

# AUTOTOPIA

PROCESS BOOK

KAELEY SLANEY

# ABSTRACT

Autotopia is a critical and speculative design project that explores the potential futures brought about by a massive paradigm shift in the way we understand work and employment. In a world where mass human unemployment has been brought about by technology, Autotopia presents objects that may exist in our not too distant future.

Autotopia takes the form of several designed objects that each represent different facets of futures that have incredible amounts of automation and low human employment and is presented through an accessible online exhibition.

## CONTENTS

0.0 ACKNOWLEDGEMENTS	4		
1.0 INTRODUCTION	5		
2.0 RESEARCH	8		
3.0 PROCESS	13		
3.2 Brand	14		
3.3 PalChat!	16		
3.4 Letter & Food	18		
3.5 Moutonia	20		
3.6 SEAM	22		
3.7 Nouriche	24		
3.8 Website	26		
3.9 Exhibition Design	28		
		4.0 DESIGN OUTCOMES	30
		4.2 PalChat!	31
		4.3 Letter & Food	32
		4.4 Moutonia	34
		4.5 SEAM	36
		4.6 Nouriche	38
		4.7 Website	40
		4.8 Exhibit	41
		5.0 CONCLUSIONS	42
		6.0 APPENDICES	45
		7.0 BIBLIOGRAPHY	54

# ACKNOWLEDGEMENTS

I would like to thank Katherine Gillieson for her support and encouragement throughout this project, thanks for pushing my ideas to a more uncomfortable place. Thank you to my all classmates and friends over these past four years, especially those that I was with in fourth year, for your support, input, ideas and friendship. Many thanks for being my guinea pigs, Diana and Sylvia, your reactions to my object concepts were exactly what I needed to make my project that much better. Many thanks to my family and support system: Mom and Tom, Dad, Tristan, and especially to Faber for being there when I needed you and making sure I ate well. Finally, thank you to Buddy and Holly for not eating my homework before it was due and not spilling water directly on my laptop, but mostly for being very cute.

# 1.0 INTRODUCTION

## 1.1 PROBLEM SPACE

Although the current employment impact from automation is relatively small, we can see changes in the form of self checkouts and robotic assembly lines, economists are predicting a continuing shift towards the automation of tasks and jobs. The capacity of technology to replace jobs continues to improve at a rapid rate and will likely alter the landscape of employment in such a permanent way that will require the need for a complete paradigm shift in how we are employed and how we view work.

## 1.2 THESIS STATEMENT

What might society look like in a future with vast amounts of unemployment due to automation? With Autotopia, my goal is to create an awareness of automation and technological unemployment and present ideas of potential effects of automation through speculative design objects. Through creating believable future object scenarios, created with the use of design and storytelling, each of Autotopia's objects asks a viewer-participant to willingly suspend their disbelief and examine the implications that such an object would carry through existing in a potential future.

## 1.3 TERMS

**Automation** is when machinery and computers take over the means of labour and/or production. Automation increases production without increasing human-based labour and avoids many risks associated with human labour.

**Technological Unemployment** is the result of too much automation: humans are pushed out of possible employment through technology taking over tasks and jobs.

**Speculative Design** uses design as a mode of inquiry to explore possible future scenarios while still maintaining a grounding in our current world in order to ask questions, facilitate debate and guide ourselves to an optimal future.

## 1.4 RESEARCH OUTLINE

In order to be able to present Autotopia and its ideas in the best, most accurate way, I heavily researched how economists might see automation impacting our society. Obviously there are different points of view, some believe that technology will always make new jobs as well as replace them, but I was more interested in the other side of this topic: what would happen if new technologies took away way more jobs than it made?

Alongside my research into automation, I researched critical and speculative design in order to both situate my project as well as research the best ways to convey information through such a lens. It was important to this project to have a strong relationship to speculative design principles in order to best understand how to clearly how my ideas and narratives to an audience.

More information on my research is in section **2.0 Research**.

## 1.5 DESIGN PROCESS

With a strong research base, the initial struggle for me was how to translate my research into design. Several streams of themes regarding automation had become apparent through my research such as food production, things humans are capable of that machines are not, relationships between people, and capitalism, which became the basis of creating narratives surrounding these themes. These narratives became broken down into implications surrounding those narratives and gradually objects and snippets of stories of the worlds those objects inhabit. Each object is crafted in a way that tells only a part of the story of the future and it is up to the audience to fill in those blanks.

Alongside the designed objects, the journey to displaying these objects in an online exhibition was an answer to accessibility of information and allowing those that wanted to interact with Autotopia that time and ability to do so when they wanted to.

More information on my design process is available in section **3.0 Design Process**.

## 1.6 DESIGN OUTCOMES

Autotopia is a collection of several speculative design objects that are presented in a web based exhibition. Each of the objects have been refined and distilled to show strong narrative and present information in various ways.

To see the final outcomes, please view section **4.0 Design Outcomes**.

# 2.0 RESEARCH

## 2.1 RESEARCH INTRODUCTION

This chapter provides a summary of my research. My research was entirely composed of secondary sources, with an emphasis on critical and speculative design theory, critical and speculative design precedent and automation and economy systems. As a research focused project, I needed a strong base of information in order to move forward.



## 2.2 AUTOMATION

Automation as a tool is not new, it has been seen in the machinery of the Industrial Revolution and the assembly lines of Henry Ford, working to increase productivity and production. Currently, there is an ever increasing ability for machinery to do the jobs of people: the division of jobs into single tasks for separate machines to do with the massive processing powers of computers to analyse data with increasing capacity for intelligence, computers are quickly being able to do more and more complex tasks. By analysing current employment trends, one can see that employment is down as a whole [1], but production per person continues to climb: more goods are being produced with less man power. Machinery is able to overcome the limits of our muscles while computers will overcome the limits of our brains [2].

Invaluable to my research on automation was Ford's *A Light in the Tunnel* [3], which is half well researched information on automation and half thought experiment on the effects of automation on a future population. Ford presents his arguments in an easy to understand manner, especially for someone who does not have a background in economics. He provides statistics of employment and production and applies current trend data to bring that into the future where he shows the potential problem of a large population unable to meet the requirement for high levels skills in order to stay employed.

## 2.3 CRITICAL AND SPECULATIVE DESIGN

“By speculating more, at all levels of society, and exploring alternative scenarios, reality will become more malleable and, although the future cannot be predicted, we can set in place today factors that increase the probability of more desirable futures happening.” [4] This quote from Dunne & Raby's *Speculative Everything* represents a driving force behind my design direction. I am dealing with a problem space that has not yet come to pass, which carries the stipulation that I am not able to accurately predict the future. However, I am able to base my speculations on research and use that research to present realistic possibilities. It is my hope that the vessel of speculative design could allow me to be able to share my possible futures in a hope that people who view them could understand the potential dangers that could come to pass. Dunne & Raby break down the subject of critical speculative design into easy to digest chapters, touching on the importance of presenting different futures while not being afraid to work on the darker side of design. They demonstrate all that they have wrote about in their case study, *United Micro Kingdoms* [5] which functions as an exploratory experiment examining how different groups of people would live under specific restrictions.

## 2.3 CRITICAL AND SPECULATIVE DESIGN

“By speculating more, at all levels of society, and exploring alternative scenarios, reality will become more malleable and, although the future cannot be predicted, we can set in place today factors that increase the probability of more desirable futures happening.” [4] This quote from Dunne & Raby's *Speculative Everything* represents a driving force behind my design direction. I am dealing with a problem space that has not yet come to pass, which carries the stipulation that I am not able to accurately predict the future. However, I am able to base my speculations on research and use that research to present realistic possibilities. It is my hope that the vessel of speculative design could allow me to be able to share my possible futures in a hope that people who view them could understand the potential dangers that could come to pass. Dunne & Raby break down the subject of critical speculative design into easy to digest chapters, touching on the importance of presenting different futures while not being afraid to work on the darker side of design. They demonstrate all that they have wrote about in their case study, *United Micro Kingdoms* [5] which functions as an exploratory experiment examining how different groups of people would live under specific restrictions.

# IN 10 YEARS, YOU'LL SEE

## A FIREMAN IN A SATISFACTORY WORLD, SPEAKING WITH A COLLABORATIVE WAND.

### WHAT ELSE MIGHT THE FUTURE BRING?

Institute for the Future (2014). *Artifact Engine*. Retrieved from <http://www.iftf.org/future-now/article-detail/artifact-engine/>



Fabrica (2014). *Drone*. Retrieved from <http://droneverde.tumblr.com/>



Superflux (2014). *The Tarot Card Reader*. Retrieved from <http://superflux.in/work/tarotcards>



Superflux (2013). *Open Informant*. Retrieved from <http://superflux.in/work/openinformant>



Tobias Revell. *A Brief History of Power*. Retrieved from <http://www.tobiasrevell.com/Projects/A-Brief-History-of-Power>

## 2.4 DESIGN PRECEDENTS

My understanding of the potential of critical and speculative design was essential to be able to create strong design objects for Autopia. I looked at various examples of design, from Sputniko!'s work to Superflux in order to understand the scope possible of critical design as well as to understand effective means of communication within the works. Design is being used as a tool to apply understanding and carry messaging as well as to be a process from which to work. Many of the works exist in an unreality, but are grounded enough in our current understandings so that they don't seem completely improbable. The most successful examples of critical and speculative design are able to challenge perceptions and allow a viewer to confront issues and ask questions, but many do not attempt to solve problems, only highlight them and frame them in ways that are more approachable. In particular, Dunne and Raby's *United Micro Kingdoms* [5] displays information and their project in a way I find very inspiring, but most importantly, accessible, as it is available on the web and they have provided references for those wanting to find out more information on the topic they worked in.

It is my intent to be able to take these traits and be able to use them in ways that are able to challenge people and alert them to a topic they may not know about or may not understand the same way I have some to understand the space.



## UNITED MICRO KINGDOMS: A DESIGN FICTION

The United Micro Kingdoms (UMK) is divided into four super-shires inhabited by Digitalians, Bioliberals, Anarcho-evolutionists and Communo-nuclearists. Each county is an experimental zone, free to develop its own form of governance, economy and lifestyle. These include neoliberalism and digital technology, social democracy and biotechnology, anarchy and self-experimentation and communism and nuclear energy. The UMK is a deregulated laboratory for competing social, ideological, technological and economic models.

### UNITED MICRO KINGDOMS

United Micro Kingdoms is a speculative fiction project by Dunne & Raby that presents an alternative UK through four different factions based on a social-political scale. Each of the four groups has different transportation technology and social values. It is presented on a web based platform that explains each group with a series of photographs and some explanations of their way of life and values. Visually, this project has similar aesthetics to Dunne & Raby's digital work, which could be considered a visual identifier

or branding. Having the project on the web allows it to be very accessible and their inclusion of all the links to their resources at the bottom facilitate engagement with the thought experiment. As this was also presented in a gallery space, I wonder how much is presented on their website versus what appeared in the gallery show. If the web version is only the bare bones version of the project, I would appreciate more information in order to more fully appreciate the project.



### MENSTRUATION MACHINE, TAKASHI'S TAKE

Sputniko!'s Menstruation Machine is a device that can be worn around the abdomen and looks a bit like metal underwear. It has electrodes to stimulate muscle cramping and it drips blood, essentially stimulating a menstrual period. Her object is presented via a catchy J-Pop music video featuring Sputniko! as a male character called Takashi and tells the story of Takashi's desires and where the Menstruation Machine fits in to who he wants to be. The song itself acts as another layer of narration by adding what

could be a persuasive inner voice. Sputniko!'s videos feature well crafted visuals alongside objects that demand the viewer think and process what they saw. It does take several views in order to get a good understanding of her project alongside reading her project statements. Her weaving of a viral format with critical design is interesting and well applied, drawing in an audience that may not typically be in a gallery setting where her work is normally featured.



## SHIPS NOT SHELTERS

*Ships not Shelters* is a publication by the Peckham Outer-Space Initiative. It is a bold, graphic book with the mission of “renouncing the stasis inherent in the idea of a shelter, and instead embracing the ship as a vehicle (physically, mentally) for some diagonal forward thinking” (2011). This is a publication that encourages viewers to hop aboard a space ship and fly away, both figuratively and literally. It uses text and image to share its message,

with most of its pages being minimalist. This makes for a simple message on first glance, but encourages readers to delve deeper to get the most out of the project. I enjoy its deceptively indirect message where they explore ship versus shelter, freedom versus cage. At first appearance this is a book of seemingly simple poster like spreads, but the message of pressing forward on a mission is the undercurrent of the publication.



## FIFTEEN MILLION MERITS

*Fifteen Million Merits* is an episode of TV series *Black Mirror* that explores a fictional future scenario where people who are physically able bike during the day for Merits. Merits are used to pay for everything, from food, to entertainment to skipping mandatory advertisements. It explores a culture dependant on entertainment for fulfilment, as there is no other source of enrichment in exchange for labour. Those that cannot bike are forced to clean

up after those that are biking or participate in humiliating TV game shows, creating two tiers of citizens. The world is immersive and plausible, which is very important when presenting speculative fiction, as viewers need to maintain some sense of reality in order to maintain belief in the scenario.

# 3.0 PROCESS

## 3.1 PROCESS INTRODUCTION

Autotopia is a project that has always been heavily based in research. The initial struggle was how to bring all of that research into the design phase: how was I going to articulate all of the dangers of automation using design? Understanding critical and speculative design gave me a platform through which to work and express my messages. Starting by borrowing visual cues from science fiction writers of the 1970s, I set to work developing Autotopia into what it is now.

### 3.2 BRAND DEVELOPMENT

The idea of utopia has been an undercurrent in much of my development for Autotopia and utopia has been a strong feature of many science fiction novels of the late 20<sup>th</sup> century. Gathering reference in the form of science fiction covers, I noted that it was popular at that time to use strong, blocky typography set on top of vivid illustrations that did not shy away from bright, bordering on neon, colours.

I went through many brand explorations using a single cover as inspiration each time (see the appendix for examples). Fans of science fiction may see my branding choices as a call back to these stories and their ideas of the future.

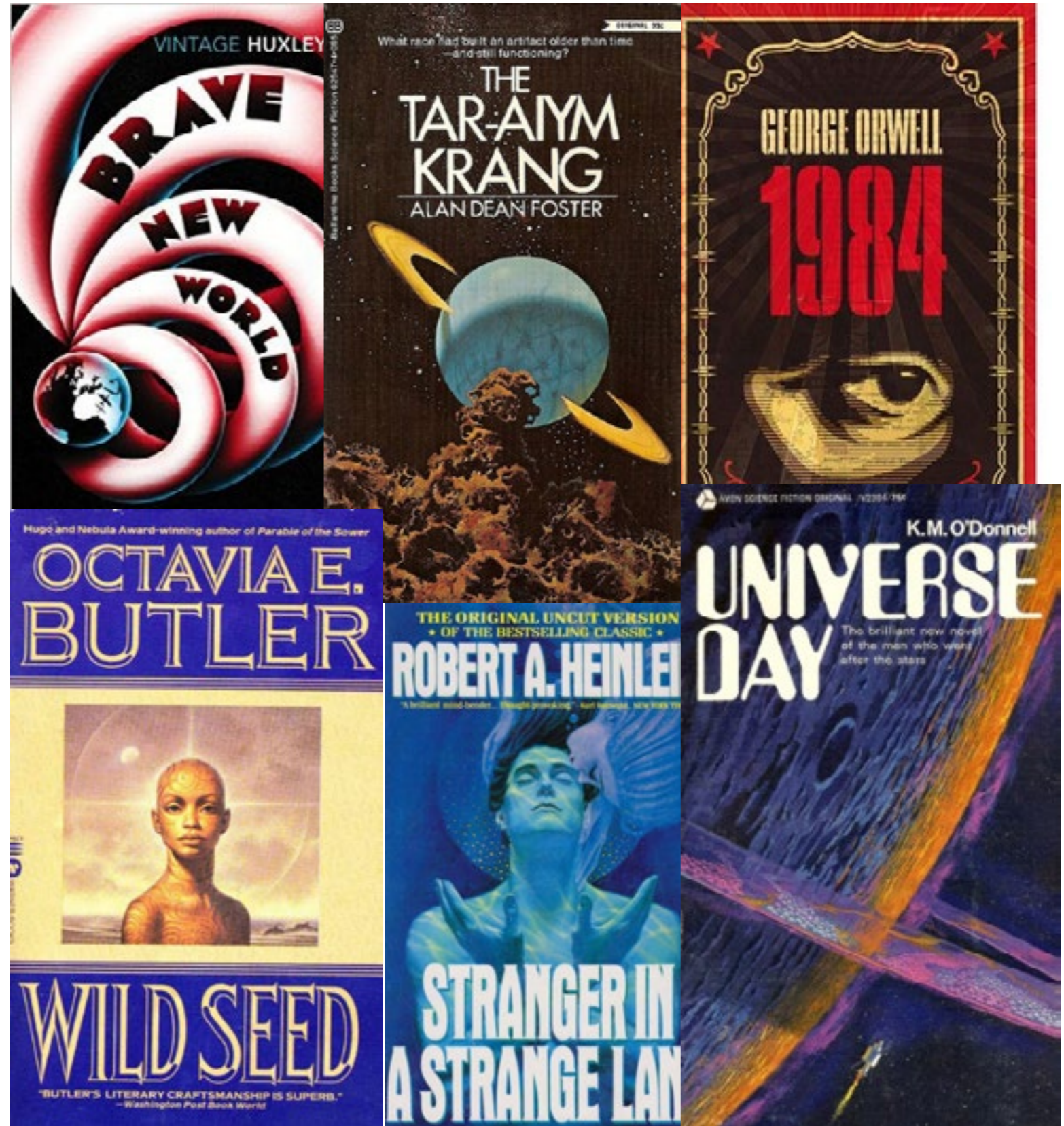


FIGURE 3.1 BRANDING INSPIRATION

# AUTOTOPIA



R: 237  
G: 190  
B: 60  
#ecebe3b

C: 7.468  
M: 23.996  
Y: 88.562  
K: 0



R: 44  
G: 49  
B: 97  
#263161

C: 24.137  
M: 77.041  
Y: 16.471  
K: 0.009



R: 193  
G: 92  
B: 143  
#c05c8f

C: 24.137  
M: 77.041  
Y: 16.471  
K: 0.009

## VOX

ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890

Vox is used for subtitles. It is a squared typeface that brings to mind calculator screens and technology. It is only used in capitals.

## Roboto

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz1234567890

Roboto is a web font from Google. It was chosen as a body copy on my website due to its legibility on screen and low contrast strokes, instilling a feeling of computer made type.

## AUTOTOPIA BRANDING

The overall branding for Autotopia was created with pulp science fiction and lower resolution computer graphics and type as an inspiration.

Each individual object retains its own branding, which will be shown in sections about those specific objects.



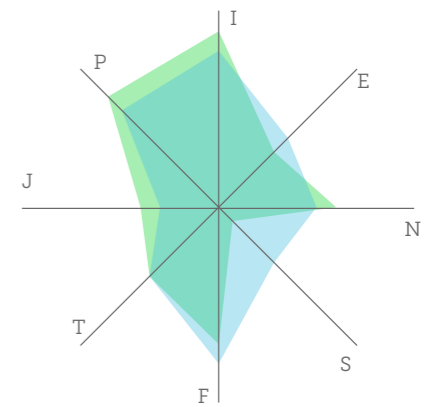


# amieCorp

# PalChat!



amieCorp  
amieCorp



## VIDEO ASSETS

For the PalChat! video, I had to create assets that would be later animated in After Effects. The silhouettes represent people that would be using the program without assigning them too much personal information (like faces). The chart shown on the left is a representation of a Myers-Briggs personality type, which

is a lengthy personality test and something that I used to quickly and visually represent similar personalities.

The branding of PalChat! and AmieCorp itself is meant to evoke playfulness and security

FIGURE 3.3 PALCHAT! VIDEO ASSETS

### 3.4 LETTER AND FOOD DEVELOPMENT

The Letter and Food Object is another object that touches on the need to emotionally connect with others, this time through food. Many families and cultures experience food as a social space, with communal dinners and sharing their food culture and making food together. Imagining how this might happen in a future with absolute efficiency in food production and how this would impact our relationship with making and sharing food, I created a narrative where a mother is sending some home made food to her child as a sort of house warming gift. The letter speaks to the challenges of actually making food in such a reduced food system as well as our attachment to memories associated with food. I want viewer-participants to be able to engage with this object in ways that challenge their assumptions about our current relationship with food as well as the effects on our food system in a world shown in this letter.

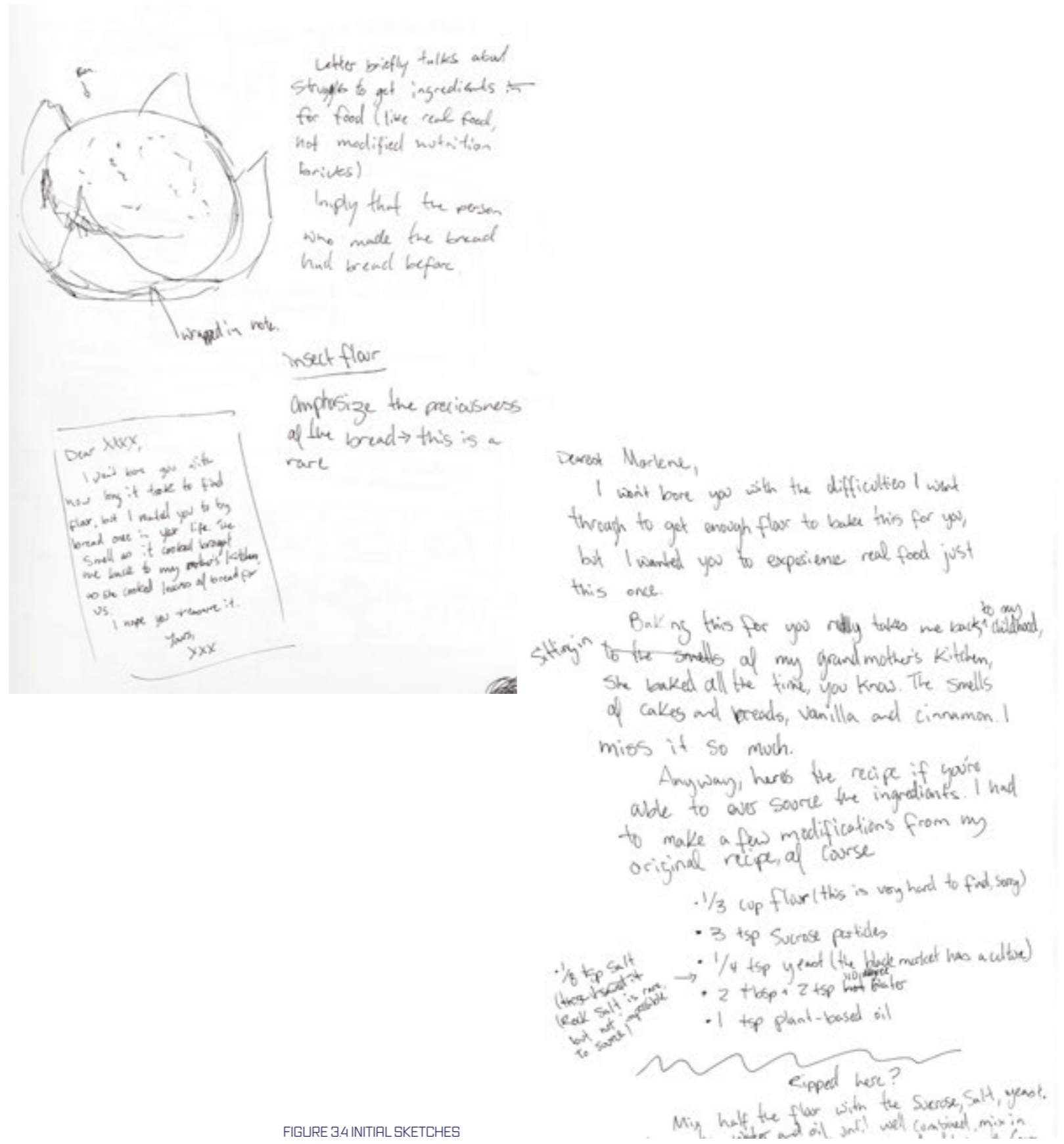


FIGURE 3.4 INITIAL SKETCHES

My dear Aydan,

Thank you for the letter you sent the other week, it was great. I hope you're doing alright in the city, and your new job is going well. I hope you are taking care of yourself and your new place properly. Your father and I are doing alright, just missing having you around. The apartment feels a little bit too big now that you've moved out on your own.

Between worrying almost non-stop about you, I've been spending a lot of time thinking about when you were a small child and were practically glued to my side. It really makes me miss spending summers at your grandmother's farmhouse in the countryside. I have to say, my favourite part of it was sitting at the kitchen table and speaking with her while she baked fresh loaves of bread and you played on the floor with your toys, babbling along to our conversation. I can still remember the smell as if I was sitting there still, so sweet and warm. It was homey and comforting, in the way that a blanket just cocoons you and makes you feel safe. Eating it was the best part though. The crunch and flake of the crust as the knife bit into it. The sweet yet tart raspberry preserves spread across the fluffy bread, with sticky, golden honey drizzled on top. It was heavenly. My mouth is watering just thinking about it. You probably don't remember it too well though, you were very young when she passed, after all.

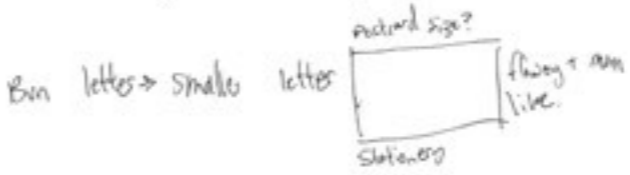
Sorry to go off on a tangent there. I guess I just wanted to explain what possessed me to send you some bread. I was just so engulfed in the memories of you as a tiny babe, I had to do something that would take me back to that moment. It was a bit of an obsession, really. I'm sure you can understand how much of a challenge it was for me to get to the end result: the bread. It's not like we eat food like we did twenty years ago, after all. I even had to substitute flour, since growing grains is apparently not efficient, so I can't guarantee the texture, cricket flour is so much more dense. I had come to a point where I feared that yeast had gone extinct, none of my searches were yielding any positive results, until a co-worker pointed me in the direction of a closely guarded sourdough culture, apparently over two hundred years old. Imagine that! Thank goodness your father works with machinery repair and was able to get me into a certain high-ranking government official's summer home to repair the old fashioned kitchen appliances so I could make use of the oven. That room smelled so incredibly heavenly, my eyes welled with tears.

Now, I can't say that the bread tastes anything like what we had at your grandmother's house and the texture is certainly not as fluffy. However, if you can get a hold of some honey and preserves and think of the texture of cotton as you chew, you'll get a similar experience. Give me a comm and let me know what you think when you get it. And, of course, fill me in on everything! I want to hear about your job, and your new place, and if you've made any friends yet, and if you're eating properly, and keeping healthy. You don't call enough!

I love you, sweetheart.  
-Mom

FIGURE 3.5 LETTER CONCEPT 1

Video → make it closer to 1 min. give some more breathing room for information.



Hi Sweetheart!  
I know you've never really had home cooking since grandma's home many many summers ago, but I was so reminiscent about those times ~~and~~ you moved out I wanted you to have <sup>some</sup> a homey comfort. I'm sure you can appreciate my efforts to make this, since it's not like I can exactly access wheat flour anymore.  
Anyway,  
Love you, Call me!  
♥ Mom.



FIGURE 3.6 REFINED CONCEPT

DESIGN REFINEMENTS

The original form for the letter was very long and said too little in so much space (see figure 3.). It seemed very out of place next to all of the other Autotopia objects, with a mountain of text and it just wasn't a designed object. It was a letter.

The newer iterations of the letter show a digitally hand painted background and a short note. The story told in the note is a very similar one to the extremely long letter, but I find the shorter letter to be more compelling for what it doesn't say. It requires a reader to fill in more of the blanks to understand what is going on with the story.

### 3.5 MOUTONIA DEVELOPMENT

What would a country ruled by a company mascot look like? As touched on in the previous section, capitalism operates in a circle of make objects —> earn income —> buy objects —> company earns profit —> make objects. If an economy was completely dependant on this loop of production, what measure could be put in place to encourage this cycle. My idea was to combine this with a company like Sanrio, who has a ton of mascot characters and allows brands to purchase the rights to use those characters on merchandise very frequently. The end result of this being the ability to buy Hello Kitty branded anything. These characters also make consumption for the sake of consumption more palatable to someone like myself, who like to surround themselves with objects of a specific aesthetic.



### DESIGN PRECEDENTS

In order to achieve the style I needed to reference companies like Sanrio and Pokemon, I referenced their designs and similar approaches. Roundness is a key trait in the characters along with

bright colours and easy to draw designs. The character's eyes tend to be far apart on the face and rounded, with an overall squish to the facial features.

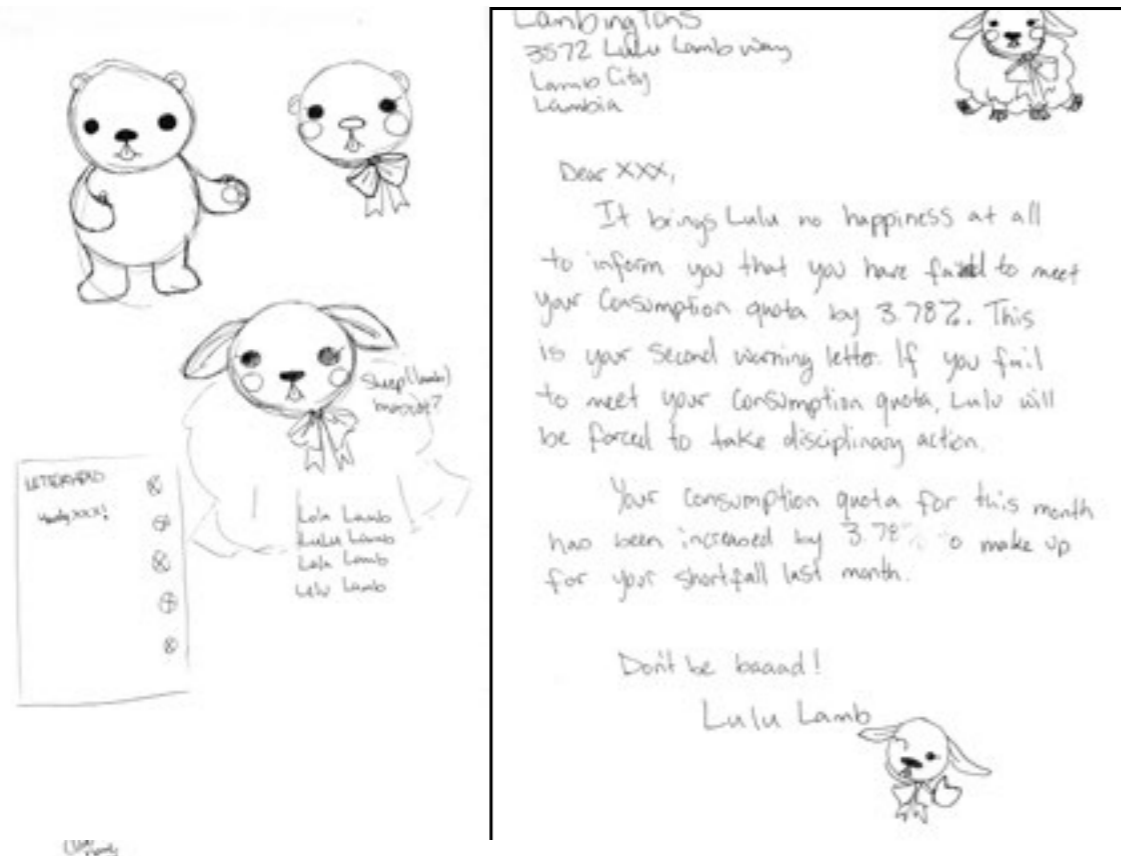


FIGURE 3.7 CHARACTER AND LETTER CONCEPTS

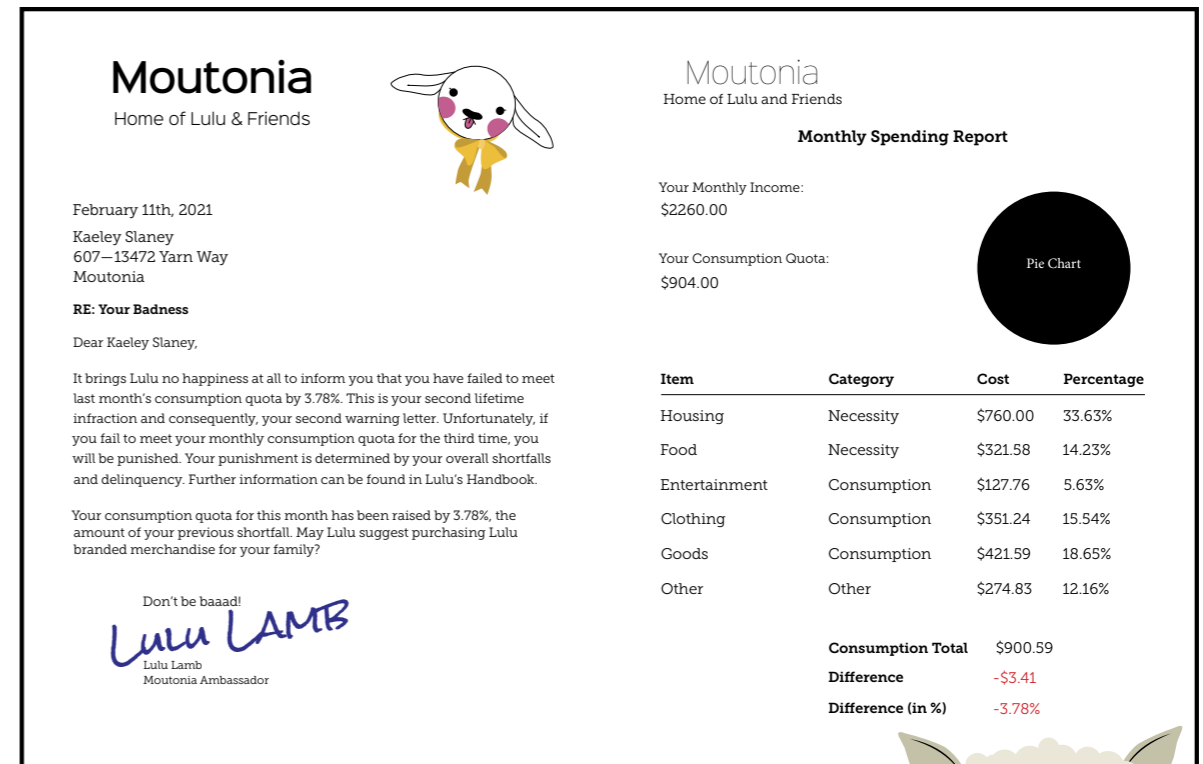


FIGURE 3.8 REFINED LETTER



FIGURE 3.7 CHARACTER AND LETTER CONCEPTS

DESIGN DIRECTION

The two letters above are from the fictional country of Moutonia (mouton is sheep in French). This object is in the form of a warning letter from the government, warning the recipient that they have not completed their duties as a citizen by not spending the



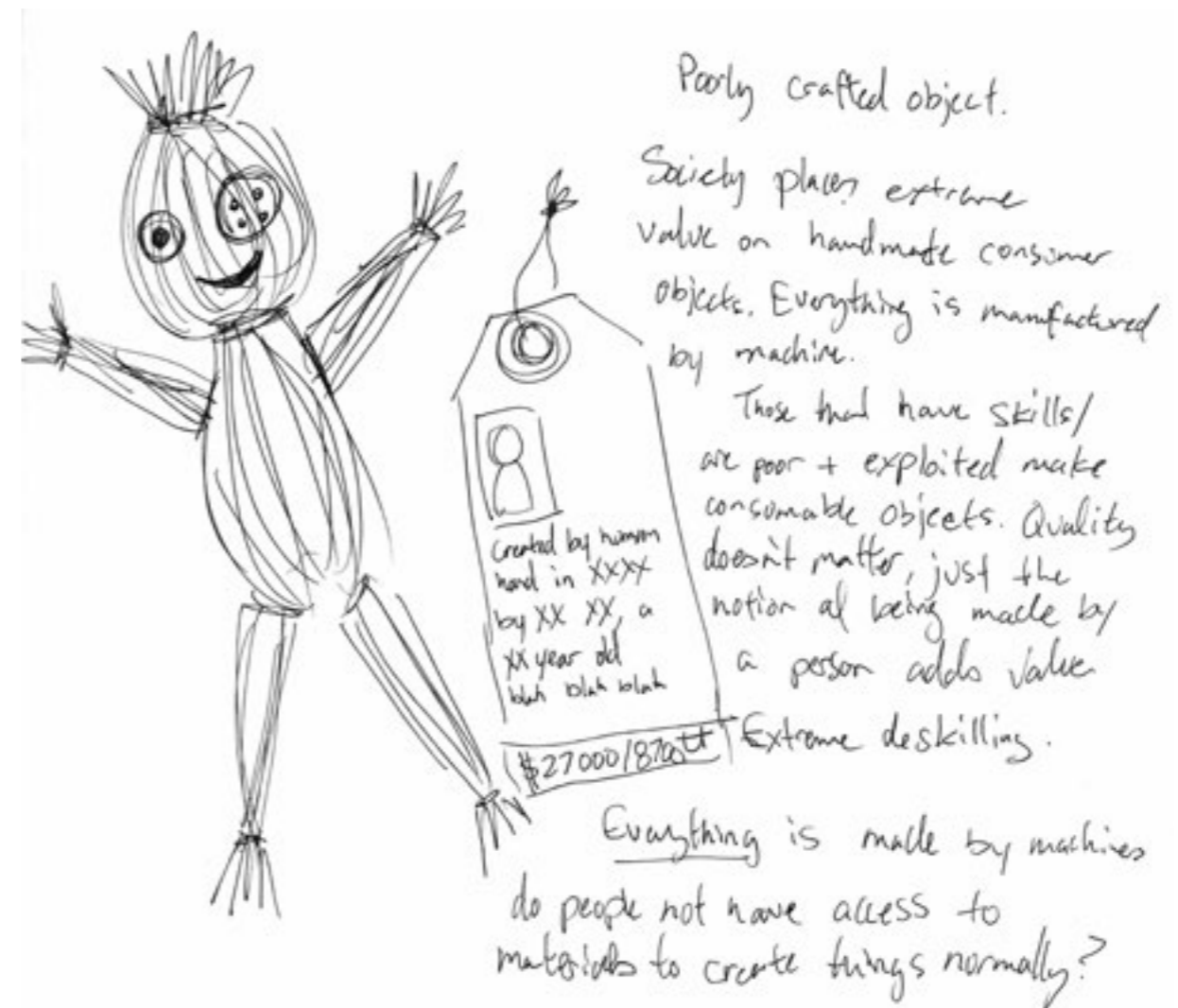
FIGURE 3.9 LULLU CHARACTER DESIGN

required percentage of income. The final iteration of this pushes the appearance of the letter more towards government letterhead.

### 3.6 SEAM DEVELOPMENT

When everything is created by machines, those with the ability to create things by hand will have extremely valuable skills. Deskilling is a process that commonly happens to those involved in manufacturing: people become skilled making only one facet of a thing versus being able to make the whole thing. This creates a population of people that are generally unskilled.

The idea behind this representation is to show both deskilling and the overvaluing of hand-made objects versus machine made objects. Right now, we can purchase ethically made and hand made objects for a greater price than a mass produced object. These objects are usually better quality than their mass produced counterparts and would last longer. For SEAM, I wanted to show an object that was made with questionable quality, versus a precision made machine fabricated object. However, due to the novelty of this object being made by hand, it is a valuable commodity.



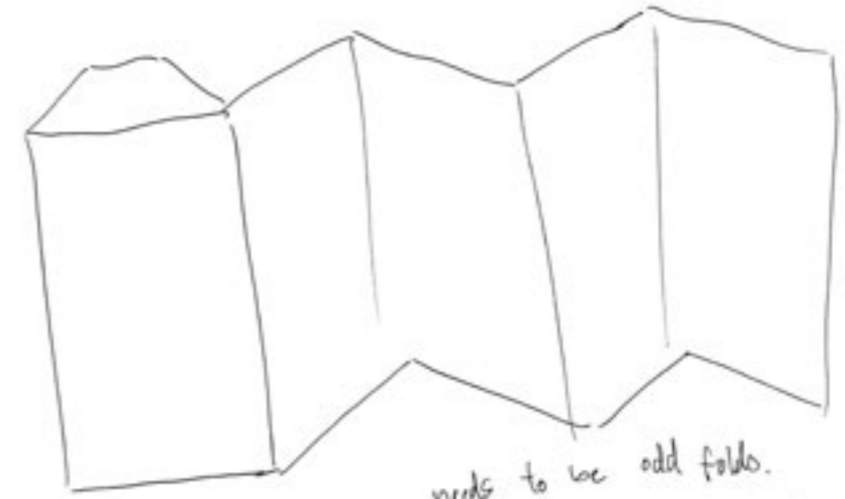
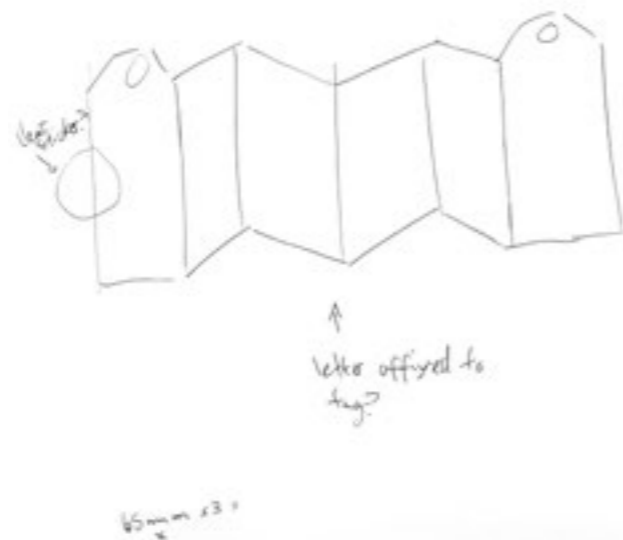
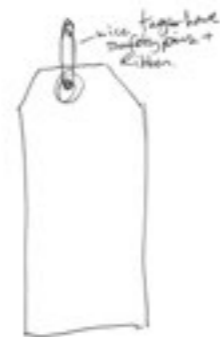
Object ideas → art work, jewelry, knitting, shadow doll.

Doll → could be something made by a child living on a farm/outside of advanced civilization + stolen to sell?

Cultural artifact?



Photo + Signature.  
 Personal letter from  
 Person.  
 Personalization  
 handcrafted.



needs to be odd folds.  
 Origami instead? → more handmade looking.

Origami envelope → has price + things on  
 outside with small letter on the inside.

5x15 cm → fits 10.5cm x 6.5cm

## DESIGN DEVELOPMENT

You'll see in the next chapter that SEAM has changed a lot since these sketches. The overall design direction presented here doesn't really speak to luxury and handmade, which are vital if an audience are going to buy that this object (a scarf) will be worth a lot of money. I researched origami envelopes as an idea: it could hold

a letter to the buyer as well as function as a tag for the object. It would look more luxurious than a folding hang tag and the necessity of folding meant that it would have another aspect of being handmade to it.

FIGURE 3.10 TAG CONCEPTS

### 3.7 NOURICHE DEVELOPMENT

The second object that examines food, the idea for Nouriche started from the reduction of our food supply into the utmost efficiency. Through researching the nutritional requirements of an average person, and through understanding that the way that we consume food right now is incredibly wasteful and inefficient, I looked for ways to represent a food system that had been reduced to only the necessary requirements for a human body to survive (and by survive I really mean exist in a state of perfect nutrition and satisfaction, not barely survive). The visual development for this object has taken cues from boxes of protein bars as well as a current of a vaguely medical appearance.

Nouriche as an object started out carrying stronger aesthetics of protein bars, being in the form of a bar itself. However, meal replacement bars are nothing new for us, as people regularly do meal replacement bars and smoothies. The goal for Nouriche then became to be more of an interruption in how we eat, and in this case, by removing the need for us to eat at all.



### DESIGN PRECEDENTS

I used the aesthetics of protein bars in the design of Nouriche with a slight medical touch to add trustworthiness to the design. I chose protein bars because people already associate them with high levels of nutrients and the ability for them to help you create your ideal body shape. The examples shown above are all protein

bars primarily marketed towards women and feature brighter colours and very specific choices in typography to add in noticeable femininity, especially with the Luna Bars and their swirly handwritten style type. I did move away from the overly feminine type in my final design, instead choosing softer pastels for colour.





### 3.8 WEBSITE DEVELOPMENT

As I always planned to have Autotopia be on a website, I wanted to create a design that would allow the objects themselves to be at the forefront of the web pages with supporting text and information. With that in mind, I had sketched out layouts that matched these requirements. Additionally, I felt that I needed a page so that people viewing the website would be able to be directed to information about automation and perhaps critical design in order to better understand my topic if they so choose to. Information wise, I have provided a short introduction to automation and critical design alongside links to more information about both topics.



AUTOTOPIA Website Wireframe

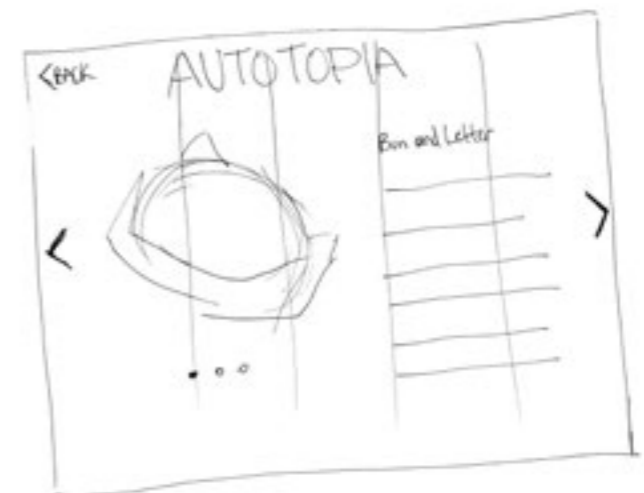
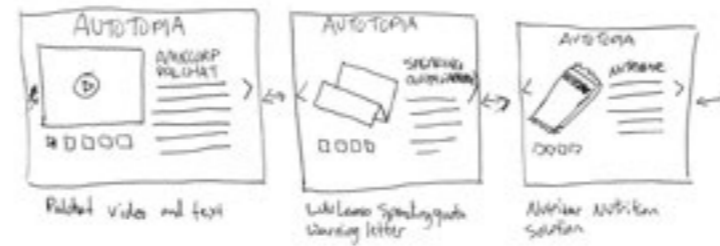
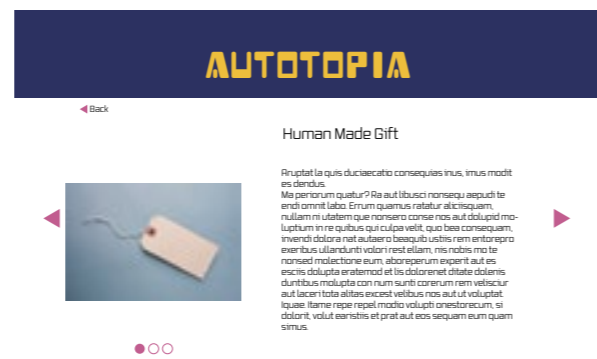
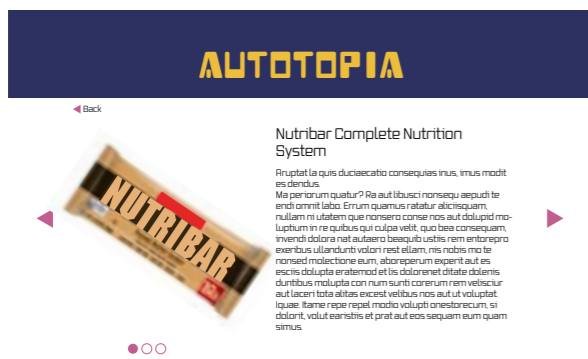
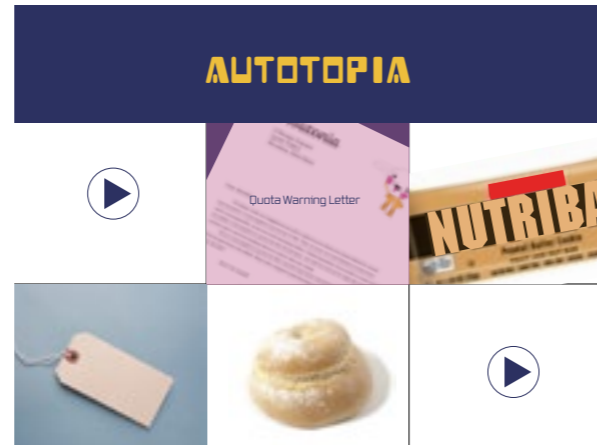
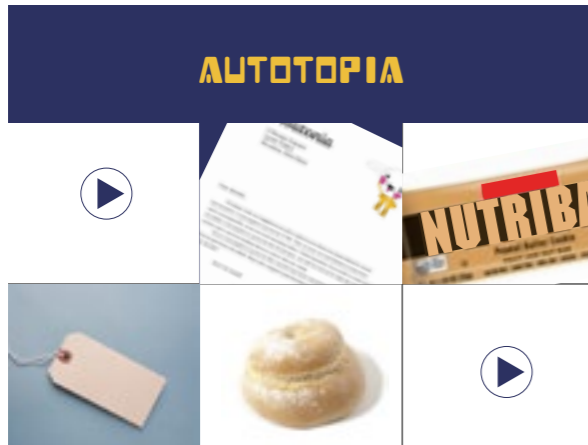


FIGURE 3.13 WEBSITE SKETCHES



## WEBSITE WIREFRAMES

The wireframes present the order of the pages on the website as well as the order of the objects when viewed on the website. The final page serves as a hub of information for those wanting to learn more about automation as well as critical design. At this stage I wasn't sure of the direction to take the copy on the site: did I

want to tell yet another story or did I want to treat it more of a documentation? Either way, what I didn't want to do was lead the viewer-participant in any sort of direction with the text, it was up to them to make meanings.

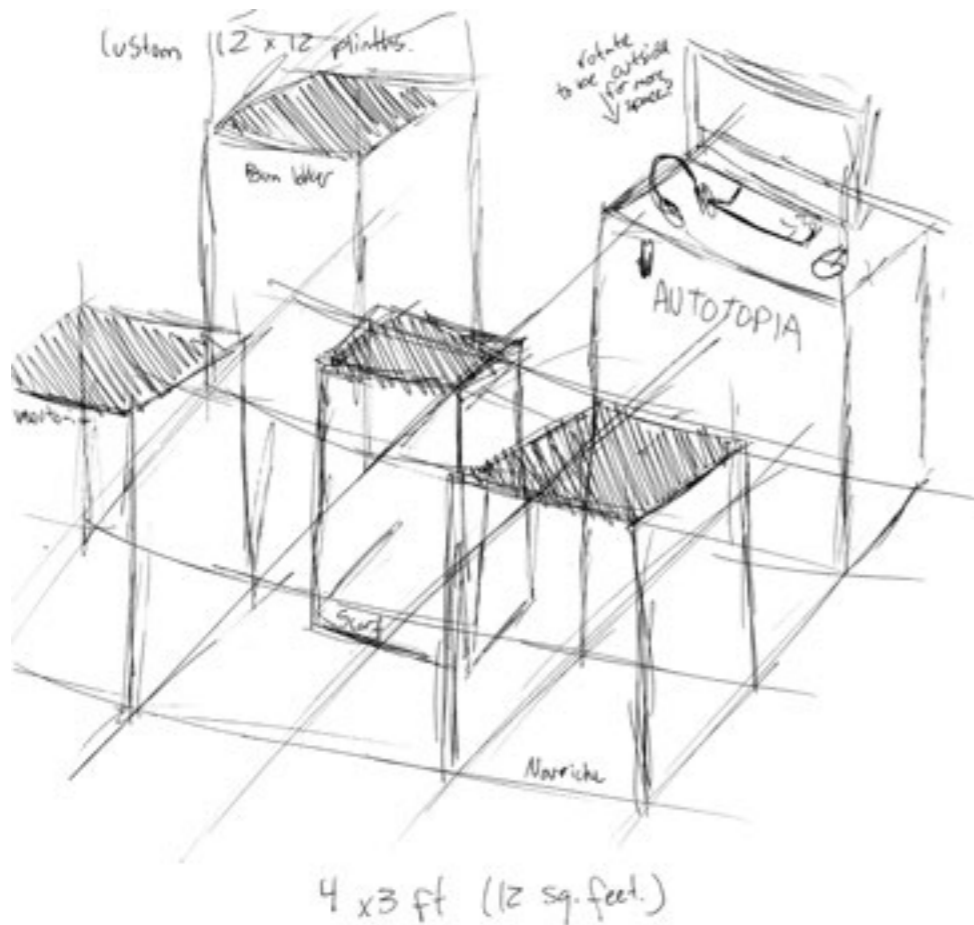
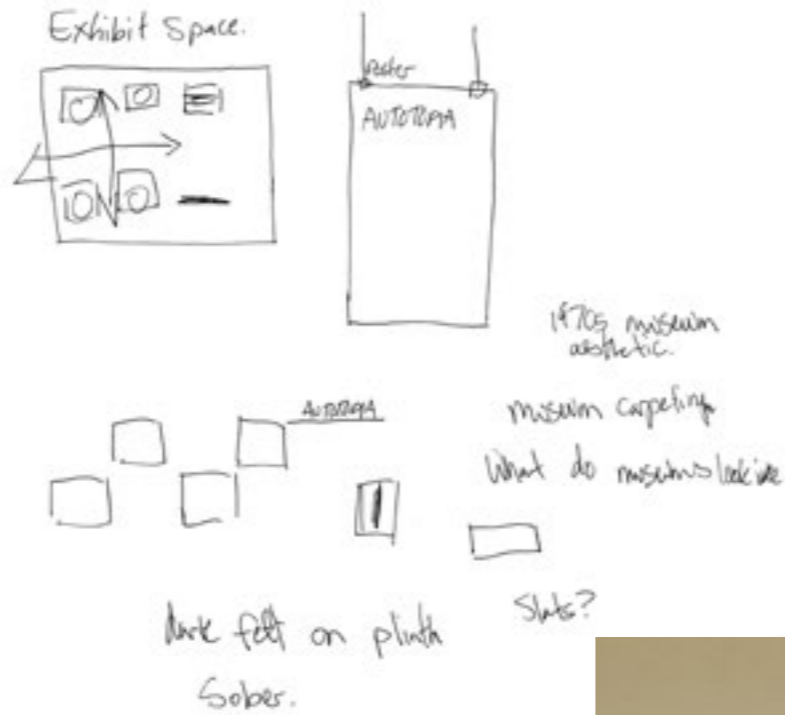


FIGURE 3.14 EXHIBITION REFERENCE AND INSPIRATION

### 3.9 EXHIBITION DESIGN

As a majority of my concepts and objects from Autotopia draw inspiration from 1970s science fiction, in themes and visuals, I decided that I would also carry forward that inspiration into my exhibition design. The photos included on this page present a sterile, library-esque aesthetic that is functional and minimalistic.

It is my intention with the exhibition design to allow my work to be presented as archival objects that speak for themselves. It is important that a viewer is given the opportunity to engage with the project as much as they want to, which suited this presentation.



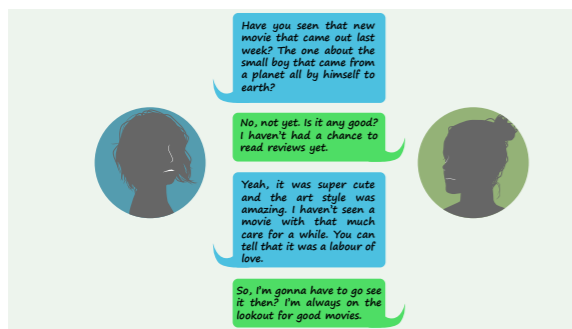
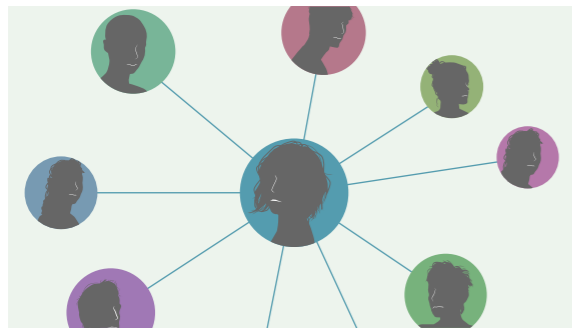
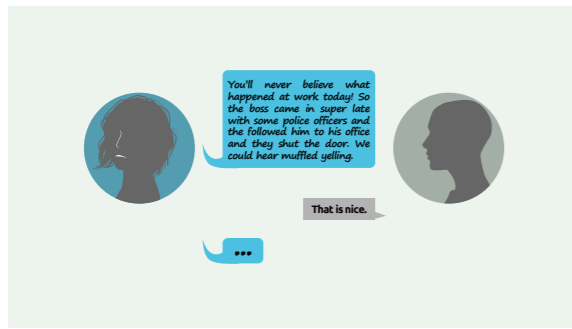
### 3.10 EXHIBITION MAQUETTE

Distilling the visual research and inspiration into sketches, I then created a 1:12 inch scale model of the exhibition space. Each of the 4 objects appearing on display are also represented in miniature on plinths, with plastic sheets representing plexiglass cases. The arrangement of the objects would change when I was assigned my space in the exhibition.

# 4.0 DESIGN OUTCOMES

## 4.1 DESIGN OUTCOMES INTRODUCTION

Through the refinement of designs, each of Autotopia's objects represents a finely tuned narrative with supporting design choices. As a speculative design object exhibition, a viewer-participant needs to connect with the story of the object and be able to think through the implications attached to each of the objects. The goal here is to ask people to be able to willingly suspend their disbelief and treat the objects as though they actually exist, and the success of the objects depends on how people are able to resonate with them.



## 4.2 PALCHAT!

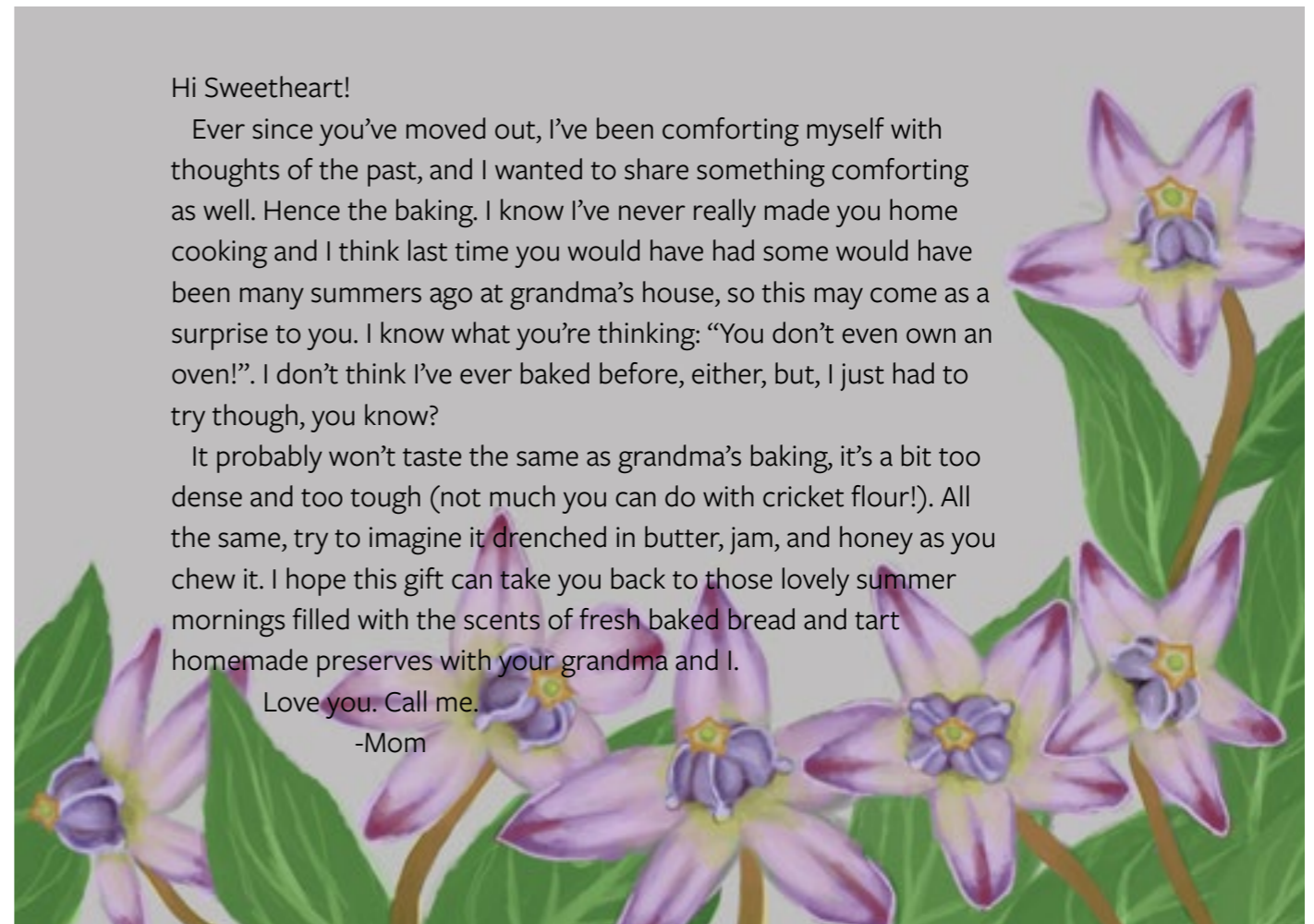
Currently the video for PalChat! is 30 seconds long. It is a motion graphic video done in After Effects that acts like a commercial: the video describes a service that allows people to purchase time to speak with another human being. The video declares that they can match a user up to another person using algorithms that take

personal information from the user, as it also implies that all personal information is not actually personal.

FIGURE 4.1. PALCHAT! SCREEN SHOTS



FIGURE 4.2 STRANGE FLOWERS



Hi Sweetheart!

Ever since you've moved out, I've been comforting myself with thoughts of the past, and I wanted to share something comforting as well. Hence the baking. I know I've never really made you home cooking and I think last time you would have had some would have been many summers ago at grandma's house, so this may come as a surprise to you. I know what you're thinking: "You don't even own an oven!". I don't think I've ever baked before, either, but, I just had to try though, you know?

It probably won't taste the same as grandma's baking, it's a bit too dense and too tough (not much you can do with cricket flour!). All the same, try to imagine it drenched in butter, jam, and honey as you chew it. I hope this gift can take you back to those lovely summer mornings filled with the scents of fresh baked bread and tart homemade preserves with your grandma and I.

Love you. Call me.

-Mom


#### 4.3 LETTER AND FOOD

Instead of a wordy, unwieldy letter, this object has been changed into a postcard with paintings of strange flowers in the background. The letter touches on the challenges that the mother faced creating the food gift for her child as well as describing a connection to memories that food has for the mother, but they live in a reality where

those connections to food have more or less been severed. I want this object to allow people to think about the memories that they have associated with food and how that relationship may continue to change in the future where our relationship to food has the potential to change drastically.







February 11 2021  
 Kaeley Slaney  
 607-13472 Yarn Way  
 Moutonia




**RE: Your Badness**

Dear Kaeley Slaney,

It brings Lulu no happiness at all to inform you that you have failed to meet last month's consumption quota by **3.78%**. This is your second lifetime infraction and consequently, your second warning letter. Unfortunately, if you fail to meet your monthly consumption quota for the third time, you will be punished. Your punishment is determined by your overall shortfalls and delinquency. Further information can be found in Lulu's Handbook.

Your consumption quota for this month has been raised by **3.78%**, the amount of your previous shortfall. May Lulu suggest purchasing *Lulu & Friends* branded merchandise for your family?

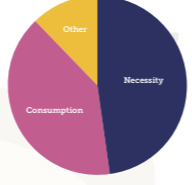
Don't be baaad!

**Monthly Spending Report**

Your Monthly Income:  
**\$2260.00**

Your Consumption Quota:  
**\$904.00**



Item	Category	Cost	Percentage
Housing	Necessity	\$760.00	33.63%
Food	Necessity	\$321.58	14.23%
Entertainment	Consumption	\$127.76	5.63%
Clothing	Consumption	\$351.24	15.54%
Goods	Consumption	\$421.59	18.65%
Medical Expenses	Other	\$110.33	4.88%
Other Services	Other	\$89.67	3.97%
Other	Other	\$74.83	3.31%
<b>Consumption Total</b>		<b>\$900.59</b>	
<b>Difference</b>		<b>-\$3.41</b>	
<b>Difference (in %)</b>		<b>-3.78%</b>	

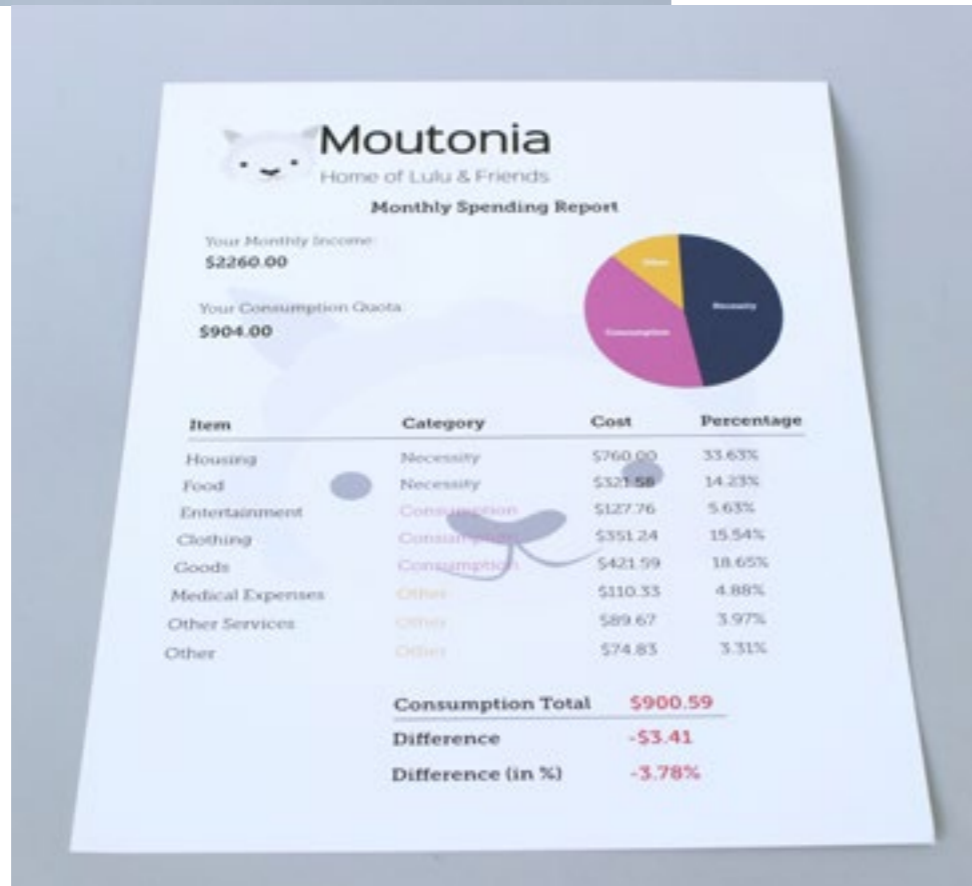


4.4 MOUTONIA LETTER

Appearing as a letter and a bill, the Letters from Moutonia look very cute at first glance, but carries undercurrents of totalitarianism and absolute capitalism. The name and dates on the letter will be blacked out for the exhibition and photos, in order to not place

it in a certain time period and to create anonymity, as the identity of the recipient of the letter is not important.

FIGURE 4.3 MOUTONIA LETTER DESIGNS





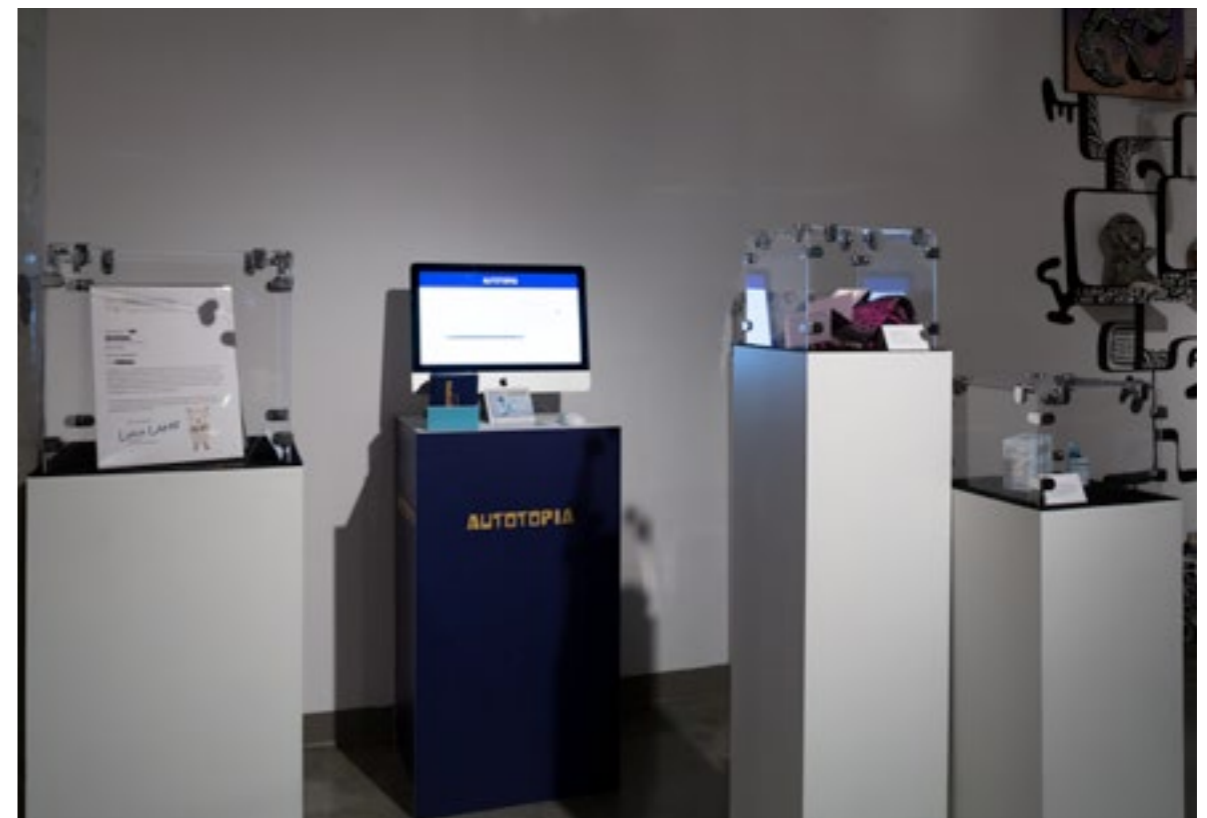
#### 4.5 SEAM TAG

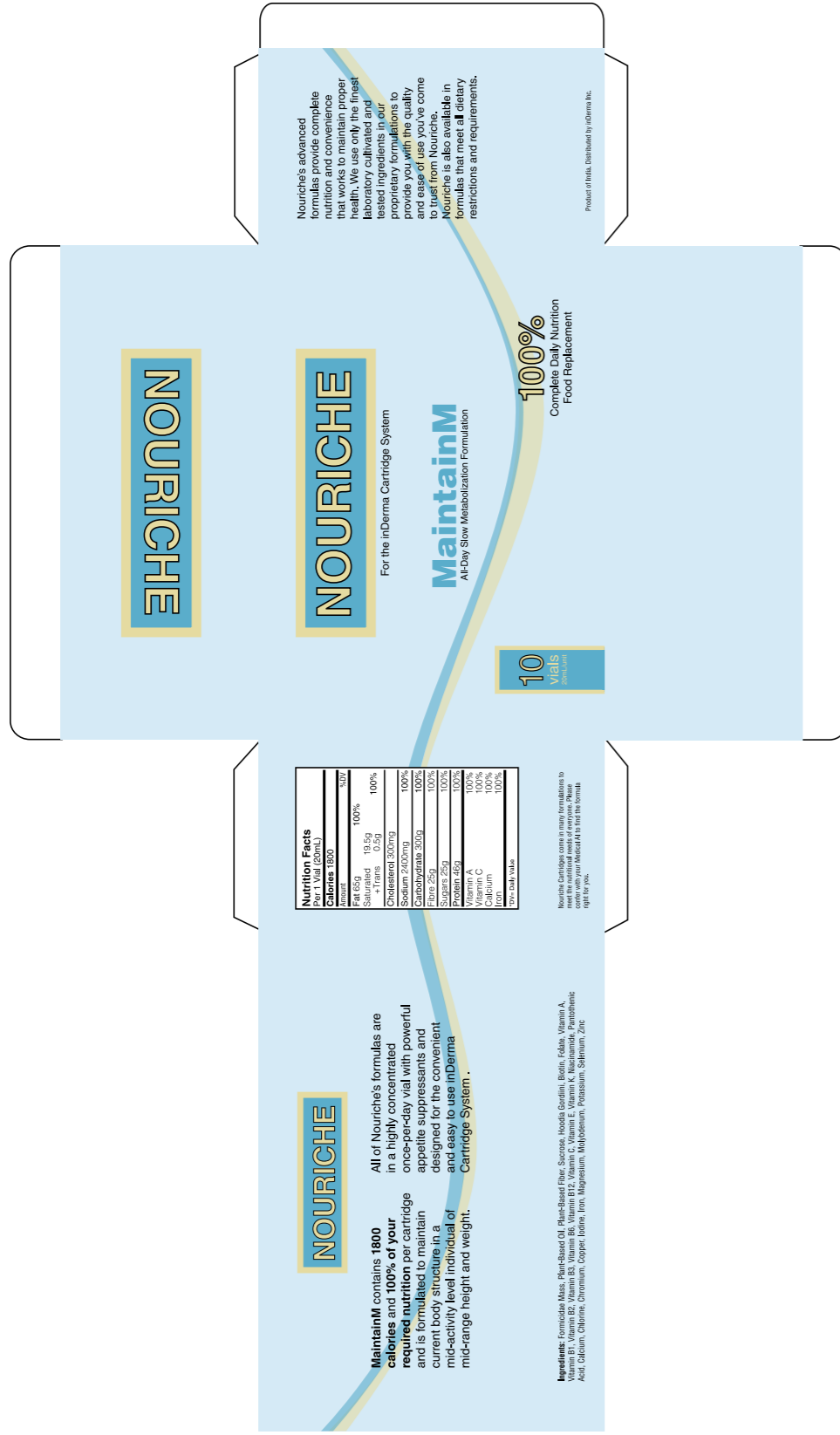
The hang tag for SEAM consists of a folded origami envelope and a letter. I decided to go with purples and a brocade pattern to emphasize the luxury element of the object and to show that the handmade aspect extends from the scarf and into the tag, since the practice of origami requires a human hand to do it. The design I chose for the origami resembles

a ribbon and has an intricate appearance compared to other envelopes.

The letter itself describes some aspects of the life of the person who made the object, as a selling point of the scarf, so that the people buying the object are able to also purchase the personal details of someone else.

FIGURE 4.4 SEAM LETTER DESIGNS





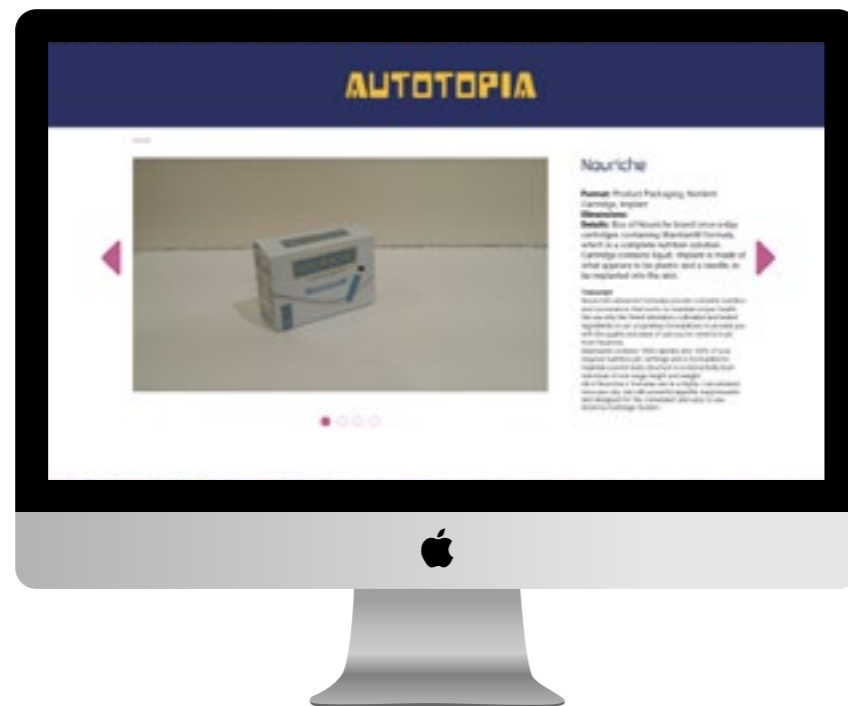
#### 4.6 NOURICHE

At first glance, I feel that Nouriche is a little unassuming: it looks a little medical, a little bit like a supplement. However, the real information is gained by reading the box, which describes how to use the product, nutritional information and ingredients. My favourite part of the design was the little bits of information I

was able to sneak in, like that the protein is derived from insects and instructions on how to use, which lets a viewer know it is an injectable.

FIGURE 4.5 NOURICHE DIELINE





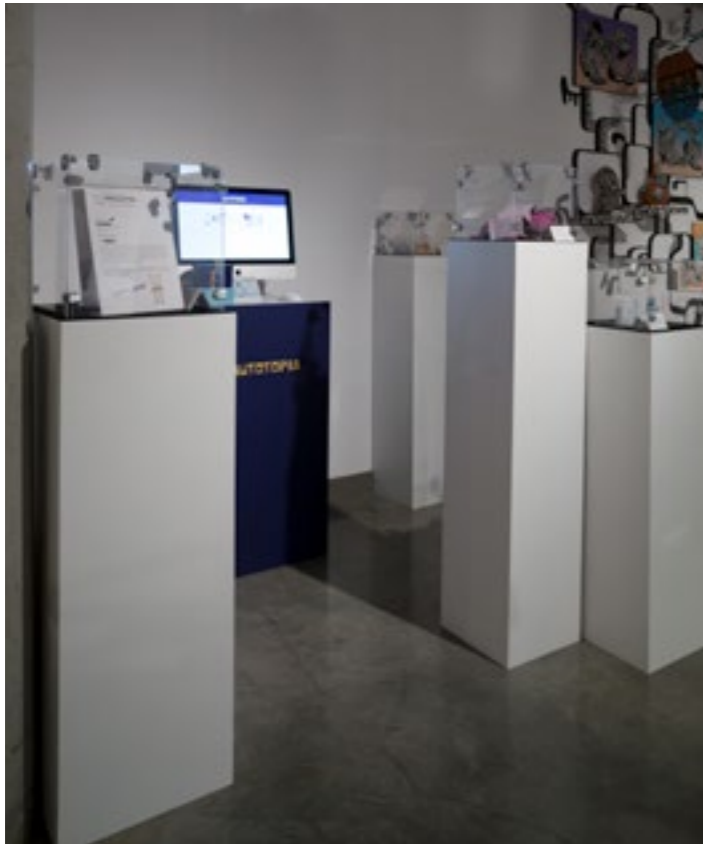
#### 4.7 WEBSITE

The website for Autotopia treats each object like an object found in a museum: the information accompanying the object is purely informational. Each object is shown alongside a text transcript of all the copy on the object or spoken word in the video as well as information such as size of object and length of video. Each

object is shown multiple ways via a slideshow so that people are able to view the object from multiple angles and be able to more fully engage with the object visually. The final page of the website is informational and give a brief explanation of the project with some resources for people curious about automation.

FIGURE 4.6 AUTOTOPIA WEB PAGES





#### 4.7 EXHIBITION DESIGN

In the exhibition space, each object is accompanied by an information card, with pertinent information such as dimension and title on it and is protected by a plexiglass cover. The objects sit on top of black felt, which lends an air of sterility and sombreness. This set up treats the objects like museum artifacts and forces a viewer to

engage with them at arm's length. This representation also lends credibility and believability to the objects. A viewer may walk around the objects and view them at multiple angles as well as access the computer to view the website.

# 5.0 CONCLUSIONS

## 5.1 CONCLUSION SUMMARY

**This chapter functions as a decompression and examination of all the work completed thus far. With this section, I will be looking at the project as a whole, breaking it down, speaking to my experience in making Autopia and where I intend to take it in the future.**

## 5.2 PROJECT ASSESSMENT

Creating Autotopia was a giant step outside of my design comfort zone in many ways and was a great challenge for me to create. I enjoyed the marriage of research and design in creating the objects and was able to use each object to show different skills and present the concepts in different ways. Accessibility was a huge factor for me in this project, as people needed to be able to access the information easily and be able to at least understand each object on a surface level. I know that this sort of project will not be appealing to everyone, but I feel that those who want to spend time with Autotopia will be able to get a new understanding of automation and see how design can be used in ways that are not commercial.

This project helped me to better understand where I want to go and who I want to be as a designer and the direction that I want to take my future work in. I hope to be able to continue to build on my ability to be a critical designer and to work in order to challenge how things currently are.

## 5.3 PROJECT EVALUATION

Doing this project gave me the opportunity to think abstractly and create objects meant to pose questions rather than offer solutions.

Some of the objects didn't quite turn out as well as I'd liked, in the timeframe I had for the project at this point. In particular, I'm not pleased with the presentation of the letter and gift object. My concepts presented a more elegant solution in terms of the layout of the letter that didn't get translated to the final version.

Amie Corp knows you have more love to give than just your single allotted child. That's why we're now running a trial program for Shared child Surrogacy and you've been chosen to participate! Your Citizen data has matched you to your perfect second child and our flexible plans allow you to select the parental surrogacy commitment plan that suits your life. Your participation in this trial will allow us to fine tune the programme and create the perfect commitment plans. We guarantee that our parental surrogacy program will enrich your happiness.

Amie Corp: Relationships that fit your lifestyle.

#### 5.4 FUTURE STEPS

Autotopia, as a project, is able to continue as long as I create new objects for it. As automation is discussed and examined, I would like to be able to create objects that react to or result from the topics those dialogues engage with.

As an example of a new object, to the right, there is the script and storyboard for a service that rents out children to wealthy people in order to provide them with an additional parenting outlet. This video would be the second of the AmieCorp videos, the first one being PalChat! and would examine a darker, more questionable, monetization of interpersonal relationships.



# 6.0 APPENDIX

## 6.1 APPENDIX NOTES

Contained within the appendix are research notes and drawings that didn't fit into the main body of the process book.

Sputniko! Menstruation Machine, Takashi's Take  
 Well known Artist + Designer - explores alternate futures.  
 Menstruation - Why are women still menstruating?  
 Examines cultural factors for periods, what  
 a period means to women/female experience. What  
 does it mean to be female + not menstruate?  
 Music video used to attract viewers not in a  
 typical gallery space. → uses jpop. on Youtube.

Black Mirror - 15 million Merits.

People that are of wealthy body like for money.  
 Everything costs money → food, skipping ads, entertainment.  
 Biking is for raising money. Somewhere Pop stars  
 are very important in society → There are auditions to  
 run your own channel + be a star, those channels provide  
 the only form of entertainment for those physically fit  
 enough to bike, which are middle class citizens. Physically  
 unfit are lower class + either clean or participate in  
 degrading work to survive. Upper class are the people running  
 society as well as Pop stars.  
 Commenting on a world fueled by entertainment, labour, +  
 micro transactions.

Future envisioning  
 on a design exhibits. Old style futurism  
 Square (Pump)  
 Suffixes + prefixes.  
 dyst/utopia  
 (dys)(u)topia  
 Post- (scolding) Utopia  
 AUTOSIA  
 AUTOTOPA  
 Autopia: Automation Utopias  
 Autopia  
 Automation Utopias

Forced Consumption Artifacts: Warning letter for not spending enough,  
 heavily branded character merchandise, propaganda featuring character  
 telling you to spend. Something to highlight lack of jobs, competition for  
 remaining jobs. Expensive option - vitamin fortified, precious materials  
 (Spandy version)

Handmade Artifacts: Shoddily made object w/ large amounts of personal  
 information on creator. (deskilling + desire for non machine made objects). Small  
 loaf of bread (ugly, made by hand vs machine) Doll/humanoid object.

Emotional labour Artifacts: Subscription to a 24 hour <sup>12 month</sup> access to a  
 human to talk with object to represent women as primary workers.  
 Purchase child - temp kids.

Utopian Artifacts: hand written, partially destroyed "list" of  
 banned things. Ethically sourced + produced lab grown nutrition  
 pouch. Info packet for new family/baby/marriage

## → Tobias Reull - Critical design fiction lecture →

"Critical design uses speculative design proposals to challenge narrow assumptions, preconceptions and views about the roles products play in everyday life. It is more of an attitude than anything else, a position rather than a method. Its opposite is affirmative design, design that reinforces the status quo" - Hertzian Talks.

### Towards a Critical Design.

Normalcy is vital in Design Fiction, human

What is Design Fiction?

Bruce Sterling "It's the deliberate use of (diegetic prototypes) to suspend disbelief about change" → prototypes from another world

President

United Micro Kingdoms.

James Biddle

Little Printer

Space Exodus (Harissa Sansour)

Ships not Shelters (Peckham Outerspace Initiative)

3D printing.

Current State of the world. (Between 2008+2011)

- US + UK evacuated officials from Yemen (terrorist fears)
- Massive Earthquakes in Asia killing thousands.
- Icelandic Volcano erupts + grounds Euroflights.
- Haiti Earthquake
- Fukushima tsunami + earthquake
- Revolutions in Kyrgyzstan, Niger + Honduras.
- Swine flu (Ebola)
- North Korea attacked South Korea
- Greek economy collapsed + Euro debt (bans)
- 1st synthetic cell invented
- Wikileaks
- Massive flooding
- Arab Spring → Spiked oil price by 20% (oil has now crashed)
- Osama bin Laden killed
- Anders Brevik kills 77 in Norway.
- Epidemic levels of school shootings in US (still sane + police brutality)
- Mars Curiosity landed
- Occupy Wall Street.
- Student Riots.

This sort of upheaval is not usually noted in design fictions.

\* The Real threat to our jobs was never offshoring  
(youtube)

2000-2008 5.8 million jobs lost in manu-blamed on offshoring.

Only 20% actually due to offshoring.

Rest due to technological advance & lower demand

Get Ready for the Next Wave of Tech Disruptions

Tech + 3D printing. Its cheaper to manufacture in

Europe + US is cheaper than China. Manufacturing

will be disrupted massively. No more outsourcing.

15-20 years → 3D print own electronics

Finance → Bitcoin + Crowdfunding disrupting capital ventures.

Personal loans. Cardless transactions. Don't need banks.

Major innovations can happen abroad.

Health → Apple wants to be center for health. Monitor everything w/sensors + send to cloud. Predict sickness

AI based physicians. Genome sequencing → cheap.

Health care revolutions. Robotic surgeons. 5-10 years.

Energy → Solar is becoming very affordable. Will become cheaper to produce own solar than buy from grid. Eclipse fossil fuel.

Vertical farms.

3D print meat.

Wifi everywhere. make phonecalls over internet.

Companies refuse to invest into this future. New industries will emerge.

\* Are Droids taking our jobs? TED Talk

Are all the new technologies taking over jobs?

Corporate profits are at an all time high + investing in new tech, but employment has not. Fewer people working @ the end of the decade vs start.

Tech is displacing skills like never before.

Translators are becoming obsolete.

writing by algorithm.

Siri and Watson are just getting better + better (knowledge work)

Google self driving cars.

An economy that doesn't need a lot of human workers.

"Work saves us from 3 <sup>great</sup> evils boredom, vice + need" - Voltaire

What have been the most important developments in human history? Religion, Empires, plagues, ~~flourishing~~ flourishing of Arts + Sciences.

STEAM ENGINE → Industrial Revolution.

Overcoming limitations of our muscles.

Computers - overcome limitations of our brains.



## The lights in the tunnel.

- Computers could become <sup>~Intro~</sup> at least as intelligent as humans by 2029.
- Issues associated w/human employees: Vacation, Safety Considerations, payroll, performance, mat leave, Sick leave etc.
- Many jobs do not require the full intellectual breadth of a human being. Robots will be able to fulfill these jobs.
- Economists not thinking about this → "unthinkable"
- Mainstream economists believe that an increase in technology will always result in an increase in prosperity and new jobs → seen as an economic law → called a Neo-Luddite
- Little attention given to mundane and immediate threats to job market + Economy. Assumption that technological economic issues will sort themselves out.
- Historically tech + the market economy has worked hand in hand to make us all wealthier.
- Our economy cannot work without a viable labour market. Jobs are the primary mechanism through which income is distributed to the people who consume everything the economy produces.
- Machines taking over the majority of basic labour done by humans will be a threat to our economic system.

Technology is accelerating → the impact of this could be long before we expect it.

## ~ Chapter 1: The Tunnel ~

conventional views that people accept re: offshoring + automation

- offshoring + automation may result in 'job losses' in certain types of industries, types of jobs or geographic regions.
- As jobs are eliminated in one area, innovation + economic growth create new opportunities.
- As a result, new products, services, business + jobs are created.
- Offshoring creates new opportunities for people in low wage countries (China)
- which creates a larger middle class.

assumption of the text: at some point in our future, machines will be able to do the jobs of a large percentage of "average" people in our population and these people will not be able to find new jobs (pg 9)

who will these people be? 50-60% of the population who do things like drive trucks, fix cars, work in retail or grocery stores, offices + factories. Customer service, accounting, sales people, small businesses.

assumption: These people will not be able to find a new job. New jobs might be in a different field, out of their skill set or automated right away.

Across the board automation → reduces demand for products, as employment falls + employment falls as demand is reduced for products.  
People who rely on jobs as income are the same people who buy stuff.

• Mass produced goods are the backbone of our current economy.

• Initial automation → small amount of job loss, but efficiency allows for cheaper goods. Paying less employees + higher output + increase in sales = good!

• Continued automation → greater reduction in lower level jobs = less people employed = less people buying things = need more layoffs to be profitable = corporations and wealthy lose money = lots of poverty.

~ Chapter 2: Acceleration ~

Computer tech ~~double~~ improves at a rate of about double every 2 years. (geometric growth)

"Exponential [or Geometric] growth is deceptive. It starts out almost imperceptibly and explodes with unexpected fury." - Ray Kurzweil (37)

The average worker is better educated + more able to perform complex tasks than in 1912 (Industrial Revolution) (49)  
Can we expect this to continue?

In the US, currently, high school grad rates are 66 to 88 percent → over 14 percent of adults lack basic reading skills. → average worker's skills growing stagnate? (tech is doubling every 2 years, we are not!)

Health in working age people also declining (obesity etc) while health improvements help the elderly. (52)

Automation has resulted in more IT job losses than offshoring (56)

The Light in the Tunnel Cont.

~ Chapter 3: Danger ~

We would expect to see gradually rising unemployment, stagnating wages + significant increases in productivity as industries were able to produce more goods + services w/ fewer workers (134)

Output per worker soared by 5.7% in the second quarter, at an annualized rate. But in today's less exuberant times, the figure has raised the unhappy prospect of growth without job creation (139)

The amount of goods or services a worker produces an hour has soared a dizzying 21% (139)

Economists do not consider the market itself to be a public resource. However, I will argue that the market is really the ultimate public resource (139)

Payroll taxes makes the funding of social programs highly susceptible to demographic imbalances (142)

Jeremy Rifkin gives many examples of the social impact that job automation has already had and speculates that in the future, it may lead to social disintegration, dramatic rise in crime, civil unrest and possibly even the fall of governments. (152)

In order to preserve the mass market in a largely automated economy, we need to provide an alternative to jobs (159)

The idea that we must work for a living is one of our most basic core values (159)

This is a belief system that is fundamentally based on the historical reality that human labour is indispensable to the production process (159)

To preserve our free market system, broad-based consumption is essential. (160)

There is simply no real alternative except for the government to provide some type of income mechanism for consumers. (160)

We cannot have long term prosperity unless enormous numbers of people have sufficient income - and sufficient confidence in the future - to power sustained consumption. (161)

## Speculative Everything.

"It is becoming clear that many of the challenges we face today are intractable and the only way to overcome them is by changing our values, beliefs, attitudes and behaviour." (2)

"We believe that by speculating more, at all levels of society, and exploring alternative scenarios, realities will become more malleable and, although the future cannot be predicted, we can help set in place today ~~that~~ factors that increase the probability of more desirable futures happening." (6)

Conceptual design should have a social usefulness. to question, critique, and challenge the way technologies enter ~~our~~ lives + the limitations they place on people through their narrow definition of what it means to be human. (34)

Concerns w/ critical design - becomes a design label rather than activity, style rather than approach.

"The most threatening act of ~~the~~ <sup>capitalist</sup> protect in a capitalist system would be for its citizens to ~~not~~ <sup>refuse to</sup> consume" (37)

"Citizens choosing more leisure time + less consumption lead to economic collapse due to severe decline in profits."

Critical design centered with deep, dark emotions, which are often ~~of~~ forgotten about in regular design; designers "don't make ugly, negative things".

\* "about positive use of negativity, not negativity for its own sake, but to draw attention to a scary possibility in the form of a cautionary tale." (38)

\* Bernd & Holger Matthies "Belief Systems" 2009.

for a critical design to be successful, viewers must make up their own mind. (40)

\* Dark Design \*

Emancipator Social Science: "As a theory <sup>a journey from</sup> of the present to a possible future: the diagnosis and critique of society tells us why we want to leave the world in which we live; the theory of alternatives tells us where we want to go; and the theory of transformations tells us how to get from here to there - has to make viable alternatives achievable" - Erik Olin Wright / Envisioning Real Utopias.

To achieve change → unlock people's imaginations and apply it to all areas of life at a microscale.

A good Science fiction writer does not just think of the automobile, but also the traffic jam  
develop "useful fictions" for facilitating debate.

\* Roberto De Zerо - Heterocosmica: Fiction and other worlds \*

"The key distinction is between actual and fictional. Actual is part of the world we occupy whereas fictional is not." (70)

(Pg 74)

\* We provide some visual clues but the viewer still has to imagine the world the design is being based on: politics, social relations and ideologies. (74)

Designs that the viewer can use to imagine the kind of society that would have produced them (76)

The best speculative designs do more than communicate, they suggest possible uses, interactions and behaviours that are not always obvious at a quick glance (89)

If our beliefs and ideas don't change then reality won't change either. It is our hope that speculating through design will allow us to develop alternative social imaginaries that open new perspectives on the challenges facing us. (189)

Although these proposals draw on rigorous analysis and through research, it's important that they do not lose their imaginative, improbable, and provocative qualities. (189)

Ask questions rather than provide answers. [...] Value is in not what it achieves or does, but what it is and how it makes people feel, especially if it encourages people to question [...] everydayness + how things could be different (189)



# HAMBURGEFONTS

Titles: Cronos Pro Display Bold

## Hamburgefonds

Body: Ubuntu Mono



# HAMBURGEFONTS

Titles: Futura BQ Book

## Hamburgefonds

Body: Neutraface 2 Text Book



# HAMBURGEFONTS

Titles: Raleway Heavy

## Hamburgefonds

Body: Akzidenz-Grotesque Regular



# HAMBURGEFONTS

Titles: Paganini Open

## Hamburgefonds

Body: Proxima Nova Regular

## 7.0 BIBLIOGRAPHY

### 7.1 WORKS REFERENCED

- [1] Big Think (2015, August 1). *The Real Threat to Our Jobs Was Never Offshoring - It's Robotic Automation* [Video file]. Retrieved from <https://www.youtube.com/watch?v=EZ6dk2pfT1E>
- [2] Wadhwa, V. (2014, December 16). *Get Ready for The Next Wave of Tech Disruptions* [Video file]. Retrieved from <https://www.youtube.com/watch?v=czNzulNl31s>
- [3] Ford, M. (2009) *The Light in the Tunnel : Automation, Accelerating Technology and the Economy of the Future*. U.S.: Acculant Publishing.
- [4] Dunne, A., & Raby, F. (2013). *Speculative everything: Design, fiction, and social dreaming*.
- [5] Dunne, A. & Raby, F (2013). *United Micro Kingdoms*. Retrieved from <http://www.united-microkingdoms.org/umk-map/>

