# PROJECT 1: DESIGNING FOOD THOUGHTS A FOOD FICTION

DEPD 2430
SOCIO-CULTURAL ISSUES IN
DESIGN

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**GLEN DOWNIE** 

### INTRODUCTION

In the very near future, possibly as early as 2050, the world could be facing a food and waste crisis that will result in an extinction level event or at least the demise of a significant portion of the population of the earth. As part of the subculture I selected, Food Neopunk, I will be looking at a future alternative to food donation and repurposing food that is going to waste that could feed homeless as well as an innovative look at the hardware we will be using to complete this monumental task. I also wanted to apply the concept of this being a new way of thinking and something we as humanity pursue when we eventually start terraforming new planets or moons like Mars, Titan, or Europa.

### QUALITATIVE RESEARCH

With this project I wanted to examine the problem of recreating food while not creating waste. Then to take waste and make food to benefit those in need or to ensure the need of all can be met.

In an immediate crisis like the pandemic, we have seen issues keeping items in stock at grocers and having to adapt to a distribution world that is better equipped to handle radical change in demand. Companies like Loblaws and Sobeys are adjusting to change and are confident we as a whole will get better in time if another pandemic should occur

Food Shortages amidst COVID-19

https://www.canadiangrocer.com/top-stories/headlines/grocers-respond-to-food-shortage-fears-amid-covid-19-outbreak-93597

But a bigger problem overall is the food shortage that will start to occur with a radically growing population and no measures in place to protect the global economy from the extraction resources to fulfill that need and the waste created from those who are removed from the fallout of the resources they have.

**World Food Crisis** 

https://time.com/5216532/global-food-security-richard-deverell/

One of the films I used in examining the food waste issues in British Columbia was The Clean Bin Project which was a production made by a Vancouver couple in 2010 concerned with the need to radically reduce their own carbon footprint. They also examine the opportunity created by grocers throwing food away that was perfectly healthy to consume and mostly disposing to avoid liability and increase profits. A movement that is called "Freegan".

The Clean Bin Project (2010)

https://www.imdb.com/title/tt1729557/?ref\_=nm\_flmg\_dr\_4

They follow this film up four years later with a sequel called Just Eat It that continues to take a deeper dive into the issue by examining waste from farm, through retail, all the way to the back of their own fridge. The details of this growing problem are terrifying and something that start to really inspire the need for more design projects like this one.

Just Eat It (2014)

https://www.imdb.com/title/tt3597400/?ref\_=nm\_flmg\_dr\_3

An article is issued from the UN that disaster is on the horizon and because of the current pandemic some issues have speed more rapidly than we had anticipated. This year alone, at least 50 million people risk falling into extreme poverty which inevitably will lead to malnutrition and life-long suffering. The Guardian documents the concerns and tries to highlight emphasis on the need to change existing food systems and that we need to do sooner than later.

50-year Food Crisis

https://www.theguardian.com/society/2020/jun/09/world-faces-worst-food-crisis-50-years-uncoronavirus

With the realization that we need to start thinking of long-term solutions now, the space race to arriving and setting up habitats on terrestrial land is very thought provoking and can make us challenge the idea of how do make sure we do it better. In this article we realize the steps needed to terraform the planet Mars and the complications we are going to face.

How Terraforming Mars Will Work https://science.howstuffworks.com/terraforming.htm

Understanding that moving to a new planet does not solve all humanities problems, but what it does accomplish is the emphasis that we start to find solutions and have hope for the future whatever it may be. Also, the possibly of finding a new future helps us redesign the one we have already started to create.

### **COLLABORATIVE RESEARCH**

During team meeting in class with Rouchen we discussed some of the many complications we face with capitalism and food. One such article we talked about was a Starbucks employee discussing their day-to-day activity and the stories they are told by management around discarding food at the end of the day. The tweets go on to summarize that if they do not throw away the sandwiches/salads and protein plates it would be considered theft:

Walter Chaw-Twitter

https://twitter.com/mangiotto/status/1350629396248367104

Luckily Starbucks was inspired with a change of heart after losing so much business throughout the pandemic and decided more publicity like this was not beneficial to their stock overall has considered a new method of disposing their daily food that did not sell.

Starbucks U.S. food waste plan has Canadian food banks 'delighted' https://www.cbc.ca/news/business/starbucks-food-waste-canada-food-banks-1.3505816

We wanted some simple ideas that could assist in being more mindful of food waste and simple things like freezing food and then preparing items like soup are key to ensuring that leftovers are treated like garbage.

How To Not Waste Food - David Suzuki https://davidsuzuki.org/queen-of-green/help-end-food-waste/

We then went on to discuss the value of being a "freegan" and how it might be trying to gather food by dumpster diving on a regular basis. We felt the complication would be getting over the idea food was in the garbage and would need to be cleaned but a lot of the problem is the stigma of thinking about food that has been thrown away and understanding it is still good.

Dumpster Diving: Hobby Which Combats Food Waste https://www.whatsorb.com/waste/dumpster-diving-a-hobby-that-helps-to-combat-waste

In discussing some of the hygienic concerns with garbage and food, I remembered several articles I have heard about in the last couple years. The first being the health of children in homes that have dogs and that their noses can contain bacteria that that can be found in cave art is also the same microbe that prevent people from having allergies or asthma.

How Dog Exposure May Protect Against Allergies or Asthma https://www.livescience.com/41988-dog-exposure-protects-against-allergies.html

This then lead me down the path of finding the articles that referred to other benefits of bacteria and how it influences the gut microbiome. The act of transplanting fecal matter from one person to another so it can treat diseases like diabetes, fatty liver disease, fibromyalgia, arthritis, asthma eczema and more.

Everything you need to know about fecal transplants https://www.medicalnewstoday.com/articles/325128

### **DESIGN FICTION**

It's 3-5:36 AM in the year 2252 on the moon Titan. Time has an additional number now to reflect what cycle of the 24-hour clock you are in since Titan's full day lasts 15 earth days to orbit around the sun. It can be exhausting just being awake here, until your third year when your body starts to adjust, or in my case just gives up fighting.

I woke up to the constant beeping meter on my HUC telling me the waste containment unit is full. HUC stands for Hermes Utility Composter that a I run here in the new city of Terminus on the Saturn facing side of the moon. Hermes was apparently some kind of a Greek god that travelled between planets or worlds in winged sandals, whereas I am lucky if every morning when I wake up, my HUC can move the 8 city blocks needed to get to the market without the tracks getting stuck in some unearthly substance that fuses my gloves together or covers me in some version of crystallized salt every time I clean it.

The HUC has been a reliable source of income considering what jobs on Titan are available. I never really fantasized about being a methane miner and I definitely didn't want to be one those jar headed morons that take off in fleets driving hundreds of miles every day in search of new minerals or the pipe dream of finding a protein they can sell back to earth. Besides, I get car sick. Jobs are limited but with the state of the moon, almost any job can get an off-world sponsor that will pay them a living wage, thus making Titan more inviting for the meatballs that could not afford a space on Mars. Sadly, that might just make this place filled with more lonely souls like me that have some grand idea we are making a better world for families of the future, hopefully a future where everyone hasn't cashed in on the resources and made the place uninhabitable.

After taking the 13 mins it takes to get in my suit and sealing all the joints, it is time to make my way into the red murky horizon and drive my beast to the market and start selling the delicacies only Buck's HUC-A-Truck can provide. Catchy name, right? Buck, that's me Bucky Shuttleworth, age 32, bright radiation blasted complexion, most of my teeth still intact and born in an incubation pod orbiting Saturn like so many others trapped on this frozen rock with dreams of making a new world. HUC-A-Truck was just obvious addition to the name since it is a composting food truck, and who doesn't love a purple interplanetary liquid lunch with all the nutrients and bacteria your gut microbiome could ever desire? Funny, because the same drinks the HUC's produce on Mars are blue since I think they want everyone to think they taste different depending on which planet or moon you are visiting hoping you might forget the chalky aftertaste of this nutritious cocktail.

I hop in and start my trek to the market. "Wheee!" I yell ecstatically, as I do every morning when I hit the accelerator. The ratio of weight to torque produced by the HUC never ceases to surprise me. I am typically a larger than normal guy but here on Titan I weigh a whopping 32 pounds and the HUC I drive is 280 lbs. It is big, but as long as I keep up with sessions online in weight resistance training, I do every evening, I could easily pull the HUC home should the EV fail. I quickly slow to a snail's pace since the HUC is full and the last thing I need is to stop three times on route to clean the tracks or hit a bump that keeps me airborne for up to a minute and toppling over by the time I land.

Not too long later I find my spot at 3-6:06 AM and rejoice that in the last 16 hours a dust storm hasn't torn through town and covered the dig my drill made yesterday after spending 3 hours testing sites, only to find I am perched above some ancient rock quarry with new and fascinating crystals to destroy my drill every time I start a dig. I place the drill and start the energy probe that converts the gas below the crust to the soothing humming sound of a broken spring inside a tube piercing the moon miles below me.

"Hello all, Buck's HUC-A-Truck has arrived, and we are now open for business!". I turn the sign on and await the first miner off the next fleet top arrive and offer them the delicious blend of 12 proteins, 32 vitamins, 5036 known bacteria and just a dash of human fecal matter to keep the doctor away. Luckily, the candy-like flavouring doesn't hurt but I'd sell a limb if I just have a thermos of it where I didn't immediately want to scrape my teeth with a straight razor from the chalky aftertaste. It's like you would never have guessed that the same garbage we pull from our hydroponics, wrap our materials, fuel our vehicles and rinse off in a sink would produce the tasty zingy rotten dumpster harvest we all thrive on today!

Oh well, time for another lucky customer.

### **IDEATION**

Wordstorming

**Mechanical Edibles** 

Clammy Waste

Doughty Disposal

**Moody Melons** 

**Delinquent Diner** 

**Effervescent Evergreens** 

Gurgling Garbage

Icky Dumpster Delicacies

**Knotty Waste Nuggets** 

Wacky Winter Feast

Zingy Rotten Dumpster Harvest

\*\*Zingy Rotten Dumpster Harvest\*\* - Superhuman Food Sensitivity and reduction in allergies due to bacterial resistance growing in humans. Exposing humans to bacteria that saves lives.

Turning Dumpsters into street side buffets or back alley food trucks

### Concept Art

https://www.iamag.co/the-art-of-the-mandalorian-official-concept-art/#jp-carousel-298881

https://www.instagram.com/p/BZWZmC2AEgv/?utm\_source=ig\_web\_copy\_link

https://www.iamag.co/the-art-of-the-mandalorian-official-concept-art/#jp-carousel-335026

https://i.imgur.com/BvDtV5U.jpg

https://cdn.vox-

cdn.com/uploads/chorus\_image/image/60409857/eec1dff733eadc5ec217d989055abf5b.0.jpg

## FOOD AND WASTE SYSTEMS HOW CAN THEY COEXIST



### **DESIGN BRIEF**

### **Primary Objectives**

Improve waste containment and recycling to ensure food is not wasted or discarded unnecessarily.

Use an innovative approach to finding solution for both waste and food that benefits all.

Using space as a location for development and thinking of a future that can be used anywhere.

### **Target Audience**

Humans terraforming and populating new planets and moons and being resourceful with their power consumption.

Seeking a solution that benefits everyone and is a little or no cost due to its efficient use of resources and materials gathered to produce products.

### Problem

To recreate food while not creating waste. Then to take waste and make food keeping a complete cycle and closed loop. Do not rely on or waste management systems or extracting new materials to keep humanity alive and end the ongoing food crisis.

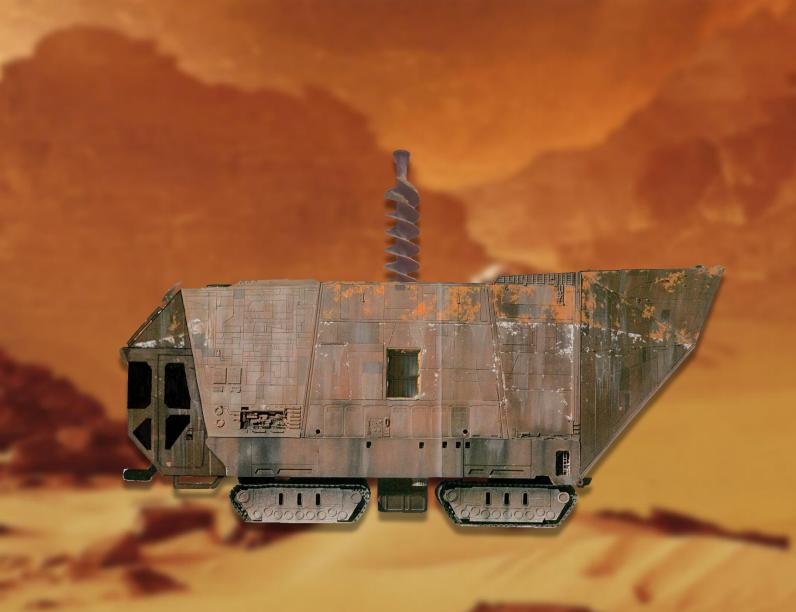
### Concept

Dumpster food trucks on Titan or Mars

Start on the right foot creating a new civilization and avoid exploiting people and resources to obtain your goal.

Ensure all food gets used with no waste and have a means to distribute the product.

Bacteria will no longer be something we are afraid of or avoid, it will be used to make us stronger and prevent disease.

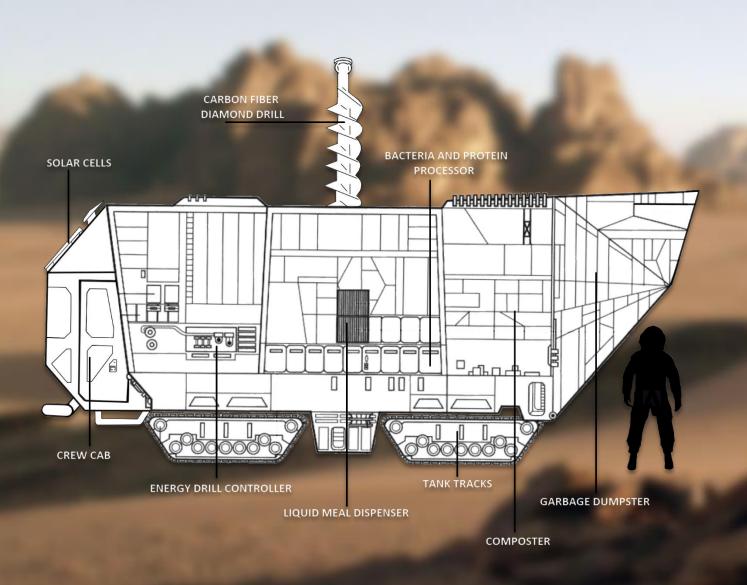


### **DESIGN CONCEPT**

### HUC

HERMES UTILITY COMPOSTER

## DESIGN CONCEPT SELF-SUFFICIENT WASTE COMPOSTER AND FOOD DISPENSER



### **SUMMARY**

This was a very interesting project. I spent a lot of time brainstorming different methods I was going to approach this project with as well as following some of the suggestions provided project brief. Leading up to the writing of the story, this project required some of the most research I have done in design school since I started. In this story I chose to write, it isn't an idyllic future but more of a Blade Runner-like version. The design from that particular movie alone spawned many innovations and products we use today. Some of the examples being teleconferencing, smart homes, key card access, computational photography, talking crosswalks and artificial intelligence. Unfortunately, still no flying cars. In my story, like Blade Runner, the setting might not be the most glamourous, but it is the future we could possibly have. As unappealing as it might be, its better thinking we might need to sacrifice some things before everything gets better and benefit from knowing we choose not to exploit others on our way to get there.

The more I researched, the more I was fascinated with taking something like garbage we throw away everyday and making it food since it is a growing concern. How could we continue to create so much garbage and spend so much money to make it go away and we have no idea how to feed the masses and stop using all the resources to feed the few we do. Thus, the concept of the space-garbage-composter-turned-food-truck was born.

One of the big influences doing research was the benefits bacteria could have on humans if we introduced into our diets more often and how our immune systems would be far more prepared to deal with diseases or pandemics like we are facing now. Luckily, a lot of research is starting take place now that can answer some of these questions and how can we safely introduce these bacteria to gut microbiome.

Another consideration I had when taking on this concept was what option would there be in not only having a dumpster become a food truck, but could it power itself and rely on its surroundings for fuel and function. This took me to the moon Titan as it had a very interesting chemical dynamic, an ocean of methane below the icy crust of lunar rock that encompasses the whole moon. Realistically, I think the year 2252 is a bit hopeful for humans to start populating and terraforming on Titan, but with the climate crisis we are creating on earth, the timeline will need to exponentially increase in speed if we are faced with extinction.

The target market for my concept is all of humanity. This product could be the basic item needed for survival available to everyone, much like the makers of Soylent the meal replacement, only not for profit by Silicon Valley monsters. But should you have more money you might select something a tiny bit more appetizing and possibly less chalky and colourful.

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