

Towards Mindful Consumption

by

Juliana Covarrubias

Submitted to the

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ABSTRACT

Humanity is using up more of the Earth's resources than the planet can replenish each year. The unsustainable rate at which humanity is depleting the Earth's resources threatens the viability of our current lifestyles, posing significant challenges for future generations. Further, it places a heavy burden on the planet, resulting in several environmental problems, most notably climate change. Many approaches to combating climate change focus on lessening the impact of our current living habits on the Earth. Popular initiatives involving biodegradability, recycling, and carbon offsetting seek to reduce the effects of pollution while allowing humanity to keep consuming products at the same rate. Alternatively, reducing the production of these goods in the first place eliminates the need for such anti-pollution interventions downstream.

This thesis considers climate change at one of its sources: overconsumption. The thesis examines the history of consumer culture to identify the causes of our current excessive consumption patterns. Through analyzing the influences that advertising and culture have on our behavior, this thesis aims to demystify and uncover the power we have over our actions as consumers.

The final output of this thesis is a handwritten book of thoughts and sketches that is distributed around the public sphere to provoke conversations about our individual relationships with consumerism. These discussions may have broader implications as they spread and lead to behavioral shifts towards more mindfully consumerist lifestyles. Ultimately, this thesis uses a dialogue with itself to plant a seed challenging the status quo of overconsumption, catalyzing meaningful discussion about our responsibilities, behaviors, and concerns in a consumption-driven world.

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I. OVERVIEW

1.1 Vision

In 2023, the global average temperature was 1.45 degrees Celsius warmer than during pre-industrial periods (WMO, 2024). This same year, average global atmospheric carbon dioxide was at a record high of 419.3 parts per million (Lindsey, 2024). In 2021, upwards of 199 million tonnes of plastic were estimated to occupy the oceans (UNEP, 2021). According to the World Health Organization, approximately 3.6 billion individuals currently reside in regions highly vulnerable to the impacts of climate change (WHO, 2023). By the year 2030, it is projected that the damages directly caused by climate change could result in health-related expenses ranging from 2-4 billion USD annually (WHO, 2023).

Many approaches to combating climate change focus on lessening the impact of our current living habits on the Earth. Biodegradable cups, LED light bulbs, and recycled polyester t-shirts all reduce the effects of pollution while allowing us to keep consuming products at the same rate. While these innovations reduce the effects of our consumption, they do not address the source of the problem -- overconsumption. For a plastic bottle to get to the point that it is recycled, first the petroleum needs to be sourced, then the bottle needs to be manufactured, and finally transported around the world to the customer. Each of these steps generate pollution that must be individually addressed by expensive reactionary measures in order to prevent further climate change (WEF, 2023). Alternatively, none of these complications would exist if the bottle was simply not purchased in the first place. Almost every object we've ever

interacted with has been sourced, produced, packaged, and transported before one day being thrown away. While some of these objects do bring real utility to our lives, many are bought and disposed of far more frequently than necessary.¹

In 1994, photographer Peter Menzel's photo series "Material World: Global Family Portrait" captured images of families from around the world posed along with all of their respective belongings (Menzel, 1994). Even before personal computers, cellphones, and other technical marvels of the 21st century became commonplace, average American houses were jam-packed with decorations, entertainment devices, and duplicate sets of furniture on a scale unmatched in most other countries. In the 30 years between then and now, production has only gotten more efficient and goods have only become more accessible (Shrestha, 2016). Today, the United States alone accounts for 17% of all energy consumption worldwide every year (Kahn, et al. 2021)². The US has served as the leader in consumer culture since the industrial revolution and currently produces 12% of the entire world's yearly MSW³ despite only consisting of 4% of the global population. (Verisk Maplecroft, 2019).

1.2 Research Question

This thesis aims to challenge climate change at one of its sources: overconsumption. By analyzing the origins, trends, and driving factors behind consumerism, this thesis aims to demystify the phenomenon and uncover the power the public has over it. The thesis attempts

¹ Americans purchase around 50 billion single-use plastic water bottles every year (Grand View Research, 2022)

² "the U.S. uses one-third of the world's paper, a quarter of the world's oil, 23 percent of the coal, 27 percent of the aluminum, and 19 percent of the copper." (Tillford, 2012)

³ Municipal Solid Waste: solid phase household, commercial/retail, and/or institutional waste (EPA, 2016)

to produce a work that informs and inspires a behavioral change among the public towards a more mindfully consumerist way of living.

1.3 Challenges

Climate change is, overall, an enormous threat to handle. Countless projects have attempted to reroute the trajectory of climate change, including UN backed agreements committed to dedicating 100 billion USD towards mitigation and adaptation every year⁴ (UNCCC 2022). While these initiatives have collectively contributed to healing our relationship with the planet, there is still a long way to go before climate change becomes entirely manageable. As it stands, global average sea levels are still projected to rise anywhere from 1 to 6.6 feet by 2100⁵, accompanied with potential temperature increases of 2-4 degrees Celsius (Sweet, et al., 2022). Climate change remains an unsolved problem because of the sheer scale of the factors contributing to it and the insufficient focus it has received up until this point.

Among climate change initiatives, some have promoted environmental support through social initiatives that encourage individuals to live more sustainably. These projects focus on inciting behavioral change through various measures, including education, community development, public demonstration, and more (Borg, 2022). While these approaches strategically target climate change upstream, they are limited by the willingness of the public to change (Borg, 2022). In a society structured around the things we consume, it is nearly

⁴ The Paris Agreement: an international treaty between 195 parties to commit to a plan that maintains no more than a 2 degree Celsius increase in global average temperatures above pre-industrial levels written and signed at the UNFCCC in 2015 (UNCCC, 2022)

⁵ Relative to sea levels in 2000 (Sweet, et al. ,2022)

impossible to escape the appeal of cheap, convenient, and trendy products and habits that are ultimately harmful to the planet.

1.4 Impact

The purpose of this thesis is to start a conversation about our relationships with consumerism as individuals living in a capitalistic world. This thesis addresses the influences that advertising and culture have on our behaviors. These influences are crucial to understanding and unveiling the power consumers have over our own actions. The ideas presented in this thesis and as part of this thesis project could inspire readers to reflect on their personal consumption levels and potentially move towards more mindfully consumerist lifestyles. These habits, if adopted, could have broader implications for long term behavioral shifts that have effects on climate change downstream.

1.5 Epistemological Lens

This thesis is largely written through an environmentalist lens, as opposed to that of an economist or politician. As such, some of the goals are biased towards benefiting the environment, rather than ensuring the proliferation of other factors, such as economic growth. Much of the research comes from papers with environmental focuses (WMO 2024, Global Footprint Network 2007, among others), although many are written by economists (Parker 2023, Cowdrick 1927, among others) and historians (Nicolaidis 2017, Hilmes 2011, among others) as well. In the project that results from this thesis, many of the conversations are my own and are biased by the people and conversations around me.

1.6 Final Product

The final output of this thesis is a small book of handwritten thoughts that has been distributed around the public sphere (see Appendix I). The book contains ideas and questions surrounding consumerism that arose during the investigation of this topic. Ultimately the book is meant to serve as one side of a conversation by leaving all of its conclusions open and inviting the readers to develop and communicate their own impressions on the matter.

II. BACKGROUND

2.1 An Unsustainable Problem

In 2007, humanity exceeded the Earth's annual resource regeneration capacity by 30% (Global Footprint Network, 2007). Ecological overshoot has occurred every year since 1987, meaning every year we have accumulated more and more ecological debt. The World Wildlife Fund explains ecological debt with a financial analogy: “just as it is possible to withdraw money from a bank account faster than to wait for the interest this money generates, renewable resources can be harvested faster than they can be re-grown. But just like overdrawing from a bank account, eventually the resource will be depleted” (WWF, 2012). We do not exist on this planet alone, and the depletion of the Earth’s resources will further result in the mass destruction of ecosystems and other natural processes (WWF, 2012).

The effects of our endlessly increasing consumption are not limited to the environment, but also directly affect human wellbeing (Boulding, 1971). Since we have already surpassed the Earth's replenishing capabilities, we will ultimately run out of the resources necessary to maintain our current lifestyles. In 1971, economist Kenneth Boulding developed his “dismal theorems” describing the potential futures that growing populations will eventually meet (Boulding, 1971). Boulding proposed that if the only check on human population growth is misery, then the population will keep growing until it is miserable enough to stop growing (Boulding, 1971). Perhaps even before the natural disasters caused by climate change cause mass deaths, humans will one day be unable to extract the resources we want from the Earth at

the rate we want.⁶ "Misery" is left deliberately vague in Boulding's model, because it can refer anywhere from mild inconvenience to extreme poverty, which will come to affect different human populations at different intensities (WHO, 2023).

Alternatively, Boulding proposes that if we find something other than misery to keep a prosperous population in check, then the population does not have to keep growing until it is miserable and can instead be stably prosperous⁷ (Boulding, 1971). This "something other than misery" is also left vague, allowing one to speculate whether it could be a drastic, expensive environmental cleanup effort, or a cultural shift in standards for what people consider a satisfying amount of consumption. There is not one solution to climate change, but it is undeniable that if no solution is attempted, humanity will inevitably end up miserable.

2.2 History of Consumer Culture

How did humanity get to this point of overconsumption? Overconsumption on this scale is not simply human nature. While there had been some progress towards the development of a consumer culture leading up to the industrial revolution, there had never before been a period of time where a significant percentage of the population could engage in luxurious markets beyond smaller non-necessities such as the occasional purchase of fashionable clothing (Stearns, 1997). Around the turn of the century, the rise of factory machinery and assembly lines drastically improved efficiency to the point that basic necessities and smaller luxuries

⁶ "The Dismal Theorem": "If the only ultimate check on the growth of population is misery, then the population will grow until it is miserable enough to stop its growth." (Boulding, 1971)

⁷ "The moderately cheerful form of the Dismal Theorem": "If something else, other than misery and starvation, can be found which will keep a prosperous population in check, the population does not have to grow until it is miserable and starves, and it can be stably prosperous." (Boulding, 1971)

could be made cheaply enough for most people to be able to afford increasingly non-essential items like greeting cards and sports equipment (Stearns, 1997). Production kept growing and began to surpass the demand from the public. Following WWI, production in the United States was 12 times greater than it was in 1860, but the population had only grown by a factor of 3 (Higgs, 2021).

By the 1920's, efficiency was so high that business owners were faced with a choice: either shorten the work week and allow production progress to stagnate, or artificially create demand to necessitate more production (Higgs, 2021). A 3:1 vote among Kellogg factory workers for shorter work weeks indicated that workers still valued their free time more than their spending power (Higgs, 2021). It was not that people didn't want nice combs and useful gadgets, but rather that once they had them, they didn't feel the need to buy them again. Contemporary historian Frederick Allen summarized in his 1931 book *Only Yesterday* the phenomenon he was witnessing, that "unless [the consumer] could be persuaded to buy and buy lavishly, the whole stream of six-cylinder cars, super heterodynes, cigarettes, rouge compacts, and electric ice boxes would be damned up at its outlets" (Allen, 1931). The corporations needed a new plan to keep people interested in consuming their products. Edward Bernay's book *Propaganda* identified that "today supply must actively seek to create its corresponding demand... [and] cannot afford to wait until the public asks for its product" (Bernays, 1928). To create this demand, a corporate driven cultural shift was engineered away from thrift and repair (Higgs, 2021). As economist Edward Cowdrick described in his piece "The New Economic Gospel of Consumption," this approach involved "educating" the public in the "new skills of consumption" (Cowdrick, 1927).

Newer advertising mediums including radios and later televisions facilitated the spread of this promise of social mobility through consumption (Hilmes, 2011). Journalist Vance Packard suggested that “the products have been the luxuries of the upper classes. The game is to make them the necessities of all classes. This is done by dangling the products before non-upper-class people as status symbols of a higher class” (Higgs, 2021). The American Dream that had once promised a chance at financial stability through home ownership was shifting towards an ever-escalating promise of social stability as defined by the amount of luxuries one could afford (Higgs, 2021). It was no longer enough to simply have a nice car; now there was social pressure to have the newest nice car (Higgs, 2021). This shift in attitude towards consumerism has not yet been undone and still reflects the way we consume today.

Following WWII, the United States experienced an unprecedented population boom that left families needing new places to live. At the same time, highways and other infrastructure were developed, allowing people to live farther and farther from cities (Nicolaidis and Wiese, 2017). In response to a collection of social, political, and economic pressures, the suburbs were born as a new way to organize American life (Nicolaidis and Wiese, 2017). Unlike almost all human settlements up until this point, the suburb was a place entirely organized by planners and marketed to people to move to. While previous cities had grown organically, establishing businesses and houses where people needed them, the suburb started as a blank slate (Nicolaidis and Wiese, 2017). Houses could be placed in neat rows and cul-de-sacs organized around driving, rather than walking (Nicolaidis and Wiese, 2017). This suburban layout didn't center on public squares or government facilities. Instead, a new center

was formed around mass consumption, and nothing accomplished this goal more than the exciting new shopping malls.

Shopping malls were situated neatly in the middle of suburbs and became the alternative new centers for communities in these suburbs. They were exciting new places where families could eat, watch movies, and socialize with others in the community (Arcamone, et al., 1957). Unlike traditional town squares and city centers though, the community aspect was only one attractive feature to get people to come to the shopping mall; consumption was the main function. Shopping malls were seen as glamorous one-stop destinations for people to satisfy their every need and get to gather with community away from concerns about the weather. Redbook magazine describes their sprawling design consisting of “gilt fountains, commissioned statues, put-in restaurants ... banks, loan offices, rental plans, plant nurseries, and places to buy building materials” (Arcamone, et al., 1957). Over the course of half of a decade, the landscape of American consumer culture had exploded and even rooted itself in the country’s infrastructure.

2.3 Modern Influences of Marketing

In the past 80 years, advertising has developed into an entire industry. Modern day advertisements target human emotions to create constant streams of desire for more products (Bhattacharjee, 2022). Such approaches involve inducing fears of missing out, feeling inadequate, or being unprepared for disaster (Rubin, 2022). Products are then presented as perfect solutions to all of these engineered problems (Rubin, 2022). Studies by James Burroughs at the University of Virginia have suggested that more materialistic tendencies do

not actively improve people's perceived wellbeings above a certain financial threshold (Burroughs, 2002). Further, studies published in *Developmental Psychology* identified that people who have lived more difficult childhoods tend to develop materialistic tendencies anyway, likely because they are told or shown to believe that physical products will fix their other problems (Kasser, 1995).

Marketing plays an important role in ensuring that people buy as much as they physically can even when it comes to low-income markets. The American dream brings with it a biting notion of the "unworthy poor" that has been capitalized on by the advertisement industry to keep people buying out of fear of falling into that category (Shrestha, 2016). Sriya Shrestha of the Department of American Studies and Ethnicity at USC explains, "along with giving customers a wide variety of choices, dollar stores create an atmosphere of excess so central to an idealized American, middle-class consumer experience. They stock a dizzying array of 'non-necessity' leisure goods, including books, toys, holiday decorations, candles, make-up, jewelry, and religious paraphernalia" (Shrestha, 2016). Doing so pushes the notion that displaying the American dream through sheer material wealth should still be individuals' primary goals even when they are barely able to afford their groceries. Some name-brand companies even package smaller portions of their products and market them to low-income buyers to create the impression of gaining access to a middle class lifestyle, sometimes even providing deals that are actually less affordable than the more expensive larger quantities of product (Shrestha, 2016). In this strategic targeting of different socio-economic classes, the

effects of advertising on consumerism are nuanced and widespread, making it difficult to create a one-size-fits-all solution to reducing overconsumption.

2.4 Past Approaches to Climate Change

Countless attempts have been made to lessen the effects of climate change. This thesis requires a thorough understanding of the varied attempts that have already been made as well as their shortcomings. Through this review, this thesis intends to identify feasible and effective approaches to addressing climate change that fit within the scope of this project.

2.4.1 Technology Focus

Historically, product design has been the primary focus of many climate change interventions (Ceschin and Gaziulusoy, 2016). A technology focus relies on design and technology to solve the problems of pollution and waste management by making products more efficient, durable, or less harmful to produce. Most product-focused approaches promote the idea of "green consumerism," a philosophy suggesting that as long as the things people want are not harmful for the environment, people should continue to consume as much as they want to. What this mindset misses is that low-pollution products slow down the waste that is generated, but do not eradicate it. Ceschin and Gaziulusoy illustrate this point, with a simple example from the 2008 EEA technical report (Ceschin and Gaziulusoy, 2016). Improvements in car design over 15 years resulted in cars being 10% more efficient, but the effects of this improvement were offset by the 30% increase in the overall distances traveled by cars, which directly resulted from more people getting on the road. At some point the emissions from the sheer amount of driving started to surpass the benefits from the more efficient designs, so the

problem of reducing car emissions was only slowed for a bit, until ultimately continuing to grow as it would have before (Ceschin and Gaziulusoy, 2016).

Further, "cradle to cradle"⁸ models that suggest that all of the materials going into a product should either make their way back into the ground or into the following cycle of production ignore the waste generated throughout the rest of the lifecycle of the product (Pere Llorach-Massana et. al, 2015). Plastics bottles made from recycled plastic bottles may have the same net material usage as only one bottle, but require extensive transportation and processing between each new version (Pere Llorach-Massana et. al, 2015). Moreover, the heavy reliance on technology as a lone solution ignores the cultural and political opinions that influence the actual adoption of these innovations into common use (Ceschin and Gaziulusoy, 2016). Well-designed goods and services can only be adopted when the surrounding cultural and physical infrastructures allow them to be.

2.4.2 Behavioral Focus

At the very core of consumption is the consumer, so a number of sustainability approaches have focused on directly influencing public opinions and behaviors (Borg, 2022). There are, however, several overarching social barriers standing in the way of substantial public change. One of the most fundamental barriers may be the general lack of understanding about climate change itself. John Cairns Jr. explains that it is fundamentally difficult for all humans to understand exponential growth because our lives are primarily centered around concepts that

⁸ Cradle to Cradle - all of the resources that make up a product make their back to the original source or are recycled to make the product again without new material entering the system (Pere Llorach-Massana et. al, 2015)

are not exponential (Cairns, 2006). Coupled with this misunderstanding of data is the lack of impact that people feel from climate change in their lives (Cairns, 2006). A survey of studies regarding the effectiveness of various sustainability focused behavioral interventions published in the Journal of Cleaner Production found that the least effective methods relied on education about the environment and climate change. These methods were less successful because it is difficult for people to make deep connections between the environmental destruction they witness and their daily actions (Borg, 2022). Further, when someone is told that the world is exponentially running out of resources, but their lives remain relatively unchanged, they often will not mobilize to change their behaviors (Cairns, 2006). This “not in my backyard” mentality regarding climate change spans from individual apathy to widespread political inaction (Cairns, 2006).

On the other end, the most effective behavioral approaches involve encouraging individuals to commit to more sustainable habits for short periods of time. Often the relative ease of these small changes, along with the newly formed intrinsic motivation, result in those individuals permanently shifting their behavior (Borg, 2022). Overall, the vast majority of purely technology or behavior focused interventions were found to be significantly less impactful than those that took interdisciplinary approaches towards multiple sectors of society (Borg, 2022).

2.4.3 Three-Pronged Approach

A report from the World Economic Forum suggested that the most effective approaches are those that incorporate the efforts of the government, corporate, and public spheres. All three of these sectors influence each other, with consumers creating demand, companies

supplying that demand, and the government regulating those companies' actions (WEF, 2021). A successful implementation of this combined approach involved changing the "default" options of certain necessities in stores to more sustainable versions (Borg, 2021). When the public identifies an issue in the quality of a good or service, people put pressure on the government to do something about it (WEF, 2021). The government has the power to regulate the quality of the goods sold in that country, and the businesses must follow suit. Then, when the new goods or services are sold, the public has to buy this new variation of the product that is safer, more sustainable, or more ethically sourced (WEF, 2021).

The government of Victoria, Australia has proposed one of these three sided approaches to making their state more sustainable through the creation of a circular economy (State Government of Victoria, 2023). Circular economies have been suggested in other regions as well, but none have been fully integrated yet, so there is no formal data on their real effectiveness (Parker, 2023). Economists, environmentalists, and politicians have acknowledged a few limitations blocking the development of this kind of economy though. Journalist Gillian Parker shared takeaways from the Economist Impact's 2023 Sustainability Week Asia regarding the transition to circular economies (Parker, 2023). Parker identifies that since every other economy in the world is linear rather than circular, a state would either need to exist entirely independently or else have a modified circular economy that relies on trusting outside parties to keep everything inside of the system (Parker, 2023). Further, the emphasis on reducing waste and recycling everything else back into the production stream would be financially detrimental to the companies producing goods unless 100% of the materials were perfectly replaced (Parker, 2023). This also assumes that recycling would be economically favorable,

which is currently difficult to conclude considering how affordable virgin plastic is (Parker, 2023). Given that a circular economy has never been attempted on a large scale, it has not yet been demonstrated that one would be economically viable over a longer period of time (WEF, 2021).

While there have been successes in a few of the approaches mentioned above, the aforementioned challenges and more illustrate the limitations of even the most effective climate change approaches and suggest that there is still significant room to grow before climate change is actually reversed. Where some approaches fail, others find specific targets that make substantial dents in the fatigue the Earth is facing. Focusing on over-consumption itself for the sake of limiting unnecessary consumption targets one of the roots of our unprecedented burden on the planet.

III. PROJECT DESIGN

3.1 Precedents

This project draws inspiration from several artistic projects and methods throughout history.

In 1968, German artist Joseph Beuys produced around 10,000 simple pine boxes with the word "intuition" handwritten on each for his project *Intuition* (Beuys, 1968). Beuys wanted to begin a conversation about intuition and self-representation with everyday people. Inspired by boxes other artists would make to summarize their work, Beuys distributed his boxes for people to fill themselves about their own lives (Beuys, 1968). This simple piece was not meant to just be looked at and thought about, but instead interacted and lived with.

This thesis takes inspiration from Beuys by dropping unorganized thoughts and wonderings into other peoples' lives and having them live with, agree, criticize, or ignore them as they see fit. The thesis acts as one side of a traveling discussion, providing no resolution, but leaving the conversation open for others to interpret and react to. It is a loose guide meant to jumpstart thoughts on living sustainably, while providing no strict path on how to get there or where to end up.

In 1974, Italian artist Enzo Mari designed and distributed sets of instructions for making simple pieces of furniture out of cheap, readily available materials (Mari, 1974). Mari's instructions were designed to convince and empower the public in their autonomy to not contribute to capitalism by encouraging them to make, rather than purchase, their household

goods (Mari, 1974). While he only made a few designs, his work's effects spread because of the core idea behind them: that people could make the things they needed without being reliant on a larger system. Similarly, this thesis itself is a small project that aims to spread a few simple ideas that could have farther reaching effects. Rather than presenting a single, absolute solution, this thesis is intended as a starting point to spark a greater movement of public conversations.

Antoine de Saint Exupery's 1943 novella *The Little Prince* served as significant inspiration for the content and form factor of this thesis project. *The Little Prince* follows the thoughts and conversations between the narrator and a charming alien prince through the narrator's personal notes (Saint Exupery, 1943). The book addresses themes of mindfulness throughout, illustrated through fictional anecdotes and meandering viewpoints. This thesis aims to address similar topics of mindfulness as it relates to consumerism and does so through an informal, note-taking style, reminiscent of the narrator's field journal in *The Little Prince*. These notes are meant to be simple but substantive, provoking consideration from the reader but not confusion.

3.2 Scope

This project aims to address a microcosm of the greater population as a first step in inspiring a more widespread conversation about overconsumption. The target audience of this project consists of the immediate environment of people in the public around Cambridge, MA. While this audience is not a generalizable representative sample of the entire United States population, no singular audience is, and it is a start. As previously addressed, the most effective

sustainability initiatives are those that mobilize governments, corporations, and people to work together. However, given the time and resources available for this project, it is not possible to reach all three of these groups, so this thesis is only focused on one of these bodies - the people.

3.3 Project Description

The primary output of this project is a short, handwritten book following the meandering conversations I have engaged in about living a more sustainable life (see Appendix I). Multiple copies of the book are replicated and placed around in public places (stores, libraries, etc.) for anyone to find, read, and respond to. The book concludes with a QR code to a virtual forum that people can visit and continue the conversation with others that have found the books.

IV. CONTENT DESIGN

4.1 Project Conception

Leading up to the production of the books, I kept a notebook of thoughts and illustrations from conversations I had on how to publicly address overconsumption. During this time, the final goal for the thesis was to provide a concrete, physical solution that would communicate a deeper understanding of consumerism and climate change with the public. Of these proposed solutions were plans for behavioral guides, public exhibitions, and various objects people could take home with them. Each new direction inspired discussion on the topic it addressed, ultimately inspiring the next iteration and the wave of ideas that came with it.

After numerous twists and turns, it became clear that there could not be one definite, "correct" message placed in a neat package to pass on to people, because the issue of individual overconsumption is a complex and personal one necessitating conversation rather than concrete answers. My thoughts were never absolute, rather they were often contradictory and meandering, and I did not want to approach people with any kind of promise that my conclusions were any more valid than theirs. I wanted to share the conversations I had already engaged in to inspire people to explore those directions and others on their own. An effective tool throughout all of my previous conversations was my notebook that allowed me to convey my thoughts visually. What had started out as just a design notebook soon became the core outline for the output of the thesis.

The content of the books include the personal thoughts and hand drawn sketches from these conversations adapted from the writing in the original notebook. Through short, handwritten notes, the books present the conversations in sparse, simple sections made up of personal stories, questions, and ever-changing opinions. The sections in the books are roughly organized by each conversation, but flow into each other as they did throughout the course of the project. In this form, the goal of the thesis is to share the conversations, rather than conclusions, in order to provoke questions and responses from the public as part of an ongoing discussion.

4.2 Designing the Books

The final output was designed as a physical, handwritten book in order to create a sense of intimacy with the reader. One of the defining features of this output is that it is fundamentally unfinished. Throughout the design process, I discovered that the journey towards a sustainable life is one that is less effectively taught than it is experienced. The book invites the reader to join the conversations, rather than just read them, by consistently leaving doors open and questions unanswered.

The project should not give the impression that my thoughts are conclusive or superior to anyone else's, in the ways that most published books do, so the thoughts are instead presented as nearly raw ideas. To encourage this reading, the book is presented as if it was a sketchbook, rather than a polished guidebook. The ultimate purpose of the book is not explicitly stated so as to not bias readers against it early on. Rather, it is meant to show the

effects of consumerism and follow a set of my personal discoveries, without any claim to what is good or right.

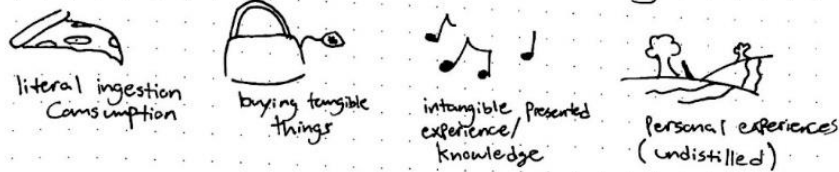
The only ending that the book provides is a gateway to a virtual discussion space via a QR code on the last page of the writing. The discussion is left half complete by the words written on the page, and readers are encouraged to communicate together virtually to continue it. While there are perhaps more inviting, physical ways to organize this conversation, the project aims to lower the barrier as much as possible for readers to respond. Scanning a code and typing as the thoughts arise requires significantly less energy than going to predetermined locations or organizing in-person meetups.

4.3 Production

To concisely fit the core points and directions of these conversations into book form, I had to revisit the original notes and consider each of the arguments one by one. Each section garnered new ideas that I incorporated into the final writing to further flesh out their investigations. All of the other editing that occurred was only to present the content more clearly to the audience, as it was originally only written for me to understand.

To live is to Consume

Throughout this project, I have accepted that there are some things people do need to consume. I had not yet stopped to consider though what it would mean to actually not be consuming at all.



At this point, none of the above have been spared of commodification. It has become increasingly popular to sell ~~experiences~~ strictly experiences that have been prepared to take place. An amusement park sells an atmosphere accompanied by activities that allow and inspire a personal experience. The other three kinds are a bit more self-explanatory, although I wonder if I have missed any.

I don't think that commodification defines consumption, but I do think it makes consumption easier to identify. When would a person not be consuming something? When they are not enjoying something? When they are dead?

It does not really matter what kind of consumption is occurring as long as the brain is getting some kind of reward from it. The reason I care about what isn't consumption, is I want to make something that doesn't just move consumption from a less sustainable medium to a more sustainable one, because who is to stop it from moving right back?



The behavior to consume is still present and no real change has occurred. So is it possible for humans to not consume? I'm not sure; it really does seem like someone would need to be completely dead to not feel any drive at all. Like I always say, a living being without needs to be met is no longer a living being, but a sedentary rock.



Figure 1. Original, unedited notes from the notebook.

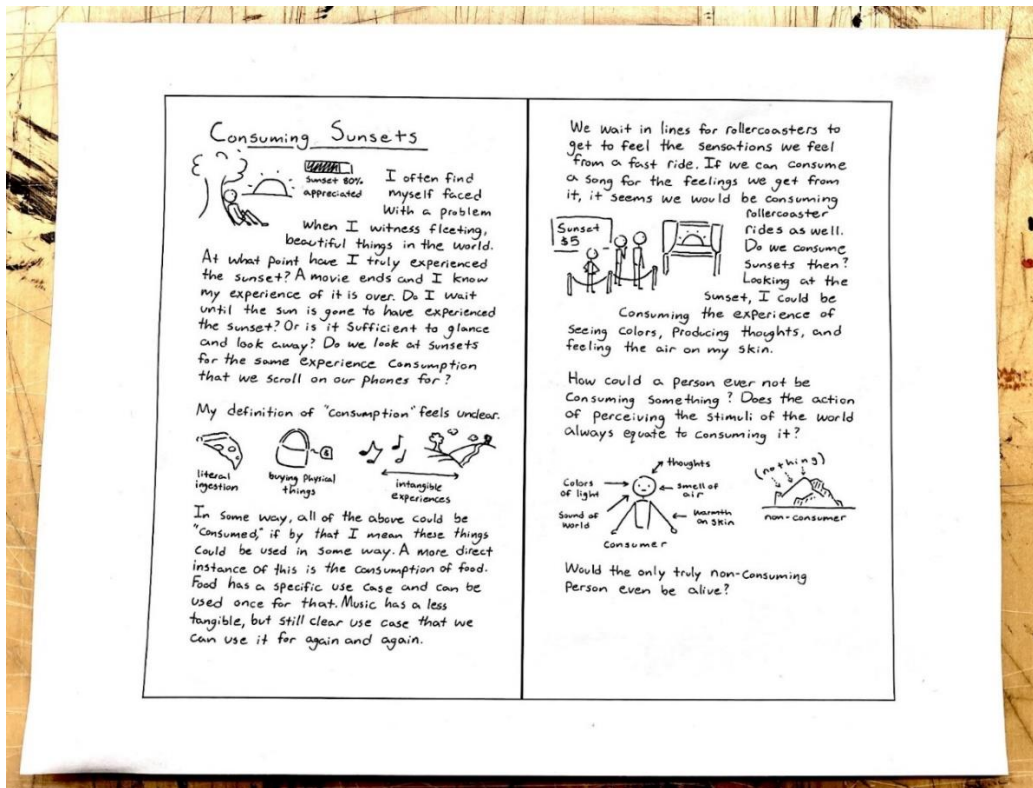


Figure 2. The same section of notes adapted into book form.

The text and drawings were transcribed in ink onto blank pages then scanned into a larger inDesign document (see Appendix 1). Because the sections in the notebook were not linear, sometimes showing up again later or building off long past discussions, I rearranged a few of the pages of the final book to better organize the flow of the narrative. The final pages were then printed in a saddle-stitch layout so that they could be folded and sewn into the final booklet. Lastly, the books were hand bound with a fabric-based cover to create a cohesive impression of a pocket-style notebook.



Figure 3. Final copy of book after printing and binding

The book concludes with a QR code page that takes readers to a simple webpage to share their thoughts. The webpage is lightweight, not requiring any fancy features to fulfill this singular function. Users do not need to make an account, and can simply enter and publish text.

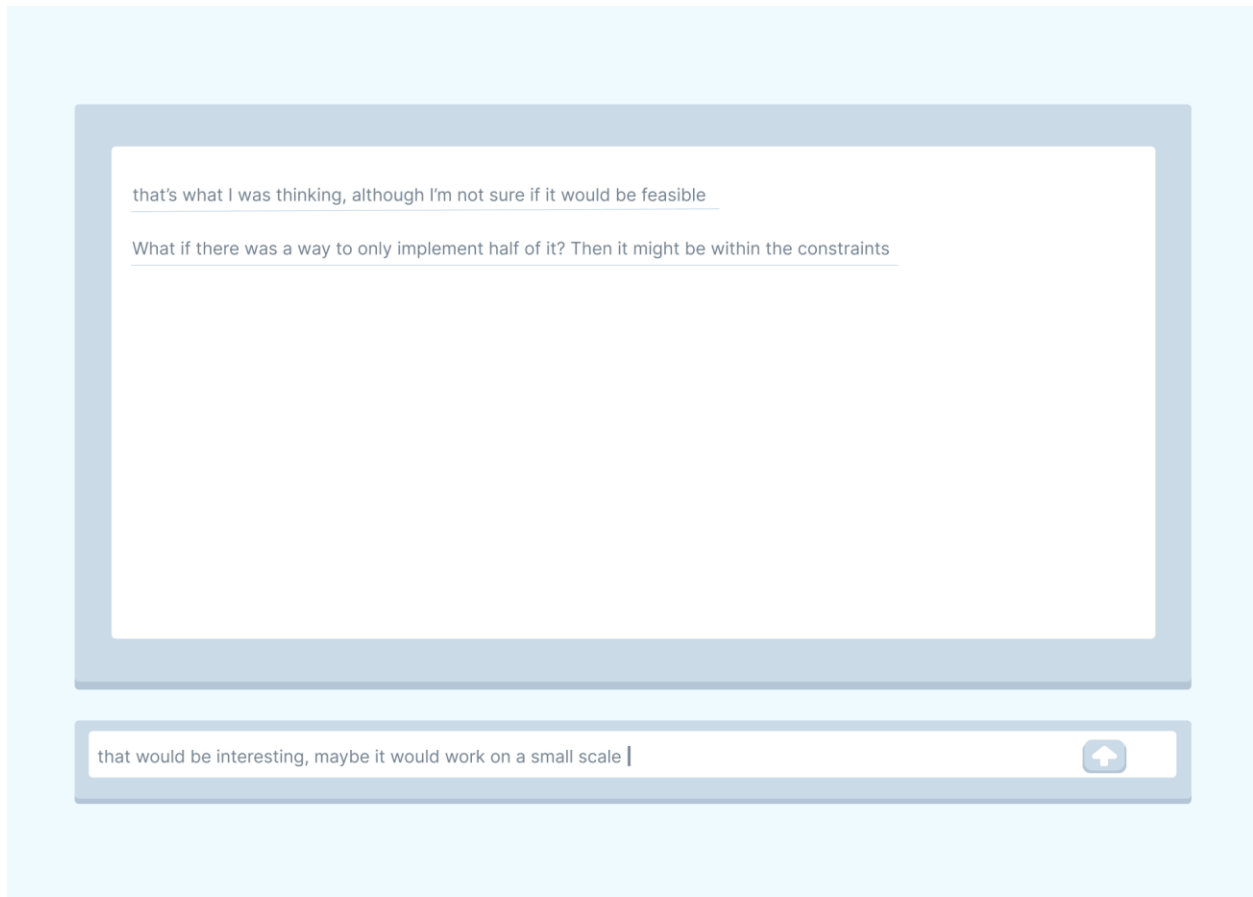


Figure 4. Webpage that the QR code directs to. The words here are my own to demonstrate the website's functionality.

4.4 Distribution

The books have been placed around public and private institutions without permission, sometimes appearing as if they were accidentally lost, other times explicitly pretending to belong. These locations include private stores, libraries, and public benches. The books are meant to be discovered by people, rather than sought out, and so are placed unexpectedly in a variety of locations in order to reach a wide variety of people.

Further, the books are placed for free in explicitly for-profit stores and private buildings to demonstrate the lack of absoluteness the status quo has. Sharing physical and intellectual content is not often done for free, so leaving the books where people expect to pay money

prompts the question of why we always operate this way. The placement suggests an approach to sharing knowledge that is collaborative, as opposed to commodified.



Figure 5. Copy of the book placed in a library


V. DISCUSSION

This thesis investigates the origins, driving factors, and societal effects of consumer culture to discover ways to lessen its effects. This consumer-focused approach is a direct response to the effects overconsumption has on climate change. Throughout these explorations, it became clear that a one-size fits all solution likely does not exist to influence public behavior on a large scale. This thesis suggests that public discussion surrounding consumer behavior is a valuable tool towards finding solutions that work for real people. The physical output of this thesis shares incomplete parts of conversations about our power and responsibility as consumers and invites readers to respond and contribute their own opinions.


While there are not yet clear results from this output, as the approach relies heavily on chance to reach its audience, the form factor itself suggests alternative ways we can approach communicating similar topics in the future. The free, inconclusive nature of the book proposes that opinions and discoveries do not always need to be final to be valuable. Regardless of the longstanding effects this thesis has on the state of the climate or overconsumption, it has provided interesting insight on a matter that can be shared and appreciated on its own. Perhaps the contents will inspire thoughts in completely different areas of someone's life, or maybe cause them to enjoy their day a bit more. In any case, it has taken me on a journey that I hope will touch even one other person's life in the way it has mine.

APPENDIX I – scans of book produced for print


Stability



This is a stable equilibrium point. When disturbed, the ball will always return to this point on its own.



This is an unstable equilibrium point. When disturbed, the ball cannot return to this position without external help.



The rate at which we as a species are using up the world's resources is often described as "unsustainable," but what does that even mean? Maybe it helps to think about our consumption as an unstable system.

For a long time, we lived in such a way that the Earth could replenish the things we took from it each year.

Stable
Planet: □ □ ^{new} □ □
Take: □ □

At some point, we started taking more than it could replace.

Stable
Planet: □ □ ^{new} □ □
Take: □ □ □

Every year since then we have run further and further away from this replenishing capacity.

Unstable
Planet: □ □ ^{new} □ □ x
Take: □ □ □ □

eventually we will run out.

I appreciate the simplicity of Kenneth Boulding's "dismal theorem":


"If the only check on the growth of a population is misery, then the population will grow until it is miserable enough to stop its growth."

So, regardless of if we want to or not, we will have to stop living the way we are at some point. If we don't change anything and are forced to make a drastic change one day, we might actually end up quite miserable.

Boulding actually had another theorem:

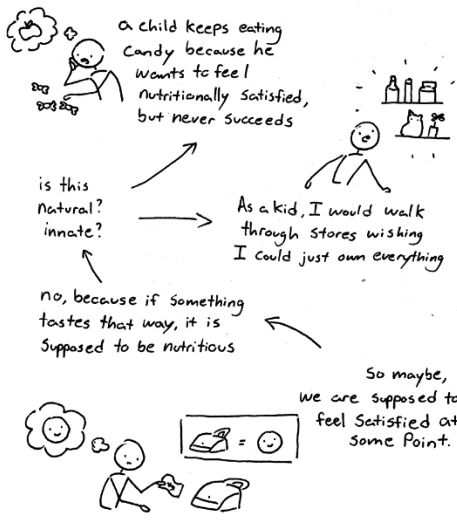
["The Moderately Cheerful Form of the Dismal Theorem"]

"If something else, other than misery and starvation, can be found which will keep a prosperous population in check, the population does not have to grow until it is miserable and starves, and it can be stably prosperous."



So, much like how rationing food is less miserable than starving, maybe the changes we make to our current lives could be less miserable than ending up with nothing later.

And yet, we are binging all of our rations right now. I'm not saying that anyone is to blame or is even wrong for this, but why are we consuming so much?



a child keeps eating candy because he wants to feel nutritionally satisfied, but never succeeds

is this natural? innate?

As a kid, I would walk through stores wishing I could just own everything

No, because if something tastes that way, it is supposed to be nutritious

So maybe, we are supposed to feel satisfied at some point.



My professor took his young daughter to a huge toy store but all she wanted was a single tiny doll.

Maybe at such a young age she hadn't yet internalized the belief that bigger toys would make her happier?

→ the doll was enough to satisfy whatever she felt was missing?

I wonder if we could be satisfied so finitely? Could we put all of the belongings we need to be satisfied in one box? If we could, why do we have so many things outside of those boxes?



Beyond Boxes



Personal desk

Box of things needed to be satisfied

Some days my roommate sits down at her desk the minute she wakes up, puts on her headphones, and stays there until she goes back to bed.



is this everything she needs to be satisfied?

If she can spend the entire day at her desk, then it must be. Then again, maybe physically she is only using the same 10 objects, but she is spending her time on her computer watching videos, playing games, and reading comics.



She is still consuming, albeit consuming non-physical things, meaning she isn't actually constrained by the box (desk) she is physically sitting at. But okay, maybe even if we aren't satisfied in a finite, box kind of way. Seeking out our consumption in the virtual realm might fix our problem of taking too much from the physical world.



I'm not sure if it would though. For one, the digital world does not exist independently of the physical one. Everyone who uses the internet still lives in the physical world, so the internet is actually a perfect, widespread place to advertise physical products.



The relative convenience and ease that online shopping provides could actually be making people buy more things than they would have without the internet. Regardless, in this way the internet does not distance us from buying physical things, but rather just provides another medium for us to do so.

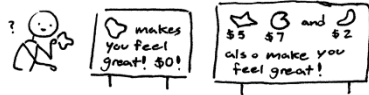
I wonder if the more pressing effect from moving to digital consumption is that it allows us to develop stronger dependencies on consumption than we would otherwise have the chance to.



and on
and on
and on

With endless-scrolling style social media we get to take hit after hit of easy to digest content at absolutely no cost to us. Consuming like this makes us feel good and, unlike

in other mediums for consumption, we aren't limited by how much we can afford. But even if we develop this addiction in a place free of charge like the internet, the obsession with consuming could still stretch into other realms.



The pleasure I get from watching little videos on my phone might also be found from buying lots of clothes. Even though the latter costs me money, if I already know that consuming will make me feel good, I might feel compelled to make the sacrifice anyway.



So maybe, in order to decrease our physical consumption, we need to not get roped in to digital consumption as well. And maybe if we want to treat this as an addiction, we should eliminate our consumption of physical and intangible things. But is that actually possible? And what does it even mean to consume anything?

Consuming Sunsets



I often find myself faced with a problem

When I witness fleeting, beautiful things in the world.

At what point have I truly experienced a sunset? A movie ends and I know my experience of it is over. Do I wait until the sun is gone to have experienced the sunset? Or is it sufficient to glance and look away? Do we look at sunsets for the same consumption experience that we scroll on our phones for?

My definition of "consumption" feels unclear.



In some way, all of the above could be "consumed," if by that I mean these things could be used in some way. A more direct instance of this is the consumption of food. Food has a specific use case and can be used once for that. Music has a less tangible, but still clear use case that we can use it for again and again.

We wait in lines for rollercoasters to get to feel the sensations we feel from a fast ride. If we can consume a song for the feelings we get from it, it seems we would be consuming rollercoaster rides as well.



Do we consume sunsets then? Looking at the

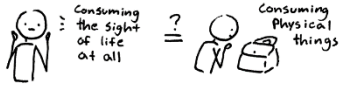
Looking at the sunset, I could be consuming the experience of seeing colors, producing thoughts, and feeling the air on my skin.

How could a person ever not be consuming something? Does the action of perceiving the stimuli of the world always equate to consuming it?



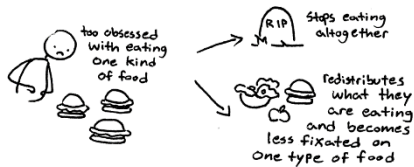
Would the only truly non-consuming person even be alive?

Going back to my previous proposal, it would seem impossible to ever try and decrease a person's desire to consume products, because there might not be a way for us to ever not be consuming. I should reevaluate my models.



Even if both actions count as consumption, can I actually make the connection that these behaviors are equivalent?

Further, maybe complete abstinence is not the solution to over consuming something. Food could be a good metaphor here.



Charging Objects

Why was the person in the food metaphor so obsessed with that one kind of food though? People do not treat all objects equally. Some are completely taken for granted while others spark obsessions.



Advertising creates artificial pressure for people to want things. People reasonably like well designed things, but does this equate to being satisfied by them?

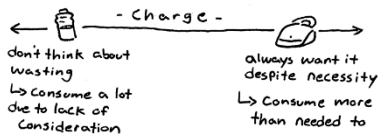


The shoes are all well designed, but having one isn't enough.

Let's call whatever this desirability factor is the amount of "charge" an object has. Obviously, there must be many reasons for why some objects are more charged than others.



I find it interesting that both extremes of objects being charged or not result in heightened consumerism in different ways.



Are there some objects that are appreciated enough that we are conscious about not wasting them but not so much that we feel the drive to get them when we don't need to?

↳ Actually, couldn't we just decide to treat everything this way?

Satisfaction

When people leave their cats at home for a weekend with an abundance of food, the cats self-regulate and only eat what they need. Humans are capable of self-regulating food intake as well, most of the time, because there are signals from our bodies that tell us when to stop.



Do we even have built-in signals for feeling satisfied with the things we own though?



Are collector animals only limited by their own abilities to acquire things?



Is this what people are limited by as well?

But why are animals collecting those things at all? And why are we?

While the exact reasons are unknown, it has been suggested that birds collect pretty things to show off to other birds their ability to gather in general. Doing so allows them to mark their territory and attract mates.



If that is really the goal, then it seems reasonable that birds would not want indefinite amounts of shiny things, but just enough to get their points across.

Unlike birds then, people consume objects for their utility as well. If this was the overwhelming reason though, people probably wouldn't buy up and hoard the new Trader Joe's tote bags.



does the need for this stop anywhere?

Perhaps objects fulfill different types of needs, with some fulfilling fewer or more.



- hold things
- express personality
- sweep floor

both fulfill their utility until they break

is this the distinction? Could it be that our idea of our social needs has grown to such an extent that it could never be satisfied?

Necessity

I saw an advertisement for a \$15 popcorn ball that allegedly makes perfectly seasoned popcorn in a pot. Some people in the comments laughed at the idea, while others defended the product, arguing that the ball could solve their problem of always needing to buy freshly cooked popcorn.



So far I have considered consumption in two distinct categories: necessary and unnecessary. Where exactly does this distinction lie though?



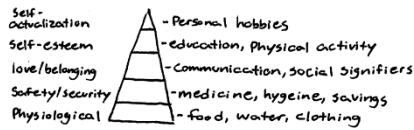
needed to physically survive (as much as a prison would provide)



[Average American Lifestyle]

While yes, we could technically survive without many of the things above, our other social and mental needs would not be met.

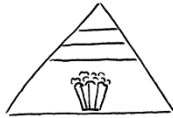
Maslow's hierarchy of needs stacks all of his proposed human needs into a pyramid, suggesting that a person would be fulfilled once their pyramid was satisfied.



Physical items can play parts in fulfilling these needs

There is still a lot of flexibility in how these needs are met, though, especially regarding which physical items we use to get there. Technically, most of these needs could be met through very cheap, environmentally friendly means.

In such a busy, complicated, and stressful world though, maybe it isn't satisfying enough to play with a ball on a stick to reach self-actualization. Maybe, in order for someone to have the motivation to work, socialize, or try any hobbies, they need the enjoyment from a fresh batch of popcorn every day.

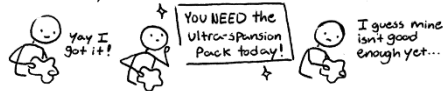


And maybe this is something flexible, even in our power to change. People are not born with innate desires that can only be solved by popcorn, but instead develop these preferences relative to the environments they grow up in. Someone raised with very little might be entirely satisfied with a simple toy while someone raised with everything would still feel fundamentally unsatisfied by hundreds of elaborate gifts.



Appreciation

I don't mean to blame this hypothetical rich child for being bored with their toys. As I touched on before, we are raised in a world where we are always being told to be unsatisfied. As soon as someone buys the newest video game console they receive ad after ad for more games, accessories, and paid subscriptions until the next console eventually comes out.



And this pressure comes from everywhere, with social and advertising pressures constantly building on and learning from each other, making escaping its influences non-trivial.



So is it even reasonably possible to appreciate the things we have? The only things I can think of that we do just appreciate without demanding more are family heirlooms. I have never met someone that once valued an heirloom then later became unappreciative of it from social pressures.



Why do sentimental things transcend trends and induced dissatisfaction? Can we develop similar appreciations that transcend social pressures for the other things in our lives?



Driving Desire

As Spring rolled around this year the Muslim holiday of Ramadan and the Christian period of Lent happened to line up for a bit of time. Both of these religious observations involve personal sacrifices, with Muslims fasting during the day and Christians giving up personal habits. I lived in close proximity to individuals observing both of these holidays. In both cases I have heard accounts of people feeling less interested in engaging with the things they had given up following their times of restriction.



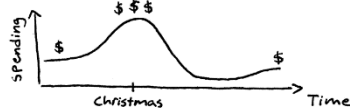
Perhaps the lack of proximity allowed their ties to those objects weaken and even break entirely.

Around the time that both of these holidays were coming to an end I attended an anime convention. I had forgotten that these conventions were almost entirely centered around buying merch.



Having gone to Conventions before, I didn't feel particularly driven to get all that much. My friends on the other hand had never had this opportunity before so one of them ended up spending \$500 in three days. The convention promised abundance, but only for a limited time, spurring customers to pick up everything they could. People who were otherwise frugal were suddenly jumping at any chance they could to get more things.

All of these springtime events with their different effects on consumption reminded me that the desire to consume is not static. Rather, it ebbs and flows according to the social, cultural, physical, and personal pressures we are feeling at a given time.



These changes occur over the span of weeks, months, years, and lifetimes.



Age 20



Age 25

Consumption is not just a steadily increasing phenomenon out of our control. Perhaps just as it is possible for individuals to consume less, it could also be possible for entire societies to demand less overall.

Responsibility

I can recognize the potential unfairness in putting the burden of changing over-consumerist behavior onto individuals. If I raised a cat and always provided significantly more food than it needed, the cat would likely grow up overweight.



The cat has only ever known this excess, as opposed to knowing a healthy amount of food. Is the cat at "fault" for not being healthy? Maybe not, even if the cat does have the autonomy to eat less, because how would it have known to? Then again, maybe, if the cat wants something to change, the cat's own behavior is the only thing it can control.

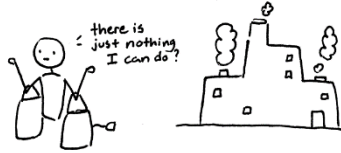
Recently, one of my friends bought a \$20 sleeping bag off of Amazon. Even though he only needed the bag for a two-night trip, buying it online was cheaper than renting one from our school's outdoors club. While his actions could be considered wasteful, I kept revisiting the scenario to see who was to blame for this wastefulness.

Yes, my friend made the final purchase, but that was because there weren't accessible alternatives that were as convenient. Is the outdoors club at fault for not providing this? Or is Amazon to blame for being so affordable? Can any of these parties actually be held "responsible"?

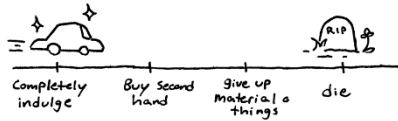


Amazon could charge more money, my friend could just deal with sleeping on the floor, and maybe if we all just "did our part" with what we could do we might be able to just undo climate change.

But how far does this extend? The big meat industry causes far more problems for the environment than my contributions could ever affect, but all I can do to reduce those problems is not participate.



Of course, on the other hand, there is always so much more that could be done. The United States alone uses up 17% of the World's annual energy consumption, so should we all just unplug from that? We could, we also could all die and stop taking any resources altogether.



Maybe the line is a personal one, but what's important is that the line does exist and we have the power to decide where ours falls.

In the end, who knows what is the best thing to be done about our overconsumption or if anything should be done at all. I have said everything I have to say, but I don't think the story should end with what I think.



If you follow this lovely QR code, you will be taken to a website where you can share your thoughts and opinions about anything I did or didn't bring up. I would love it if you could keep this conversation going either by posting your thoughts, passing this book on (or hiding it in public like I have) or even just considering any thoughts you had throughout this journey as you go about your life.

I hope you enjoyed my confusions, wanderings, wanderings and ramblings as much as I enjoyed writing them!

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