the coercive technologies of behaviour.”⁴¹

41. Foucault, Michel. *Discipline & Punish: The Birth of the Prison.*

1.0.3 PRISONS TO OTHER ENCLOSURE SITES.

These are the early foundations of the idea of hypervolition, but these are still sites of confinement. With the success of the Mettray facility and similar reproductions, the model of discipline on these sites was transplanted to other sites of discipline. This creates a society that is a "carceral archipelago."⁴² Foucault claims that this society produces docile bodies as a result, that is, bodies that not only do what we want, but do it precisely in the way that we want.⁴³ (This is getting much closer to the idea of hypervolition.)

42. Foucault, Michel. *'Discipline & Punish: The Birth of the Prison.'*

43. Foucault, Michel. *'Discipline & Punish: The Birth of the Prison.'*

He commented that docile bodies are produced through hierarchical observation. This is the fact that we can control what people do, merely by observing them, and that architecture can be used to help facilitate this very well. Normalised judgement is the second method, and this is where individuals are not judged by the intrinsic rightness or wrongness of their actions, but by where their action takes place on a ranked scaled when compared to everyone else.

The third and final method is the examination, which combines the hierarchical observation and the normative judgement. Foucault calls it "a normalising gaze [that] establishes over individuals a visibility through which one differentiates them and judges them."⁴⁴ The examination results in detailed information about the individual, and allows power systems to control them, e.g., patient charts, absentee records. This then allows individuals to be sorted into categories, and make averages and norms. Examples of this in operation

44. Foucault, Michel. *'Discipline & Punish: The Birth of the Prison'*

include restaurant rankings, national literacy standards and minimum standards tests, taxicab rating systems, and employee performance ratings. Ultimately, both bodies and minds are trained to conform to what is deemed normal. It is important to remember that for Foucault, power is neither fully positive or negative but rather has the potential for both.

1.0.4 SITES TO SOCIETIES.

To recap, we began this discussion with a solution by Samuel Bentham, for supervisors in a manufactory in Russia, which would allow them to easily observe and attend to the unskilled labourers to better assist in their training. This was decontextualised by his brother, Jeremy, who attempted for many years to push his ideas of reform, and apply this to other sites where people needed to be observed. The illustration of the panopticon was then interpreted by Foucault to be “a diagram of power reduced to its ideal form,” and further inspired his philosophical ideas.

Gilles Deleuze picks up where Foucault left off, taking the analysis of disciplinary societies further, and introducing the shift to societies of control. Deleuze notes that societies of discipline were marked by discrete physical enclosures, such as schools, and prisons or office buildings. Even in the case of Mettray, the inmates were not permitted to leave the colony. However, the institutions and technologies that have been introduced since, have allowed

for the dissolution of the boundaries of enclosures.

He compares enclosures to moulds and distinct castings, and controls as a modulation, “like a sieve whose mesh will transmute from point to point.”⁴⁵ In these societies of control, there is a dispersed installation of dominance. Social influence and discipline have moved into the lives of individuals, and unlike the societies described by Foucault, in which people know that their freedom is limited, in societies of control, people may believe that they have their freedom, and that they are in control.

45. Deleuze, Gilles. “Post-script on the Societies of Control*.” In *Surveillance, Crime and Social Control*, edited by Dean Wilson and Clive Norris, 35–39. Routledge, 2017.

To situate these ideas more concretely, consider the following excerpts:

*Do you have a social media presence? Select from the list below each social media platform you have used within the last five years. Enter information associated with your online presence, including the types of online providers/platforms, applications, and websites that you use to collaborate, share information, and interact with others. List the username, handle, screen-name, or other identities associated with your social media profile.*⁴⁶

46. “Travel.” Accessed December 16, 2020. <https://travel.state.gov/>.

*Numbers of Employees using Social Media to Screen Candidates at an All-Time High, Finds Latest CareerBuilder Study (2017). 57 percent are less likely to interview a candidate they can't find online; 54 percent have decided not to hire a candidate based on their social media profiles; Half of employers check current employees' social media profile, over a third have reprimanded or fired an employee for inappropriate content; 70 percent of employers use social media to screen candidates, up from 11 percent in 2006.*⁴⁷

47. “Number of Employers Using Social Media to Screen Candidates at All-Time High, Finds Latest CareerBuilder Study.” Accessed December 18, 2020. <https://www.prnewswire.com/news-releases/number-of-employers-using-social-media-to-screen-candidates-at-all-time-high-finds-latest-careerbuilder-study-300474228.html>.

Above we have a question on an application form for entry into the United States of America, and an excerpt from a study on common employment practices. Each of these represents an example of control and punishment through the modulation of the behaviours of people, and these examples are

relatively new, from 2019 and 2017 respectively.

As aforementioned, Mettray Penal Colony, Foucault's epitome of the carceral system, used a form of punishment that required the inmate to change and course-correct their behaviours, as opposed to torturing inmates as penance for a crime. This is also seen in the Sesame Credit system implemented within parts of China.⁴⁸ Citizens' ability to travel by air or high-speed rail, book hotel rooms and other liberties, are denied if they exhibit too many behaviours that are categorised as negative. Positive activities, like giving blood, can lead to a decrease in loan interest.⁴⁹ This is in an effort to steer individual and businesses behaviours towards 自我约束, which translates to "self-discipline" or "self-restraint."⁵⁰

The social credit system utilises big data as its driver, which is sourced from various aspects of a citizen's life, or a business' practices. The individual is under constant surveillance, which is a new form of Foucault's idea that we can control what people do, merely by observing them. A single individual never truly knows when they are being watched and to what extent, so they act as expected. In this system, there is also a threshold for what is considered a good rating (normalised judgement), and the process by which this occurs is the examination.

The Chinese Sesame System presents as an extreme form, as it also includes blacklists and public shaming as part of the enforcement.⁵¹ This system is possible because there is an established network of surveillance already in

48. Charlie, Campbell. "How China Is Using Big Data to Create a Social Credit Score." Last modified 2019. Accessed March 5, 2021. <https://time.com/collection/davos-2019/5502592/china-social-credit-score/>.

49. "Charlie, Campbell. "How China Is Using Big Data to Create a Social Credit Score."

50. Meissner, Mirjam. "China's Social Credit System: A Big-Data Enabled Approach to Market Regulation with Broad Implications for Doing Business in China." Edited by Claudia Wessling. MERICS / Mercator Institute for China Studies, May 24, 2017.

51. Charlie, Campbell. "How China Is Using Big Data to Create a Social Credit Score."

place in China, which allows for the implementation to be easier than it would be in other countries. It is easy to dismiss this as just one case of this occurring, an anomaly in a different culture and country far away. However, there are examples of modulation in many parts of the world including Canada, with most so subtle or ingrained that it is difficult to notice unless drawn to the forefront of one's attention – to the front of one's consciousness.

For example, in Venezuela, the “Carnet de la Patria” is touted to be a smart ID with birthdays, family information, employment, income, property, medical history, state benefits, presence on social media, political party membership, vote status and other information about citizens. It was co-developed with the Chinese telecom giant ZTE, amidst concerns for privacy and ability to control citizens.⁵²

UK, US and Canada have similar credit score systems that affect various aspects like job applications, the ability to take loans, to rent, refinance, utilities, getting a cell phone and/or cell phone plan, rent and purchase cars, and start a business. In most of these systems, citizens are “free” to break away from what is considered normal behaviour, but they are nudged toward normal, correct behaviour, as compliance comes with benefits and acceptance.

52. “Chinese Telecom Giant ZTE ‘helped Venezuela Develop Social Credit System’ - ABC News.” Accessed December 16, 2020. <https://www.abc.net.au/news/2018-11-16/chinese-tech-giant-zte-helps-venezuela-develop-fatherland-card/10503736>.

1.0.5 CONTROL AS AN ALL-ENCOMPASSING MIST.

The two excerpts above, included international travel and immigration restrictions, and hiring restrictions based on what is judged to be normal social media activity. These two resonate closely with what Gilles Deleuze was leaning towards in his publication, "Postscript on the Societies of Control." Back in 1990 when this was published, social media and cell phones were not as prevalent as they are today. In fact, the first cell phone to be released with PDA features such as a phone book, and a touchscreen, was not released until three years later. The first person-to-person SMS was also sent that year in 1993 in Finland, and the first phone with a full internet connection was in 1999 in Japan. The Mosaic web browser, which popularised the World Wide Web and the Internet, was released in 1993.

53. Deleuze, Gilles. "Postscript on the Societies of Control*."

Despite this, Deleuze predicted that control would be "undulatory, in orbit, in a continuous network" where "everywhere, surfing [has] replaced the older sports".⁵³ My analysis of these statements is unfortunately so corrupted by my knowledge of the invasion of internet surfing, the present highly-networked and connected world, and the entanglement of the smartphone in my daily life, that I am unable to adequately decipher the exact meaning of what Deleuze is referring to by "surfing" in 1990, before the advent of these technologies.

However, over thirty years later, if we apply his theories, Deleuze would consider the smartphone to be a great example of mobility and apparent freedom, due to its ability to connect to the Internet from anywhere. Consider

this to be the Internet superhighway, if we are to keep to the similar analogies by Deleuze.

The smartphone, and similar Internet of Things devices are a new form of control because, while it seemingly provides the freedom to access whatever, wherever, whenever into perpetuity, it is also continuously collecting data on our actions and interactions, and using that data often nefariously. It also keeps us tied to our perceived obligations of constant communication or work. Also, because it has become normalised, people without these entanglements are deemed contrarian and can be penalised as noted in the examples above. We are not trapped, but it is like a constant fog, an enduring mist.

1.0.6 WE THE GUARDS.

Byung Chul Han, in his book 'The Transparency Society,' commented that "today the entire globe is developing into a panopticon. There is no outside space. The panopticon is becoming total. No wall separates inside from outside. Google and social networks, which present themselves as spaces of freedom, are assuming panoptic forms."⁵⁴ Han considers the big data generated, as a "highly efficient psychopolitical instrument that makes it possible to achieve a comprehensive knowledge of the dynamics of social communication."⁵⁵ He concludes that this knowledge is for the sake of both domination and control, and that "it facilitates intervention in the psyche and enables influence to take place on a pre-reflexive level."⁵⁶

54. Han, Byung Chul. 'The Transparency Society.' Stanford, California: Stanford Briefs, 2015.

55. Han, Byung Chul. 'Psychopolitics: Neoliberalism and New Technologies of Power.' London: Verso, 2017.

56. Han, Byung Chul. 'Psychopolitics: Neoliberalism and New Technologies of Power.'

He states that people exploit themselves willingly, through oversharing and inviting devices to survey their every move, in an almost pornographic desire to show their private lives. The new mechanisms of control that we are seeing are continuous, and are tracking individuals at all times throughout their existence, through the locations, transactions, views, choices made, results of tests, and other identifiable information that can be collected.

He describes what we are experiencing as an "aperspectival panopticon," in that the surveillance is no longer from a central location, but is omnipresent.⁵⁷ Han elaborates on the society of transparency which follows the logic of the achievement society where consumers voluntarily give themselves over, and surrender to the addiction. He ends his chapter titled "The Society of Control"

57. Han, Byung Chul. 'The Transparency Society.'

in this book by stating that freedom in this society turns out to be a form of control, and that the prisoner of this digital panopticon is both the perpetrator and the victim at the same time.

This is where we are today. The philosophy of a solution designed to aid labourers, was redesigned for other physical sites that required the overseeing of people. It inspired the theories of adapting this to psychological forms of control in sites of confinement, which was transplanted to other sites of enclosure. It then became embedded within societies, and finally, empowered by Big Data and advancements in technology, to thoroughly and effectively imprisoning ourselves.

We see the solution of the Inspection House travelling through time, and cultures, from Russia to France and globally. It would be naïve to think that there was only one origin, or one factor that contributed to this evolution. This is simply one of the many contributors to the development of our current state of society. It is a case of hypercorrection, in the sense that as a panacea, it has exposed various concerns in relation to privacy, who has control, what is the baseline for normal, and who is doing the policing.

§1.1 HYPERNUDGE.

1.1.1 BIG DATA AS DESIGN-BASED CONTROL.

This is getting closer to hypervolition, however what has been described in the previous modern examples, is hypernudging, which is defined by legal scholar, Karen Yeung, to be Big Data-driven nudging that provides the data subject with a highly personalised choice environment.⁵⁸ Her paper, “Hypernudge: Big Data as a Mode of Regulation by Design,” examines regulation that is embedded into the design “in order to foster social outcomes deemed desirable (such as ignition locking systems which prevent vehicle engines from starting unless the occupants’ seatbelts are fastened).”

58. Yeung, Karen. “‘Hypernudge’: Big Data as a Mode of Regulation by Design.” *Information, Communication & Society* 20, no. 1 (January 2, 2017): 118–136.

Yeung’s research draws from the concept of a “nudge”, which is “any aspect of choice architecture that alters people’s behaviour in a predictable way without forbidding any options, or significantly changing their economic incentives.”⁵⁹

59. Yeung, Karen. “‘Hypernudge’: Big Data as a Mode of Regulation by Design.”

Yeung identifies two broad configurations within the use of Big Data in digital decision-making analytic processes. The first is automated decision-making, which only requires the user to input the necessary data points, and does not need human-intervention. For example, an algorithm used to evaluate a candidate, and issue credit. The second, is digital decision guidance processes, which attempt to direct or guide an individual’s decision-making process through suggestions, to the optimal solution as determined by the algorithm.

Examples of the latter include predictive policing, which helps identify high-risk individuals or targets to assist enforcement officials determine their priorities for inspections and enforcement. Another is search algorithms, that although return hundreds of pages, ranks algorithmically by what it determines to be “relevant” to you, some of which are sponsored results. GPS navigation is another example, as it readjusts to recommend a new suggestion if the driver takes an ill-advised turn, and charts a new optimal path to provide to the driver.

1.1.2 NUDGE VS HYPERNUDGE VS HYPERVOLITION.

According to Yeung, the difference between the nudge and the hypernudge is that hypernudges use automatic enforcement that is dynamic and individualised.

60. Yeung, Karen. “‘Hyper-nudge’: Big Data as a Mode of Regulation by Design.”

They “harness nudges for the purpose of selection optimisation,”⁶⁰ and when networked, they “operate as self-contained cybernetic systems.” This means that in these systems there is a recursive feedback loop of regulation that is dynamic and readjusts an individual's choices in real time in three directions:

a) refinement of the individual's choice environment in response to changes in the target's behaviour and the broader environment;

b) continual data feedback to the choice architect, which can be collected, stored and repurposed for other Big Data applications; and

c) continual monitoring and refinement of the individual's choice environment in light of population-wide trends, identified via population-wide Big Data surveillance and analysis.⁶¹

61. Yeung, Karen. “‘Hyper-nudge’: Big Data as a Mode of Regulation by Design.”

This enables personalisation beyond what could be done before, the strength of Big Data is in its ability to find the necessary patterns, and connections beyond the capacity of a human, allowing one to build in control that is appealing, and does not seem constrictive. This is the shift away from discipline.

Gilles Deleuze, in his book 'Two Regimes of Madness,' summed this up quite well. He says, “control is not discipline. You do not confine people with a highway. But by making highways, you multiply the means of control. I am not saying this is the only aim of highways, but people can travel infinitely and ‘freely’ without being confined while being perfectly controlled. That is

our future."⁶² I believe I should amend Deleuze's decades-old statement; This is our present.

62. *Deleuze, Gilles. Two Regimes of Madness: Texts and Interviews 1975-1995 (Semiotext(e) / Foreign Agents). Los Angeles, CA: Semiotext(e), 2006.*

Hypernudging plays a key role in hypervolution, however this theory is not quite the solution I was looking for. In both, Big Data is a key ingredient. Hypernudge focuses on the fact that there are changes in the choice landscape, which is guided by Big Data. Being a legal paper, this theory also considers ideas like liberal rights, notice and consent, manipulation, right to informational privacy, and the privacy of self-management (how much to weigh the costs and benefits of personal data sharing). My theory is not looking into this. Hypervolution is not about the fact that the choices have been manipulated to guide behaviour, but that the choice itself is assumed to be of our own volition. The barrier that separates "I was asked/commanded to do something" and "I want to do something" is dissolved.

§1.2 HYPERLIBIDO.

63. “Volition, n.” In *OED Online*. Oxford University Press, 2020. Accessed March 4, 2021. <https://www-oed-com.ezproxy.torontopubliclibrary.ca/view/Entry/224457?rskey=5ZjgvA&result=1>.

1.2.1 VOLITION.

64. “Volition | Meaning in the Cambridge English Dictionary.” Accessed March 9, 2021. <https://dictionary.cambridge.org/dictionary/english/volition>.

65. “Volition.” *Merriam-Webster Dictionary*. Accessed March 9, 2021. <https://www.merriam-webster.com/dictionary/volition>.

66. “Volition.” *Merriam-Webster Dictionary*.

67. “Volition.” *Merriam-Webster Dictionary*.

This “I want to do something” is “volition,” “an act of willing or resolving; a decision or choice made after due consideration or deliberation; a resolution or determination.”⁶³ It implies “the power to make [one’s] own decisions,”⁶⁴ coming from the Latin verb “velle” meaning “to will” or “to wish.”⁶⁵ The early use in the 17th century, when it was borrowed from the French, was to mean “an act of choosing.”⁶⁶ Around the mid-18th century, it developed another sense meaning, “the power to choose.”⁶⁷ In my use of “volition” in “hypervolition”, I am considering the power to choose, and power to make one’s own decisions. Hence hypervolition, is directly related to power, choice, and wish. The “wish” in this sense is our “desire”, and “hyperlibido,” which I am defining for discussion in this section, is our excessive obsession, and the application and impingement of desire. Here I am using the “over” meaning of the prefix “hyper” to form this word.

1.2.2 ORIGIN OF DESIRE.

In 2005, David Kavanagh, Jackie Andrade, and Jon May published the "Elaborated Intrusion Theory of Desire." It promised to provide a coherent theory of desire which adequately explained desire itself, and examined the implications of having a theory for the measure and intervention of desire.⁶⁸ In their contributed chapter in the book 'The Psychology of Desire,' the team of researchers and Lotte van Dillen, revisited this theory. They proposed a view of desire as a "conscious wanting" in which "an object or activity that is associated with pleasure, or relief of discomfort is in focal attention."⁶⁹ The theory is summarised in Figure 1-2, which shows the contributions of triggers, intrusive thoughts and sensory imagery to desire. It also shows the automatic influences on desires, shown with thin arrows, and the controlled processing cycle that occurs with conscious imagery and the associated affect.

68. Kavanagh, David, Jackie Andrade, and John May. "Imaginary Relish and Exquisite Torture." *Psychology Review* 112 (April 2005).

69. Hofmann, Wilhelm, and Loran F. Nordgren. *The Psychology of Desire.* New York, NY: The Guilford Press, 2015.

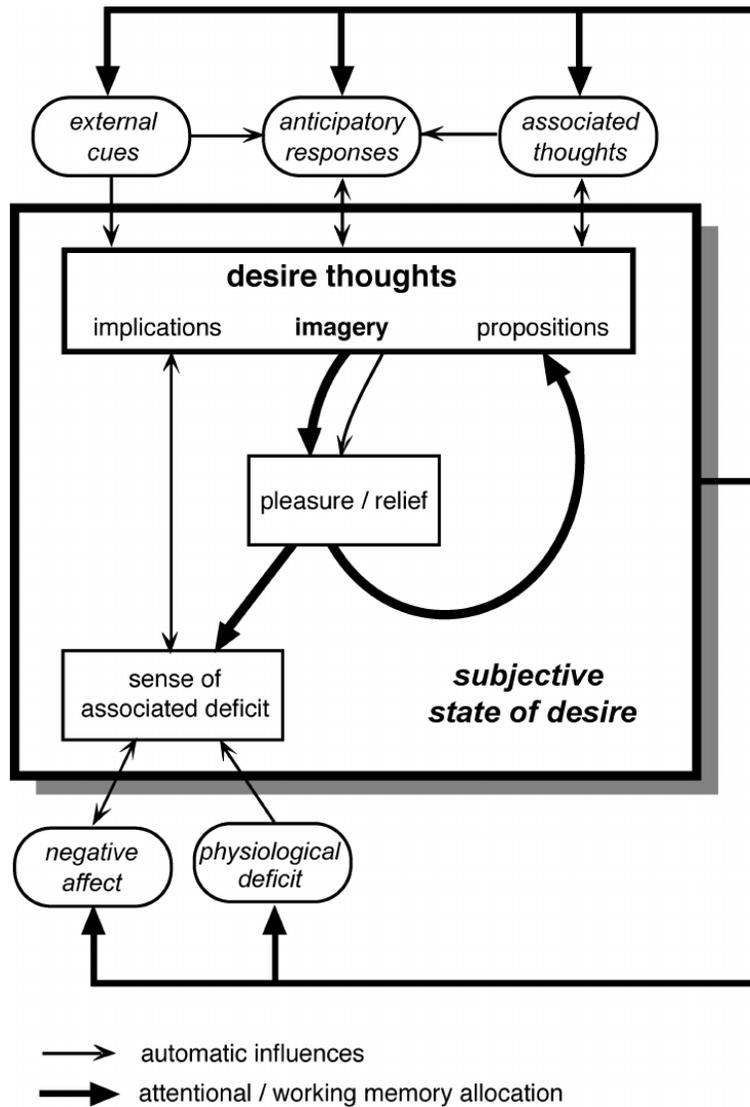


Figure 1-2: The Elaborated Intrusion Theory of Motivation Showing the Contribution of Triggers in 'The Psychology of Desire' (2015).

In summary, there are two quasi-independent systems that determine our decision making, one that is unconscious, automatic and faster which tries to reach a correct answer based on prior experiences and ease of the computation, and a second system that is slower and conscious.⁷⁰ The second system, the conscious experience, is a cycle of mental elaboration of an initial intrusive thought. This initial thought is triggered, often outside of awareness, and include associated thoughts, physiological cues, our awareness of conditioned responses, or negative mood. The trigger does not always lead to desire, and the nature of desire when it does is unpredictable.

Whether it becomes desire depends on the sequence of events that follow. First the triggers activate desire-related representations in memory (desire thoughts), which seemingly pop into the mind, then based on an individual's experience and behaviour, this thought may be elaborated on within the mind. It may elicit an anticipated pleasure or relief, but in many cases, it can vanish without much effort, even in those in the beginning stages of dealing with addictive problems.⁷¹ In the situations where the elaboration begins to occur, they can lead to further intrusions in the conscious awareness. These sensory imageries can also emulate the experience of achieving the desire, which can prime the individual to make target-directed behaviours and actions. The desire imagery also increases awareness of the current deficit, which continues to drive the desire thoughts.

A relevant takeaway from this theory is the notion that desire is “what we feel when making a controlled, cognitive response to a seemingly spontaneous

70. May, Jon, Jackie Andrade, David J. Kavanagh, and Marion Hetherington. “Elaborated Intrusion Theory: A Cognitive-Emotional Theory of Food Craving.” *Current obesity reports* 1, no. 2 (June 2012): 114–121.

71. Kavanagh, David J, Jon May, and Jackie Andrade. “Tests of the Elaborated Intrusion Theory of Craving and Desire: Features of Alcohol Craving during Treatment for an Alcohol Disorder.” *The British Journal of Clinical Psychology* 48, no. Pt 3 (September 2009): 241–254.

72. *Hofmann, Wilhelm, and Loran F. Nordgren. 'The Psychology of Desire.'*

thought about a target associated with pleasure or reward."⁷² Applying this, "volition" becomes the power to exercise that developed inner feeling. Hypervolition, if you recall, is not the loss that power. That would be the prefix "hypo-."

1.2.3 INFLUENCE OF DESIRE.

Prior to scientific studies on desire, several philosophical arguments have been made. These can be grouped by feature as was done in The Stanford Encyclopaedia of Philosophy's entry on desire.⁷³ Figure 1-3a and Figure 1-3b summarise these, oversimplifying in many cases, but giving a general idea of the theories and beliefs held. The categories, "Action-Based," "Pleasure-Based," "Good-Based," "Attention-Based," "Learning-Based," and "Holistic" represent the variations in the impetus for desire.

73. Schroeder, Tim. "Desire." In 'Stanford Encyclopaedia of Philosophy', edited by Edward N. Zalta. Summer 2020 Edition., 2020. Accessed February 8, 2021. <https://plato.stanford.edu/archives/sum2020/entries/desire>.

In my attempt to summit this mountain of research, I found myself desiring that they had all desired to do something else. This, as I have discovered, can be classified as an example of "desires for states of affairs," which is differentiable from "desires for objects." However, this is a much-contested categorisation.

The common thread in these, is an idea that has been the basis of even Aristotle's thoughts on desire in his "De Anima" of 350 BC.⁷⁴ This is, that desire is linked to how we think, and/or what we do. Each theory alters what the link or links could be, how much influence factors have, whether there are other steps involved, and what affects our ability to control it. In the case of Siddhartha Gautama's teachings, it also includes how and why we should attempt to "extinguish" its associated cravings.⁷⁵

74. Aristotle. 'De Anima (On the Soul).' Harmondsworth, Middlesex, England: Penguin Classics, 1987.

75. Burton, David. 'Buddhism, Knowledge and Liberation: A Philosophical Study' (Ashgate World Philosophies Series). Aldershot, England: Routledge, 2004.

| | Action-Based | Pleasure-Based | Good-Based |
|----------------------|--|--|--|
| SUMMARY & VARIATIONS | For an organism to desire p is for the organism to be disposed to act so as to bring about p. | For an organism to desire p is for the organism to be disposed to take pleasure in it seeming that p and displeasure in it seeming that not-p. | For an organism to desire p is for it to believe p is good. |
| | For an organism to desire p is for the organism to be disposed to take whatever actions it believes are likely to bring about p. | | For an organism to desire p is for p to appear good to the organism. |
| DISCUSSED BY | Michael Smith (1987; 1994) | Carolyn Morillo (1990) | Socrates (375 BC) |
| | Dennis Stampe (1986) | Galen Strawson (1994) | David Lewis (1988;1996) |
| | Gertrude Elizabeth Margaret Anscombe (2000) | | Dennis Stampe (1987) |
| | Wayne Davis; Joel Marks (1986) | | Graham Oddie (2005) |

Figure 1-3a: Categories of Theories of Desire (1)

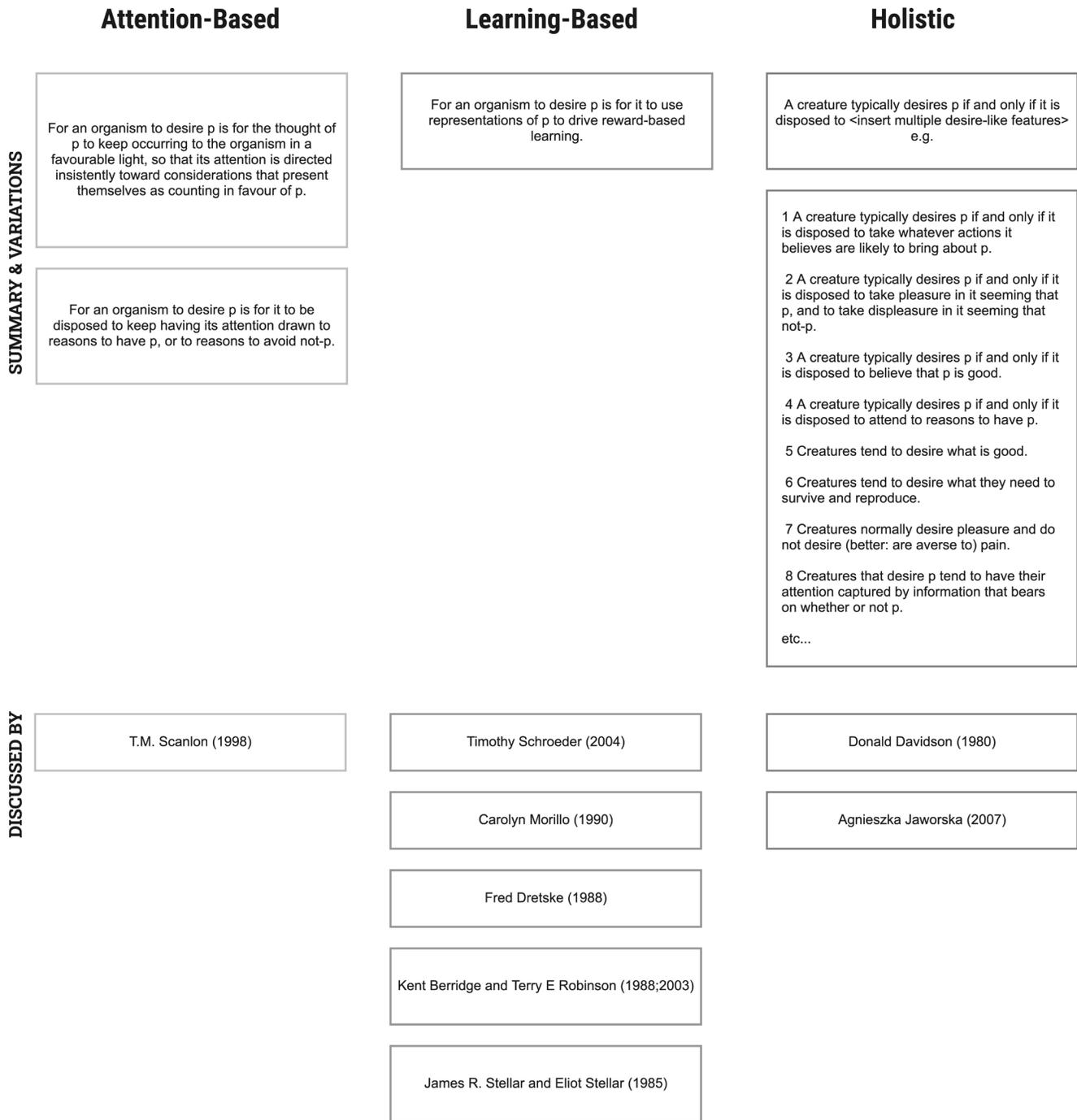


Figure 1-3b: Categories of Theories of Desire (2)

1.2.4 INFLUENCING DESIRE.

When considering imposed desires and choices, as is the case of hypervolition, it is important to understand The E.I. Theory of Desire, and also understand why and how desire can be controlled. A study on the strength and attempts to control desire in everyday life demonstrated that people experience desires to “do or consume something during half their waking hours, and half of these desires conflict, to varying degrees with other goals.”^{76 77} The study, “Everyday Temptation: An Experience Sampling Study of Desire, Conflict, and Self-Control,” provided new evidence that personality traits as well as situational factors, shape the course and outcome of everyday desires. It concluded that the respondents of that study actively tried to resist a desire for 40% of the time, and that desire-strength, conflict-resistance, and self-regulatory success were affected in many ways, by personality, situational and interpersonal factors.⁷⁸

76. Hofmann, Wilhelm, and Loran F. Nordgren. *The Psychology of Desire.*

77. Hofmann, Wilhelm, Roy F Baumeister, Georg Förster, and Kathleen D Vohs. “Everyday Temptations: An Experience Sampling Study of Desire, Conflict, and Self-Control.” *Journal of Personality and Social Psychology* 102, no. 6 (June 2012): 1318–1335.

78. Hofmann, Wilhelm, Roy F Baumeister, Georg Förster, and Kathleen D Vohs. “Everyday Temptations: An Experience Sampling Study of Desire, Conflict, and Self-Control.”

For personality, traits like behavioural inhibition, perfectionism, narcissistic entitlement, and self-control were considered within the study that involved 205 adults. For state and social environments, they considered alcohol intoxication, the presence of other people, and location. They found that personality emerged as being most important “at the source of desires, and at the origin of conflicts about those desires, setting in motion the stream of events that eventually leads to behaviour being enacted or inhibited.” This was in contrast to their findings on the influence of situational and social environments, which they found seemed to work primarily as a constraint or “unleashing impetus at later stages, much like channels, banks and floodgates affect downstream flow of a river.”⁷⁹

79. Hofmann, Wilhelm, Roy F Baumeister, Georg Förster, and Kathleen D Vohs. “Everyday Temptations: An Experience Sampling Study of Desire, Conflict, and Self-Control.”

This lends credence to the ideas of social contracts and behavioural expectations. Something philosophers like Jean-Jacques Rousseau and Thomas Hobbes have critiqued and analysed, with regard to the influence of the behaviours of those who live within societies, to varying conclusions not considered in this research.⁸⁰ Other research suggests that the presence of others can have an inhibiting, or facilitating effect on the enactment of desire, as it increases one's self-awareness.⁸¹ In this "aperspectival panopticon,"⁸² with no outside space that we live in today, the definition of "the other" extends beyond just another human. This mist, mesh, array of cybernetic systems that is "us" as a collective and surrounds "the self," is also "the other," and can influence our enactment of desire. When you take into account the Big Data-driven, IoT-infused features of this society, not only is our enactment influenced, but our desire itself, as the triggers from outside of our awareness can be acted directly upon.

80. See 'The Social Contract' by Jean-Jacques Rousseau and 'Leviathan' by Thomas Hobbes for an expanded reading on their theories.

81. Duval, Shelley. 'A Theory of Objective Self Awareness (Social Psychology)'. New York: Academic Press, 1972.

82. Han, Byung Chul. 'The Transparency Society.'

§1.3 HYPERPERSONALISATION.

1.3.1 MINE.

The enactment of desire and the related conflict ultimately boils down to “me,” “mine,” “the self,” and our desire to satisfy the wants and needs of oneself, to customise our situation and environment to suit ourselves, our personalisation of our own experiences, and brands have noticed this trend.

Traditionally, markets have been segmented using demographic or psychographic data to classify groups of people who have similar interests or values. However, now “customers want to be treated as individuals, and they are heading for platforms and companies that understand this,” as stated by Stanford University professor and former Amazon chief scientist, Andreas Weigend, in 2012.⁸³

83. Woods, Adam. “Revolution: Hyper-Personalisation - Up Close and Very Personal.” Haymarket Media Group, September 5, 2012. Accessed July 14, 2020. <https://link.gale.com/apps/doc/A301593160/AONE?u=toro37158&sid=AONE&xid=0b9f3ab4>.

Julian Haladyn in his book ‘Duchamp, Aesthetics and Capitalism’ comments on the choice economy. He writes,

*The power of the choice economy rests on the compulsive need for individuals not simply to choose, but, more invasively, capitalism’s demand that such decisions actively imbue the chosen objects with immanent and inner personal meanings, which (as it turns out) must be repeatedly replenished.*⁸⁴

84. Haladyn, Julian Jason. ‘Duchamp, Aesthetics and Capitalism’ New York: Routledge Focus, 2020.

This search for inner personal meaning and type of bespoke marketing that

customers are seeking, is known as hyperpersonalisation. It is the use of data to provide personalised and targeted products, services, and content. It is an attempt to “capture something of the friendly, personal service of a generation ago.”⁸⁵ This can be performed through behavioural targeting, as done at Google, or by extrapolation of data from social graphs as seen with Facebook. With Amazon and Netflix, we see the use of recommendation systems, which take into account, view data, search history, and rating history amongst other factors. Businesses are seeing value in mining their customers, and using these data mines to better target them to boost engagement and sales.

85. Woods, Adam. “*Revolution: Hyper-Personalisation - Up Close and Very Personal.*”

These data mines are furnished by the “mine.” Our desire to want these personalised experiences is allowing a slip in our cognisance on how much of our data is freely given away. This was something I noticed myself, and was able to utilise as a teller at Michael’s. Customers were more willing to part with their email, phone and the tracking of their shopping data, when told that they would receive preferred treatment, tailored promotions and discounts, and that it would allow them to not pay the full price that other shoppers were paying. I was able to use that appeal of being a special customer within the store, and their desire to obtain that special treatment by tailoring the pitch directly to them, and whatever feature of the deal that I thought would appeal to their unique priorities the most, to encourage shoppers to spend the extra 30 seconds at the till to part with this data. As aforementioned, this led to my peak of 70% success rate, over 30% of the store average.

1.3.2 DATA 'R US.

Customers are also freely giving away this data in other forms. In 2004, Lifestaster Steve Mann coined the term “sousveillance,” which combined the terms “surveillance” and the French word “sous” meaning below, to describe the recording of the environment from a person’s vantage point throughout their daily activities. This idea was expressed through art installations, fiction, and wearables like cameras mounted onto people. This was in contrast to cameras being attached to buildings.⁸⁶ Mann, who has been exploring electronically mediated environments using “body-borne” computers since the 1970s, saw these as a form of computer-mediated reality – an attempt to create “a new way of experiencing the perceptual world, using a variety of different kinds of sensors, transducers, and other body-borne devices controlled by a wearable computer.”^{87 88}

86. Mann, Steve. “‘Sousveillance’ Inverse Surveillance in Multimedia Imaging.” In *Proceedings of the 12th Annual ACM International Conference on Multimedia - MULTIMEDIA '04, 620.* New York, New York, USA: ACM Press, 2004.

87. Mann, Steve. “‘Sousveillance’ Inverse Surveillance in Multimedia Imaging.”

88. Mann, Steve. *Intelligent Image Processing.* New York: Wiley, John & Sons, Incorporated, 2001.

This concept of self-tracking and wearables evolved and grew into the Internet of Things (IoT) devices that we know of today. From this, emerged an international community of enthusiasts (users and makers) of self-tracking tools, who collectively called themselves the Quantified Self. With the motto, “self-knowledge through numbers,” they claim to be interested in questions such as, how one can improve the access to their data, share it in a way that protects their privacy, and how can the systems involved be better designed to help answer a broader range of questions about oneself.⁸⁹

89. *Quantified Self.* “What Is Quantified Self?” Accessed April 5, 2020. <https://quantifiedself.com/about/what-is-quantified-self/>.

Adam Greenfield, in his book *Radical Technologies: The Design of Everyday*

Life' wrote that "at present, the Internet of Things is the most tangible material manifestation of a desire to measure and control the world around us."⁹⁰ The use of Internet of Things devices is an increasingly common source of data that is used to make and support hyperpersonalisation (and hypernudging). This is data that we give away willingly, or unwillingly, knowingly or unknowingly. The secondary appeals of these devices are perhaps the convenience that they are marketed to provide for its users, or their plug-n-play quality that promises ease-of-use. It could be their very nature, in that they are internet-connected, allowing them to be interfaced with other applications, tools and devices.

For some, it is goal oriented. Thirty-two percent of adults worldwide who currently use a connected health device or tool to manage their health, reported that they did so to monitor or improve their exercise level.⁹¹ The healthcare IoT market is expected to be worth CAD 746.94 billion by 2025,⁹² with the market for smartwatches and fitness trackers expected to near CAD 42 billion by 2023.⁹³

The global spending on the Internet of Things is forecasted to reach CAD 1.5 trillion in 2022, with new technologies, such as 5G, expected to drive the market growth in the coming years,⁹⁴ and ironically, according to a 2019 IoT survey, forty-six percent of respondents are driven to spend more on the Internet of Things technologies for improved security.⁹⁵

A recent March 2020 project placed the number of connected IoT devices that are expected to be in use in 2027 at 41 billion.⁹⁶ This is an increase from the 8 billion figure of 2019. By 2027, the forecasted world population would be 8.3

90. Greenfield, Adam. *Radical Technologies: The Design of Everyday Life*. London: Verso, 2017.

91. Statista. "Connected Device Usage Reasons Worldwide 2018." Statista. Last modified September 27, 2018. Accessed April 2, 2020. <https://www.statista.com/statistics/917185/connected-device-usage-reasons-worldwide/>.

92. Grand View Research. "Internet of Things in Healthcare Market Size, Share & Trends Analysis Report by Component, By Connectivity Technology, By End Use, By Application And Segment Forecasts, 2019 - 2025." Last modified March 2019. Accessed April 2, 2020. <https://www.report-linker.com/p05763769/Internet-of-Things-in-Healthcare-Market-Size-Share-Trends-Analysis-Report-By-Component-By-Connectivity-Technology-By-End-Use-By-Application-And-Segment-Forecasts.html>.

93. Forbes Insights Team. "Forbes Insights: Can A Fitness Tracker Save Your Life?" Forbes Insights. Last modified October 1, 2019. Accessed April 6, 2020. <https://www.forbes.com/sites/insights-teradata/2019/10/01/can-a-fitness-tracker-save-your-life/#1d-89f94847a2>.

94. Statista. "Internet of Things Spending Worldwide 2023." Statista. Last modified March 4, 2020. Accessed April 2, 2020. <https://www.statista.com/statistics/668996/worldwide-expenditures-for-the-internet-of-things/>.

95. Statista. "IoT Spending Drivers Worldwide 2019." Last modified March 5, 2020. Accessed April 4, 2020. <https://www.statista.com/statistics/1079622/iot-spending-drivers-worldwide/>.

96. Business Insider. "The Internet of Things Report." Business Insider Intelligence. Last modified 2020. Accessed April 3, 2020. <https://store.businessinsider.com/products/the-internet-of-things-report?op=1>.

97. The World Bank. "Total Population." *The World Bank*. Last modified 2020. Accessed April 1, 2020. <https://data.worldbank.org/indicator/sp.pop.totl>.

98. Finley, Klint. "The Internet of Things Could Drown Our Environment in Gadgets | WIRED." *Wired*, June 5, 2014. Accessed July 15, 2020. <https://www.wired.com/2014/06/green-iot/>.

99. Sequeira, Neil. "IoT Applications in Waste Management." *IoT For All*. Last modified January 22, 2019. Accessed April 3, 2020. <https://www.iotforall.com/iot-applications-waste-management/>.

100. Nortje, Mc'kyla. "IoT Assists with Challenges in Mining Operations." *Creamer Media's Mining Weekly*. Last modified April 10, 2020. Accessed April 4, 2020. https://www.miningweekly.com/article/iot-assists-with-challenges-in-mining-operations-2020-03-25/rep_id:3650.

101. *PBS NewsHour*. "The Quantified Self: Data Gone Wild?," 2013. Accessed April 5, 2020. <https://www.youtube.com/watch?v=NP5okzCjrj0>.

billion.⁹⁷ This means that by the year 2027, it is estimated that there will be five IoT devices for every woman, man and child alive on the planet we call home. Naturally, due to uneven distributions of wealth and access, this ratio does not represent the number of devices each person will have, but rather it reflects the proliferation of the Internet of Things into the fabric of the everyday lives of many.

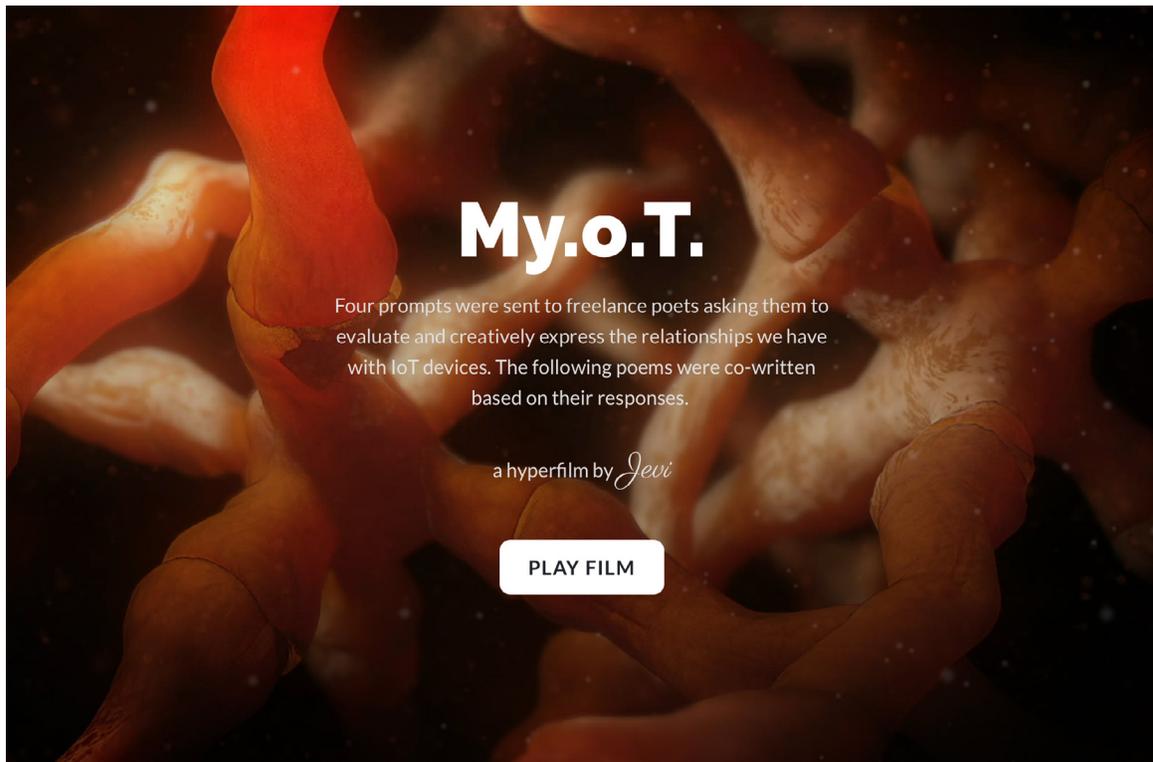
With planned obsolescence, technology advances, and wide-spread poor implementation of recycling practices, these gadgets and devices are doomed for the landfill within a few years.⁹⁸ Interestingly, IoT is increasingly being sought as a solution for waste management,⁹⁹ and the mining of the metals used in its manufacture.¹⁰⁰ These stats highlight that for many, the motivation for purchase is the perceived control that these devices can bring to one's life, home, cities or systems, and as they enter these spaces, they influence environments and people through their use.

Evidence of this influence can be seen even in those who advocate positively for its infiltration. According to technologist and writer, David Pogue, in a 2013 PBS Newshour interview on the Quantified Self, the very act of knowing that users are being watched and observed, leads the users to act accordingly because they are rewarded with "lights and graphs" for compliance. He comments on the "fitness through shame" component of many of the IoT health devices, which are programmed to motivate and change the user's behaviour by comparing them to the activity levels of their peers. He also remarks that it is a form of narcissism, or perhaps ego, in that one studies "themselves as an interesting topic."¹⁰¹

1.3.3 My.o.T.¹⁰²

102. "My.o.T" was created in 2021 by Jevonne Peters as part of this research.

THIS IS AN ART-CHAPTER.



Use AR to see a short preview of "My.o.T." (2021).
See the full work at hypervolution.study/mfa/art-chapters/

1.3.4 OUR PERSONALISED TRAP.

Thus, we see these cultural shifts as discussed by David Lyon in 'The Culture of Surveillance,' from convenience to compliance, from novelty to normalisation, and from online to onlife.¹⁰³ This control and awareness of behaviour and mannerisms are further addressed by Greenfield. In his chapter on "The Internet of Things: A Planetary Mesh of Perception and Response" he compliments the technology on being a "sprawling and complex domain of possibility," but considers it to be foolish to avoid investigating it with an "unusually strong leavening of scepticism."¹⁰⁴ Greenfield comments on the disproportionate benefit between the user and the provider of the IoT service, where the user derives some form of convenience in exchange for "everything."

103. Lyon, David. *The Culture of Surveillance: Watching as A Way of Life.* Polity, 2018.

104. Greenfield, Adam. *Radical Technologies: The Design of Everyday Life.*

In 2018, NPR published an article, cautioning the consumer adoption of fitness trackers in exchange for discounts on insurance. In that year, an estimated six million workers worldwide were to receive wearable fitness trackers as part of their workplace wellness programs, an increase from four million just two years prior. In the USA, the discounts can be as high as USD \$2000 for achieving goals set by the company, and were reportedly incentive enough to inspire many to try. The underlying assumption was that healthy workers should cost the insurer less money.¹⁰⁵

105. O'Neill, Stephanie. "As Insurers Offer Discounts for Fitness Trackers, Wearers Should Step with Caution." NPR. Last modified November 19, 2018. Accessed April 6, 2020. <https://www.npr.org/sections/health-shots/2018/11/19/668266197/as-insurers-offer-discounts-for-fitness-trackers-wearers-should-step-with-caution>.

As an opt-in or niche culture, these concerns are of deep interest, but is quite alarming when the Quantified Self habits, and culture are normalised. The norm becomes that there is sufficient data, and thus health issues like

being overweight, unwell, tired, or stressed, is the fault of the person for not collecting the data, or not paying sufficient attention to it. For this, one could be penalised for making bad choices – what is currently being implemented as a carrot, could be refashioned into a stick. It is not as far-fetched, as a lot of the recruitment and job-seeker advice given in the past few years, stated that one's absence on a social networking site could be detrimental to one's career advancement, and to getting hired.

§1.4 HYPER- PRACTICES & ALGORITHMS.

1.4.1 HYPER- PRACTICES.

This thesis began with an examination of hyper- as a prefix, from the Proto-Indo-European root, to the Greek adaptations, and through the fantastical tales of the authors who have creatively and colourfully prepended hyper- to words over the centuries. Through the hyper- practices, I showcased the changes in the way we viewed and thought about ideas, for example, alternative versions of text as hypertext, media as hypermedia, hyperreal, and most recently in the 21st century, hyperobject. Hypercorrection was redefined and used as a framework for exploring the theoretical progression of ideas from The Inspection House, to the Panopticon, to 'Discipline and Punish' and "sites of controls," to "societies of control," and ending with what I referred to as an all-encompassing mist. This is the evolution of ideas on governance as viewed by theorist like Jeremy Bentham, Michel Foucault, Gilles Deleuze and Byung Chul Han.

I looked at the historical and modern theories on desire: where it comes from, how it can be controlled and the influence on how we think and what we do. Finally, I examined at our relationship with data, and how our desire to want to control the world and our environments, makes us susceptible to the trap of big data, as it provides a promise of a very appealing means to do so. Throughout these explorations, I used various hyper- practises, specifically, hypercorrection, hypernudge, hyperlibido, and hyperpersonalisation, with the aim of exploring the term hypervolution both synchronically and diachronically.

1.4.2 THE IMPINGEMENT OF ALGORITHMS AND IoT.

At present, and as implied within the other subchapters, the use of automated processes and rules, algorithms, is embedded into our everyday lives, and can be quite invasive and influential. In 2016, a user submitted a post to Reddit expressing concern about a faulty Fitbit due to his wife's elevated heart rate. He followed up on a comment from a female Fitbit owner suggesting that his wife may be pregnant. A day later, he posted that she indeed was. In true reddit style, commenters jokingly called "dibs" on the baby, and urged him to ignore previous advice and not "reset the baby."¹⁰⁶ Algorithms are able to see patterns that we may not, to seemingly "know" us better than we know ourselves, to appear to better understand complex concepts, and distil it to easy-to-understand data points.

106. "HR Reading Consistently High Last Few Days: Fitbit." Accessed March 7, 2021. https://www.reddit.com/r/fitbit/comments/445ppj/hr_reading_consistently_high_last_few_days/.

The power that we yield with the use of these algorithms is a great one and is sometimes taken for granted. In the 1991 fictional book 'Jurassic Park' by Michael Crichton, Dr. Ian Malcom, a mathematician and chaos theorist remarked that "we live in a world of frightful givens. It is given that you will behave like this, given that you will care about that. No one thinks about the givens. Isn't it amazing? In the information society, nobody thinks. We expected to banish paper, but we actually banished thought."¹⁰⁷ He later goes on to comment that

107. Crichton, Michael. 'Jurassic Park: A Novel.' Ballantine Books, 2012.

Scientific power is like inherited wealth: attained without discipline. You read what others have done, and you take the next step. You can do it very young. You can make progress very fast. There is no discipline lasting many decades. There is no mastery: old scientists are ignored. There is no humility before nature [...] And because you stand on the shoulders of giants, you can accomplish something quick [...] reported it, patented it, and sold it. And the buyer will have even less discipline than you. The buyer simply purchases the power, like any commodity. The buyer doesn't even conceive that any discipline might be necessary.¹⁰⁸

108. Crichton, Michael. 'Jurassic Park: A Novel.'

While fictional, and addressing the matter of bringing dinosaurs to life, and controlling them using an elaborate network of computer systems, the comment applies to the wide-spread use of algorithms (through Artificial Intelligence, Data Science or Big Data) today. Although these systems are born of principles and ideas of discipline, there is a lack of discipline in their use. There are success stories of its use, like Stitch Fix, who utilised their users' size, price range, style preferences, questionnaires, social media, uploaded pictures, and other channels to gather information about their customers and develop a "data-driven, personal" styling service for their customers.¹⁰⁹ However, also in the retail clothing sector, is the 2011 mishap by Urban Outfitters who experimented with single gender personalisation on their website, leading to very upset users who shopped for friends and family of other genders.¹¹⁰

109. "Understanding Stitch Fix: Finding the Perfect Fit – Goodwater Capital." Accessed March 4, 2021. <https://www.goodwatercap.com/thesis/understanding-stitch-fix>.

110. Woods, Adam. "Revolution: Hyper-Personalisation - Up Close and Very Personal."

As the fictional doctor in 'Jurassic Park' pointed out in his long soliloquys, complex systems are difficult to understand and control, and oftentimes the algorithms being used, especially in the case of artificial intelligence and machine learning, GANs and modelling, combine with the driving motivations of organisations to form a black box, where the true inner workings, the "why" of the results obtained, are not visible or fully understood, but their persuasion is felt.

A side effect of the algorithmic persuasion is the pressure for continual self-improvement and optimisation, as defined by a means which we have established to be opaque, and influenced by capital. It is one thing to collect the raw data, but another to have it define and qualify “the self.” The device establishes the norm, which the user then reflects. In many ways, the gaze is a very influential one, and the device acts as a mirror of who the user is, and who they should be, or will be. We are waving at the technology, and it is waving back. “Technology wants to be like us, and we kind of want to be more like it.”¹¹¹

W.J.T. Mitchell talks about the power of things in his book, 'What Do Pictures Want?' published in 2014. He writes,

*Objects are the way things appear to a subject—that is, with a name, an identity, a gestalt or stereotypical template... Things, on the other hand, ... [signal] the moment when the object becomes the Other, when the sardine-can looks back, when the mute idol speaks, when the subject experiences the object as uncanny and feels the need for what Foucault calls a metaphysics of the object, or, more exactly, a metaphysics of that never objectifiable depth from which objects rise up toward our superficial knowledge.*¹¹²

Jane Bennet ascribes the aforesaid quote to “thing-power,” or the “active role of nonhuman material in public life.” One could consider the thing, and interaction with the things of Internet of Things, as a “complex of energy and information”¹¹³ – a form of our everyday reality where the devices transform everything and every experience into information, and subject them to repeated transformation, or “hypermateralisation.”¹¹⁴ Just how much can we trust these IoT devices and algorithms to tell us about, and accurately reflect reality?

111. Leech, Guy. “James Bridle - Waving at the Machines.” *Web Directions*. Last modified December 5, 2011. Accessed April 6, 2020. <https://www.webdirections.org/resources/james-bridle-waving-at-the-machines/>.

112. Mitchell, W J T. “What Do Pictures Want?: The Lives and Loves of Images.” *University of Chicago Press*, 2006.

113. Bennett, Jane. *The Agency of Assemblages in Vibrant Matter: A Political Ecology of Things*. *Duke University Press*, 2010.

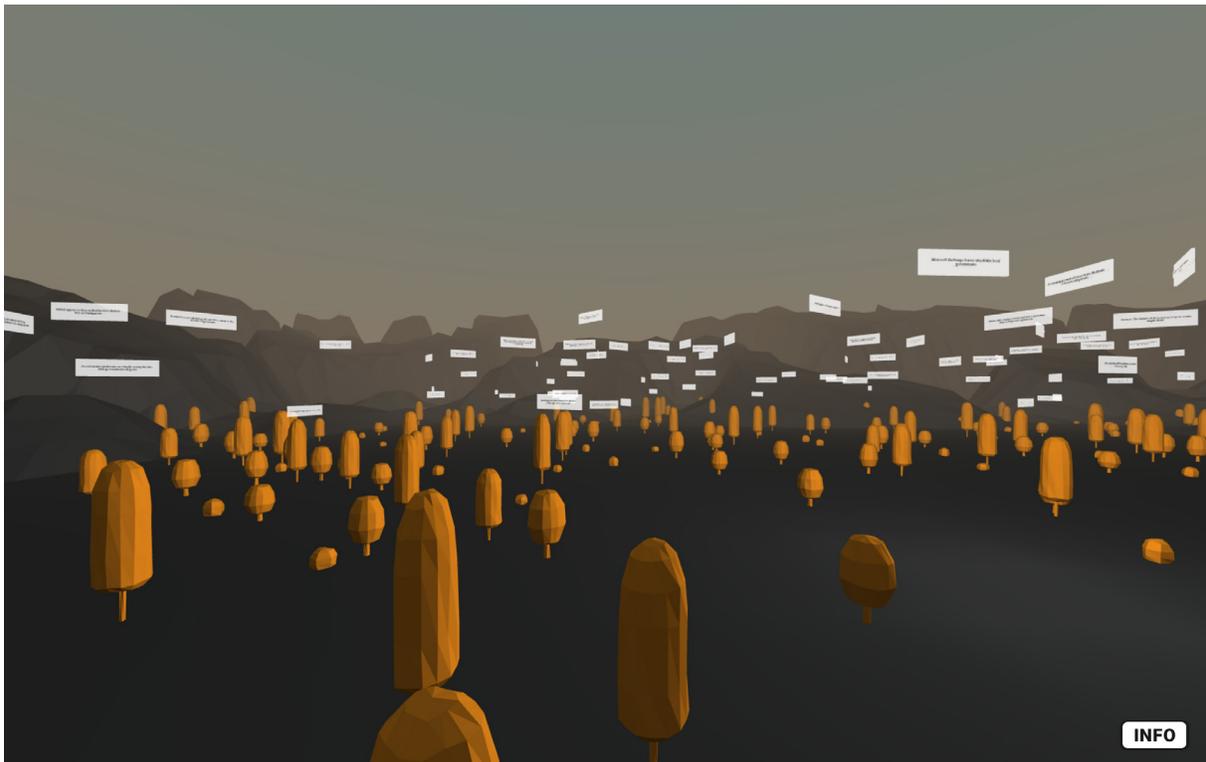
114. Stiegler, Bernard, Philippe Petit, and Vincent Bon-tems. *Economie De L'hypermateriel Et Psychopouvoir*. *Paris: Mille et une nuits*, 2008.

Whatever the reality is, we use the technology to attempt to connect it, both the physical and virtual. It does this through devices that respond to the environment, and our interaction with the devices, through both the generation and consumption of data. They help to connect us to the world, shape who we are, and what we experience as the world. However, they are not merely in-between the agents in this relationship, but rather, they are engaged in a highly intertwined affair. This is the intermingling between humans and nonhumans by mediation through technology. Our actions and practices on the world are changed, and so are our perception and experience of the world.

1.4.3 INTER ALIA.¹¹⁵

115. “Inter Alia” stylised “INT3R 4LIA” was created in 2021 by Jevonne Peters as part of this research.

THIS IS AN ART-CHAPTER.



Use AR to see a short preview of “Inter Alia.” (2021).
See the full work at hypervolution.study/mfa/art-chapters/

§1.5 HYPERVOLITION.

1.5.1 SIMULACRUM.

Hypervolition is rooted in hyperreal, and to understand it, one also has to understand simulacrum.

Imagine the condition of men living in a sort of cavernous chamber underground, with an entrance open to the light and a long passage all down the cave.¹¹⁶

116. Plato. "The Allegory of the Cave." in 'The Republic of Plato.' London: Oxford University Press, 1951.

This is one of the opening lines of Plato's 'The Allegory of the Cave.' The allegory tells of chained men who, unable to move their heads or bodies since birth, only know of life as the shadows projected onto a wall. They give names to these shadows, and associate them with the echoes they hear within the cave. However, unbeknownst to them, these shadows and voices are created by hidden performers who carry various puppets that represent objects in front of a fire that blazes behind them.

As the story continues, we learn that one of the men has been released from the chains and coaxed to rise. He first learns of the source of the shadows, and is told that what he previously knew to be real is an illusion. He is forced to look at the fire, but it hurts to gaze at it, and he pulls away, finding comfort in the darkness that he knew before. The man is dragged out of the cave and into the sunlight, and slowly he grows accustomed to the brightness outside. He is

initially only able to see the shadows while his eyes adjust, but soon, he can see reflections in the water. Eventually, he is able to see the objects themselves, including the moon, and the stars, and finally able to see the sun, contemplate its nature, and understand its value. The man later returns to the cave, but is unable to see clearly in the dark. He is deemed to be a blabbering fool with damaged sight by the others, and killed.

Plato used this allegory to explain the reaction to those who have been enlightened, and the difficulty in its discovery and revelation of it to others. It also serves as a warning against plunging the untrained too quickly into moral discussions. Within this allegory, but highlighted more clearly in Plato's 'Sophist,' is the idea of two forms of representation; a faithful one, and an intentionally distorted one, which can be referred to as a simulacrum.

The ideas of the simulacrum (simulation, similitude, dissimulation, simultaneity) have been a topic of interest in the works of Pierre Klossowski, Gilles Deleuze, and Jean Baudrillard, but each in a distinct way. For Klossowski, a phantasm is "an obsessive but uncommunicable image produced within us by the unconscious forces of our impulsive life, [and] a simulacrum is a reproduction of that phantasm that attempts to simulate this invisible agitation of the soul in a literary work, in a picture or a sculpture, or in a philosophical concept."¹¹⁷

Acknowledging the contributions of Klossowski, Deleuze developed his own concept of the term in 'Difference and Repetition,' where he used simulacra to

117. Smith, Daniel W. "The Concept of the Simulacrum: Deleuze and the Overturning of Platonism." *Continental Philosophy Review* 38, no. 1-2 (July 10, 2006): 89-123.

118. Deleuze, Gilles. *Difference and Repetition*. New York: Columbia University Press, 1995.

119. Deleuze, Gilles, and Rosalind Krauss. "Plato and the Simulacrum." *October* 27 (1983): 45.

describe "systems in which different relates to different by means of difference itself."¹¹⁸ Deleuze arrives at his definition through his reading of Nietzsche's reading of Plato, in an exercise to invert Platonism. Deleuze defines simulacrum as a copy with no original, "an image without resemblance."¹¹⁹

In Deleuze's interpretation, he returns to Plato, and notes that the problem Plato was concerned with at the time was rivalry, more specifically, determining the difference between a true thing and other claimants, something echoed through Plato's other works. (In 'Stateman,' the problem was determining who were the statemen in society, and in 'Phaedrus,' who were the true lovers.)

Studies on origins of Greek thought, attributed the development of thinking around that time to the architecture of the cities that opposed to the "imperial and transcendent sovereignty of the State,"¹²⁰ and encouraged freedom, mobility, equality, and thus rivalry.

120. Smith, Daniel W. "The Concept of the Simulacrum: Deleuze and the Overturning of Platonism." *Continental Philosophy Review* 38, no. 1-2 (July 10, 2006): 89-123.

Then there is Baudrillard, who assigned the word to describe "the increasingly hyperreal status of certain aspects of contemporary culture."¹²¹ He argued that it is no longer that there is a simulation, but that there is a blending of reality and representation, where there is no clear demarcation of where representation begins and reality ends. In this research, I will be following a line of thought close to that of Baudrillard's.

121. Smith, Daniel W. "The Concept of the Simulacrum: Deleuze and the Overturning of Platonism."

1.5.2 PRECESSION.

In Baudrillard's 'Simulations,' a compilation of two works of the French philosopher, he is primarily concerned with the role that images play in our society, and the way that reality is mediated by images. In the chapter, "The Precession of Simulacra," he illustrates the concepts of simulacra and hyperreality through examples he observed at the time, making observations on the disconnect between the real and the abstraction/image of the real thing. He notes that reality now precedes and imitates the model, which now determines the real world. He writes,

It is no longer a question of imitation, nor duplication, nor even parody. It is a question of substituting the signs of the real for the real [...] A hyperreal henceforth sheltered from the imaginary, and from any distinction between the real and the imaginary, leaving room only for the orbital recurrence of models and for the simulated generation of differences.¹²²

122. Baudrillard, Jean. *Simulations*. 1st ed. New York City, N.Y., U.S.A: Semiotext(e), 1983.

He argues that these simulations have escalated to the point that we have lost the ability to distinguish the reality from the simulation. He is not making the case that reality is lost, or that the societies are artificial, but rather that the distinction is blurred.

Baudrillard, and the theorists that followed, reference various historical progressions as the catalyst and explanation for hyperreality. These include "the explosion of new media technologies, the loss of the materiality of objects, the increase in information production, the rise of capitalism and consumerism, and the reliance upon God and/or 'the centre' in Western thought."¹²³ These,

123. "Reality, Hyperreality (1)." Accessed March 22, 2021. <http://csmt.uchicago.edu/glossary2004/realityhyperreality.htm>.

and other developments, allowed for wide-scale reproduction of simulacra, simulations preceding the real, and ultimately leading to the disconnect described, which is hyperreality.

1.5.3 IN PLAIN SIGHT.¹²⁴

124. "In Plain Sight" was created in 2020 by Jevonne Peters as part of this research.

THIS IS AN ART-CHAPTER.



Use AR to see a short preview of "In Plain Sight" (2020).
See the full work at hypervolution.study/mfa/art-chapters/

1.5.4 POWER & SOCIETY.

Power is a key ingredient in understanding the Jevinian Orders and Phases introduced in the subsequent chapters, and despite the term thing-power, as referenced by Bennet to denote the power of things, power itself is not a thing. It is a relationship in which one can direct or determine another's behaviour. Foucault in 'Society Must Be Defended,' claims that power "is exercised through networks, and individuals do not simply circulate in those networks; they are in a position to both submit to and exercise this power. They are never the inert or consenting targets of power; they are always its relays. In other words, power passes through individuals. It is not applied to them."¹²⁵ Individuals may be docile as a result of conforming, but are not inert.

125. Foucault, Michel. "Society Must Be Defended": Lectures at the Collège de France, 1975-1976 (Michel Foucault Lectures at the Collège de France, 5). First. New York: Picador, 2003.

Power has structural origins, and exists only when it is put into action, and according to Foucault, it always leaves the possibility for resistance open. One cannot be outside of power as it is something that is always already there, however, this is not a hopeless situation, and resistances are "all the more real and effective because they are formed right at the point where relations of power are exercised."¹²⁶

126. Foucault, Michel, and Colin Gordon. 'Power/Knowledge: Selected Interviews and Other Writings, 1972-1977.' 1st American. New York: Pantheon Books, 1980.

One of the earliest power structures is juridical power or sovereign power. It is a deductive power. It is a dissymmetrical, and is one of permissiveness and seizure. The subjects are in a position of danger and may be threatened in order to secure the safety of society, or the sovereign. "Power in this instance [is] essentially of seizure: of things, time, bodies, and ultimately life itself; it

culminated in the privilege to seize hold of life in order to suppress it."¹²⁷ History has shown that this form often results in revolutions, as noticeably seen in France in the 1700s during the French Revolution that lasted decades. It uses the law as its tool, enforcing rules defined in negative terms like "do not steal," "do not commit adultery," "do not..." Negative actions are made to be undesirable and punishable, and are blocked or refused.

127. Foucault, Michel. *The History of Sexuality: Volume I: An Introduction.* 1st American. New York: Pantheon Books, 1978.

Power relations do not only operate through this type of repression, however. It can be productive, and it "traverses and produces things, in induces pleasure, forms knowledge, produces discourse."¹²⁸ Foucault sees the need for it to be considered as a "productive network which runs through the whole social body, much more than as a negative instance whose function is repression." If it were solely repressive, there would be difficulty inspiring others to obey, and while some relations are of domination, but not all are.

128. Foucault, Michel, and Colin Gordon. *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977.*

This is disciplinary power. Instead of using prohibition through laws, it utilises normalisation as its tool. It creates a positive ideal, rewarding those who conform, and punishing those who do not. This is the "gentler way" of punishment shown through psychological control as seen at the Mettray Penal Colony, and societies of control as described by Deleuze. It is the continuous network, all-encompassing mist, which has been entangled into society dictating the norm. Foucault "micro-physics of power" describes the procedures of power that produce norms and habits rather than pain and death, and that must "qualify, measure, appraise, and hierarchize, rather than display itself in its murderous splendor."¹²⁹

129. Foucault, Michel. *The History of Sexuality: Volume I: An Introduction.*

Byung Chul Han notes that in the modern era a “diffusion and scattering of

130. Han, Byung-Chul. *‘Topology of Violence.’* Cambridge, Massachusetts: MIT Press, 2018.

power has taken place.”¹³⁰ He writes,

Unlike the obedience-subject, the achievement-subject is free because it is dominated by no one. Its psychic constitution is not determined by should but by can. It must be its own master. Its existence is not governed by commands and prohibitions but rather by freedom and initiative. The imperative for performance transforms freedom into compulsion. Self-exploitation replaces exploitation of the other. The achievement-subject exploits itself until it collapses completely.

The measure, the yardstick, shifts from being against the ideal member of the society, to an internalised self. Han summarises that “no outside authority forces [the individual] to continually achieve more. Rather, it forces itself and wages war with itself.”¹³¹

131. Han, Byung Chul. *‘Topology of Violence.’*

Han provides some criticism to Foucault approach of truth in these theories, however there is an interdependence of note between power relations, truth and knowledge. Foucault states that “each society has its régime of truth, its ‘general politics’ of truth: that is, the types of discourses which it accepts and makes function as true.”¹³² Truth is not outside power or lacking in it. It is produced “only by virtue of multiple forms of constraint.” Truth, as Foucault puts it, is a system of “ordered procedures for the production, regulation, distribution, circulation and operation of statements,” and there is a circular relation with systems of powers which produce and sustain the truth.

132. Foucault, Michel, and Colin Gordon. *‘Power/Knowledge: Selected Interviews and Other Writings, 1972-1977.’*

With the technological era, came advancements in the way in which we could understand the world, and better methods to acquire knowledge and

determine truth, exceeding the capabilities of the human mind. In this society, data, specifically big data, is seen as being indiscriminatory, objective, and the truth. The mined raw data is viewed as indisputable facts with data scientists on their quests to discover “underlying truths” of human society, through what is believed to be “unbiased data and unerring algorithms,”¹³³ and there is power in that.

133. Leetaru, Kalev. “Data Isn’t ‘Truth.’” *Forbes*. Last modified May 7, 2019. Accessed March 11, 2021. <https://www.forbes.com/sites/kalevleetaru/2019/05/07/data-isnt-truth/?sh=31a01463789f>.

This is algorithm power, that acts indirectly and covertly through the manipulation of a person’s choice landscape based on Big Data. Instead of using prohibition, or normalisation, this form of power is enforced through suggestion built into the design. It not only creates a positive ideal based on the Big Data, and what has been determined to be the truth, but makes it so that the positive ideal is highly likely to be selected. This power is exercised on free people, by this I mean the individuals being considered in these discussions have a field of possibilities that they can choose. The field may be manipulated, but the possibilities still exist.

1.5.5 BAUDRILLARDIAN ORDERS & PHASES.

In his book, Baudrillard describes the “orders of appearance.”

Three orders of appearance, parallel to the mutations of the law of value, have followed one another since the Renaissance:

- Counterfeit is the dominant scheme of the “classical” period, from the Renaissance to the industrial revolution;
- Production is the dominant scheme of the industrial era;
- Simulation is the reigning scheme of the current phase that is controlled by the code.

The first order of simulacrum is based on the natural law of value, that of the second order on the commercial law of value, that of the third order on the structural law of value.¹³⁴

134. Baudrillard, Jean. ‘Simulations.’

He also proposed the four successive phases of the image:

- it is the reflection of a basic reality;
- it masks and perverts a basic reality;
- it masks the absence of a basic reality;
- it bears no relation to any reality whatever: it is its own pure simulacrum.¹³⁵

135. Baudrillard, Jean. ‘Simulations.’

1.5.6 JEVINIAN ORDERS & PHASES.

Likewise, I propose that the evolution of volition is determined by mutations of the subject's desired ideal within societies. I propose the following orders of desire:

- Disciplinary desire is a socio-normalising force within societies, which encourages conformity to the social norm. It utilises a desire to comply and cooperate to become the ideal member of society;
- Neuronal desire is a self-idealising force within societies, which encourages self-actualisation to the idealised sense of self – a self that is always not already “mine.” It utilises a desire to achieve, a trait of the “achievement subject;”
- Algorithm desire is a computation-assimilating force within the societies which encourages assimilation to an algorithmically-deduced and provided idealised self.

I also propose these four successive phases of the choice environment:

- it is a reflection of the individual's volition, and operates according to that will;
- it masks and perverts the individual's volition, nudging and promoting another goal;
- it masks the absence of the individual's volition, changing the available options, or impact of the individual's interaction;
- it bears no relation to any volition: it is its own pure, self-contained cybernetic intelligent system; the demarcation between a what would have been the individual's volition and the algorithm implodes. This is hypervolution.

1.5.7 OUR SACRIFICE OF CHOICE.

When the concepts of desire and power are brought together, they form the orders and phases described above, and hypervolition, defined as the inability of consciousness to distinguish our true desires and choices, from our algorithmically deduced and imposed desires and choices. The interest is the role that desire plays within societies, and the way that volition is mediated.

The three orders disciplinary desire, neuronal desire, and algorithm desire describe the mutations of psychological control. In the first order, there is pressure to conform to the societal ideal, with an example being the social credit systems seen in several countries. Our choices in this order are aligned and motivated by this desire to conform. Our desires align with this utilitarianism, and in a disciplinary society, that alignment and normalisation is rewarded. Although not as heavy-handed as juridical/sovereign power structures, which used physical control, this is still governed by rules that have become entangled within social norms.

In the second order, the ideal is an internalised sense of self – the force is neuronal. Jenny Holzer’s work “Protect me from what I want...” (1984) embodies this idea, and in his book ‘The Burnout Society,’ Han highlights that the side effects can manifest as “neurological illnesses such as depression, attention deficit hyperactivity disorder (ADHD), borderline personality disorder (BPD), and burnout syndrome [that] mark the landscape of pathology at the beginning of the twenty-first century.”¹³⁶ Our choices align with the desire to achieve,

136. Han, Byung Chul. *The Burnout Society.* Stanford, California: Stanford Briefs, 2015.

and this society of achievement, “increasingly rids itself of the negativity of prohibitions and commands, presenting itself as a society of freedom.”¹³⁷ The appearance of freedom comes from the shift in the ideal from an external force to an internal force, but more importantly the shift of “the self” that is to be desired.

137. Han, Byung Chul. ‘Topology of Violence.’

In the third, the idealised model of “the self” lies within the code, and is generated using Big Data by an intelligence (e.g. Artificial Intelligence, Data Science, or Machine Learning). This “clone” of the individual aims to mimic the ideals, wants, and desires, presenting as the individual’s real volition, and in addition, the individual’s choices are aligned to this “clone.” What results is a cybernetic intelligent system with no “real.” An individual’s consciousness can no longer differentiate their real choices and desires, from their algorithmically deduced and imposed choices and desires.

Ultimately, on the path to problem-solving governance within society, convenience, attempting to better understand ourselves, and customising our experiences to be tailored for ourselves, we have sacrificed our choice.

1.5.7 THE RESISTANCE.¹³⁸

138. "The Resistance" was created in 2020 by Jevonne Peters as part of this research.

THIS IS AN ART-CHAPTER.



Use AR to see a short preview of "The Resistance" (2020).
See the full work at hypervolution.study/mfa/art-chapters/

UNINTENTIONALLY BLANK

CHAPTER TWO

Works

2.0 ART AS RESEARCH.

2.0.1 PURPOSE OF ART IN THIS THESIS.

2.1 RESEARCH-CREATION GOALS.

2.1.1 ASSESSING WORLD CONTEXT.

2.1.2 EXPRESSING AND EVALUATING PERSONAL IMPACT TO SELF AND OTHERS.

2.1.3 CREATIVELY CONVEYING IDEAS.

2.2 My.o.T.

2.2.1 SUMMARY.

2.3 INTER ALIA.

2.3.1 SUMMARY.

2.4 IN PLAIN SIGHT.

2.4.1 DESCRIPTION.

2.4.2 ANALYSIS.

2.5 THE RESISTANCE.

2.5.1 SUMMARY.

§2.0 ART AS RESEARCH.

2.0.1 PURPOSE OF ART IN THIS THESIS.

The spirit of the polymath resides within this research, as I sought to utilise many forms of expression when writing this thesis and creating the art. The artwork related to this thesis, served as a form of research, and can be classified according to Owen Chapman and Kim Sawchuk's sub-categories of research-creation,¹³⁹ as creative presentations of research, and creation-as-research.

The aim of the creations was two-fold; (a) to explore the concepts surrounding the topic and (b) to translate the theoretical research work into other forms of media (video, sound, expression) that could be easily understood i.e. creative presentations of research. The combined goal was to show the results of the research conducted in creative formats, as opposed to noting the findings as text within the thesis. That is, in place of a written section exploring the results, the artworks created allowed one to experience the results. Below is a summary of what each of the works was seeking to do:

139. Chapman, Owen B., and Kim Sawchuk. 2012. "Research-Creation: Intervention, Analysis and 'Family Resemblances.'" *Canadian Journal of Communication* 37 (1). <https://doi.org/10.22230/cjc.2012v37n1a2489>.

| ART-CHAPTER | CHAPTER CONTENTS SHORT SUMMARY |
|--------------------|--|
| My.o.T. | A present and (speculative) future look at our relationship with I.o.T. devices. |
| INTER ALIA | IoT and Big Data in modern times. |
| IN PLAIN SIGHT | Hyperreal and consumerism in modern times. |
| THE RESISTANCE | A speculative fiction look at a future world with the features of hypervolution. |

Figure 2-1: Art-Chapter Summary.

§2.1 RESEARCH-CREATION GOALS.

2.1.1 ASSESSING WORLD CONTEXT.

Although somewhat unorthodox, I adopted analysis strategies utilised within the marketing sector as part of my research. In assessing the world context within which I was proposing this theory, and to better understand some of the inspirations and motivators, I conducted a STEEP+V Analysis. This tool is typically used within marketing to evaluate external factors that may impact a business' decisions, is used to prompt discussion, and to flesh out the societal factors within a future scenario.

In my analysis, I considered the Social, Technological, Economical, Environment, Political, and Value impacts, aspects and concerns that the subject areas of interest were having within the world. This Horizon Scan looked at events and advancements as reported in local and foreign news and editorial pieces. The findings were framed to understand where and how these advances are impacting us as a society. This would later inform my speculative fiction/design ideation processes, and is reflected within the art works. Figure 2-2 elaborates on the aspects considered.

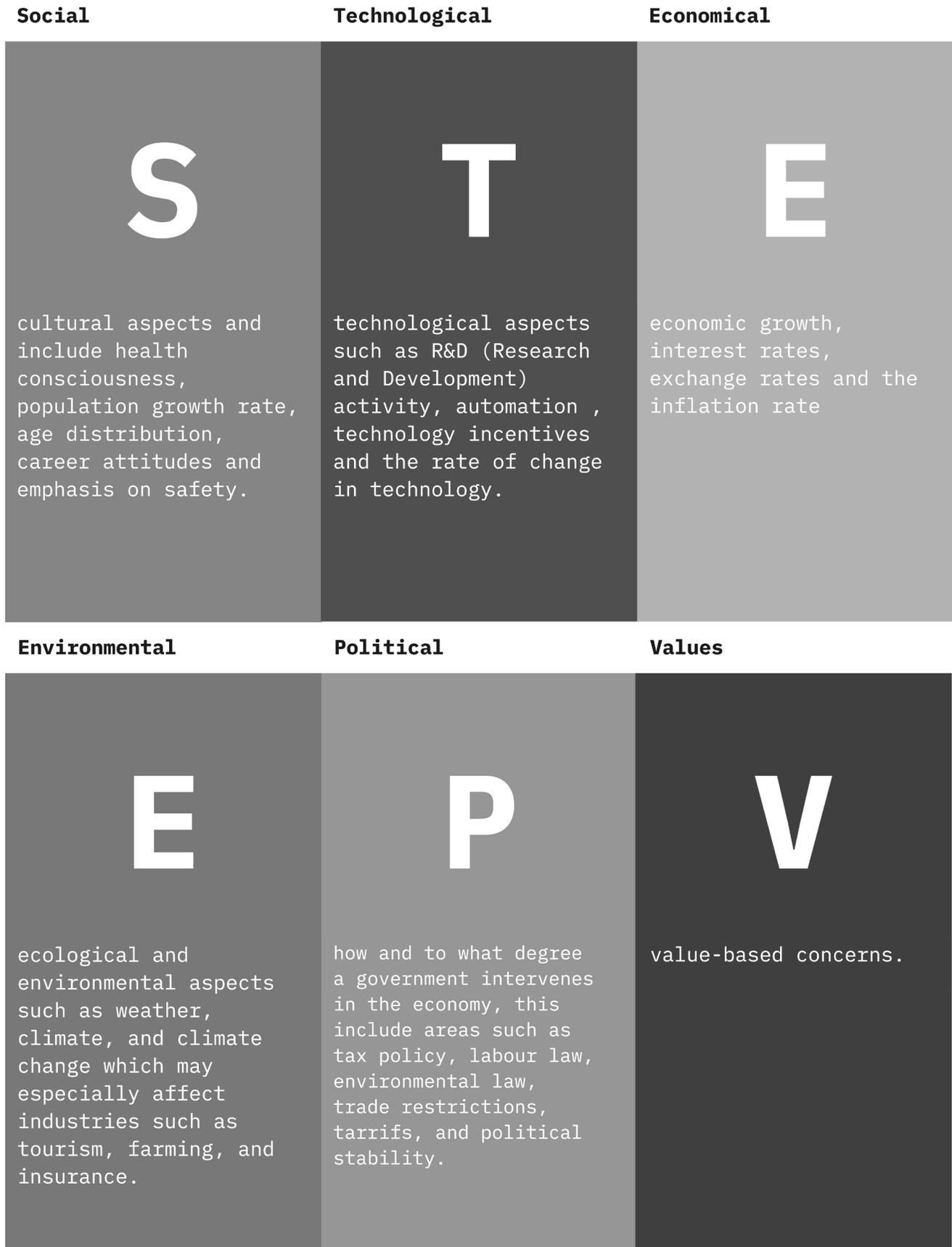


Figure 2-2: Research Horizon Scan.

2.1.2 EXPRESSING AND EVALUATING PERSONAL IMPACT TO SELF AND OTHERS.

When researching the topics, I was also curious to know how others and even myself, interacted with and engaged with devices that utilise these algorithms. An easily understood concept for assessment is to look at the everyday devices that we use, specifically Internet of Things (IoT) devices. To assess this, I commissioned poets to write two poems, one with a positive tone, and another with a negative tone based on the following prompts.

– Discovery Prompt: Write on a person's relationship with an IoT device that knows a lot about them. [Timeframe: current, based in reality.]

– Dream Prompt: Write on a person's relationship with an IoT device that knows everything about them and can anticipate their wants. [Timeframe: futuristic, fictional, idealistic.]

The poems were treated as raw data, and I reworked them into new forms that kept the original context. I then assessed the poems looking for differences, commonalities of interests. In the final stage, I created an art-chapter using the poems as the source material, which highlighted the outcomes of this research. The process is outlined in Figure 2-3.

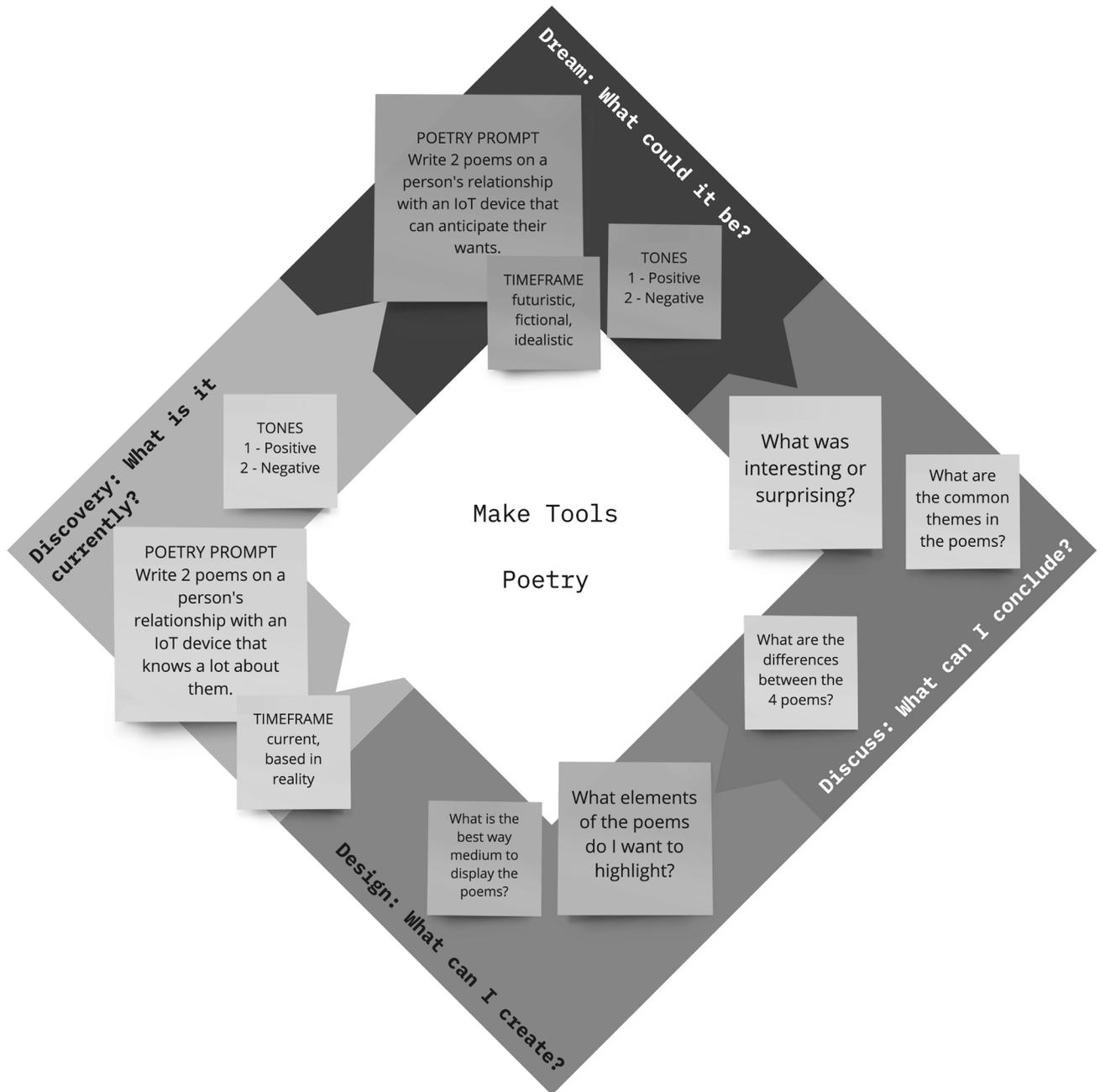


Figure 2-3: Research Make Tools.

The next step was to assess myself. For this, I took a page from self-experimenters, like Antoni van Leeuwenhoek, a curious draper and merchant who taught himself glassmaking, and is known for his homemade microscopes, and the discoveries that he achieved with his devices. Humphry Davy is another such example from the late eighteenth/early nineteenth-century. The British chemist discovered laughing gas, which he foresaw as an anaesthetic, although his discovery was never realised during his lifetime.

Isaac Newton is also part of this group. He began studying prisms in 1665 and was curious to know how the mind perceived the idea of colour, so experimented on his own eyes to observe the changes when different pressures were applied. In another experiment he inadvertently induced solar retinopathy in one of his eyes when trying to study after-images on the retina.

While not as controversial, within this research I performed some experiments on myself, to better understand and be immersed within the topic. For a few months I wore a Xiaomi Mi Watch (Figure 2-4), and paid close attention to my interactions with the smart watch, my Alexa devices, and the smart plugs and lights within my home. I was interested in seeing how my behaviour changed based on the prompts, and the analysis of my data.

I enabled activity monitoring, lighting on/off settings based on sunrise and sunset, heart rate monitoring, stress tracking, activity goal tracking, sleep tracking, personal physiological activity indicators, and prompts to notify me on whether I am not being “optimal.”



Figure 2-4: Personal Experience Logging - Smart Watch.

2.1.3 CREATIVELY CONVEYING IDEAS.

The final goal was to creatively convey ideas. I used rapid prototyping in the early stages which comprised of short skill-building experiments proved to be useful when developing the outputs of the thesis. I also received unsolicited general feedback that helped to improve the execution of new iterations of the works. MoSCoW is a tool used to prioritise features based on Must-, Should-, Could- rankings (must have, should have, could have, won't have). I used this as a planning tool to determine what aspects of my research and findings would be relevant when to convey through the works, and in the exhibition of this research.

There were two stages for the prototyping:

- STAGE 1: Skill-building activities, experiments and explorations with speculative fiction writing, and software.
- STAGE 2: Skill-building activities, experiments and explorations with immersion, SFX and VFX.

Figure 2-4 and Figure 2-5 show a summary of the two rapid prototyping stages, including the objectives, technologies explored, output of each stage and in some cases how it directly led to the creation of the art-chapters. The process can be viewed in detail on the companion website and Appendix.

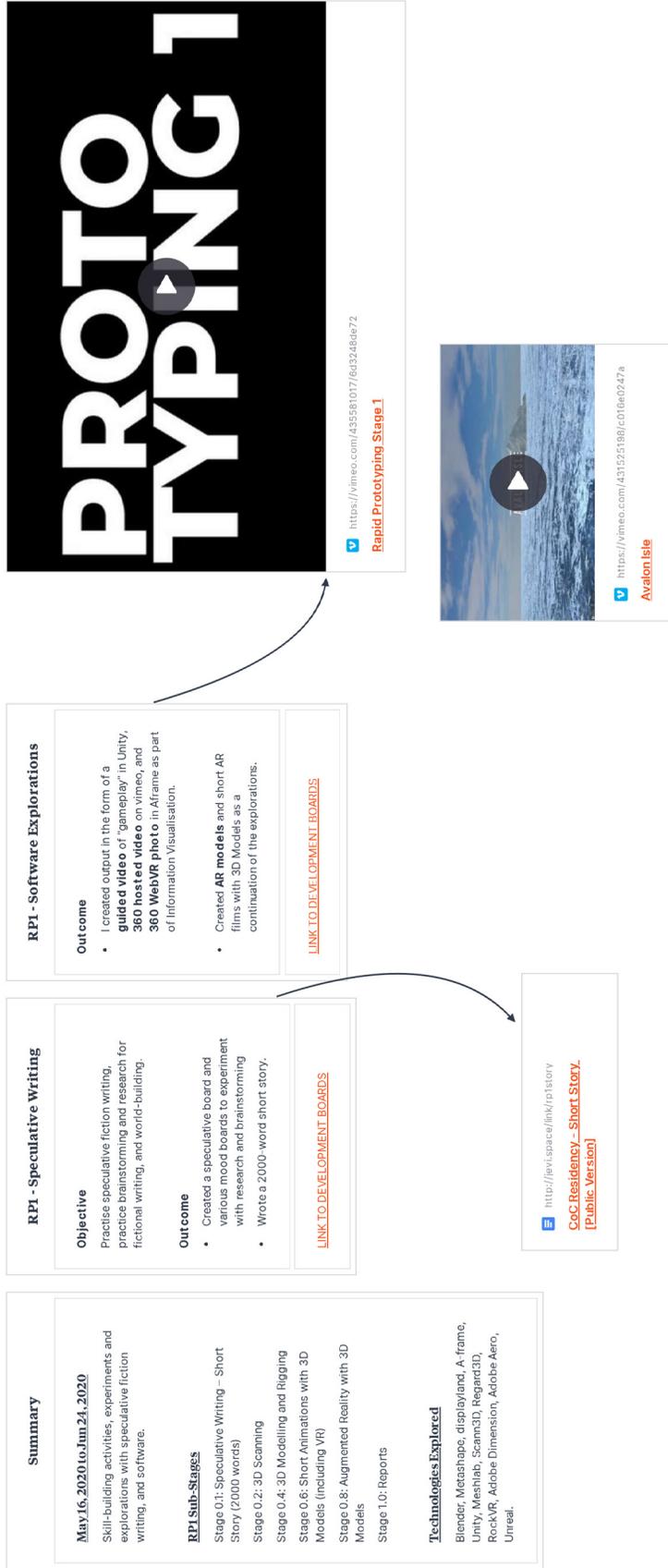


Figure 2-5: Rapid Prototyping Stage 1 Summary.

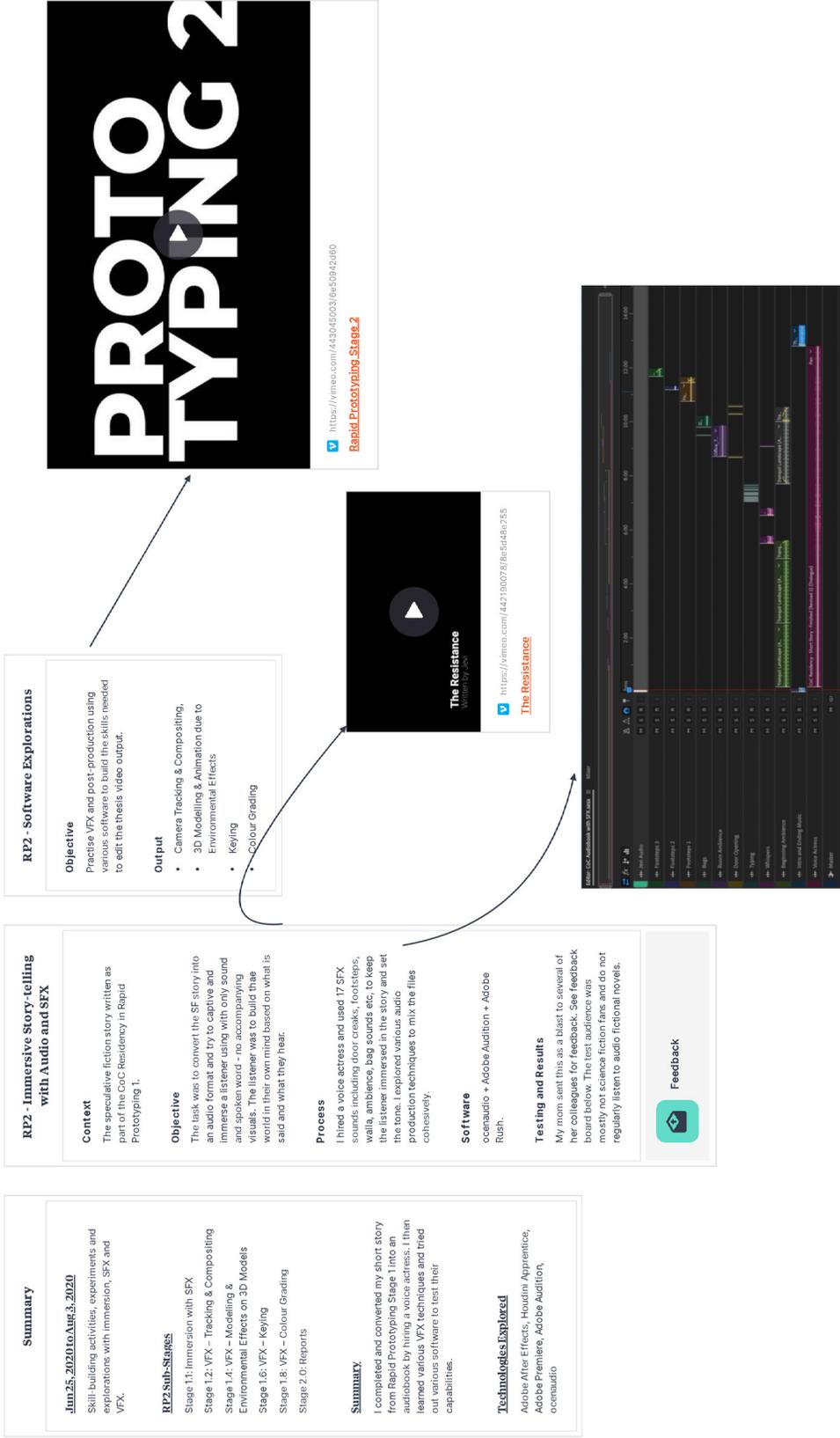


Figure 2-6: Rapid Prototyping Stage 2 Summary.

One of the outputs in the Rapid Prototyping Stage 1 was Avalon Isle, which is a short audio-visual animated speculative fiction/sci-fi film, featuring a fictional island of the same name. It makes an attempt at immersive storytelling through sound, video and camera movement. The film tells the story of the once modest settlement:

Strategically located, it served as an outpost for the armies of the neighbouring mainland, Avalon, a major country and key political stronghold. Avalon lost the war, and the island was captured. Monuments of the opposition's leader were erected as a reminder of their victory at war. Soon, another more powerful foe seized the island and laid waste to it. The island has not been repopulated since, and was soon forgotten. Four hundred years later, the island still tells the story of a war-stricken land.

This work was created through experiments with photogrammetry, 3D modelling, and manipulation of scanned data in a 3D environment. It uses music, and sound effects to set an atmosphere of lost, and to hint at the history of the island. The film begins with the camera tilting upwards from the ocean, and dollying in a smooth zigzag motion towards the island before rising again, to dive directly into the centre of the land from above. The first artefacts shown are fallen half-buried monuments, and housing structures of the previous inhabitants. The camera highlights a near-sunken lighthouse suggesting a great passage of time as the land and sea levels have changed over the years. More housing structures are shown, as well as partial sidewalks and walkways in what remains of a residential neighbourhood. Aircrafts downed during one of the wars are submerged in mounts adjacent to the houses, however, being made of a superior material, the aircrafts have not eroded and remain in pristine form. The last remnants of Avalon Isle's barracks are shown

surrounded by a field with more aircrafts in what was likely a fierce battle. The sole upright monument stands over the scene. Last, is a view of a weather and time-worn building, and as the camera zooms out, it reveals the main cause of the majority of the destruction – a mammoth battle-carrier that crashed through the mountain. In the final scene, the camera moves to an establishing shot of Avalon Isle showing what remains of the island.

Without a voiceover to provide the context for the film, it relies on building an atmosphere through other means. The tone is set early on through the use of slow solemn music, and the viewer is lulled by the waves and the smooth camera movement set to the music, to encourage them to follow along for this journey to Avalon Isle. The sounds of an advanced technology war are heard in the background whenever the camera passes by a grave of aircrafts. The final battle-carrier reveal gets the most dramatic and menacing of the chords, as it zooms to the establishing shot.

The sci-fi fiction novel 'The Path Between Worlds' by Paul Antony Jones, which was in turn inspired by the 1970s 'Riverworld' series by Philip José Farmer, served as inspiration for this film. From these emerged the idea of finding evidence of a technological advanced civilisation on a deserted island.

During the development phase, I explored taking objects out of their original context, and placing them within another, something I called going "contra-director," to build my own world. In particular, the aim was to experiment with objects found within other videos and films, and the idea of being able to

possess an object that I have never physically seen or been around, or one that is not mine in the physical world. The monuments were made from creating 3D scans of mannequins in the women's section at The Hudson Bay Centre, and the barrack's wall from the 2015 James Bond movie, *Spectre*. The houses were created by processing real estate videos found on YouTube, and drone footage of the Sydney Opera house was commandeered to recreate a model. The other features, lighthouse, aircrafts, land and water were all virtual assets lacking a true real-world version.

Avalon Isle combined the skills I learned in the 3D modelling and animation rapid prototyping exercises, and allowed me to make a first attempt at using speculative fiction. An overview of the development of Avalon Isle are found in full detail on the companion website for this thesis. The takeaways from this prototyping project in terms of sound design, story-telling and immersion, aided in the develop of the art-chapter "The Resistance."

Artists like Skawennati have used speculative fiction to share stories, cultures and their ideas. In her works "TimeTraveller TM", and "From Skyworld to Cyberspace," she used Second Life to create new worlds in which to tell these stories. Chris Marker uses speculative fiction in his film "La Jetee," and also created a Second Life world that viewers can visit, called "Ouvroir." His other work "Immemory" is another example of a creative use of technology, in this case, a CD-Rom format. Stan Douglas challenges ideas of narrative. His work 'Der Sandmann', translates the ideas of two texts into film, and "Circa 1948" is both an interactive installation, and an app for iOS devices.

§2.2 My.o.T.

2.2.1 SUMMARY.

My.o.T. is a hyperfilm on our relationship with I.o.T. (Internet of Things) devices. This work is the result of a study of how we (myself included) view our present and future interactions with IoT devices in both negative and positive lights. To assess this, I commissioned poets to create two poems, one with a positive tone, and another with a negative tone based on prompts that I provided. The poems included in the work were cowritten based on their responses.

This audio-visual work is a hyperfilm as it is situated somewhere between a movie and interaction – it is a movie meant to be interacted with. The video and music loops with the intent to hypnotise the viewer as they seek through the film exploring the poems. The visuals feature organic structures that vaguely, but not quite, resemble the structures within us (specifically our neural system), similar to how A.I. attempts to mimic our thoughts.

§2.3 INTER ALIA.

2.3.1 SUMMARY.

Inter Alia, also stylized 1NT3R-4LIA, is an immersive audio-visual webVR experience that attempts to place you in my shoes as I explored what was happening in the world around me, when developing the ideas that led to “hypervolution.” The phrase “inter alia” is Latin for “amongst other things.” The piece places you in an audio-visual landscape, where you experience the news headlines as they fly pass you. This work is the result of a STEEP+V exercise.

The reports included were not cherry picked, and reflected the true state of what was observed. For the audio, the entirety of a single news segment was used, and the audio effects, the peaks in volume and audio channel shifts, were manipulated at random.

The audio features an ambient piano piece, overlaid with the sound of a rainstorm, sounds of news reporters, and excerpts from the news. The sounds combine to give an ominous feeling. Psychologist Tom Stafford suggests that newspapers, and TV broadcasts are filled with disaster stories, and headlines of corruption and incompetence, because we may be drawn to these depressing stories without realising.¹⁴⁰

¹⁴⁰. Shafford, Tom. “Psychology: Why Bad News Dominates the Headlines - BBC Future.” Last modified July 28, 2014. Accessed March 14, 2021. <https://www.bbc.com/future/article/20140728-why-is-all-the-news-bad>.

Researchers Marc Trussler and Stuart Soroka conducted an experiment at

McGill University examining the consumer demand for cynical and negative news. They published their results in 2014.¹⁴¹ They found that politically interested participants are more likely to select negative stories, and the results suggested that despite the attitudes and opinions of the subjects, they chose the cynical ones.

141. Trussler, Marc, and Stuart Soroka. "Consumer Demand for Cynical and Negative News Frames." The International Journal of Press/Politics 19, no. 3 (July 2014): 360–379.

The news reports in the audio are from a cyber security podcast, and the 134 headlines (as emphasised in the stylised title) were scraped from news aggregators on the advancements and research on Internet of Things, IT Security, Privacy and Big Data over the past two years.

The sterile landscape of the VR space spins, mimicking the phrase "as the world turns," and the viewer of the work is not permitted to control the speed or direction of the spin. The viewer can choose to focus on a headline, and read it as quickly as they can, before it is hidden from vision because of the "news cycle."

§2.4 IN PLAIN SIGHT.

In Plain Sight is a short experimental film addressing the concepts of reality, consumption, and beauty (hyperlibido, hyperreality). It makes several references to contemporary culture, thus for posterity, this chapter will fully document them.

2.4.1 DESCRIPTION.

The film opens with a *mélange* of stunning scenes from nature, demonstrating a spectacle of its expanse and wonder at great heights, at the sea level and in the ocean. It then draws attention to the ways that animals in nature flock and swarm together. This is shown through shots of a school of fish, a flamboyance of flamingos, a kaleidoscope of butterflies, a grist of bees, a cauldron of bats, and a herd of sheep, which then transitions into a simulation of connected nodes in a network on a white background.

In the background of the work, the peaceful angelic chorus is interjected by a voice saying, "It's our loading program." This is a sample of a conversation in the 1999 Movie 'The Matrix,' where Morpheus and Neo discuss the movie's fictional 'construct,' an initial dimension-less, empty arena that serves as virtual workspace created to run a simulation or upload virtual objects for use in the "matrix," a massive simulated virtual reality of the world that humanity is trapped in.

The visuals of “In Plain Sight” transitions from the nodes on a white background, into a flock of birds on a pale cloudless sky, then cuts to a time-lapse of several floors within a crowded mall. As the angelic chorus continues, the sound of a crowd of people grows. Scanner beeps from a cash register are intertwined with technology sci-fi tones, and these swell together with the music, simulating a human heartbeat.

Morpheus continues the conversation to explain that Neo’s “appearance is what we call ‘residual self-image’ [...] the mental projection of [his] digital self.” This is said as a montage of scenes showing a diverse demographic of people examining their appearance, using mobile devices, taking selfies, and using VR and hologram technology, is rapidly flashed on the screen before settling on a young woman staring directly at the viewer. In the audio Neo asks Morpheus, “This.. this isn’t real”, to which Morpheus response “what is real?” is heard binaurally on an audio delay as the video temporarily cuts black.

The audio fades in with a sample of The Airplane Boy’s 2011 single ‘Ice Age’ which samples the 1976 movie ‘Network,’ and Radiohead’s single Idioteque (2000), which in turn samples the Tristan Chord synthesiser phrase from Paul Lansky’s computer music “mild und leise” created in 1973, on an IBM mainframe computer using FM synthesis. It is featured on the 1976 “Electronic Music Winners” album, and also Arthur’s Kreiger’s ‘Short Piece’ from the same album.

As the audio amplifies, the video fades into a hypnotic black and white cropped

off-centre view of waves rolling in and out in slow motion, and reversed. Over this unsettling but mesmerising scene, the soothing melody is juxtaposed with snippets of an increasingly frantic Howard Beale from the movie *'The Network'* (1976), where he criticises viewers for their blind worship of the television, and warns of the power the device has on society, and its ability to confuse what is reality and illusions, and confuse free choice and free will.

*It's our leading program.
Your appearance now is what we call "residual self-image".
It is the mental projection of your digital self.
This...
This isn't real?
What is "real"?*

*Because the only truth you know is what you get over this tube.
Right now, there is a whole and entire generation that never knew anything that didn't come out of this tube.
This tube is the Gospel. The ultimate revelation.
This tube can make or break presidents, popes, prime ministers.
This tube is the most awesome goddamn force in the whole godless world, and woe is us if it ever falls into the hands of the wrong people, and that's why woe is us...*

*But, man, you're never gonna get any truth from us.
We deal in illusions, man. None of it is true.
But you people sit there, day after day, night after night ... all ages, colours, creeds. We're all you know.
You're beginning to believe the illusions we're spinning here.
You're beginning to think the tube is reality and your own lives are unreal.
You do whatever the tube tells you.
You dress like the tube, you eat like the tube, you raise your children like the tube, you even think like the tube.
This is mass madness, you maniacs.
In God's name, you people are the real thing.
We are the illusion.*

Audio Transcript from "IN PLAIN SIGHT" (2020)

During the Howard Beale speech, the "In Plain Sight" film inserts a subliminal

message "CONSUME" that flashes on the screen for a fraction of a second, contradicting the message of the audio over the hypnotic waves on the screen. In the background, a man can be heard laughing maniacally.

The speech ends with Howard Beale remarking that the media is the illusion, and the visuals dizzyingly cut back to a full frame close up of the same young woman smiling directly at the viewer in full colour. In the left audio track, one hears the sounds of children playing blissfully, in the right the man's laughter becomes increasingly delirious, and overlaying both tracks, the sound of a woman loudly bewailing. The film cuts to black with just the audio, and ends with a two-second jump cut of a man with his head as a television set, reaching out to the viewer.

This audio and video version as described above is preceded by an audio-only rendition on a black screen. A viewer of the work is first introduced to this piece without seeing the imagery. They are made to reflect on just the words while staring into a void. On the second rendition, that emptiness is replaced, and they are flooded with clips related to the piece.

2.4.2 ANALYSIS.

As aforementioned, the initial experience with the visuals is of the beautiful scenes from nature. While real, they are not images that the average person typically encounters. They were captured using drones set close to the subject or at great heights, or with the use of time lapse to show off the beauty of nature, much like the British documentary series 'Planet Earth' (2006). The close-ups, time lapses and high-resolution shots are pornographic, or smooth, as described by Byung Chul Han in his book 'Saving Beauty.'¹⁴² The images are devoid of imperfections, giving a magical sense of wonder – a smoothness that promises serenity.

142. Han, Byung Chul. 'Saving Beauty.' Cambridge, UK: Polity, 2017.

The herd behaviour shown in the first few moments is a reference to the swarm-like behaviour noticed in society by theorist like Gustave Le Bon in "The Crowd: A Study of the Popular Mind." In 1895, Le Bon observed that "the age we are about to enter will in truth be the ERA of CROWDS,"¹⁴³ proposing that the collective crowd mind dominates, and the conscious personality of an individual is submerged. In the video, I draw the connection between the movement of groups and herds of various other species, to that of crowds of people, and then likened this to nodes within a software network that can be controlled via an algorithm.

143. Le Bon, Gustave. *The Crowd: A Study of the Popular Mind.* Loki's Publishing, 2016.

The audio used is from the movie 'The Matrix,' which is inspired by Baudrillard, 'Simulacra and Simulations.' The book also makes an appearance within the movie. The movie explores the idea of the hyperreal with 'The Matrix,' and the

scene from which the audio is lifted, is paraphrasing Baudrillard's explanation of hyperreal in the chapter "The Precession of Simulacra." In the scene, Morpheus explains to Neo that the blank space they are in is the loading program, and that the reality he is about to experience is the hyperreal, a simulation.

The audio hints to the various economies that contribute to this current state – the sounds of consumerism, crowds overlaid with the technological sound of a heartbeat from a heart monitor. Not a real heartbeat, but one mediated through technology, which seemingly becomes part of, and folds into it.

Morpheus explains that this is the "digital self," alluding to the change that occurs to the self as a result of our mediation through technology, how we view ourselves, how others view us, and how we are affected as a result. This is visually demonstrated through the montage of scenes. The montage shows a diverse range of users of different ages and races, and comments on the intrusion of technology into common activities like celebrations, outings, holidays, gatherings, hangouts with friends, and exercise, as the technology sounds intensify.

The audio of Neo questioning reality and Morpheus response is binaural in an attempt to disorient the listener. It is followed by the outro for the song 'Ice Age,' a song about surveillance, with references to the movie 'They Live' in its music video, and 'Network' in the audio.

'They Live' is a science fiction action horror, where the main protagonist

discovers that the reality he knows, is not real, and that humanity is ruled by an upper class of extra-terrestrials who oversee and use subliminal messages through mass media, to encourage them to conform to the status quo, breed and consume. He becomes aware of this through a pair of glasses with a special lens.

'Network' speaks about the entertainment and consumption of the media. The film is said to have predicted the advent of "trash TV". In a 2003 interview, the director, Sidney Lumet commented that "Network" is not satire, but "reportage, drawing similarities to what happens in the film to what he observes within society."¹⁴⁴

144. Rapf, Joanna E. "Network." Accessed March 14, 2021. <https://www.loc.gov/static/programs/national-film-preservation-board/documents/network.pdf>.

The sample in 'Ice Age,' Radiohead's unsettling single 'Idioteque' (2000), was created using synthesisers and computer technology, and sample computer-generated music. The Tristan Chord found in the samples, originated from composer's Richard Wagner's 'Tristan und Isolde,' and was inspired by Wagner's reading of Arthur Schopenhauer's 'The World of Will and Representation,' amongst other philosophical ideas and works he was mulling over at the time.¹⁴⁵ The chord that the piece begins with, later popularised as the Tristan Chord, is a "musical bridge between suffering and yearning that will not be resolved until its transformation at the end of the opera, [...] in full accord with Schopenhauer's theory of music."¹⁴⁶

145. Hutcheon, Linda, and Michael Hutcheon. "Death Drive: Eros and Thanatos in Wagner's 'Tristan Und Isolde.'" *Cambridge Opera Journal* 11, no. 3 (November 1999): 267–293.

146. Hutcheon, Linda, and Michael Hutcheon. "Death Drive: Eros and Thanatos in Wagner's 'Tristan Und Isolde.'" *Cambridge Opera Journal* 11, no. 3 (November 1999): 267–293.

The atmosphere in the film also between yearning and suffering – a yearning to consume, to escape, to be a part of, while equally suffering at its

hand. Visually, this is portrayed with a calming and hypnotic scene of waves at a shoreline which is devoid of colour, off-centre, and unsettling because the waves are in reverse, and move in an unexpected way. This dissonance over what the waves scene should look like and how the waves should behave occasionally interrupts the calming sensation. The calm is further disrupted by the rising momentum of Howard Beale's speech over the calming song, pleading with the listener to face reality, and not be consumed by illusion. The screen subliminally flashes "CONSUME" to contradict his message.

Howard Beale's voice distorts near the end of his speech and the film cuts back to oversaturated colour, back to "reality," and we see and hear the responses to Howard's message – on screen a woman laughing, and in the various audio channels, blissful ignorance, manic laughter, and bewailing.

The film ends with a jumpcut of a man with a television as his head reaching out to the viewer.

We will consume, and have been consumed.

§2.5 THE RESISTANCE.

2.5.1 SUMMARY.

The Resistance is a speculative fiction short story in an immersive audio format. It tells the story of a highly governed future society, and the struggle against it. This work uses speculative fiction writing, world building, and immersive SFX to bring the reader into a world set 50 years into the future, featuring the ideas of hypervolution. It also hints at the positive advancements that have occurred as a result of the type of governance within this society.

The script was developed using prompts from the speculative future game “The Thing from the Future.” The challenge was to create an audio format that would immerse a listener, using with only sound and spoken word – no accompanying visuals.

The story follows the protagonist, who works at an international security firm that develops national-level multi-passes, and are part of a merit system that nudges its citizens towards desired behaviours and traits. It lists the positives outcomes of this world and the action opens to the office in a panic over break-ins that occurred overnight at one of the secure labs which housed a means to covertly circumvent the multi-pass system. The protagonist is pulled into the story, and into helping the outliers of society, who called themselves Nudites.

www.hypervolition.study

BIBLIOGRAPHY

BIBLIOGRAPHY.

Aristotle. 'De Anima (On the Soul)' (Penguin Classics). Reissue. Harmondsworth, Middlesex, England: Penguin Classics, 1987.

Alter, Nora M. Chris Marker. Urbana: University Of Illinois Press, 2006.

---. "Translating the Essay into Film and Installation." *Journal of Visual Culture* 6, no. 1 (April 2007): 44–57.

Baudrillard, Jean. 'Simulacra and Simulation' (the Body, In Theory: Histories Of Cultural Materialism). 14th ed. Ann Arbor: University of Michigan Press, 1994.

---. 'Simulations'. 1st ed. New York City, N.Y., U.S.A: Semiotext(e), 1983.

Bennett, Jane. 'The Agency of Assemblages in Vibrant Matter: A Political Ecology of Things.' Duke University Press, 2010.

Bentham, Jeremy. 'Correspondence of Jeremy Bentham.' Edited by Ian R. Christie. Vol. 3. January 1781 to October 1788. UCL Press, 2017.

Bentham, Jeremy, John Bowring, and J H Burton. 'The Works of Jeremy Bentham, Published under the Superintendence of His Executor, John Bowring.' British Library, Historical Print Editions, 2011.

Burton, David. 'Buddhism, Knowledge and Liberation: A Philosophical Study' (Ashgate World Philosophies Series). 1st ed. Aldershot, England: Routledge, 2004.

Business Insider. "The Internet of Things Report." Business Insider Intelligence. Last modified 2020. Accessed April 3, 2020. <https://store.businessinsider.com/products/the-internet-of-things-report?op=1>.

Chapman, Owen B., and Kim Sawchuk. "Research-Creation: Intervention, Analysis and 'Family Resemblances.'" *Canadian Journal of Communication* 37, no. 1 (April 13, 2012).

Charlie, Campbell. "How China Is Using Big Data to Create a Social Credit Score." Last modified 2019. Accessed March 5, 2021. <https://time.com/collection/davos-2019/5502592/china-social-credit-score/>.

Crichton, Michael. 'Jurassic Park: A Novel.' Ballantine Books, 2012.

Deleuze, Gilles. 'Difference and Repetition.' Revised. New York: Columbia University Press, 1995.

---. "Postscript on the Societies of Control*." In 'Surveillance, Crime and Social Control,' edited by Dean Wilson and Clive Norris, 35–39. Routledge, 2017.

---. 'Two Regimes of Madness: Texts and Interviews 1975-1995' (Semiotext(e) / Foreign Agents). 1st ed. Los Angeles, CA: Semiotext(e), 2006.

- Deleuze, Gilles, and Rosalind Krauss. "Plato and the Simulacrum." October 27 (1983): 45.
- Douglas, Stan. "Double Take | Frieze." Translated by Robert Enright. Accessed May 6, 2021. <https://www.frieze.com/article/double-take>.
- Duval, Shelley. 'A Theory of Objective Self Awareness (Social Psychology)'. New York: Academic Press, 1972.
- Finley, Klint. "The Internet of Things Could Drown Our Environment in Gadgets | WIRED." Wired, June 5, 2014. Accessed July 15, 2020. <https://www.wired.com/2014/06/green-iot/>.
- Forbes Insights Team. "Forbes Insights: Can A Fitness Tracker Save Your Life?" Forbes Insights. Last modified October 1, 2019. Accessed April 6, 2020. <https://www.forbes.com/sites/insights-teradata/2019/10/01/can-a-fitness-tracker-save-your-life/#1d89f94847a2>.
- Foucault, Michel. 'Discipline & Punish: The Birth of the Prison.' Reprint. New York: Vintage Books, 1995.
- . "Society Must Be Defended": Lectures at the Collège de France, 1975-1976 (Michel Foucault Lectures at the Collège de France, 5). First. New York: Picador, 2003.
- . 'The History of Sexuality: Volume I: An Introduction. 1st American.' New York: Pantheon Books, 1978.
- Foucault, Michel, and Colin Gordon. 'Power/Knowledge: Selected Interviews and Other Writings, 1972-1977.' 1st American. New York: Pantheon Books, 1980.
- Grand View Research. "Internet of Things in Healthcare Market Size, Share & Trends Analysis Report By Component, By Connectivity Technology, By End Use, By Application And Segment Forecasts, 2019 - 2025." Last modified March 2019. Accessed April 2, 2020. <https://www.reportlinker.com/p05763769/Internet-of-Things-in-Healthcare-Market-Size-Share-Trends-Analysis-Report-By-Component-By-Connectivity-Technology-By-End-Use-By-Application-And-Segment-Forecasts.html>.
- Greenfield, Adam. 'Radical Technologies: The Design of Everyday Life.' London: Verso, 2017.
- Harbord, Janet. Chris Marker: La Jetée. London: Afterall Books, 2009.
- Han, Byung Chul. 'Psychopolitics: Neoliberalism and New Technologies of Power.' London: Verso, 2017.
- . 'Saving Beauty.' 1st ed. Cambridge, UK: Polity, 2017.
- . 'The Burnout Society.' 1st ed. Stanford, California: Stanford Briefs, 2015.
- . 'The Transparency Society.' 1st ed. Stanford, California: Stanford Briefs, 2015.
- . 'Topology of Violence.' Cambridge, Massachusetts: MIT Press, 2018.
- Hobbes, Thomas. 'Leviathan.' 2009th ed. CreateSpace Independent Publishing Platform, 2009.

Hofmann, Wilhelm, Roy F Baumeister, Georg Förster, and Kathleen D Vohs. "Everyday Temptations: An Experience Sampling Study of Desire, Conflict, and Self-Control." *Journal of Personality and Social Psychology* 102, no. 6 (June 2012): 1318–1335.

Hofmann, Wilhelm, and Loran F. Nordgren. *The Psychology of Desire*. New York, NY: The Guilford Press, 2015.

Hutcheon, Linda, and Michael Hutcheon. "Death Drive: Eros and Thanatos in Wagner's 'Tristan Und Isolde.'" *Cambridge Opera Journal* 11, no. 3 (November 1999): 267–293.

Igloliorte, Heather, Carla Taunton, and Julia Nagam. "Transmissions: The Future Possibilities of Indigenous Digital and New Media Art." *Public* 27, no. 54 (December 1, 2016): 5–13.

Jordan-Haladyn, Miriam. *Dialogic Materialism*. Peter Lang US, 2014.

Kavanagh, David, Jackie Andrade, and John May. "Imaginary Relish and Exquisite Torture." *Psychology Review* 112 (April 2005).

Kavanagh, David J, Jon May, and Jackie Andrade. "Tests of the Elaborated Intrusion Theory of Craving and Desire: Features of Alcohol Craving during Treatment for an Alcohol Disorder." *The British Journal of Clinical Psychology* 48, no. Pt 3 (September 2009): 241–254.

Le Bon, Gustave. *The Crowd: A Study of the Popular Mind*. Loki's Publishing, 2016.

Leech, Guy. "James Bridle - Waving at the Machines." *Web Directions*. Last modified December 5, 2011. Accessed April 6, 2020. <https://www.webdirections.org/resources/james-bridle-waving-at-the-machines/>.

Leetaru, Kalev. "Data Isn't 'Truth.'" *Forbes*. Last modified May 7, 2019. Accessed March 11, 2021. <https://www.forbes.com/sites/kalevleetaru/2019/05/07/data-isnt-truth/?sh=31a01463789f>.

Lupton, Catherine. *Chris Marker: Memories of the Future*. London: Reaktion Books, 2004.

Lyon, David. *The Culture Of Surveillance: Watching As A Way Of Life*. 1st ed. Polity, 2018.

Mann, Steve. *'Intelligent Image Processing'*, Vol. 1. 1st ed. New York: Wiley, John & Sons, Incorporated, 2001.

———. "'Sousveillance' Inverse Surveillance in Multimedia Imaging." In *Proceedings of the 12th Annual ACM International Conference on Multimedia - MULTIMEDIA '04*, 620. New York, New York, USA: ACM Press, 2004.

May, Jon, Jackie Andrade, David J. Kavanagh, and Marion Hetherington. "Elaborated Intrusion Theory: A Cognitive-Emotional Theory of Food Craving." *Current obesity reports* 1, no. 2 (June 2012): 114–121.

Meissner, Mirjam. "China's Social Credit System: A Big-Data Enabled Approach to Market Regulation with Broad Implications for Doing Business in China." Edited by Claudia Wessling. *MERICs | Mercator Institute for China Studies*, May 24, 2017.

Mitchell, W J T. 'What Do Pictures Want?: The Lives And Loves Of Images.' University of Chicago Press, 2006.

Montero, David. "Film Also Ages: Time and Images in Chris Marker's *Sans Soleil*." *Studies in French Cinema* 6, no. 2 (September 2006): 107–115.

Morton, Timothy. 'Hyperobjects: Philosophy and Ecology after the End of the World' (Posthumanities). 1st ed. Univ Of Minnesota Press, 2013.

———. 'The Ecological Thought.' Harvard University Press, 2012.

Nelson, Theodor Holm. "Selected Papers, 1977 : Theodor Holm Nelson." Accessed March 3, 2021. <https://archive.org/details/SelectedPapers1977/>.

Nortje, Mc'kyla. "IoT Assists with Challenges in Mining Operations." *Creamer Media's Mining Weekly*. Last modified April 10, 2020. Accessed April 4, 2020. https://www.miningweekly.com/article/iot-assists-with-challenges-in-mining-operations-2020-03-25/rep_id:3650.

O'Neill, Stephanie. "As Insurers Offer Discounts for Fitness Trackers, Wearers Should Step with Caution." NPR. Last modified November 19, 2018. Accessed April 5, 2020. <https://www.npr.org/sections/health-shots/2018/11/19/668266197/as-insurers-offer-discounts-for-fitness-trackers-wearers-should-step-with-caution>.

Oxford English Dictionary. "'hyper-, Prefix'." Accessed February 26, 2021. <https://www.oed.com/view/Entry/90273?isAdvanced=false&result=4&rskey=aZhZdX&>.

PBS NewsHour. *The Quantified Self: Data Gone Wild?*, 2013. Accessed April 5, 2020. <https://www.youtube.com/watch?v=NP5okzCjrj0>.

Plato. "The Allegory of the Cave." In *The Republic Of Plato*. 1st Edition. London: Oxford University Press, 1951.

Pullen, Treva Michelle. "Skawennati's-Timetraveller™ : Deconstructing the Colonial Matrix in Virtual Reality." *AlterNative: An International Journal of Indigenous Peoples* 12, no. 3 (September 2016): 236–249.

Quantified Self. "What Is Quantified Self?" Accessed April 5, 2020. <https://quantifiedself.com/about/what-is-quantified-self/>.

Rapf, Joanna E. "Network." Accessed March 14, 2021. <https://www.loc.gov/static/programs/national-film-preservation-board/documents/network.pdf>.

Rousseau, Jean-Jacques. 'The Social Contract.' BN Publishing, 2007.

Schroeder, Tim. "Desire." In 'Stanford Encyclopedia of Philosophy', edited by Edward N. Zalta. Summer 2020 Edition., 2020. Accessed February 8, 2021. <https://plato.stanford.edu/archives/sum2020/entries/desire>.

Sebag Montefiore, Simon. 'The Prince of Princes: The Life of Potemkin.' First Paperback Edition. Weidenfeld Nicholson History, 2001.

- Semple, Janet. 'Bentham's Prison: A Study of the Panopticon Penitentiary.' 1st ed. Oxford: Clarendon Press, 1993.
- Sequeira, Neil. "IoT Applications in Waste Management." IoT For All. Last modified January 22, 2019. Accessed April 3, 2020. <https://www.iotforall.com/iot-applications-waste-management/>.
- Shafford, Tom. "Psychology: Why Bad News Dominates the Headlines - BBC Future." Last modified July 28, 2014. Accessed March 14, 2021. <https://www.bbc.com/future/article/20140728-why-is-all-the-news-bad>.
- Smith, Daniel W. "The Concept of the Simulacrum: Deleuze and the Overturning of Platonism." *Continental Philosophy Review* 38, no. 1–2 (July 10, 2006): 89–123.
- Speake, Jennifer. 'Literature of Travel and Exploration: An Encyclopedia.' New York: Routledge, 2003.
- Statista. "Connected Device Usage Reasons Worldwide 2018." Statista. Last modified September 27, 2018. Accessed April 2, 2020. <https://www.statista.com/statistics/917185/connected-device-usage-reasons-worldwide/>.
- . "Internet of Things Spending Worldwide 2023." Statista. Last modified March 4, 2020. Accessed April 2, 2020. <https://www.statista.com/statistics/668996/worldwide-expenditures-for-the-internet-of-things/>.
- . "IoT Spending Drivers Worldwide 2019." Last modified March 5, 2020. Accessed April 4, 2020. <https://www.statista.com/statistics/1079622/iot-spending-drivers-worldwide/>.
- Stiegler, Bernard, Philippe Petit, and Vincent Bontems. 'Economie De L'hypermateriel Et Psychopouvoir.' Paris: Mille et une nuits, 2008.
- The World Bank. "Total Population." The World Bank. Last modified 2020. Accessed April 1, 2020. <https://data.worldbank.org/indicator/sp.pop.totl>.
- Trussler, Marc, and Stuart Soroka. "Consumer Demand for Cynical and Negative News Frames." *The International Journal of Press/Politics* 19, no. 3 (July 2014): 360–379.
- Werrett, Simon. "Potemkin and the Panopticon: Samuel Bentham and the Architecture of Absolutism in Eighteenth Century Russia." *Bahasa dan Seni : Jurnal Bahasa, Sastra, Seni, dan Pengajarannya* (June 1, 1999).
- Woods, Adam. "Revolution: Hyper-Personalisation - Up Close and Very Personal." Haymarket Media Group, September 5, 2012. Accessed July 13, 2020. <https://link.gale.com/apps/doc/A301593160/AONE?u=toro37158&sid=AONE&xid=0b9f3ab4>.
- Yeung, Karen. "'Hypernudge': Big Data as a Mode of Regulation by Design." *Information, Communication & Society* 20, no. 1 (January 2, 2017): 118–136.
- "Chinese Telecom Giant ZTE 'helped Venezuela Develop Social Credit System' - ABC News." Accessed December 16, 2020. <https://www.abc.net.au/news/2018-11-16/chinese-tech-giant-zte-helps-venezuela-develop-fatherland-card/10503736>.

"Coryat's Crudities – The Rosenbach." Accessed February 25, 2021. <https://rosenbach.org/blog/coryats-crudities/>.

"Dictionnaire de l'Académie Française | 9e Édition | Hyperbole." Accessed February 23, 2021. <https://www.dictionnaire-academie.fr/article/A9H1285>.

"HR Reading Consistently High Last Few Days : Fitbit." Accessed March 7, 2021. https://www.reddit.com/r/fitbit/comments/445ppj/hr_reading_consistently_high_last_few_days/.

"Hyper | Definition of Hyper by Merriam-Webster." Accessed February 23, 2021. <https://www.merriam-webster.com/dictionary/hyper>.

"Hyper Real." Accessed March 4, 2020. <https://nga.gov.au/hyperreal/>.

"Hyperreal | Definition of Hyperreal by Merriam-Webster." Accessed February 25, 2021. <https://www.merriam-webster.com/dictionary/hyperreal>.

"Hyperreality - Wikipedia." Accessed February 24, 2021. <https://en.wikipedia.org/w/index.php?title=Hyperreality&oldid=925812654>.

"Hyperreality - Wikipedia." Accessed February 25, 2021. <https://en.wikipedia.org/w/index.php?title=Hyperreality&direction=next&oldid=54304527>.

"Kepner-Tregoe - Solution-Caused Problems and How to Prevent Them." Accessed March 2, 2021. <https://www.kepner-tregoe.com/knowledge-center/articles/problem-solving/solution-caused-problems-and-how-to-prevent-them/>.

"Number of Employers Using Social Media to Screen Candidates at All-Time High, Finds Latest CareerBuilder Study." Accessed December 18, 2020. <https://www.prnewswire.com/news-releases/number-of-employers-using-social-media-to-screen-candidates-at-all-time-high-finds-latest-careerbuilder-study-300474228.html>.

"Reality, Hyperreality (1)." Accessed March 22, 2021. <http://csmt.uchicago.edu/glossary2004/realityhyperreality.htm>.

"The Five Whys Technique | Asian Development Bank." Accessed January 28, 2021. <https://www.adb.org/publications/five-whys-technique>.

"Travel." Accessed December 16, 2020. <https://travel.state.gov/>.

"Understanding Stitch Fix: Finding the Perfect Fit – Goodwater Capital." Accessed March 20, 2021. <https://www.goodwatercap.com/thesis/understanding-stitch-fix>.

"User:Abcissa - Wikipedia." Accessed March 4, 2021. <https://en.wikipedia.org/wiki/User:Abcissa>.

"Volition." Merriam-Webster Dictionary. Accessed March 9, 2021. <https://www.merriam-webster.com/dictionary/volition>.

“Volition | Meaning in the Cambridge English Dictionary.” Accessed March 9, 2021. <https://dictionary.cambridge.org/dictionary/english/volition>.

“Volition, n.” In OED Online. Oxford University Press, 2020. Accessed March 3, 2021. <https://www-oed-com.ezproxy.torontopubliclibrary.ca/view/Entry/224457?rskey=5ZjgvA&result=1>.

“Wikipedia:Citing Sources - Wikipedia.” Accessed February 25, 2021. https://en.wikipedia.org/wiki/Wikipedia:Citing_sources.

“William Chillingworth | Encyclopedia.Com.” Accessed February 24, 2021. <https://www.encyclopedia.com/history/encyclopedias-almanacs-transcripts-and-maps/chillingworth-william>.

BIBLIOGRAPHY – ART & ARTIST REFERENCES OF NOTE.

The following artists and works of note serve as examples of other artists who use technology, creative new media integrations and/or speculative fiction to creatively convey complex ideas, or to immerse the viewer into a new world. These artists use their resources in a playful manner to create interesting works of art. See §2.1.3 Creatively Conveying Ideas for discussion.

Douglas, Stan

Circa 1948 presents as an interactive installation, and also as a movable immersive experience, as it is released as both a site specific installation and a mobile app available for download.

Der Sandmann is a two channel film inspired by the short story by E.T.A. Hoffmann, and the ideas in Sigmund Freud's 'The Uncanny'.

Skawannati

TimeTraveller™ is a multiplatform project that includes a website (www.TimeTravellerTM.com), a nine-episode machinima series, a set of digital prints, and a prototype action figure.

From Skyworld to Cyberspace traces a line from our origins somewhere in the heavens to the virtual realm, one of the newest territories on Earth. The work uses the virtual world, Second Live to investigate cultural construction, contemporary Indigenous self-representation in cyberspace, and our relationship with the digital world.

Marker, Chris

Immemory used the format of the CD-Rom to create a multi-layered, multimedia memoir where the viewer navigates various zones, each with a theme through different forms of media including text, music, and clips.

La Jetee is a landmark film that is made up almost entirely of photographic stills.

Ouvroir is a museum in the sky of the Second Life game, where users can explore and interact with his works.

APPENDIX

APPENDIX A

REFERENCE – TECHNICAL GLOSSARY.

algorithm (mathematics and computing): a procedure or set of rules used in calculation and problem-solving. (see discussion in §1.4 Hyper- Practices & Algorithms)

big data (computing): data of a very large size, typically to the extent that its manipulation and management present significant logistical challenges. (see discussion in §1.3 Hyperpersonalisation)

cybernetics: the field of study concerned with communication and control systems in living organisms and machines. (see discussion in §1.1 Hypernudge)

data: a collection of facts from which conclusions may be drawn. (see discussion in §1.3 Hyperpersonalisation)

data analysis: the process of examining information, especially using a computer, in order to find something out, or to help with making decisions. (See discussion in §1.3 Hyperpersonalisation)

internet of things: the networking capability that allows information to be sent to and received from objects and devices (such as fixtures and kitchen appliances) using the Internet. (see discussion in §1.3 Hyperpersonalisation)

machine learning: the process by which a computer is able to improve its own performance (as in analyzing image files) by continuously incorporating new data into an existing statistical model. (see discussion in §1.4 Hyper- Practices & Algorithms)

network (electronics): a system of interconnected electronic components or circuits; an interconnected system of things or people. (see discussion in §1.1 Hypernudge)

recursion (mathematics): an expression such that each term is generated by repeating a particular mathematical operation. (see discussion in §1.1 Hypernudge)

APPENDIX B

REFERENCE – 'HYPER-' GLOSSARY.

hyper- : above ; beyond ; excessively, that is or exists in a space of more than three dimensions; bridging points within an entity (such as a database or network) nonsequentially.

hypercorrection [Jevonne (Jevi) Peters]: the application of a solution that excessively attempts to correct a problem, thereby unveiling inherent pressing issues and concerns that were previously concealed, or overlooked in the initial problem or analysis of it.

hyperlibido [Jevonne (Jevi) Peters]: the excessive obsession, application and impingement of desire.

hypernudge [Karen Yeung]: Big Data-driven nudging that provides the data subject with a highly personalised choice environment.

hyperpersonalisation : the use of data to provide personalised and targeted products, services, and content.

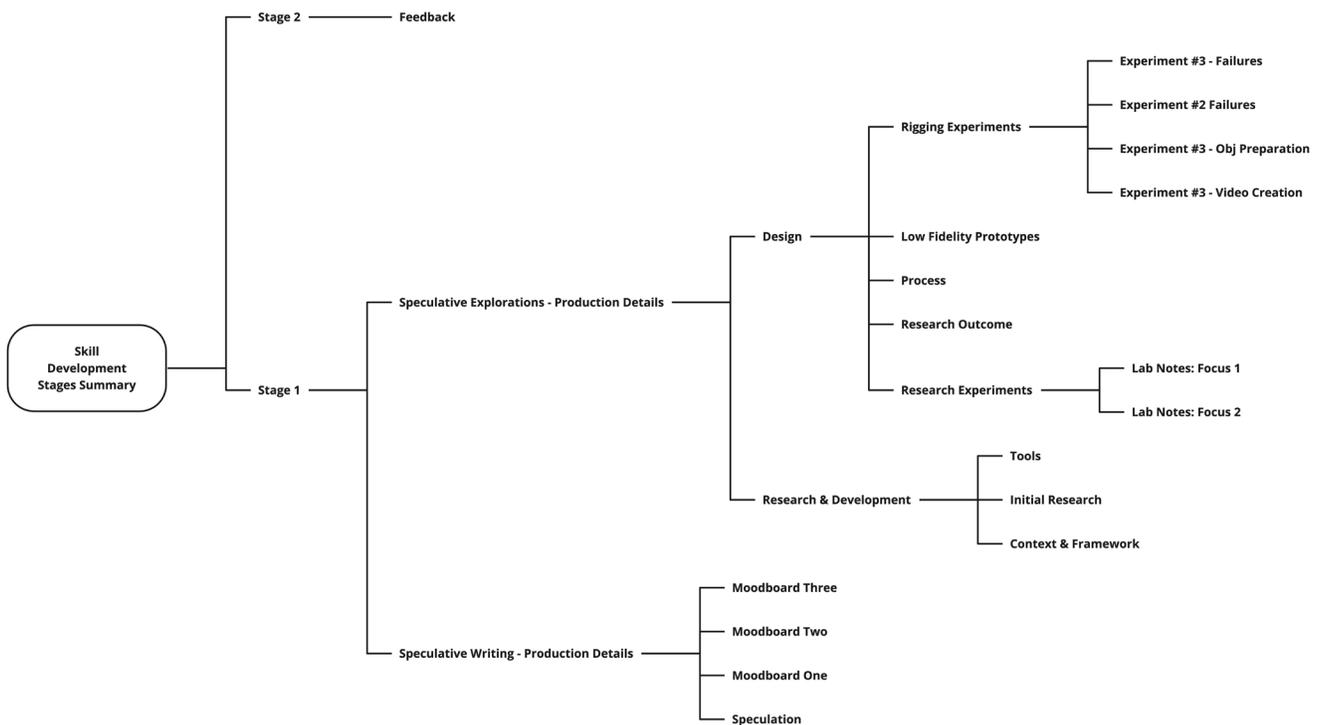
hyperreal [Jean Baudrillard]: generation by models of a real without an origin or reality.

hypervolition [Jevonne (Jevi) Peters]: the inability of consciousness to distinguish our true desires and choices, from our algorithmically deduced and imposed desires and choices.

APPENDIX C

REFERENCE – RESEARCH METHOD: CREATIVELY CONVEYING IDEAS. RAPID PROTOTYPING. SKILL DEVELOPMENT STAGES

During Summer 2020, I perform several short skill-building experiments and obtain viewer feedback, which would be useful when creating the Art Chapters of this thesis. This information is found on the companion website for this document, and the visual documentation included in this appendix is to make it available in the future. See §2.1.3 Creatively Conveying Ideas for discussion on this section.



Skills Development - Content Map

 TIP: On subpages, click the title or three dot menu to return to parent pages.

STAGE 1: May 16, 2020 to Jun 24, 2020

- Stage 0.1: Speculative Writing
- Stage 0.2: 3D Scanning
- Stage 0.4: 3D Modelling and Rigging
- Stage 0.6: Short Animations with 3D Models (Including VR)
- Stage 0.8: Augmented Reality with 3D Models
- Stage 1.0: Reports

PROTO TYPING 1

 <https://vimeo.com/435581017/6d3248de72>
[Rapid Prototyping Stage 1](#)

Hypervolution

APPENDIX

Skill Development Stages

The Skill Development stages of this research ran from May 2020 to August 2020.

Objective: Perform several short skill-building experiments and obtain viewer feedback, which would be useful when creating the Art Chapters of the thesis.

The Thesis Art Chapter *The Resistance* was completed as part of this process.

Click the icons below for details.

- 1 Stage 1
- 2 Stage 2

Note from Jevi: This documentation goes very deep. In Stage 1, there are *MANY* layers of things I studied, tried, failed and learned. Happy Exploring!

STAGE 2: Jun 25, 2020 to Aug 3, 2020

- Stage 1.1: Immersion with SFX
- Stage 1.2: VFX – Tracking & Compositing
- Stage 1.4: VFX – Modelling & Environmental Effects on 3D Models
- Stage 1.6: VFX – Keying
- Stage 1.8: VFX – Colour Grading
- Stage 2.0: Reports

PROTO TYPING 2

 <https://vimeo.com/443045003/6e50942d60>
[Rapid Prototyping Stage 2](#)

Skill Development Stages

Summary

May 16, 2020 to Jun 24, 2020

Skill-building activities, experiments and explorations with speculative fiction writing, and software.

RPI Sub-Stages

Stage 0.1: Speculative Writing
 Stage 0.2: 3D Scanning
 Stage 0.4: 3D Modelling and Rigging
 Stage 0.6: Short Animations with 3D Models (including VR)
 Stage 0.8: Augmented Reality with 3D Models
 Stage 1.0: Reports

Technologies Explored

Blender, Metashape, displayland, A-frame, Unity, Meshlab, Scann3D, Regard3D, RockVR, Adobe Dimension, Adobe Aero, Unreal.

Speculative Writing

Objective

Practise speculative fiction writing, practice brainstorming and research for fictional writing, and world-building.

Outcome

- Created a speculative board and various mood boards to experiment with research and brainstorming
- Wrote a 2000-word short story.

 **Speculative Writing - Production Details**

Software Explorations

Outcome

- I created output in the form of a **guided video** of "gameplay" in Unity, **360 hosted video** on vimeo, and **360 WebVR photo** in Aframe as part of Information Visualisation.
- Created **AR models** and short AR films with 3D Models as a continuation of the explorations.

 **Software Explorations - Production Details**



<https://vimeo.com/435581017/6d3248de72>
Rapid Prototyping Stage 1



<https://vimeo.com/431525198/c016e0247a>
Avalon Isle

Skill Development Stages > Stage 1

Skill Development Stages > Stage 1 > Speculative Writing - Production Details

Proposal

In a 2011 paper, aptly named "Care and Creativity," Ann Game and Andrew Micalfe describe care as "an in-between or transitional phenomenon, requiring a trusting suspension of self[,] and a grateful holding that is equally a grateful openness to being held." They make reference to American Catholic Benedictine monk, David Steindl-Rast, who says that "and" is "the decisive word in give-and-take. Mere giving is as lifeless as mere taking; if you merely take a breath and stop there, you are dead. And when you merely breathe out and stop there, you are also dead. Life is not giving or taking, but give-and-take." Game and Micalfe connect creativity and caring using D.W. Winnicott's notion of transitional space, which has both "holding" and "potential" qualities. "The transition space is in-between the self and the other, "me and not-me, a connecting space that both connects and separates," Winnicott in his book "Playing and Reality" (1971) which examines the origins of creativity, describes it as "a creative way of being capable of just being, as one or another, as a self and other, integrated and integrating self." Both Winnicott and Merle Epstein (1995) view this non-purposive state and dissolution of the ego as important to creative experience.

In this residency, I would like to explore the ideas of caring and creativity as an in-between and transition phenomenon, and as described above. Specifically, I am interested in taking these ideas, perhaps satirically, and applying them through an original and playful world-building project to a world, or near or distant future. I would like to answer the question, what could a speculative design (fictional design world look like or have, when we consider care/creativity as being merely transactional, or care/creativity as transitional, or any of the other interpretations that I am likely to come across through my research.

For my research, I plan to explore psychological, philosophical, and cultural manifestations through stories or customs that will help to build the features in my speculative design. I intend to utilize the game "The Thing from the Future" by Situation Lab to aid in the brainstorming. The output of this research and speculative design may range from a written work of fiction, art, audio, video, physical piece, or VR space or any combination of these or others. Given the time frame, it may not be possible to create a full piece, but I expect to produce at very least a clear explanation of the key aspects of this speculative world.

Alignments with thesis/further research: I am interested in the concepts of governance, control, escape, interaction and cybernetics, and intent to explore these in relation to the topic.

References:

Game, A. (2011). *Care and Creativity*. *Australian Psychologist*, 36, 70-74. doi:10.1080/00050060.106259633
 Steindl-Rast, D. (1984). *Grateful/Jessie, the heart of prayer*. New York: Paulist Press.
 Winnicott, D.W. (1951). *Playing and reality*. London: Routledge.

Boards



Speculation



Moodboard One

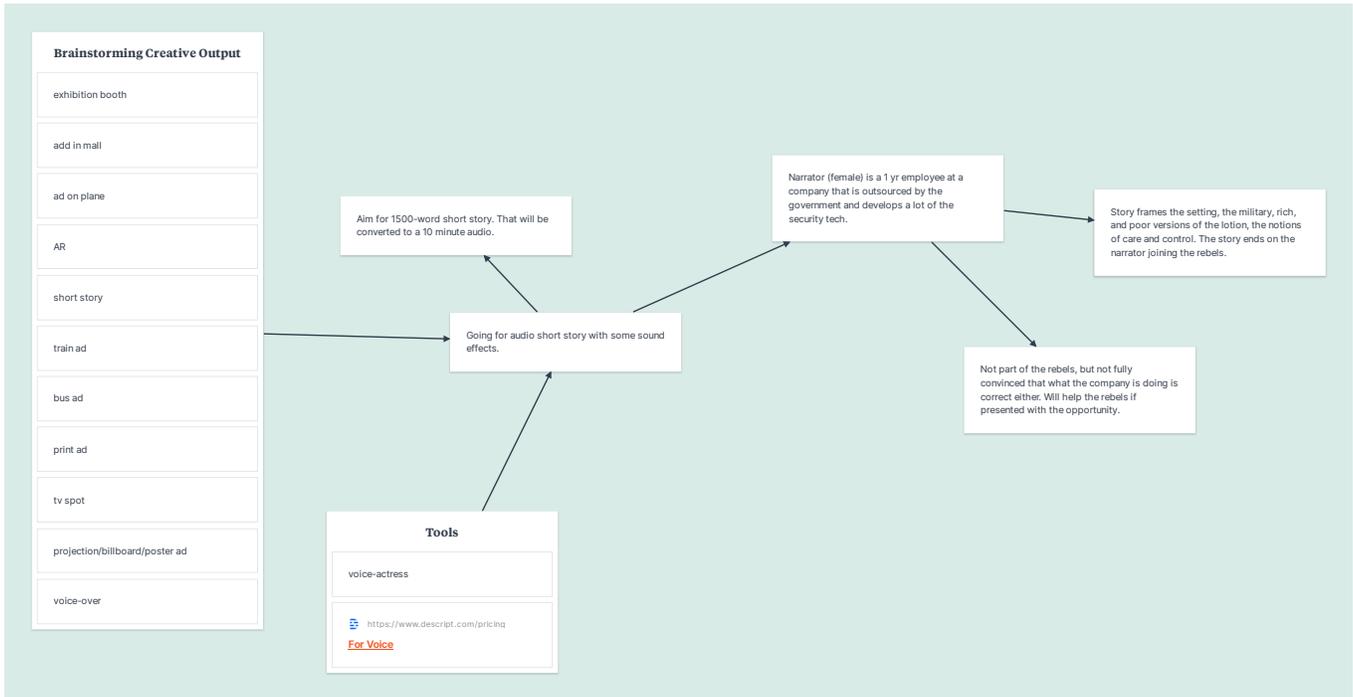


Moodboard Two

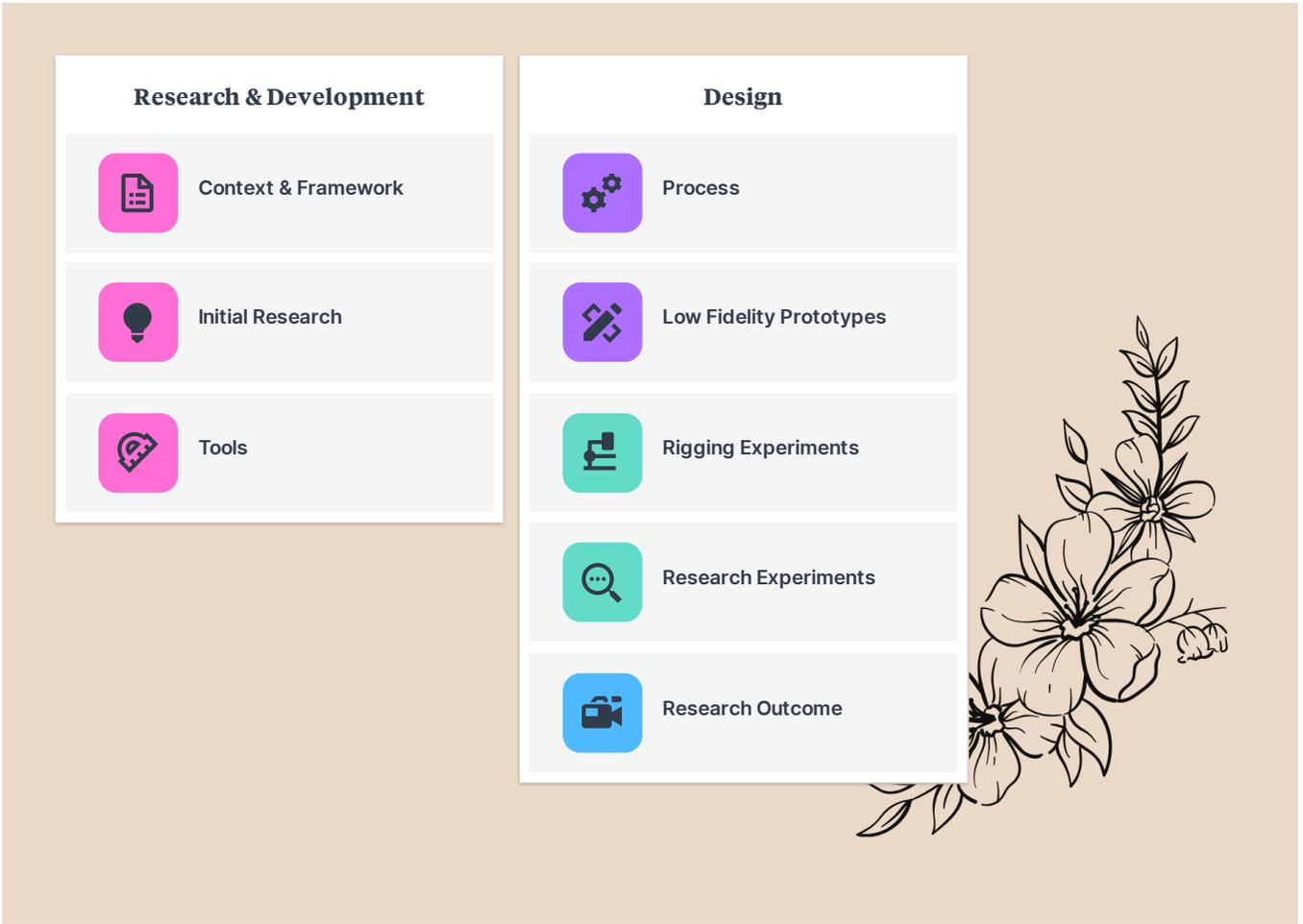


Moodboard Three





Skill Development Stages > Stage 1 > Speculative Writing - Production Details > Moodboard Three



Skill Development Stages > Stage 1 > Speculative Explorations - Production Details

Title: Change of Perspective: Long Take in Film to Photogrammetry Art

Contextual Framework

Contextual Framework.

In film, the long take is also called the continuous take or continuous shot, and is a seemingly uninterrupted shot that last longer than the conventional editing pace of the film or in general. Due to their difficulty, they are often highly praised when executed well.

According to Screen Prism, "The long take is a versatile filmmaking device - it can be used to draw attention to the camera or hide it, to awe audiences with virtuosity and showmanship or test their endurance. While technically difficult and sparingly employed, the long take offers the ability to move through time and space in a way that is purely cinematic."

It has been used as early as the 1940s, and many times since then. The best examples of these use graceful navigation of the scene surrounding the actor in a narrative way, or as a means of establishing the terrain. It is used in movies, documentaries.

In long take, many cases, it is the 2D equivalent to an 3D VR experience in film. It uses a lot of camera movement, to fully capture the scene in question and gives a sense of embodiment of the viewer as it replicates how they view life (in a continuous take).

Theoretical Context

Theoretical Context.

Due to the nature of the long take, i.e. the interrupted scanning of the scene, it is may be possible to rebuild the world that the actors embody, and be able to look around in them. Through photogrammetry it is possible, to "pause" in film and take in the surroundings of what is happening, even observing something from a point of view that the story wasn't initially intended to be told from.

One may be able to reframe a scene to view it as a neutral person, the main characters perspective, or even the antagonist's point of view, embodying the perspective and perhaps feelings of the character.

The video is simply a sequence of stills so it is possible to extract these as photos for photogrammetry as successfully testing on the Yorkville Toronto Library.

https://sas-space.sas.ac.uk/6587/1/Embodying_Movies_Embodied_Simulation_
EMBODYING MOVIES: EMBODIED SIMULATION AND FILM STUDIES
 Vittorio Gallese (University of Parma), Michele Guerra (University of Parma)

"The interaction between the film as a lived body and its viewer can go so far as to consider the movie as the crossroad of three different bodies: the body of the spectator, the body of the film, and the body of the filmmaker. MacDougall wrote that images we make are "In a sense mirrors of our bodies, replicating the whole of the body's activity, with its physical movements, its shifting attention, and its conflicting impulses toward order and disorder. [...] Corporeal images are not just the images of our bodies; they are also images of the body behind the camera and its relations with the world." "

Research Cheatsheet

What - Converting Film Long Takes into Photogrammetry Art

Why - Interested in the connection between long takes in film, and the 3D models that can be created from them. Interested in how this allows a viewer to embody the character or perhaps other characters in a scene in a way the director may not have intended.

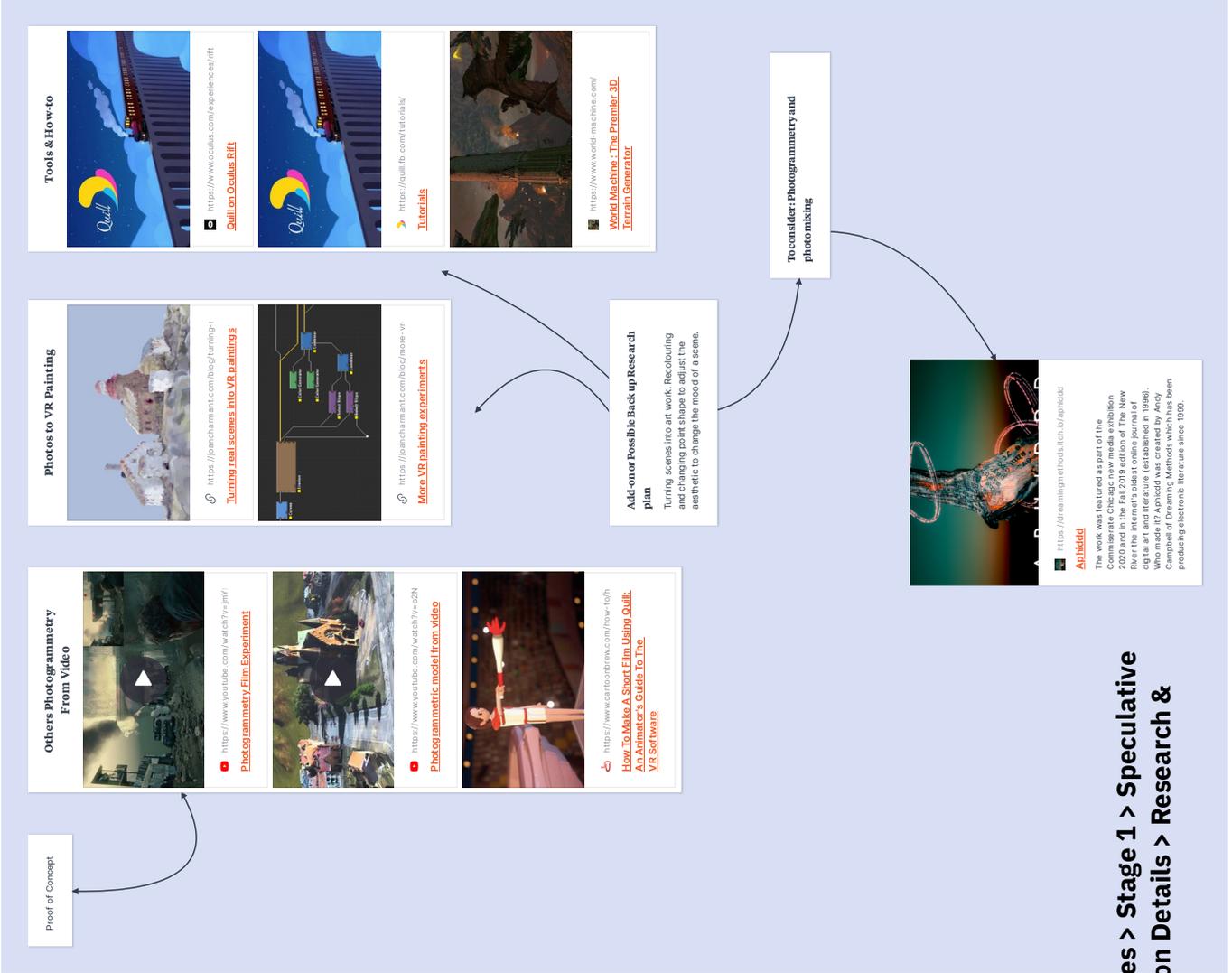
Who - Using the work of film makers, or stock footage.

Where - Film and movie scene

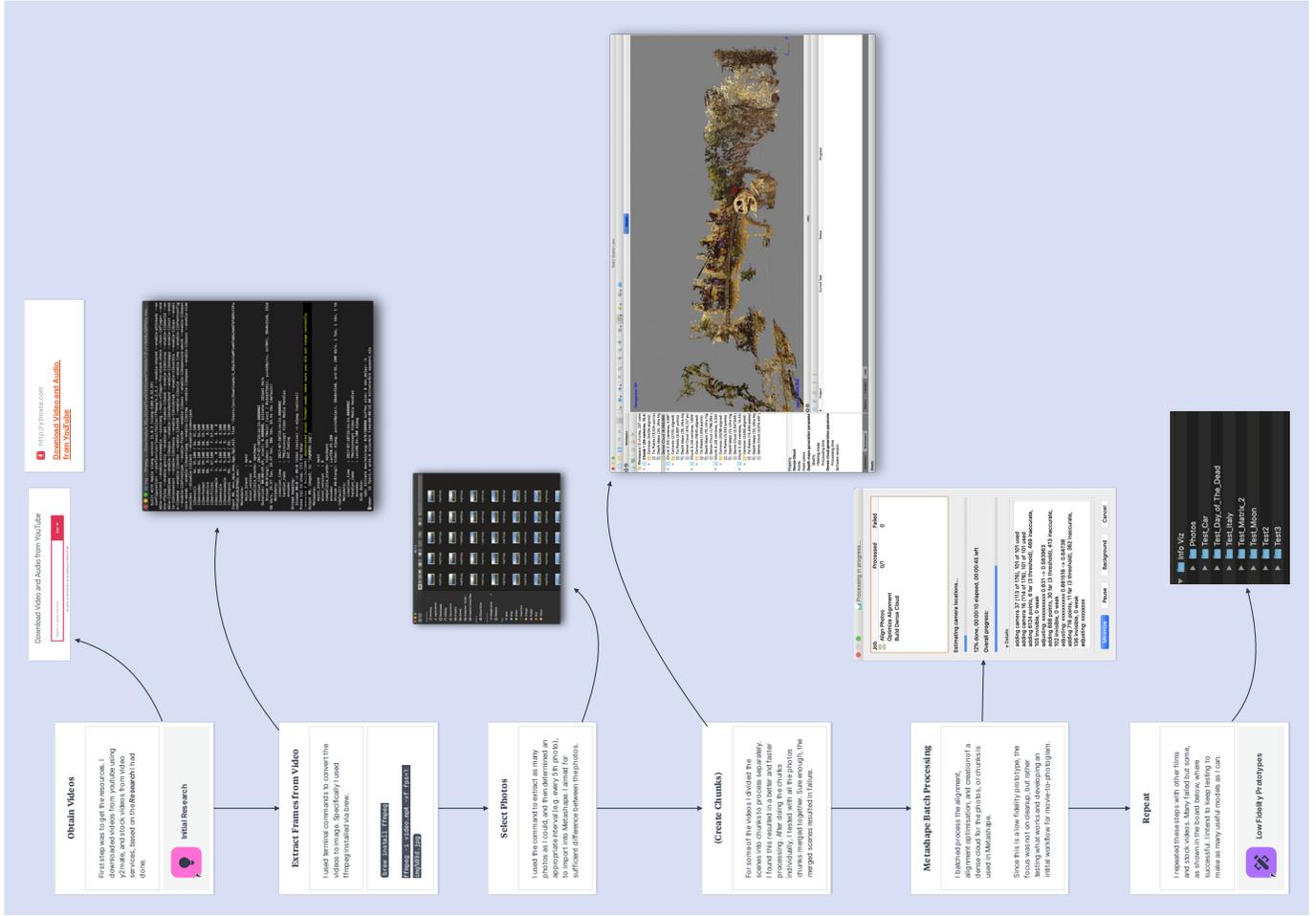
When - See schedule board.

How - Increasingly higher fidelity prototypes and tests, metashape, and Unity. Research-creation.

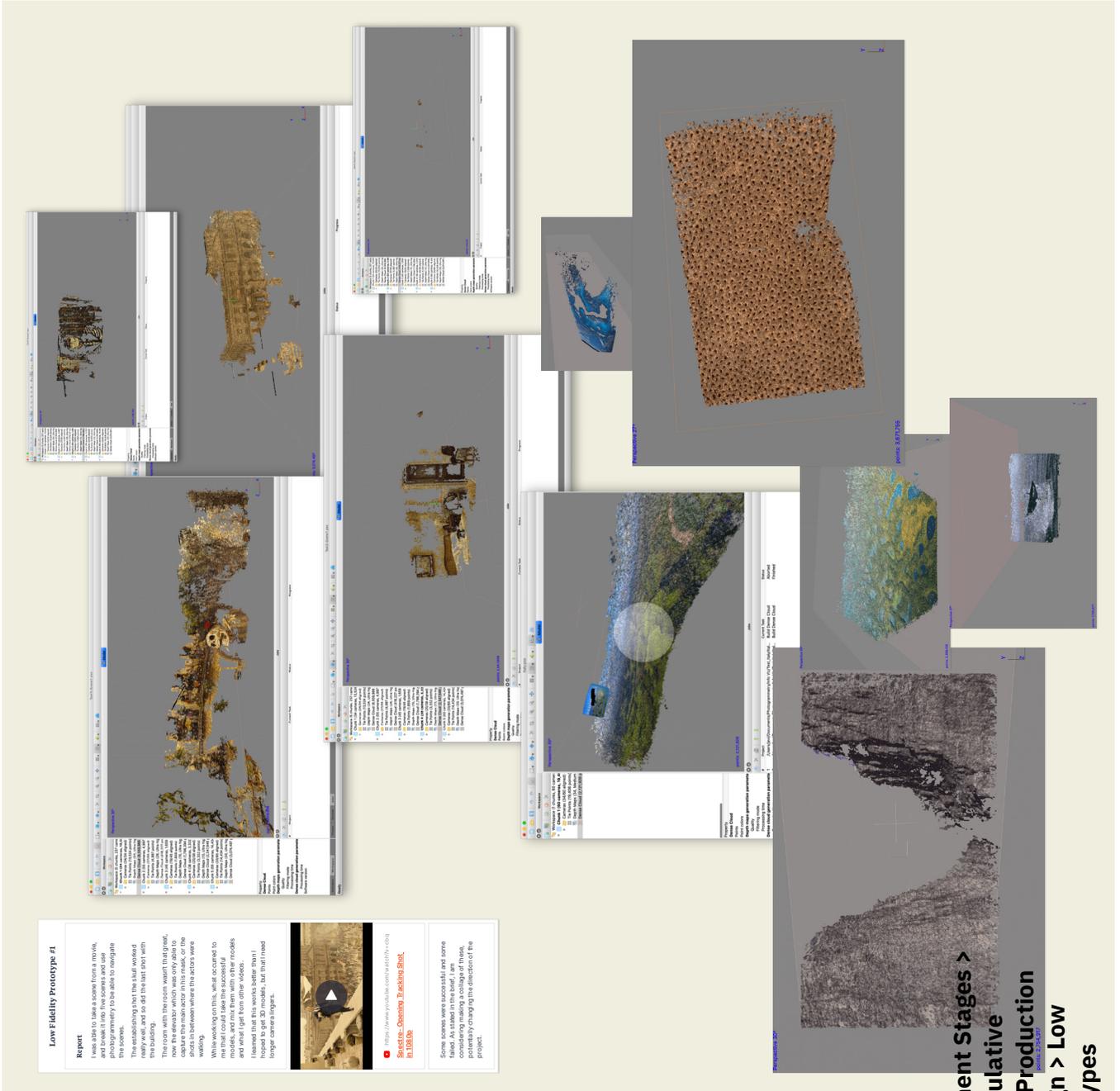
Skill Development Stages > Stage 1 > Speculative Explorations - Production Details > Research & Development > Context & Framework



Skill Development Stages > Stage 1 > Speculative Explorations - Production Details > Research & Development > Tools



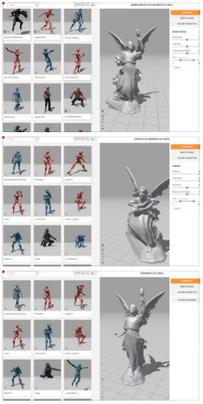
**Skill Development Stages >
Stage 1 > Speculative
Explorations - Production
Details > Research &
Development > Tools**



**Skill Development Stages >
 Stage 1 > Speculative
 Explorations - Production
 Details > Design > Low
 Fidelity Prototypes**

Experiment 0

During the tutorial, I tried rigging with a statue to test how flexible Mixamo was. Despite not having properly defined legs, or arms, the model was able to be rigged. I downloaded the model from CGTrader.



Experiment #1 & #2

I experienced several failures with the rigging exercise.

Experiment #1
My first idea was to try to rig something from the movie. However, I had significant problems extracting the necessary information resulting in several failures. I will outline those failures in the [Research Experiments](#).

Experiment #2
My next experiment was to attempt to animate toys à la Toy Story. I purchased a Star Wars figurine from the dollarstore, and also two birds and a gorilla. The plan was to create a jungle scene with character animated. All attempts failed.

Experiment #2 Failures

Experiment #3

Experiment #3
My third attempt at rigging was to scan a mannequin at the Hudson Bay Centre, and have them dance in the empty store as foot traffic is low because of the pandemic.

I scanned several mannequins and attempted to capture the surrounding area to serve as a background for the dancing mannequins. Several of my attempts failed, but I kept trying.

Experiment #3 Failures

I finally got a mannequin scan, that was somewhat usable and began the process of cleaning, sculpting, and animating it.

Experiment #3 - Obj Preparation

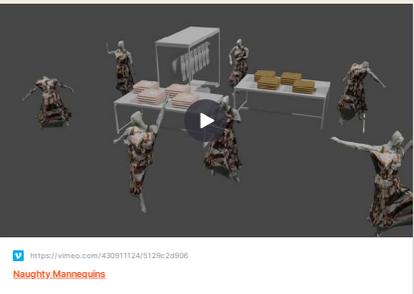
Final Output

In the end I created a video with the mannequins misbehaving in a clothing store while shoppers are not looking.

Experiment #3 - Video Creation



<https://vimeo.com/43091124/5129c2d906>
Naughty Mannequins



Skill Development Stages > Stage 1 > Speculative Explorations - Production Details > Design > Rigging Experiments

1) Rigging Mc exchange
 The rigging process for the Mc exchange involves creating a rig for a character model. The rig is composed of a head, neck, torso, and limbs. The rig is then used to animate the character's movements. The rigging process is a complex task that requires a deep understanding of anatomy and mechanics.

2) Rigging the playground
 The rigging process for the playground involves creating a rig for a character model. The rig is composed of a head, neck, torso, and limbs. The rig is then used to animate the character's movements. The rigging process is a complex task that requires a deep understanding of anatomy and mechanics.

3) Rigging Screenshot D
 The rigging process for Screenshot D involves creating a rig for a character model. The rig is composed of a head, neck, torso, and limbs. The rig is then used to animate the character's movements. The rigging process is a complex task that requires a deep understanding of anatomy and mechanics.

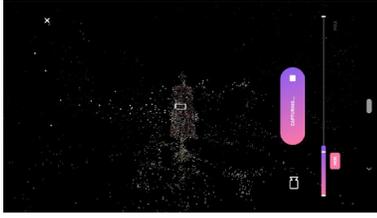
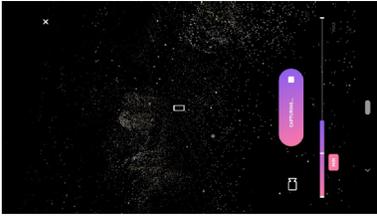
**Skill Development Stages > Stage 1 >
 Speculative Explorations - Production Details >
 Design > Rigging Experiments > Experiment #2
 Failures**

Using Display.land

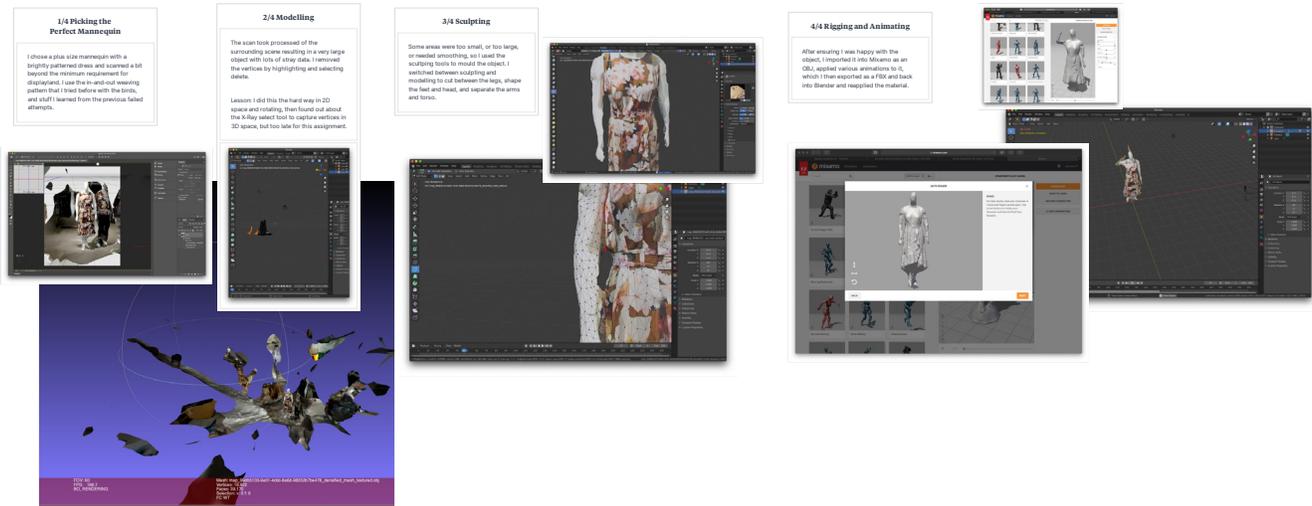
Since Metashape and Scan3d were failing on me, I decided to give display land another go. I tested it quickly on one of my dogs to make sure I understood how to use it.

Many of the attempts failed but with each one I got a bit better at scanning the mannequins and determined what obstacles and mannequins worked best.

All my attempts at making a 3D scene failed.



Skill Development Stages > Stage 1
> Speculative Explorations -
Production Details > Design >
Rigging Experiments > Experiment
#3 Failures

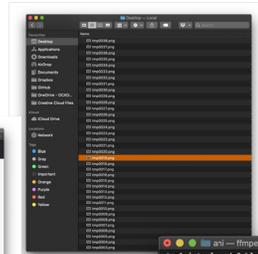
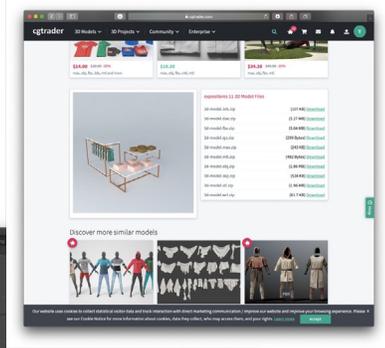


Skill Development Stages > Stage 1 > Speculative Explorations - Production Details > Design > Rigging Experiments > Experiment #3 - Obj Preparations

New Column

Using Mixamo, I created several poses and dance animations for my model and exported them as FBX. Since my attempts at creating a 3D scene failed, I downloaded a free model of the shelves in a clothing store from CGTrader, and resized and arranged my models around it. I adjusted the timing for when each would come in, and rendered the animation as images. I used ffmpeg in Terminal to combine the images into a video.

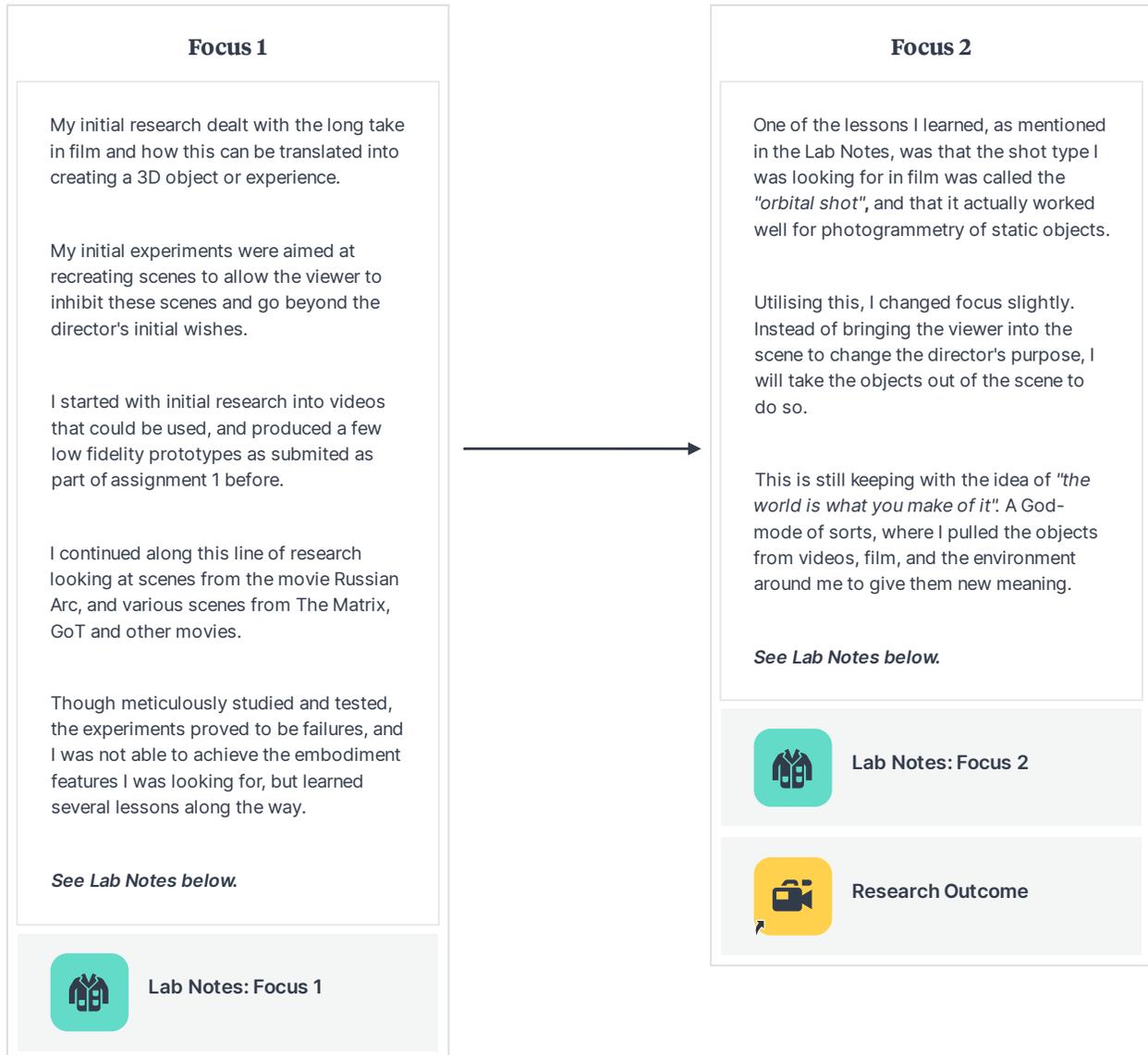
```
ffmpeg -r 30 -f image2 -s 1920x1080  
-i tmp%04d.png -vcodec libx264 -crf  
20 -pix_fmt yuv420p -test.mp4
```



```
ffmpeg -r 60 -i image2 -s 1920x1080 -i tmp%04d.png -vcodec libx264 -  
-stream 1:0 -interlaced 0 -bluray_compat 0 -constrained_intra 0 -bframes 3 -b_pyramid 2 -b_a  
-dapl1 0 -b_bias 0 -direct1 1 -weight1 0 -open_gop 0 -weight2 0 -keyint 200 -keyint_min 20  
-scenecut 0 -intra_refresh 0 -rc_lookahead 0 -rc-lookahead 0 -rc-lookahead 0 -rc-lookahead 0  
-qpmin 0 -qpmax 0 -qpsteps 4 -ip_ratio 1.40 -aq=1:1.00  
Output #0: mov, q, 'test.mp4'  
Metadata:  
encoder: Lavf58.29.100  
Stream #0: Video: h264 (libx264) (avc1 / 0x31637661), yuv420p, 1920x1080 [SAR 1:1 DAR 16:9], q=1-1, 68 fps, 15368 tbn, 68 tbc  
Metadata:  
encoder: Lavc58.54.108 libx264  
Side data:  
copp: bitrate max/min/avg: 0/0/0 buffer size: 0 vbv_delay: -1  
frame= 51 fps= 51 q=30.0 size= 0kB time=00:00:00.00 bitrate=N/A speed=  
frame= 50 fps= 50 q=30.0 size= 0kB time=00:00:00.50 bitrate= 5.4kB/s/  
frame= 90 fps= 49 q=30.0 size= 0kB time=00:00:00.65 bitrate= 0.4kB/s/  
frame= 112 fps= 44 q=30.0 size= 0kB time=00:00:00.90 bitrate= 0.4kB/s/  
frame= 124 fps= 40 q=30.0 size= 0kB time=00:00:01.00 bitrate= 0.4kB/s/  
frame= 143 fps= 40 q=30.0 size= 0kB time=00:00:01.40 bitrate= 0.3kB/s/  
frame= 160 fps= 41 q=30.0 size= 0kB time=00:00:01.70 bitrate= 0.2kB/s/  
frame= 190 fps= 41 q=30.0 size= 0kB time=00:00:02.10 bitrate= 0.2kB/s/  
frame= 237 fps= 42 q=30.0 size= 0kB time=00:00:02.60 bitrate= 0.1kB/s/  
speed=0.555x
```



Skill Development Stages > Stage 1 > Speculative Explorations - Production Details > Design > Rigging Experiments > Experiment #3 - Video Creation



Skill Development Stages > Stage 1 > Speculative Explorations - Production Details > Design > Research Experiments

Focus 1

Goal: I downloaded the movie *Russian Ark*, which is praised for being one continuous take for the entire movie. I was attempting to turn the entire movie into one complete photogram since the camera movements reveal the floorplan of the museum. This can then be used to experience the film in a different way than intended by the director.

Process: I converted the entire movie into frames, a total of 5713 photos in all. I took the first 30 scenes and sorted their photos in separate folder. Some scenes were short with 40 photos. Others were as long as 200 photos. I chose a fraction of the selections (every 7th photo), and feed the first 5 scenes as a batch process into Metashape.

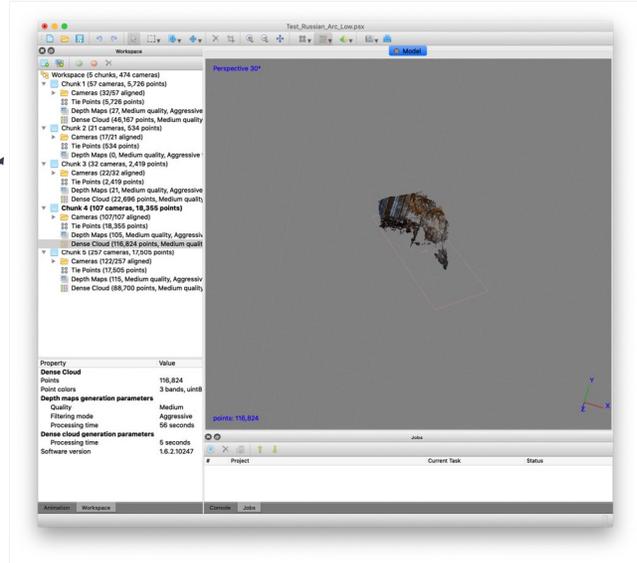
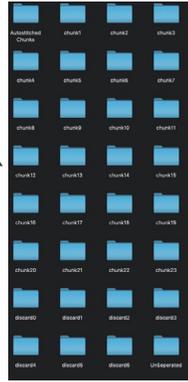
Results: The results were in most cases a 2D image or a very messy model. I stopped at the dense cloud when I realised that this failed to produce 3D scenes.

Retest 1: I tried again with parts of *The Matrix*, and a 360 long shot scene in *Game of Thrones*.

Retest 2: As a final attempt, I tried stitching the photos together first using Autostitch, then feeding the stitched photo as well as the additional photos from the scene to help provide the algorithms with context. This still failed.

Retest 3: Learning that the orbital shots worked, I tried it on a scene in *Russian Ark* that orbited around a statue. This failed.

Conclusions: Experiment failed. Based on research, in order to achieve the "floor map" idea I was hoping for, I may need advanced software. Software like Metashape is optimised to extract shapes, not scenes. Architecture software designed for mapping out the interior of a build is what I would need, and the prices are steep and/or for Windows operation systems. Orbital shots however achieved the best results of the failures.

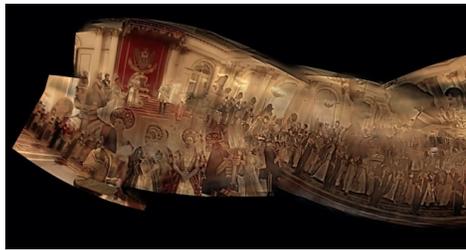


GoT scene overhead view. Almost got it!

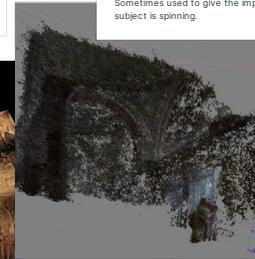


<https://www.youtube.com/watch?v=2c32N>
Game of Thrones (S4E9) Battle at the Wall 360 degree uncut Long Shot

<https://tvtropes.org/pmwiki/pmwiki.php/Main/OrbitalShot>
Orbital Shot - TV Tropes
In this inverse of the Round Table Shot, there is only one subject around whom the camera circles (usually on a dolly track), so as to provide a rotating view from all sides. Sometimes used to give the impression that the subject is spinning.



Beautiful art from autostitching. Will look into this later.



Orbital shot of statue in Russian Ark ended up getting everything in the background with little focus on the statues.

Skill Development Stages > Stage 1 > Speculative Explorations - Production Details > Design > Research Experiments > Lab Notes: Focus 1

Goal: Using orbital shots of objects in the environment, films, and videos to repurpose them

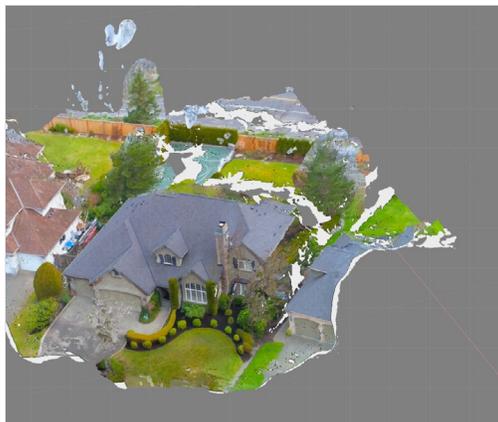
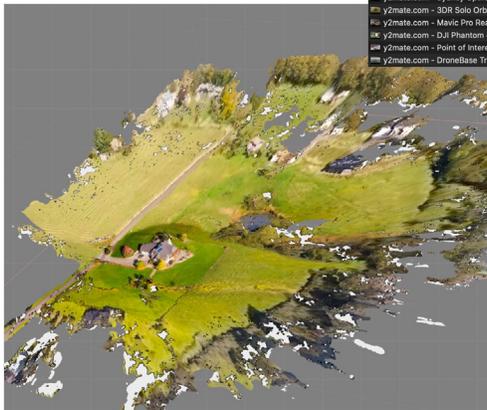
Process: I used the same method outlined previously, downloaded the videos, extracted the frames using Terminal or Metashape, created chunks and processed them. After extension research, for this, I settled on six (6) real estate videos of neighbourhoods and houses, a video of the [Christ the Redeemer statue](#) in Brazil, and a video of the [Sydney Opera House](#).

Results: Success! This proved every successful. I was able to get five of these to successful produce high quality 3D models.

Conclusions: Orbital drone footage is awesome! Furthermore, I can extract things from the world without physically ever being there.



- Takeoff Dronetography Real Estate Exterior.mp4
- y2mate.com - Cristo Rei Aerial View_djBq9KHwZL1080p.mp4
- y2mate.com - Sydney Opera House Drone Orbit_OkqDEwKAAu1080p.mp4
- y2mate.com - 3DR Solo Orbit w Gimbal_Zdgm3B0r6_M1080p.mp4
- y2mate.com - Mavic Pro Real Estate Home 360 Degree Orbital View_G27Tn0PksJhQ1080p.mp4
- y2mate.com - DJI Phantom 4 Pro - Point of Interest 360 (POI) Hotspot Orbit Demo) in ChamoniX_B0F2WVMvEZDU1080p.mp4
- y2mate.com - Point of Interest at 3842m Alguille du Midi (POI) Orbit Demo with P4 Phantom 4 Pro) DJI Mavic_ITGC8TP5JDE1080p.mp4
- y2mate.com - DroneBase Training - Orbit Shot_6CuXivV4uQ1080p.mp4



Skill Development Stages > Stage 1 > Speculative Explorations - Production Details > Design > Research Experiments > Lab Notes: Focus 2

Outcome

The end result is a video fictional island that I called Avalon Isle (named after the fictional Avalon).

I created output in the form of a **guided video** of "gameplay" in Unity, **360 video** hosted on vimeo, and **360 WebVR photo** in Aframe.

Background

Avalon Isle was once home to a modest settlement. Strategically located, it once served as an outpost for the armies of the neighbouring mainland Avalon, who was at war. The island was soon captured, and monuments of the leader erected as a reminder of their victory at war. Soon, another more powerful foe seized the island and laid waste to it. The island hasn't been repopulated since and was soon forgotten. 400 years later, the island still tells the story of a war-stricken land.

Inspiration

I was inspired by the sci-fi fiction *The Path Between Worlds* which was in turn inspired by the 1970s *Riverworld* series by [Charles José Farmer](#). From these I got the ideas of advanced tech and evidence of civilisation and a deserted island, but innovated on the rest.

Method

I used [Mixablab](#), [Metashape](#), [Blender](#) and [displayland](#) to make and clean up the models, and [Audacity](#) to remix the audio. I combined all the assets using [Unity](#). The 3D models were distressed, and in some cases, retextured. I modeled the terrain around the objects to bury them and smooth it out, and added grass and weeds. I then scripted a camera sequence, and captured the output video, 360 video, then extracted a 360 photo for webVR.

3D Models and Assets used:

- Mannequin from the Hudson Bay
- Wall from Spectre (James Bond movie)
- Houses from Real Estate Videos
- Sydney Opera House from youtube
- Lighthouse from Unity Assets
- Space ships from Unity Assets
- Island materials from Unity Assets
- Water material from Unity Assets
- Auxlio sounds from Soundcloud.

Why

As previously mentioned, the idea is taking objects and changing their context. Going contra-director to build my own world. I particularly wanted to experiment with objects within video, and being able to "possess" an object that I have never physically seen or been around. I was hoping to be able to do this with scenes and spaces in films but lacked the architectural photogrammetry software required to achieve this, so settled for objects that can be reinterpreted to make a world, and a short piece of sci-fi fiction.

Overall Outcomes:

- Confident with photogrammetry of large objects
- Comfortable using Mixamo for asset rigging.
- Competent in Blender, Metashape, Displayland, Aframe and Unity for the creation of 3D scenes for export as video, VR photospheres, and VR videos. **FIRST time using all of these technologies!**

<https://vimeo.com/431525198/c016e0247a>
Avalon Isle Guided Video

<https://vimeo.com/431673484/c44833721f>
Avalon Isle 360 Video

<https://vimeo.com/431673484/c44833721f>
Avalon Isle 360 WebVR Photo
Avalon Isle - Web VR / 360

Secondary Outputs - 360 VR

Single scene demos. Proof of Concept

I was also able to test these with my cell phone in VR mode and a VR mobile headset.

Primary Output

Designing the path of the camera in Unity

Skill Development Stages > Stage 1 > Speculative Explorations - Production Details > Design > Research Outcome

Summary

Jun 25, 2020 to Aug 3, 2020

Skill-building activities, experiments and explorations with Immersion, SFX and VFX.

RP2 Sub-Stages

Stage 1.1: Immersion with SFX
 Stage 1.2: VFX – Tracking & Compositing
 Stage 1.4: VFX – Modelling & Environmental Effects on 3D Models
 Stage 1.6: VFX – Keying
 Stage 1.8: VFX – Colour Grading
 Stage 2.0: Reports

Summary

I experimented with SFX and I learned various VFX techniques and tried out various software to test their capabilities.

Technologies Explored

Adobe After Effects, Houdini Apprentice, Adobe Premiere, Adobe Audition, ocaudio

RP2 - Immersive Story-telling with Audio and SFX

Context

The speculative fiction story written as part of the CoC Residency in Rapid Prototyping 1.

Objective

The task was to convert the SF story into an audio format and try to captivate and immerse a listener using only sound and spoken word - no accompanying visuals. The listener was to build the world in their own mind based on what is said and what they hear.

Process

I hired a voice actress and used 17 SFX sounds including door creaks, footsteps, walls, ambience, bag sounds etc, to keep the listener immersed in the story and set the tone. I explored various audio production techniques to mix the files cohesively.

Software

ocaudio + Adobe Audition + Adobe Rush.

Testing and Results

My mother sent this as a blast to several of her colleagues for feedback. See feedback board below. The test audience was mostly not science fiction fans and do not regularly listen to audio fictional novels.


Feedback

RP2 - Software Explorations

Objective

Practise VFX and post-production using various software to build the skills needed to edit the thesis video output.

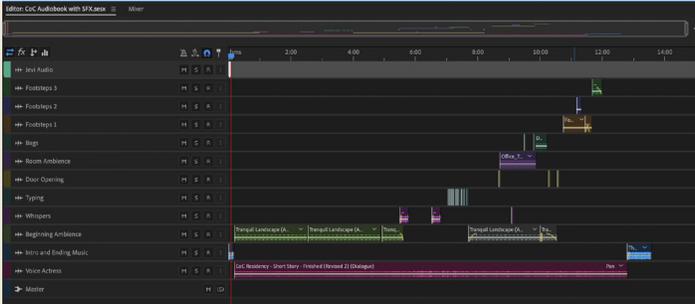
Output

- Camera Tracking & Compositing,
- 3D Modelling & Animation due to Environmental Effects
- Keying
- Colour Grading

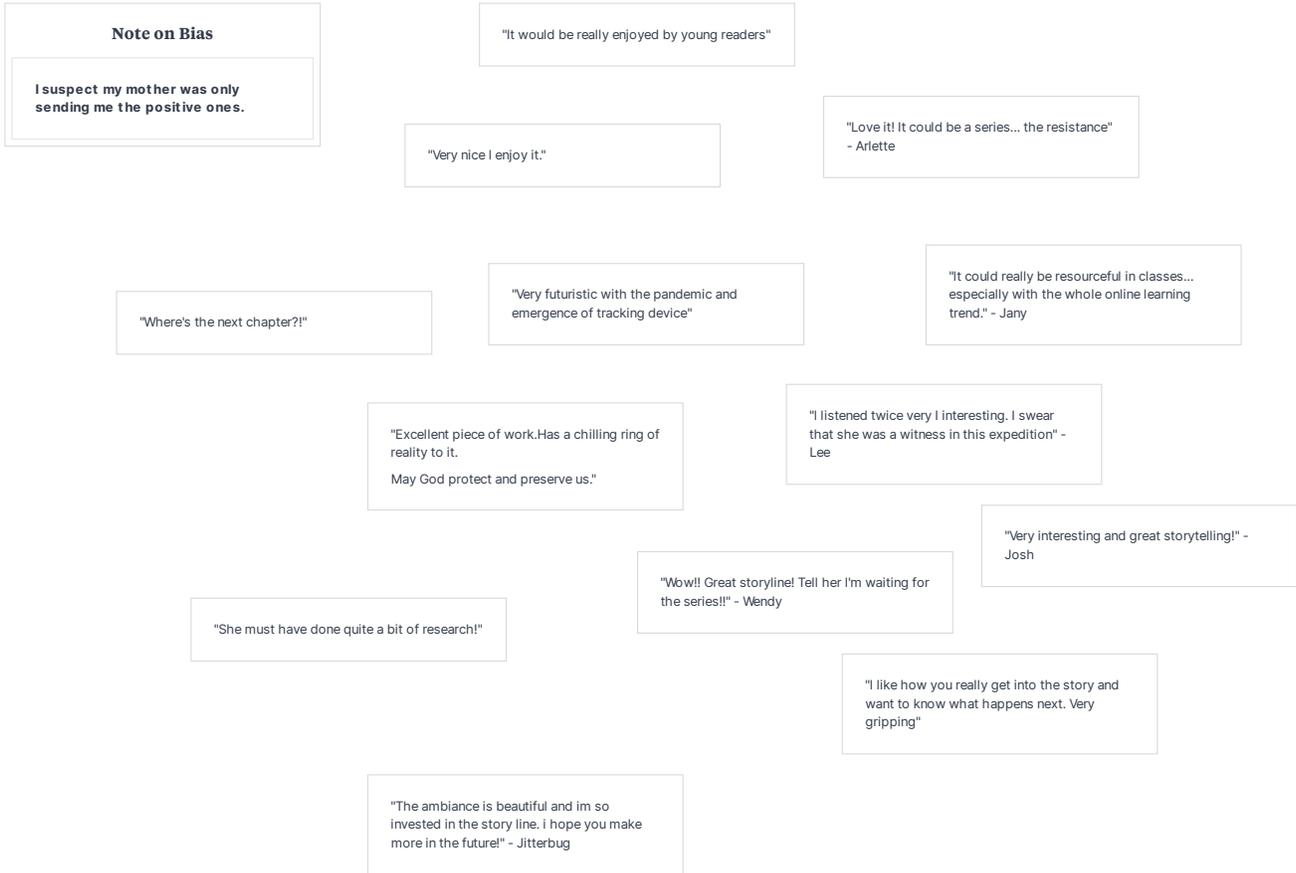


<https://vimeo.com/443045003/6e50942d60>

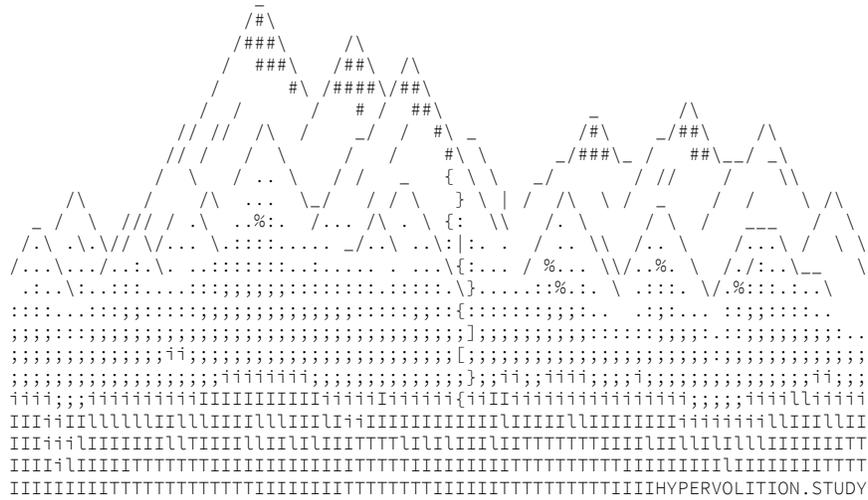
Rapid Prototyping Stage 2



Skill Development Stages > Stage 1 > Speculative Explorations - Production Details > Design > Stage 2



Skill Development Stages > Stage 1 > Speculative Explorations - Production Details > Design > Stage 2 > Feedback



2021
JEVONNE PETERS



<http://hypervolution.study>



THIS DOCUMENT FEATURES AUGMENTED REALITY COMPONENTS.
USE A SMART DEVICE WITH THE QR CODE TO ACTIVATE.

