

# Unpalatable

## The Performative Role of Food Packaging

**Virginia Patterson**

Submitted in partial fulfillment for the degree  
of Master of Fine Arts in graphic design

School of Art  
Kathrine G. McGovern College of The Arts  
University of Houston

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**Thesis Committee:**

Sibylle Hagmann, Chair  
Cheryl Beckett  
Yoon Kim  
Fiona McGettigan  
Luisa Orto  
Joshua Unikel







**Thank you**

Jimi, for your support and encouragement.

Ellen, for being my in-house critic, install assistant, and source of motivation.



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## Introduction

A trip to the grocery store (or an online order—a new norm for some since the onset of the Covid-19 pandemic) allows one to procure an abundance of food products, regardless of season or geographic origin. The modern industrial food system enables consumers to eat what they want, when they want, a system which might mystify our farming, foraging, and hunting ancestors.\* For most consumers, the acquisition of food is mediated by labels, packages, menus, or other graphic forms—visual cues which are subject to some policy and industry requirements, but primarily perform to capture consumer attention and stimulate fancy. While the food package as a structure or vessel has long been a practical instrument of transportation and preservation, extending food’s biological life or aiding in the facilitation of exchange, it is not until the early twentieth century that visual aspects of food packaging and labeling became central to mediating the relation between products and consumers. Prior to the self-service grocery store and the rapid expansion of individually packaged and labeled goods, consumers engaged with the physical nature of products directly—unmediated by textual and graphic cues (Cochoy & Grandclément-Chaffy, 2005; Hawkins, 2012). On one hand, food labeling has democratized access

to nutritional, physical, and cultural features of a product, information which was once inaccessible. On the other hand, the dominant visual ecology of food packaging is so concerned with “shelf appeal”, that it surrenders its potential to communicate rich and meaningful food origin stories, or mediate understanding of the complexities of the industrial food system. Interested in the social, environmental, and cultural impact and significance of food, this research takes on questions related to the performative role of food packaging in the marketplace and the role of design and policy in generating deeper understanding of food’s origins and impact.

\*This research does not address issues of food insecurity. Claims and data about consumption refer to food-secure households.



Common Food Claims and Labels

### Food Impact and “Activism”

The food industry is the largest sector of the US and world economies—imposing significant impact on its participants and the environment. Food is a major contributor to individual and community health outcomes, accounts for nearly one-quarter of global greenhouse gas emissions, and is responsible for the socioeconomic outcomes of those who labor within the food system (André, Chandon, & Haws, 2019; Brown & Getz, 2008; Poore & Nemecek, 2018; USDA ERS-Ag and Food Sectors and the Economy, 2020). Entangled with class, wellbeing, federal budgets, trade and immigration policy, land access, and biological ecosystems, food is incredibly complicated (Committee on a Framework for Assessing the Health, Environmental, and Social Effects of the Food System et al., 2015). The production, processing, marketing, and consumption of food have become part of a highly complex, interdependent system—a system which is fairly opaque to its end participants: consumers.

While the twenty-first century has seen a rise of activism and concern around food, centered around “alternative food movements” which encourage growing your own food, eating locally, or “voting with your fork,” these movements are grossly limited to those who have access to and can afford participation. Often racially exclusive and expensive, Hall (2015) criticizes alternative food

movements for centering “good food” around a middle-class whiteness which marginalizes and erases the struggles and labor of the people who work in our food system—predominantly people of color. Superficial labels and claims have emerged on food packaging to appeal to the privileged “food activist,” commonly representing issues related to pesticide use, genetic modification, and factory farming, rather than representing issues related to health, social, or environmental justice (Hall, 2015; Orquin, Bagger, Lahm, Grunert, & Scholderer, 2019).

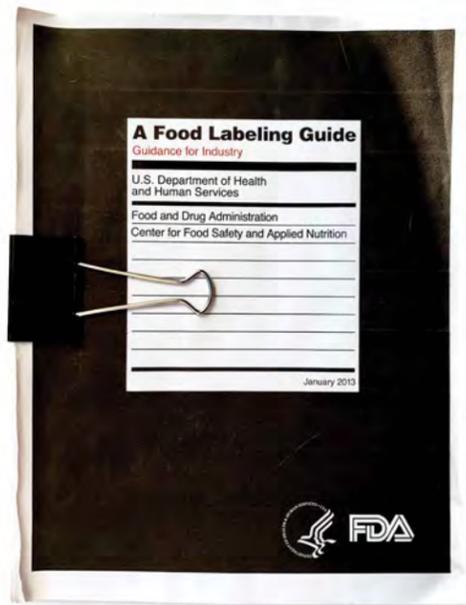
These superficial claims of the alternative food movement are frequently misleading, lacking context and contributing to greater misunderstanding of food origins. An example of this is the ubiquitous “Non-GMO” claim, a credential which many consumers seek regardless of its veracity. It is frequently included on products that have no genetically modified counterpart, or physically cannot be genetically modified, like salt. Similarly, consumers often believe “organic” chips are healthier than their “non-organic” counterpart, or that the inclusion of terms like “fresh” and “natural” indicate that a product is healthier than alternatives lacking that label. According to a 2018 study, the most popular terms consumers search for on food labels are also the most ambiguous (Kirshenbaum, 2018).



## Problem Statement + Justification, Background + Research Questions

### Problem Statement + Justification

Dominant transaction-motivated food labeling schemes erase the narratives of food biographies, food’s ecological and social impact, and food’s importance to cultural connection or preservation. Food labeling obscures the complex origins of food, performing a superficial “Buy me! Eat me! Enjoy me!” promise, with little attention to environmental impact, human labor, and clarity of healthfulness. Within a system where consumers have the opportunity to eat almost anything they desire, and increasingly demand to know more about their food, the complicated networks of origin and agricultural impact remain fairly opaque. Solutions to the demand for knowledge result in ambiguous claims such as “natural,” “Non-GMO,” and “wholesome.” Consumers have become accustomed to eating with a mindlessness groomed by marketing agendas, food media trends, convenience, and inadequate food labeling policy. *Unpalatable: The Performative Role of Food Packaging* seeks to examine the status quo of food packaging in relation to food origins and knowledge, calling into question the roles of food labeling policy, design, and consumption.



ABOVE  
FDA Food Labeling Guide

Nutrition Facts	
7 servings per container	
<b>Serving size</b>	<b>30g</b>
Amount per serving	
<b>Calories</b>	<b>130</b>
	% Daily Value*
Total Fat 4g	5%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 480mg	21%
<b>Total Carbohydrate 22g</b>	<b>8%</b>
Dietary Fiber 1g	3%
Total Sugars <1g	
Includes <1g Added Sugars	1%
<b>Protein 2g</b>	
Vitamin D 0.5mcg	2%
Calcium 20mg	2%
Iron 1.3mg	8%
Potassium 20mg	0%

\*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

RIGHT  
FDA Nutrition Facts Panel Sample

Consumers typically make decisions based on their own perceptions, values, and understanding of the information presented to them (Palma, Collart, & Chammoun, 2015). Considering that 82% of food choices are made at the point of sale, the language and information on a package carries great importance in relation to decision-making and understanding (Newman, Howlett, & Burton, 2016). The US Food and Drug Administration Food Labeling Guide, the guide which outlines policy and regulation related to food labeling—policy ranging from the format and placement of the Nutrition Facts Panel to the language of dietary-related text—only requires the presence of two elements on the front of a package (the primary display panel, or PDP). Those two elements are the *net weight statement* and the *statement of identity*, or the common language describing a product (i.e., rice cereal). The net weight statement must comply with a specific size, typographic style, and location, while the statement of identity can be as small or large as a producer desires. The limited requirements of PDP content allows for great communication freedom for producers, marketers, and packaging designers. With regards to all of the other content typically present on the PDP (imagery, branded names, flavor descriptors, social value credence icons, etc.), there is limited policy around

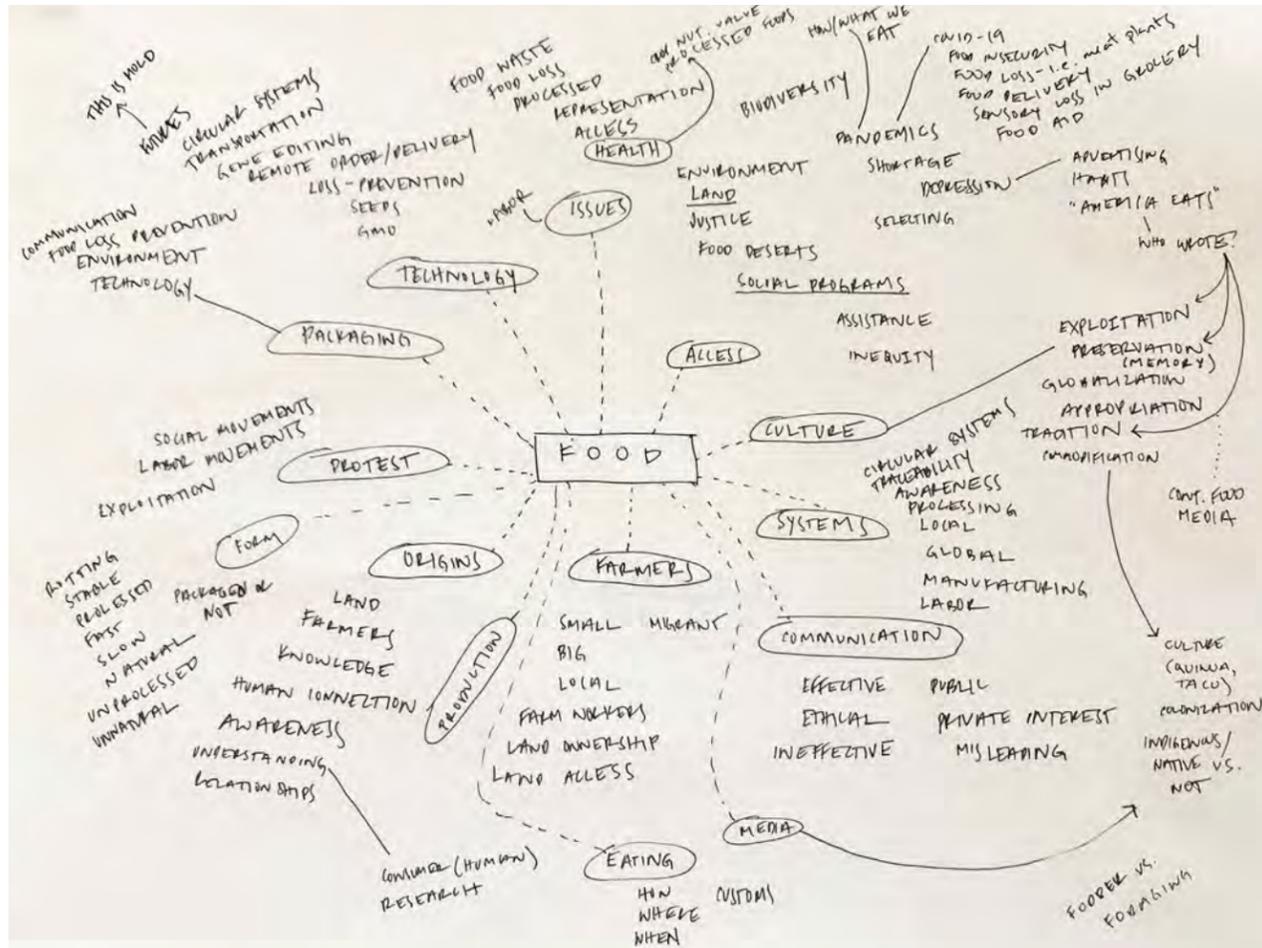
what is permissible. Many food product attributes lack legal definition and carry ambiguous meaning (Palma et al., 2015). This is why a consumer might encounter a product with a beautiful image of an orange, even though it contains no oranges, or a non-GMO label on salt, even though salt doesn't have genes.

This research evaluates the food package as an opportunity to mediate meaningful and truthful food narratives, comparing current food packaging visual schemes to alternative visual ecologies which honor the land and the labor required to produce food. Food has the ability to nourish, satisfy, delight, and transmit stories. If we must live with a system in which most food is packaged, should food packaging do the same? Rather than a mediator in support of capital gains, should food packaging mediate deeper and richer knowledge of food? Would food labeling policy that requires information related to food origins and production influence systemic change within food systems? These are just a few of the questions I have asked throughout the development of this thesis. Some consumers might argue that they would rather not peruse grocery shelves that reveal inequities in the industrial food system—its exploitation of human labor and natural resources. Some consumers may not

“We have to get complicated around consumption, because it’s complicated, and the denial of that only serves our corporate, industrial agriculture overlords who have built a world that serves their purposes, which is only profit.”

—Alicia Kennedy

want to pull a carton from their home refrigerator and be reminded of the environmental impact of food production, or that the necessity of eating also diminishes the health of our planet, and in turn, community health. This research and visual output is not meant to reinforce the self-aggrandizing values of “conscious consumption” or the ideals of privileged alternative food movements. Rather, it is meant to reveal the asymmetry of information in food labeling, the most public, ubiquitous forum for communicating food narratives, while also questioning the potential of policy and design to influence systemic change. It is meant to uncover the entanglement of current food labeling policy and capitalism and to echo the sentiment of food writer Alicia Kennedy (2020), with regards to mainstream food communication: “...there is that mindlessness, that comes from an often white, often bourgeois, often global north, often neo-colonial perspective on food that obscures the people laboring, the soil that needs nitrogen, the potable water that isn’t a given in much of the world. Enjoy, enjoy, enjoy, they seem to say, while all this is going on.” Ideally, our food system would not depend on exploitation, and consumers would not be responsible for “conscious consumption.” Ideally, offerings would be inherently ethical. Until then, what is the role of design?



ABOVE  
Research Mind Map, 2020

LEFT  
Research Framework, 2020

INTEREST	INQUIRY	THROUGH	TO
Food: justice access sovereignty rights knowledge memory origin	Design as a method and means to critique and address food issues	Speculative systems Applied practice Knowledge/awareness	Amplify awareness, inform, and motivate action

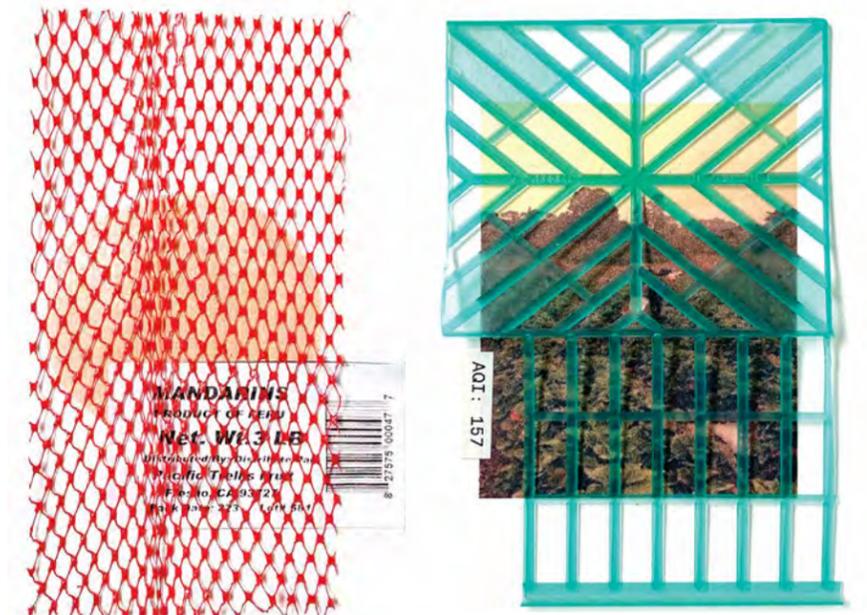
## Background + Research Questions

My early thesis research began with a much broader lens of “food issues” and the role of design, loosely guided by inquiries related to food *and*: access, culture, systems, community, media, health, production, origins, form, protest, packaging technology, and labor. Eventually, I narrowed this inquiry into the working research framework shown left. Still relatively broad, I reluctantly accepted one reality: the consideration of food issues requires the consideration of multitudes of interdependent issues, and in the scope and time of this work, I would not solve any food issues. Freeing myself from this responsibility, I began to situate my research and form-making within the context of design areas such as: design for debate, design for discussion, and critical design. While I don’t define my design research precisely within any one of these overlapping and loosely-defined design areas, they have served as models for describing and situating my work.

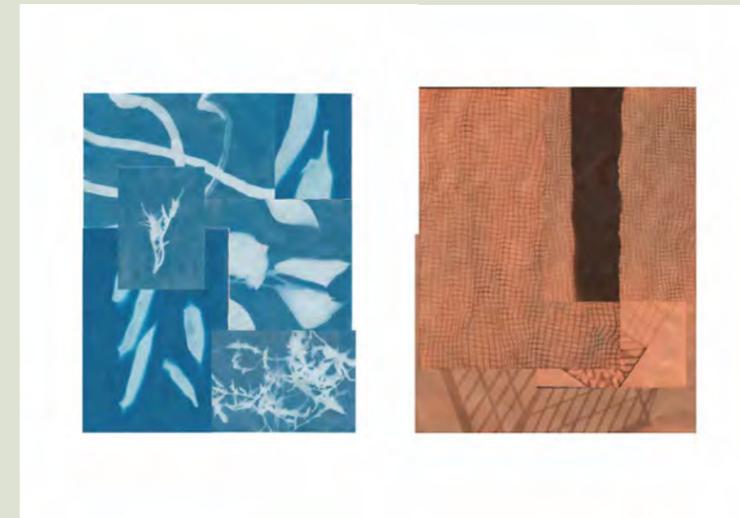
With a background in packaging design (mostly food) and an interest in food media and communication, I narrowed my thesis inquiry to a focus on food packaging, its role as a mediator of information, and its potential to communicate the complexities of our food system. I kept returning to the materiality and language of food packaging in contrast to the natural form of food and its biographies. Most often feeling like packaging obfuscated these biographies, I posed these research questions:

**How can design contribute to a more equitable food landscape?**

**How can food packaging illuminate the complexities of food systems and tell richer food origin stories?**



RIGHT  
Material Obfuscation  
Visual Research Studies, 2020



Nature Nurture  
Visual Research Study, 2020

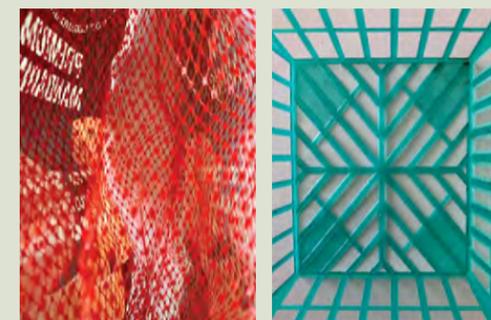


CLOCKWISE FROM TOP LEFT  
Starchy Data  
Food Impact Data Visualization, 2020

Supply Chain Intelligence  
Visual Research Study, 2020

This is Food, This is Food  
Visual Research Study, 2020

“Our first relationship with the world that surrounds us is not through contemplation and reflection, but through the use of things. That’s why design is so important when dealing with the material aspects of food systems, which inevitably also have an impact on cultural and social issues.”  
—Fabio Parasecoli



Material Scans  
Visual Research Study, 2020

## Precedents

Interested in complex systems, which require complex, interdisciplinary and interdependent design interventions, I have discovered company and inspiration in the work of several contemporary designers and design groups who identify as interdisciplinary, data-driven, and critical researchers and makers. Several are discussed in detail on the following pages.

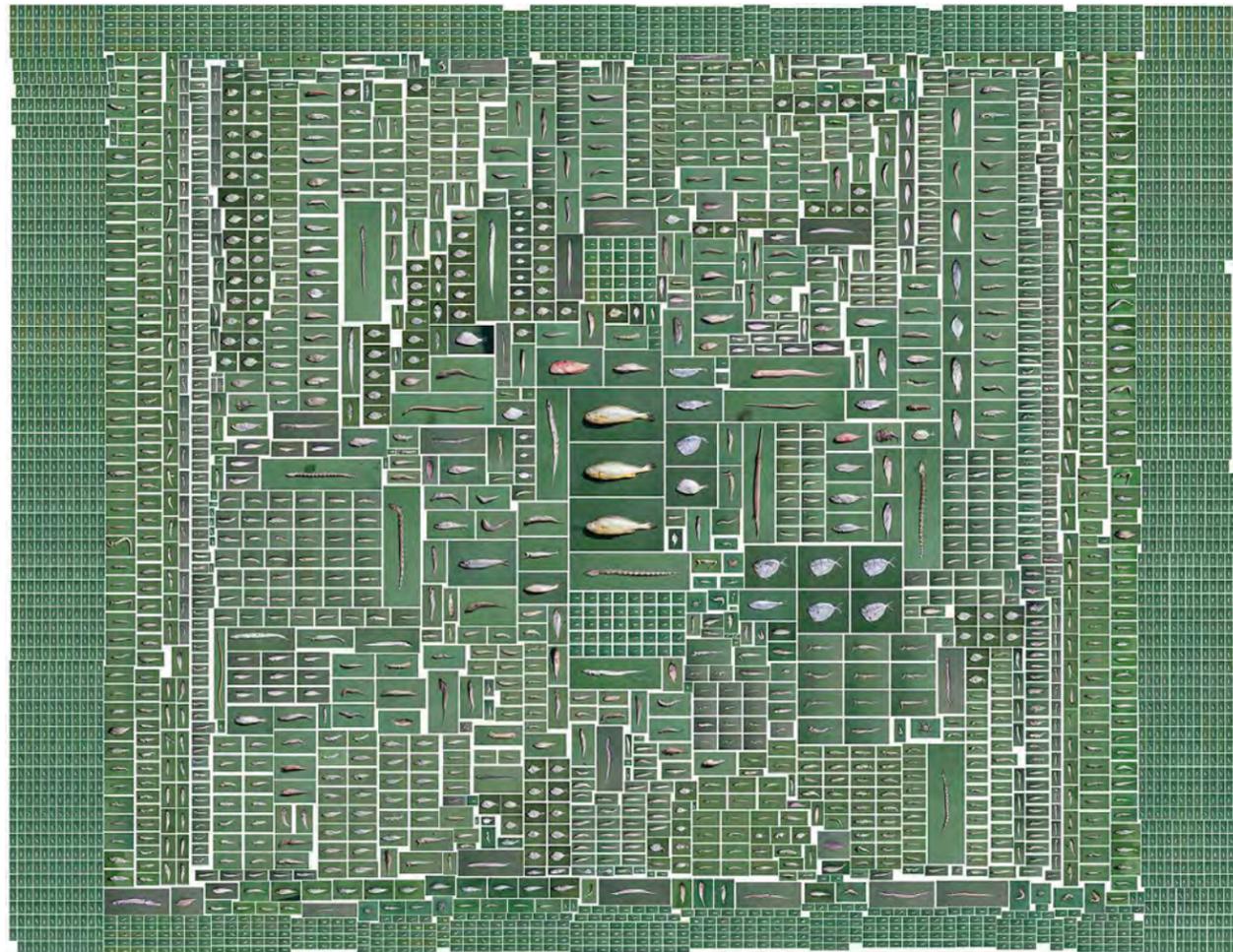
There are many other designers, artists, writers, media groups, publishers, conferences, thinkers, makers, and doers that encourage my interest in food and design. They span traditional publishing venues to artists and scientists who work with food as a medium for investigation to food anthropologists interested in food narrative and sustainable living. Some of these influences are indexed at the end of this section.

### Chow and Lin

I happened upon the work of Chow and Lin during Houston's 2019 Fotofest exhibition, *Intersect*. I was mesmerized by the impact of a mural-sized photographic installation of what looked like hundreds of zoological specimens—a variety of fish, individually photographed on green backgrounds, and reproduced true to actual scale. This particular work, *Equivalence — The Ecological Footprint of Fish* (2017), was both visually impactful and narratively intriguing. The narrative, abstracted and secondary to the visual presentation, allowed the viewer to engage, or not, with the complexity of the story. Stefen Chow and Lin Huiyi, a photographer-economist duo with collective backgrounds in visual arts, media, economics, and public policy, address complex global issues through typological, photographic documentation. Their practice is underpinned by a methodology of statistical, mathematical and computational techniques and interdisciplinary collaboration (Chow and Lin, n.d.).

In *Equivalence — The Ecological Footprint of Fish*, Chow and Lin examined the impact of farm fishing through China's most popular fish, the large yellow croaker. (It is relevant to note that China accounts for nearly 70% of the world's farmed fish (Barboza, 2007)). They collaborated with scientists, fisheries experts, and government agencies, while traveling through several towns in China to document fish through portraiture and learn how much wild fish was needed to sustain the farming of yellow croaker. They learned that more than 4,000 wild fish from 39 species were needed to raise 1kg of yellow croaker, or the equivalent of about 3–4 servings of edible fish. These 4,000 wild fish, sustenance for the yellow croaker, are caught premature, threatening both natural ecosystems and species regeneration. At the center of *Equivalence — The Ecological Footprint of Fish*, are three yellow croakers (equivalent to 1kg), and surrounding them, in mosaic fashion, are photographs of the 4,000 wild fish (Chow and Lin, n.d.).

Most of Chow and Lin's work utilizes photographic documentation, rooted in presenting a data-informed narrative. In their 2010–2020 project *The Poverty Line*, they traveled to thirty-six countries to document daily food choice determined by living at the poverty line in each country. Food which one could buy at the poverty line is photographed on a backdrop of location-specific newspapers, which Chow and Lin (2020) describe as “[confronting] the viewer with objective, non-emotional observations of our own circumstance, framed against the fragile balance of social structures, growth, and divide in an entangled, globalized world.” I draw comparisons of methodology, form, and subject between my work and Chow and Lin, both underpinned by observation and analysis. I don't claim to be even modestly as effective at communicating social and environmental issues through objective observation as Chow and Lin. Their multi-disciplinary backgrounds and deep collaboration afford their work a substance I aspire to within my research.



LEFT  
Chow and Lin  
*Equivalence—The Ecological Footprint of Fish*  
2016

BELOW  
Chow and Lin  
*The Poverty Line*  
2010–2020



## Futurefarmers

I have come in contact with the work of the collective Futurefarmers in several contexts—through niche food-related media, and more recently, in an exhibition in Italy. Founded in 1995 and with a still-active practice, Futurefarmers is a collective of diverse practitioners (artists, anthropologists, scientists, botanists, farmers, environmentalists, etc.) who question certainties and the status quo, with an overarching thematic inquiry of nature vs. humans (About - Futurefarmers, n.d.). Collectively, Futurefarmers propose alternatives to social and political organization, especially as that relates to food. Two specific projects by Futurefarmers, described in the following text, have influenced my thesis.

(i) *F.R.U.I.T.*, 2005

Part design experiment, part installation, part guerrilla intervention, *F.R.U.I.T.* aims to elevate the ecological knowledge of consumers through “fruit wrappers” which display the biographical and ecological footprint of an orange from production to consumption. These speculative orange wrappers are didactic, diagrammatic narratives which confront the consumer with the entire lifecycle of an orange. Wrapped on oranges in site-specific installations where artists engaged with participants, the wrappers were also discretely applied to citrus in open-air markets in Spain. The overarching goal of this project—to question and publicize the complexities of food production—directly relate to the inquiry of my thesis.

(ii) *Land, Use: A Blueprint for a New Pastoralism*, 2012

Thematically more poetic and anthropological, *Land, Use: A Blueprint for a New Pastoralism* was designed to open conversation about the disappearance of the tradition of nomadic pastoralism. While this project was part permanent installation, part participatory event, the central visual object was a diagram of a shepherd’s wagon, paired with didactic wall texts which illuminated the state of nomadic pastoralism. This was installed in a community space, where events were coordinated for people to gather for discussion about the topic. While my thesis work does not offer an explicit place for gathering to converse, I hope my *Food Labeling Anatomy* diagrams similarly act as focal points (like the shepherd’s wagon diagram) which explain current conditions and the proposition of my thesis. As discussed later, I believe maps and diagrams serve as meaningful cultural objects, and as a designer interested in applied research, can serve as plans for future design practice.

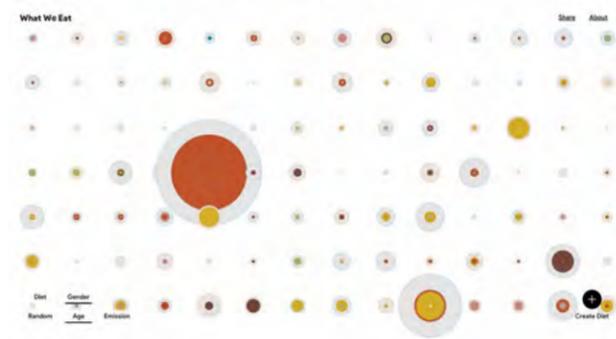
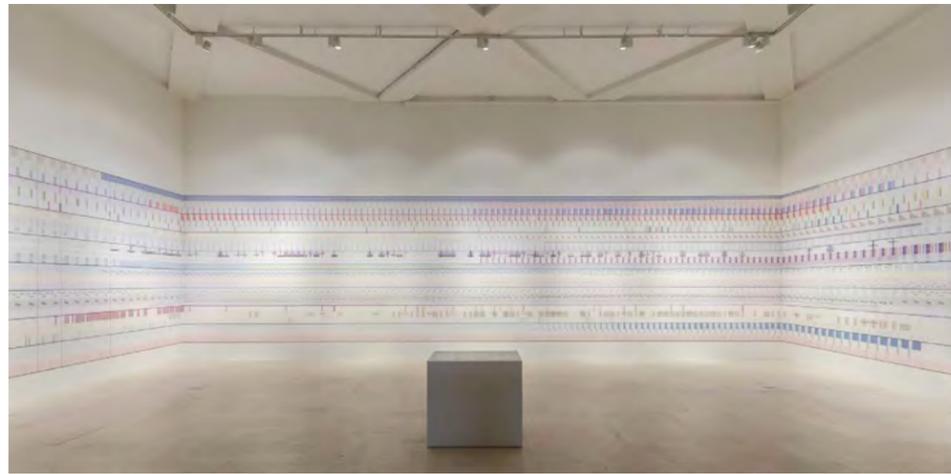
The work of Futurefarmers, often exhibited in museums, cultural institutions, or small event spaces, seems to draw a niche audience. Some of their work romanticizes ideal alternatives to the point of being inaccessible, unimaginable, or simply indulgent. While I admire the depth and importance of their research and production, I question its ability to broadly activate social and political reform. While my thesis work, also in a museum and mostly a critique, does not present an actionable design solution, I hope the continuation of this research bridges the speculative with the applied.



Futurefarmers  
*F.R.U.I.T.*  
2005



Futurefarmers  
*Land Use:  
A Blueprint for a New Pastoralism*  
2012



### Data Visualization: Giorgia Lupi and Laurie Frick

Two specific projects, by two data artists, have directly influenced my thesis work, less so formally, and more so in situating my work within or around design and data.

Around 2016, I encountered the work of Giorgia Lupi after reading an article about her book, *Dear Data*, and subsequently becoming interested in “Data Humanism,” coined by Lupi. In summer 2019, I attended the *XXII Triennale di Milano*, titled *Broken Nature: Design Takes on Human Survival*, and experienced in person *The Room of Change*, an installation by Giorgia Lupi and her then-current studio, Accurat. *The Room of Change* features a 100-foot wallpaper mural of data visualizations depicting various forms of human impact on our planet: from energy consumption to climate change, and human happiness to the spread of disease. In the center of the room was a legend to interpret the data, a detailed and complex key to aid in understanding of the beautiful tapestry. Situated on each side of the legend were two large projections displaying before-and-after satellite images from NASA, images you would first encounter upon entry into the room. Overall, *The Room of Change* had a commanding, yet quiet nature between the dramatic satellite images and the intricate wallpaper.

Like Chow and Lin’s *Equivalence — The Ecological Footprint of Fish*, *The Room of Change* also invited a viewer to choose to engage with the complexity of the data represented with scrutiny, or to admire and take in its formal presence with less attention to specificity. Either way, and in both cases, the quantification of impact was inescapably present.

While my thesis work does not deal with data visualization in the same complexity of the work of Giorgia Lupi, *Cereal Aisle* visualizes a specific density of data, and my *Alternative Food Labeling Anatomy* diagram proposes a visual logic of communicating impact through data visualization, and specifically, through visual density. Another project which utilizes a similar data-informed/impact-density visual logic is data artist Laurie Frick’s *What We Eat*—part installation, part experiment, part digital experience. In *What We Eat*, commissioned by Google Arts and Culture (2019), Laurie Frick and interactive studio, zigzag, designed and developed a digital tool which visualizes the environmental impact of the food we eat. Through a visual language of abstraction, rooted in color coding, scale, and density, *What We Eat* uses several secondary datasets and a friendly user interface to calculate and present the environmental impact of a user’s diet.



*The Room of Change* and *What We Eat* both employ an abstraction to communicate objective, scientific data. While abstraction does not comply with the immediate clarity so often demanded of graphic design projects, it does ask for a certain attention from viewers that can result in meaningful, lasting communication.

I acknowledge that much debate circulates around the visualization of data, its usefulness, and its veracity—dependent on the data source, the synthesizer, the visualizer, and the platform for communication. Scherling and DeRosa (2020) call into question the ethical implications of distilling complex data into simple graphic form, while acknowledging that centuries-old and contemporary data visualization have proven to be both useful and harmful (or destructive at worst). Accordingly, I hold the term “data visualization” in suspension, but believe it has a usefulness in communicating complex systems, when employed with care.

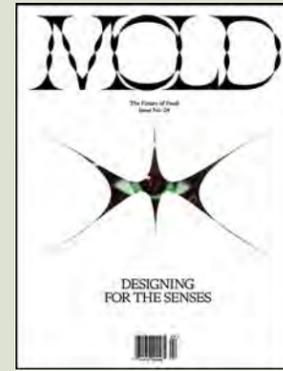
TOP LEFT  
Giorgia Lupi + Accurat Studio  
*The Room of Change*  
2019

LEFT  
Laurie Frick  
*What We Eat*  
2020

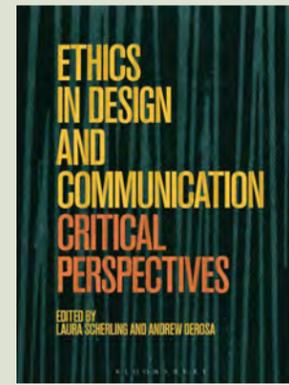
ABOVE  
Giorgia Lupi + Accurat Studio  
*The Room of Change*  
2019



Christien Meindertsma and Julie Joliat  
PIG 05049  
2009



MOLD Magazine  
Designing the Future of Food



This Book and the work of  
Laura Scherling



Point of Origin and  
Whetstone Media



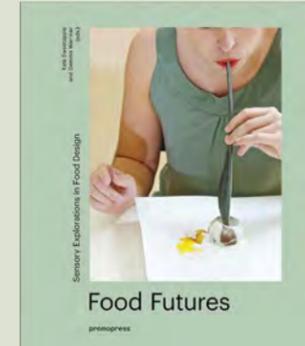
Food Zines  
Independent Food Communication



Studio Nienke Hoogvliet



@fruit\_stickers



Food Futures and the work of  
Kate Sweetapple and  
Gemma Warriner



Civic Art Lab



Community Refrigerators



The Counter



Food Lab at  
Illustration.school



## Process + Methodology

The following pages describe the process and methodologies involved in producing the work exhibited in my thesis show, broken down into the three main components, as labeled right.

RIGHT  
*Unpalatable:*  
*The Performative Role of Food Packaging*  
Thesis Exhibit, 2021



Cereal Aisle

Food Labeling Anatomy Diagrams

Checkout Line

## Cereal Aisle, a content analysis

*Cereal Aisle* is the visualization of a pseudo-content analysis. I label this analysis “pseudo” as the process did not follow all of the textbook procedures of a thorough content analysis. It did not involve multiple coders or any intercoder reliability checks, the sample was restricted to one data source, and the unit of analysis was fairly subjective. Nevertheless, *why this analysis/how did I get here?...*

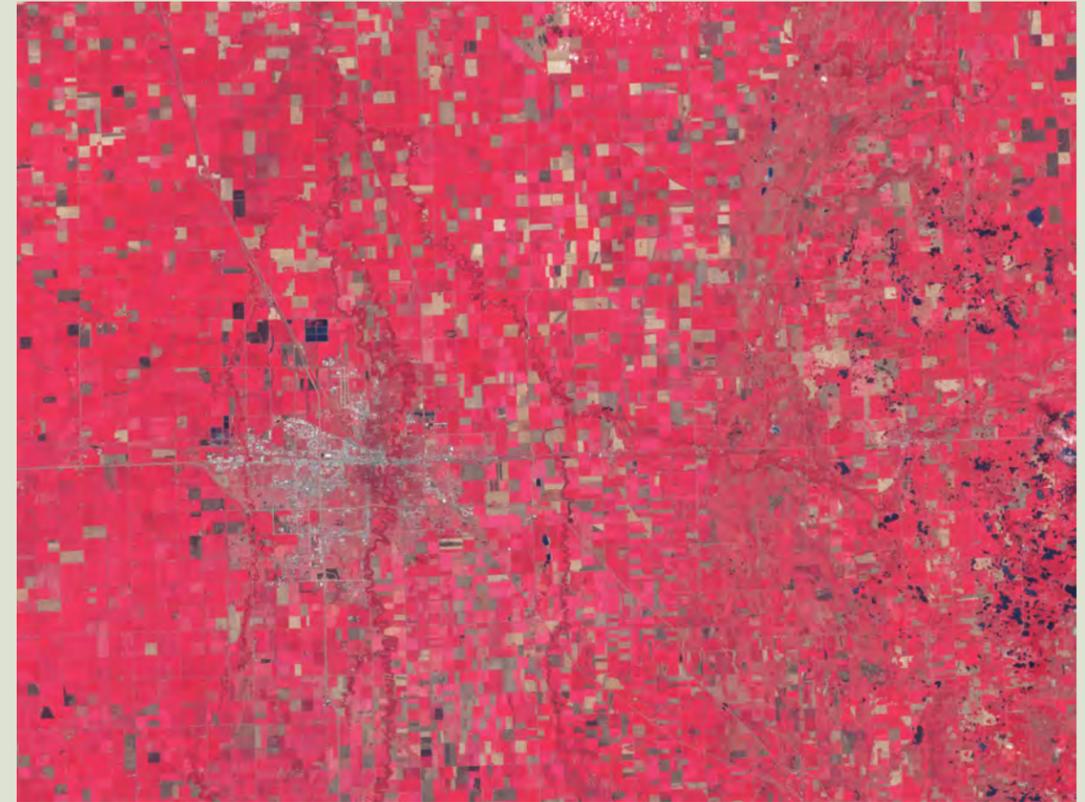
At some point during my thesis research, I was interested in the fact that online food shopping had skyrocketed during the Covid-19 pandemic. In 2019, 81 percent of shoppers claimed they had never utilized online grocery shopping, which made up about 1.2 billion dollars of total US grocery sales in August 2019. By June 2020, online grocery sales jumped to 7.2 billion dollars (Stewart, 2020). Comparing the experience of buying food in person versus buying food online, I was curious about information access on screen versus on shelf. I made an assumption that consumers could engage with more product information online, given the flexibility of product listing pages compared to the static front of a package on shelf. I was wrong, at least at the time. I found that online product listings included the same or less content than a shopper would encounter at the physical point-of-sale. While this specific observation could be its own thesis, I started thinking about the quantity of “useful” information we encounter on the front of a package—at the shelf or in an image on screen.

Simultaneously, I had been exploring NASA Landsat database images related to agricultural production and environmental impact. I encountered a satellite image that was described as being used to assess the health of crop fields (NASA Landsat-5, 2009). I made note of this contrast of information access between satellite-aided agricultural technology and the information consumers can access within 18 or so inches on a physical food package—a stark asymmetry of information between producers and consumers.

As part of my previous inquiry related to online grocery shopping and information access, I had downloaded every product image from H-E-B's Instacart platform in October 2020. Curious about the quantity of “useful” consumer information on a package, I used this Instacart image dataset as a sample for a content analysis, deciding on “cereal” as a sub-sample (mostly for its uniform orthogonal structure and somewhat consistent surface area). The codebook for my analysis, admittedly subjective, included content deemed as “useful”—textual or graphic content which described the product in common terms, the quantity, and information related to nutritional properties and product origins.

### Analysis Codebook:

- descriptive product title
- net weight
- facts up front
- sugar content
- whole grain certification
- typographic or iconographic nutrient attributes
- USDA Organic
- Fair Trade or other sourcing/production attributes related to labor



TOP RIGHT  
Precision Farming, Moorhead  
NASA Landsat-5  
US Geological Survey, 2009

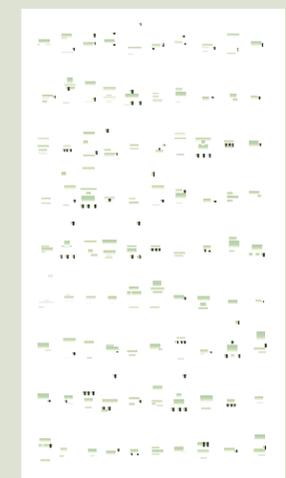
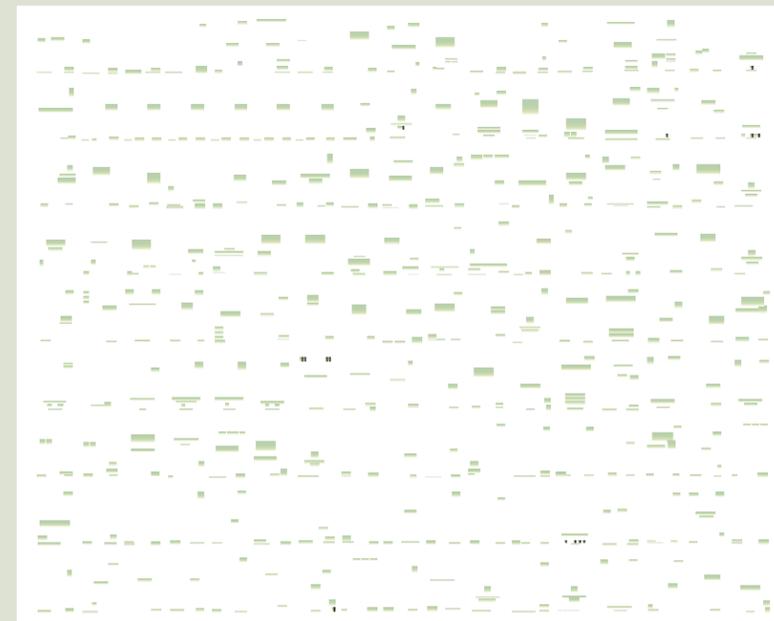
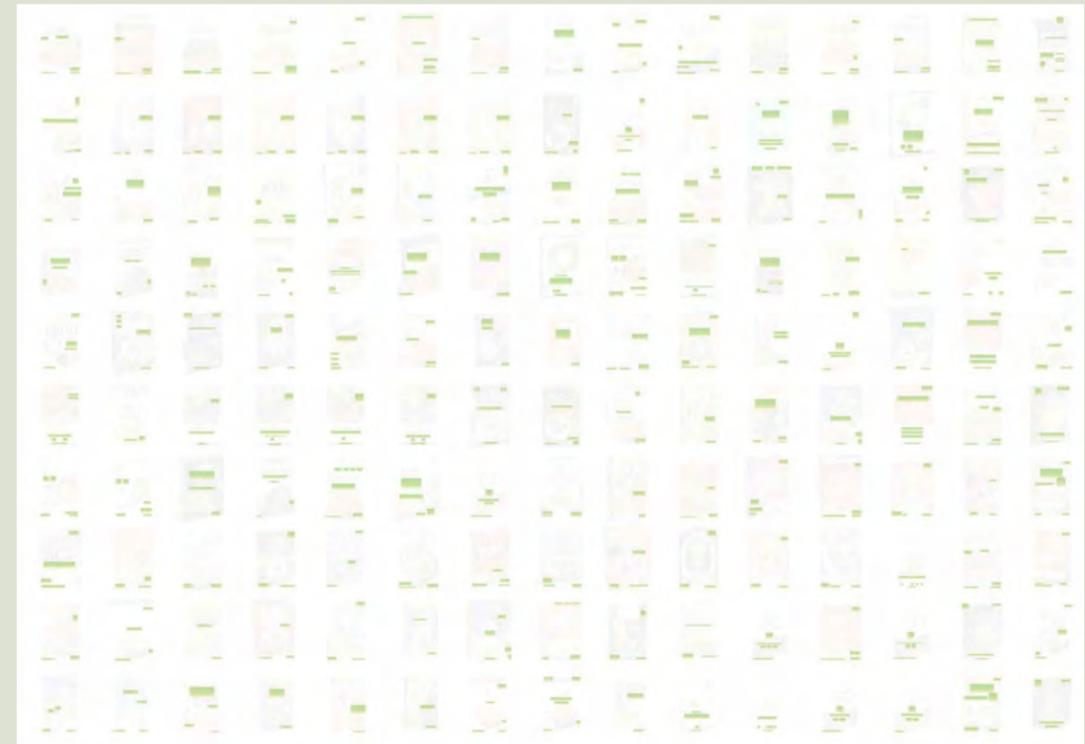
BOTTOM RIGHT  
H-E-B Instacart cereal products  
October 2020

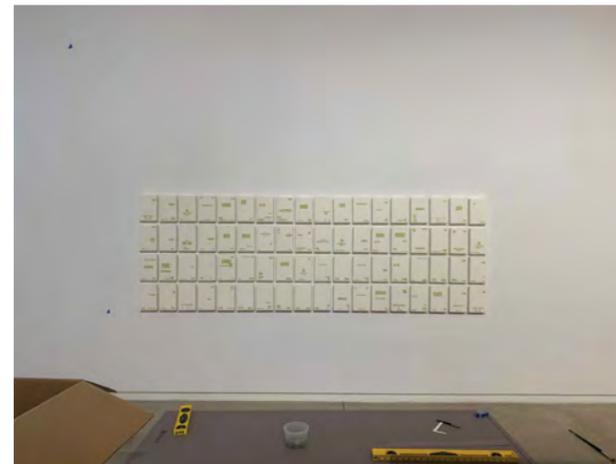
Observing *quantity* of “useful” information, within my sample of 162 cereal box PDPs, I coded the boxes by highlighting content related to my codebook. Next, I was able to calculate the total surface area of box fronts and the total surface area of “useful” content, discovering that, on average, only 8% of the front of package was designated to “useful” content. A majority of the remaining content was performative: branded language, sensationalized copy, seductive imagery, and brand “promises.” Familiar with the visual ecology of food packaging from both my practice as a food packaging designer and earlier research related to the function of the PDP, this figure (8%) didn’t surprise me, but I thought visualizing this as support of my overall research investigation could be compelling.

I expanded this analysis to milk, and initially, this took the form of two large prints, with original boxes, cartons, or structural perimeters redacted, and only the useful, highlights visible, as shown in *Cereal and Milk* (right). Wanting to contextualize this a bit more, and frankly, having some studio limitations of creating a print this scale, I transitioned the visualization to 3-dimensional miniature cereal box models. The installation became a scaled model of the grocery store shelf and content “highlights” were filled with agricultural satellite imagery, a nod to the contrast of information accessible from shelf versus space. As part of the entire exhibit of my research, *Cereal Aisle* acts as a support or justification for the other work, an analysis of existing conditions of food labeling.

TOP RIGHT  
Content analysis process

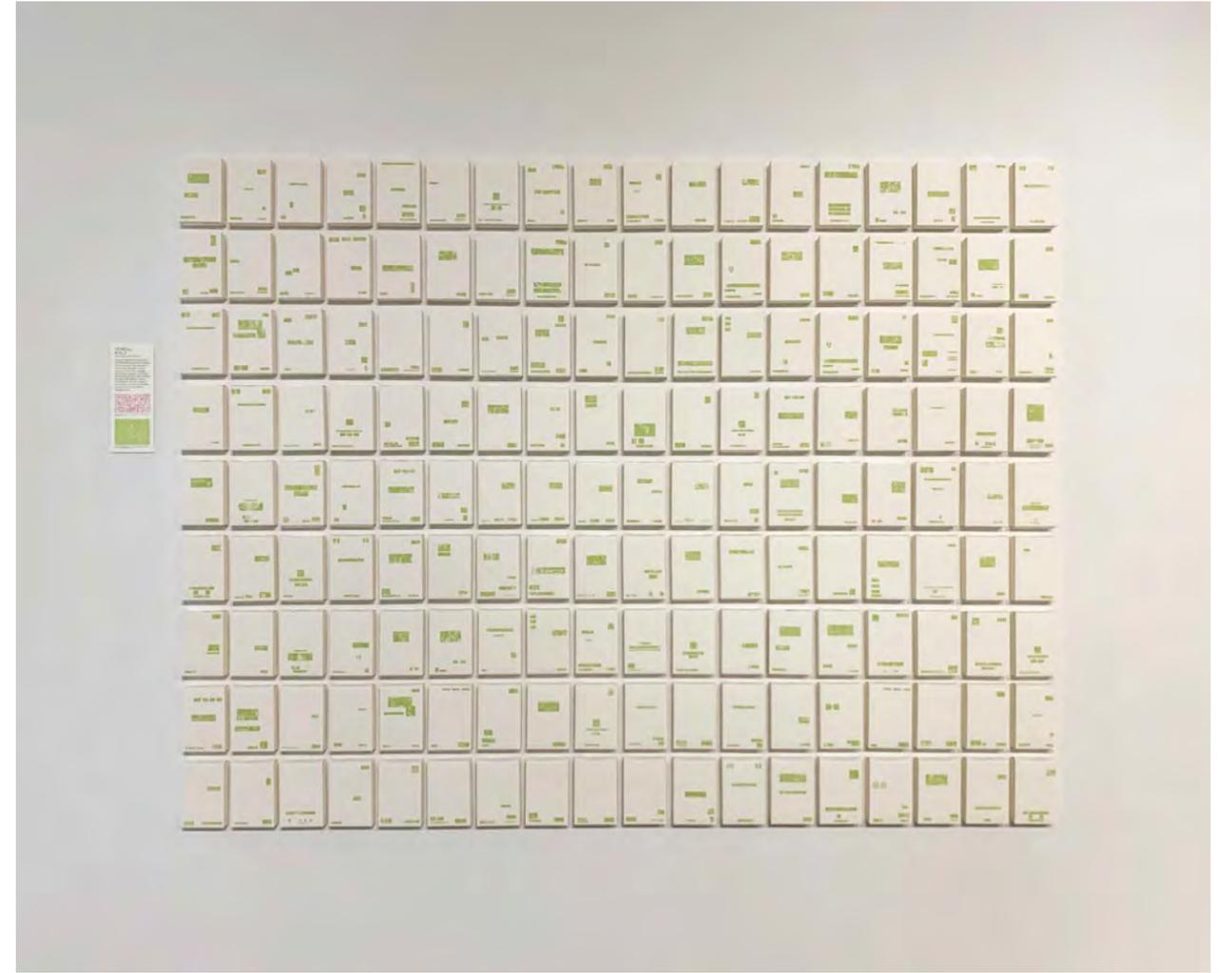
BOTTOM RIGHT  
*Cereal and Milk*  
Content analysis “prints”  
2020

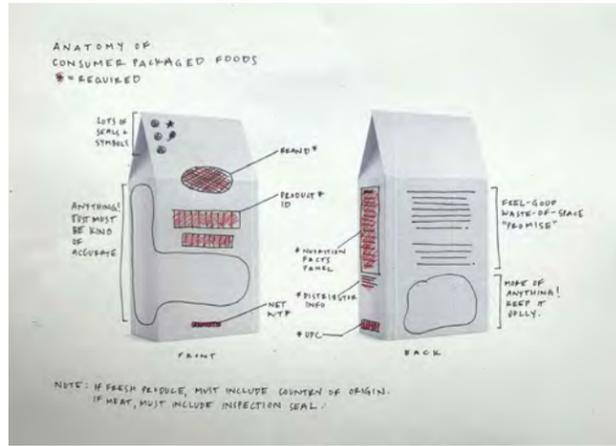




ABOVE, ALL  
Process from the making of *Cereal Aisle*  
2021

ABOVE, ALL  
Installation of *Cereal Aisle*  
2021





LEFT  
Anatomy of Consumer Packaged Foods  
Visual Research Study, 2020

### Food Labeling Anatomy Diagrams

Two food labeling anatomy diagrams, or maps, illustrate the present visual ecology of food packaging and my vision for an alternative visual ecology of food packaging. Compared to *Cereal Aisle*, they serve as more didactic objects within the exhibit. These originated from an early sketch outlining the existing anatomy of food labeling, and evolved from later, less detailed diagrams where I began to give form to the idea of an alternative food labeling scheme. At first, I was interested in co-opting the format and rules of the FDA Food Labeling Guide, constructing a completely new version rooted in different values and motives. I transitioned to developing the two *Food Labeling Anatomy* diagrams as companions to *Cereal Aisle*, hoping to provide further context and substance to the entire exhibit. I've always loved maps and diagrams as functional and symbolic artifacts that document time and ideas. The anatomy diagrams, produced as oversized, diecut, flat boxes with explanatory legends require a viewer to read in order to engage with the content, and the alternative version requires some imagination, but they are meant to illuminate and compare a current condition and a proposed alternative.



TOP RIGHT  
Development of a new Food Labeling Guide  
Process, 2020

BOTTOM RIGHT  
Development of Food Labeling Anatomy Diagrams  
Process, 2020



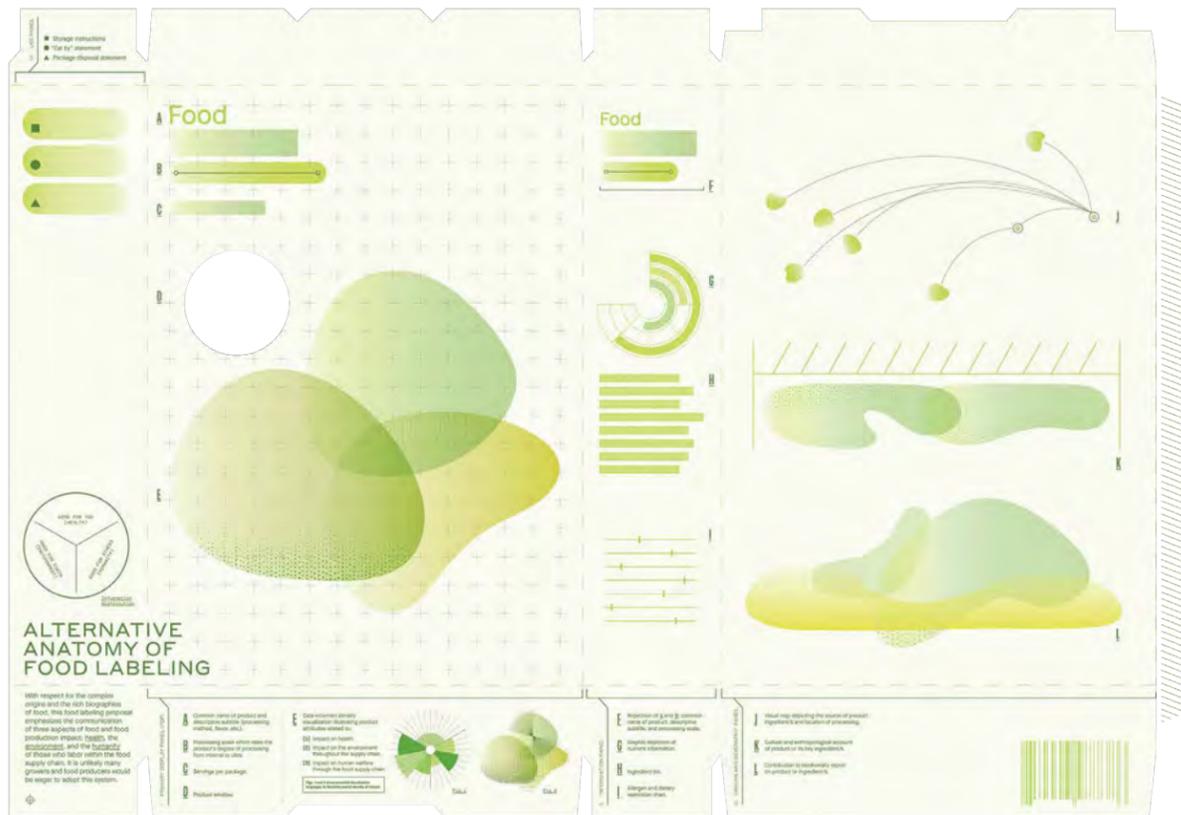


**Present Anatomy of Food Labeling**

This map borrows visual vocabulary from the current state of food packaging. Overbearing and loud, it is filled with exclamations, ribbons, and banners representative of the imagery and icons typically present on food packaging as devices to stimulate fancy or guarantee some product attribute. It diagrams the current and typical scheme of food labeling, following guidelines set in place by the Food and Drug Administration's Food Labeling Guide.

**Alternative Anatomy of Food Labeling**

Much of what this map proposes is data that does not exist or content not currently featured on food packaging, so nonrepresentational forms are used to depict a speculative idea. I opted for the use of biomorphic forms (described as beans and blobs throughout process and development) primarily to contrast the sharp and geometric forms in the *Present* anatomy diagram. This diagram asks a viewer to imagine an alternative to the current performativity of food packaging, introducing viewers to the idea of a communication system which centers human and environmental conditions over profit motives. The diagram itself states that food producers would be unlikely to adopt such a system, and my hope is that viewers also question if they'd like to encounter such a system as a mediator of food.



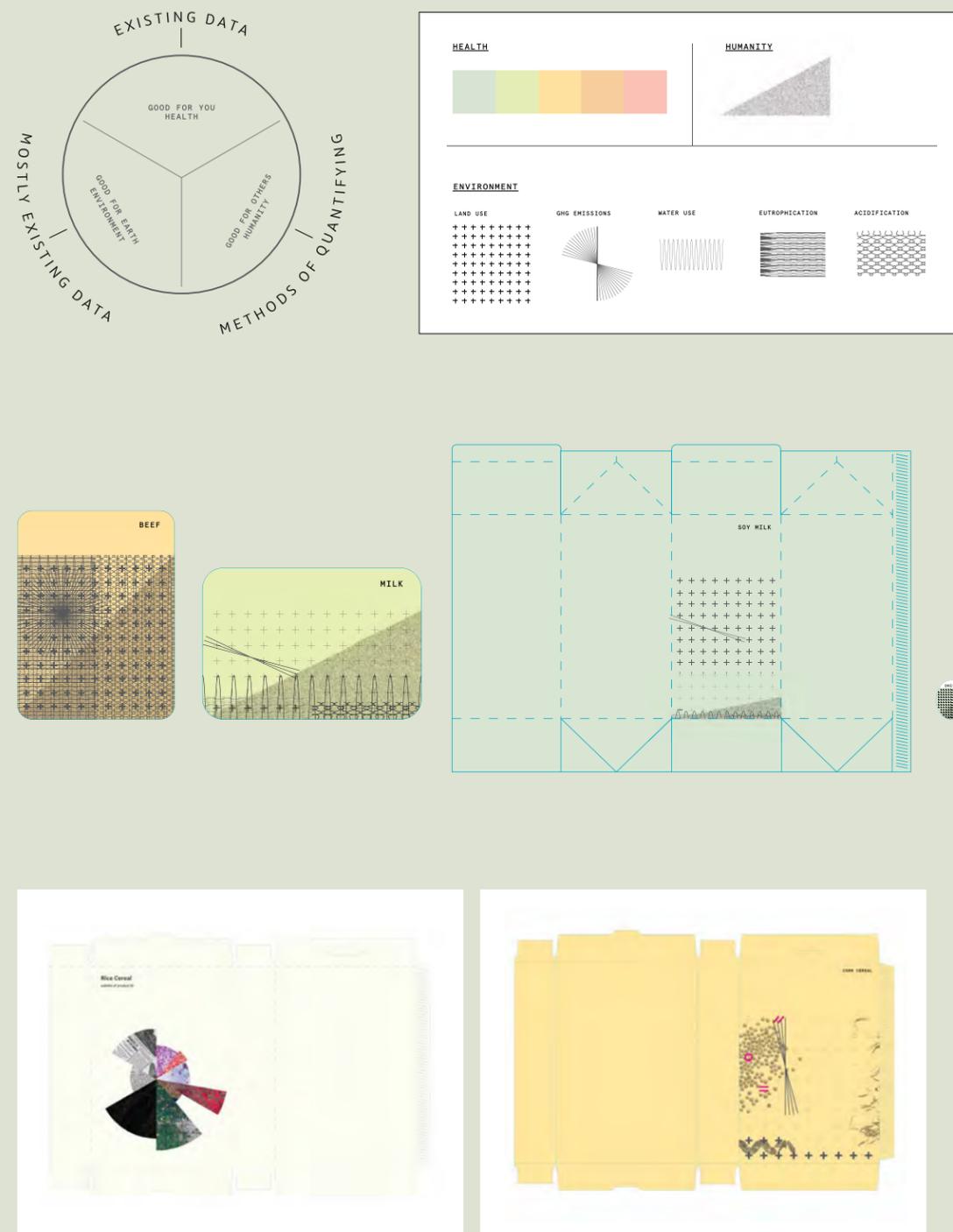
TOP LEFT  
*Present Anatomy of Food Labeling*  
2021

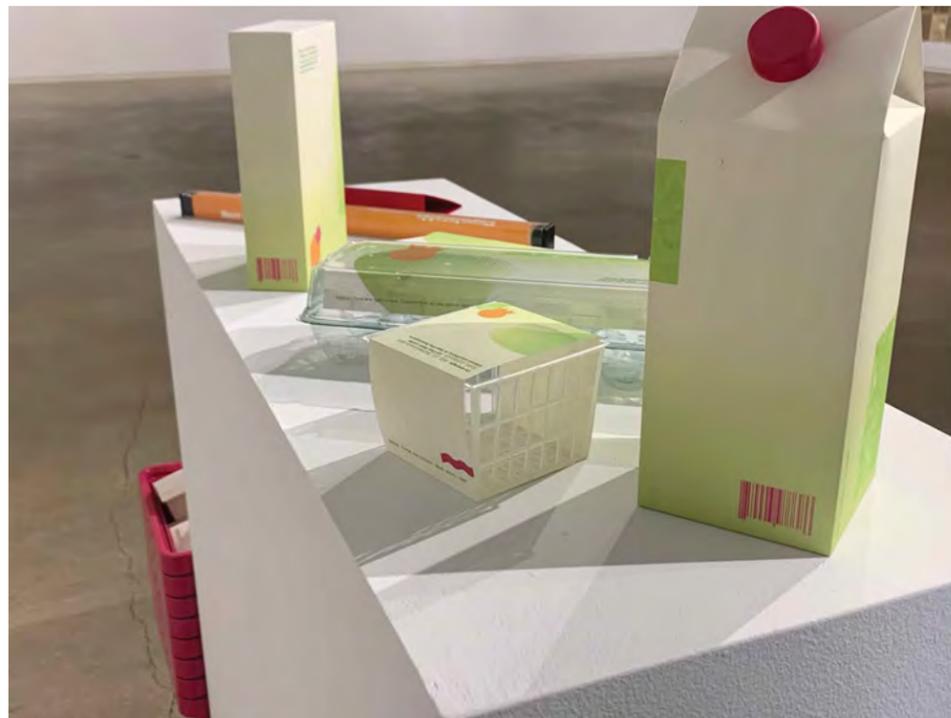
BOTTOM LEFT  
*Alternative Anatomy of Food Labeling*  
2021

### Checkout Line (untitled in exhibit)

The objects included in the “checkout line” (the pedestal within the exhibit) were originally intended to be prototypes of the “alternative anatomy” of food packaging, visualizations of that proposal. Given the presence of data abstraction in *Cereal Aisle* and the nonrepresentational forms used in the *Alternative anatomy* diagram, I decided the objects included in the checkout line should lean towards the didactic, rather than the abstract—to provide viewers some context for the work on the wall and a point of access that reinforces my interest in this topic. Throughout the process of my thesis development, I consistently received feedback that this work was not easily accessible, that it relied on a set of existing knowledge, and therefore limited access to engage with the content. While I don’t believe the work (in the context of the gallery show) needs to appeal to all, I didn’t want a majority of viewers to walk away unsure of what they had encountered. Furthermore, the *Alternative anatomy* proposal relies on two sets of data which don’t exist. As I tried to generate data visualizations built on pseudo-data,

I kept coming back to a question of ethics and responsibility in data visualization. Rather than prototyping the proposal I set out, the “checkout line” operates as more of a framing device for the work on the wall, rather than an answer or solution. Borrowing visual language from both the anatomy diagrams and *Cereal Aisle*, it ties those works together formally and operates as a kiosk which explains the exhibit. Scale was also an important consideration for these objects. Since the *Cereal Aisle* boxes are small models and the anatomy diagrams are oversized models, it felt important to include 100% scale models of familiar packaging structures as object cues of the typical grocery check-out. The objects contain statistics and sources from my research that answer some “whys” a viewer might have for content on the wall.





## Materials

All of the work in the exhibit is printed on French Paper Speckletone stock. This was an intentional choice, with concern for my material consumption and waste in the production of this work. The French Paper Speckletone line of paper is made entirely from recycled material, including 20–30% postconsumer fibers, and the French Paper mill is powered by fully renewable hydroelectric generators. This stock includes small flecks and fibers—to me, visual reminders of its once natural origins, in contrast to the often hyper-glossy, mass-produced food packages we are accustomed to. The paper contrasts the plastic objects included in the exhibit, bringing a subtle awareness to the material of food packaging, a topic not addressed in this research.



## Limitations, Conclusion, Future Implications

The term “wicked problem,” introduced by design theorists Horst Rittel and Melvin Webber (1973), best describes the greatest limitation of my research. My thesis focuses on the performative role of food labeling and the stories it tells—or could tell—in an effort to illuminate the complexities of our food system, but, packaging alone won’t solve inequities or environmental harm caused by global food production. The multitude of issues that stem from industrial food systems are wicked problems. One-off solutions that are conceived within professional or disciplinary silos will never work well enough or fast enough to transition towards sustainable futures (Irwin, 2019). Addressing food issues or even just food packaging issues will require collaborative, cross-disciplinary research and investigation.

By simply knowing food origins, our food system is not changed. The food market will not solve issues around labor, health, and the environment. While mandatory food labeling can alleviate issues of information asymmetry, mandatory food labeling won’t necessarily redress damage or disparity within food production or consumption (Marsh & Bugusu, 2007). Moreso, the values I propose in an *Alternative Anatomy of Food Labeling* are social objectives that may not be widely valued. While food labeling policy intervention has the potential to transform food systems (in a very optimistic outlook), what policy interventions reflect widespread, mutual interest? I see the greatest limitation—and fault—of this research being the fact that it was pursued and developed in my silo, centering my experiences and interests.

In their 2015 essay, *Critical Everything*, Francisco Laranjo criticizes the notion that most speculative or critical design lives within niche research forums or, in the case of design, in museums. Laranjo (2015) notes that

“if critical and speculative design are in the business of generating debate, how and who is evaluating that debate?” Perhaps critical design belongs in conversation with the public and stakeholders, and not in museums and forums accessible to mainly designers. Laranjo (2015) goes on stating: “if it (critical design, speculative design, design for debate, etc.) is to be accountable for its substance, quality and effect on society, then the bar for critical and speculative designers must be substantially raised.” In trying to categorically situate my research within Design, I keep going back to areas including: critical design, design for debate, transition design, and resilient thinking, but agree with Laranjo. This work can’t stop at the museum or design conference.

I reflect on this thesis as a bridge to future research. As stated, I came to terms early on in the process with the fact that as a sole researcher, I would not solve any food issues. I am, however, invested and interested in continuing research in the arena of design’s relationship to food packaging, policy, equity, systems, and issues, acknowledging this will necessitate collaboration with other fields (agriculture, sustainability, local communities, farmers, producers, policy makers). In continuing pursuit of this research, I am encouraged by the fact that there are growing research venues at the intersection of food and design and hope my research is held accountable to its substance—whether that means it has applied impact or participates in broadening the discourse of “design research.”

“The challenges of improving the food system in the 21st century will require systemic approaches that take full account of social, economic, ecological, and evolutionary factors. Policy or business interventions involving a segment of the food system often have consequences beyond the original issue the intervention was meant to address.”

—(Committee on a Framework  
for Assessing the Health,  
Environmental, and Social  
Effects of the Food System  
et al., 2015)



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