

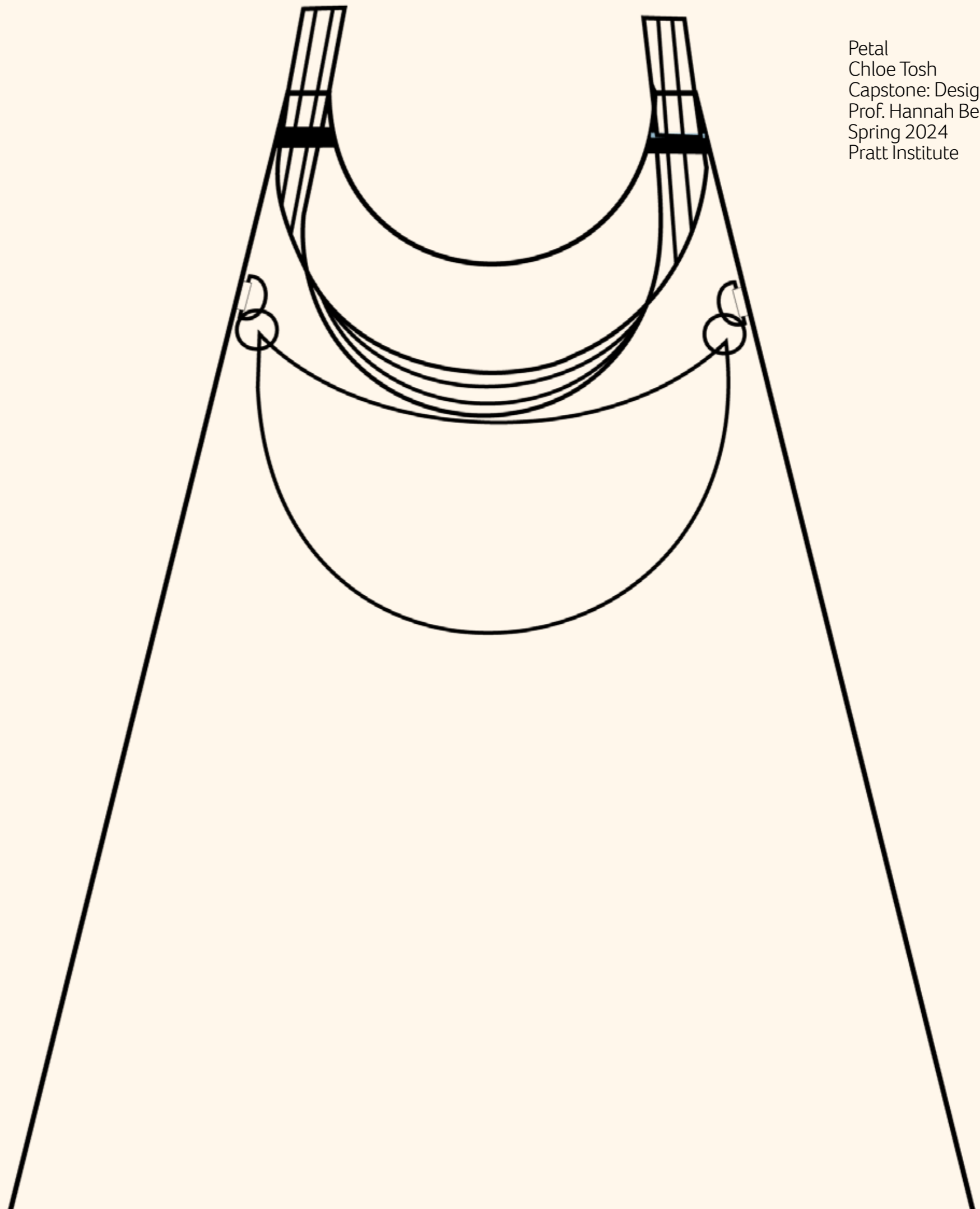
Petal

Redefining trips to the laundromat

Contents

Petal
Chloe Tosh
Capstone: Design NYC
Prof. Hannah Berkin-Harper
Spring 2024
Pratt Institute

Preface	05
Introduction	07
Chapter 1	08-15
Chapter 2	16-25
Reflection	27
Bibliography	29



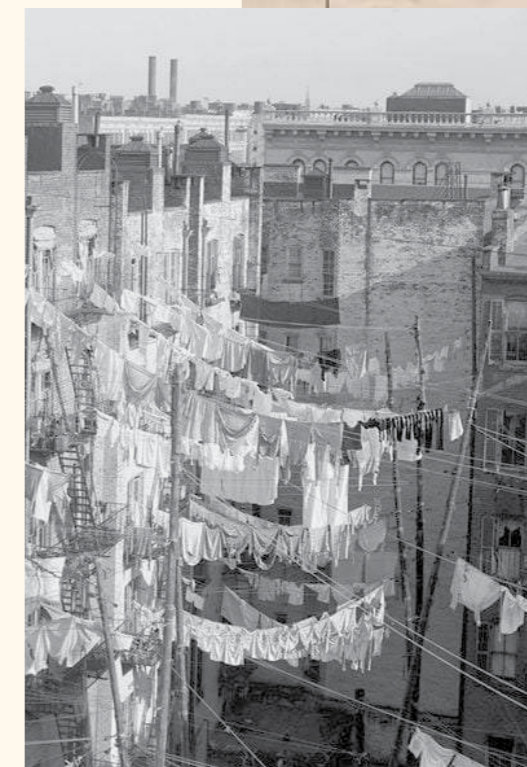
Preface

Laundry

Laundry is a mundane part of everyday life, and is unequivocally viewed as a chore. Cleaning our clothes takes time away from other tasks, and impacts the environment. I personally hate doing laundry and avoid it at all costs. While most do not enjoy laundry day, a trip to the laundromat can involve running into your neighbors, time to step away from stress, and engage in a simple task. A sense of community is created, where people with vastly different backgrounds and circumstances all come together to clean their clothes. Trips to the laundromat are a reality that we have all come to terms with, but there must be a way to make the experience better, and highlight the warmth and commonality among laundromat users. Finding a way to make going to the laundromat a choice, not a chore. How can the positive feelings and experiences in this space be enhanced?



Source: Alliance Laundry



Clothesline, NYC

Source: New York Almanack

Introduction

6

Going to the laundromat is dreaded by most, it is important to examine why it is disliked. Is it the laundromat itself, or the challenge of getting there? What are the possible benefits to using the laundromat, maybe more of us should be taking advantage. How can an object improve the experience for laundromat users? The majority of buildings in NYC were built before washing machines were common. The lack of infrastructure still effects residents today, and is why laundromats are so vital in NYC. Areas with newer buildings, often more expensive, are built with laundry in mind but homes like this are few and far between.

From completing a survey, speaking with laundromat users, and observation, it became clear that users dread lugging their clothes to the laundromat. Most respondents agree that their favorite part of doing laundry is simply having clean clothes. Users also shared that they travel around five minutes to do their laundry. Observing the laundromat I saw people bring laundry in suitcases, giant backpacks, the classic “granny cart”, and even a laundry basket bunjeed to a dolly.

Based on these observations and survey results I came to the conclusion that transportation is a pain point, and a bag addressing this concern would be the most impactful to users. The current most popular vessels for laundry include the classic “granny cart” and IKEA bags, both with pros and cons.

Through this process it was key to consider the wide variety of New Yorkers who may have use for this product. Those who live in walk-ups, people con-



cerned about cleanliness moving through the city with their laundry, discovering how this project could stand out among the market of laundry bags and transportation solutions.

Sketches led me to the functional features, including a folding mat, zipper-down face, and removable base with wheels for transport. Paper sketch models helped me discover the form and visualize the design as a whole as I moved through the prototyping process. Color and materiality bring this design to life, aiming to introduce playfulness to the mundane.

7

Chapter 1

History
Survey
Observation
Precedent

A brief history of washing machines...

1700s

Early washing machines were invented during the 18th century. Requiring hand cranking and steam, they were still quite labor intensive for the user. ¹



source: nli.org

Early 1900s

Electric washing machines were not created until the early 20th century. Popularity rose until the great depression when the cost became too great for most families. ¹



Thor electric washing machine, 1930, By Lee Brothers

1930s

As people could not afford to own machines, the opportunity arose for the creation of laundromats. ¹



Source: automaticwasher.org

1. D'Costa, Krystal. "Spin Cycle: The Social Realm of the Laundromat." Scientific American, January 21, 2013. <https://www.scientificamerican.com/blog/anthropology-in-practice/spin-cycle-the-social-realm-of-the-laundromat/>.

"Why can't I have laundry in-unit?"

*New York apartments lack the space and infrastructure to support in-unit washers.*¹

Landlords and building managers may not allow washers and dryers in-unit even if you own and can afford them.

there are benefits to the laundromat...

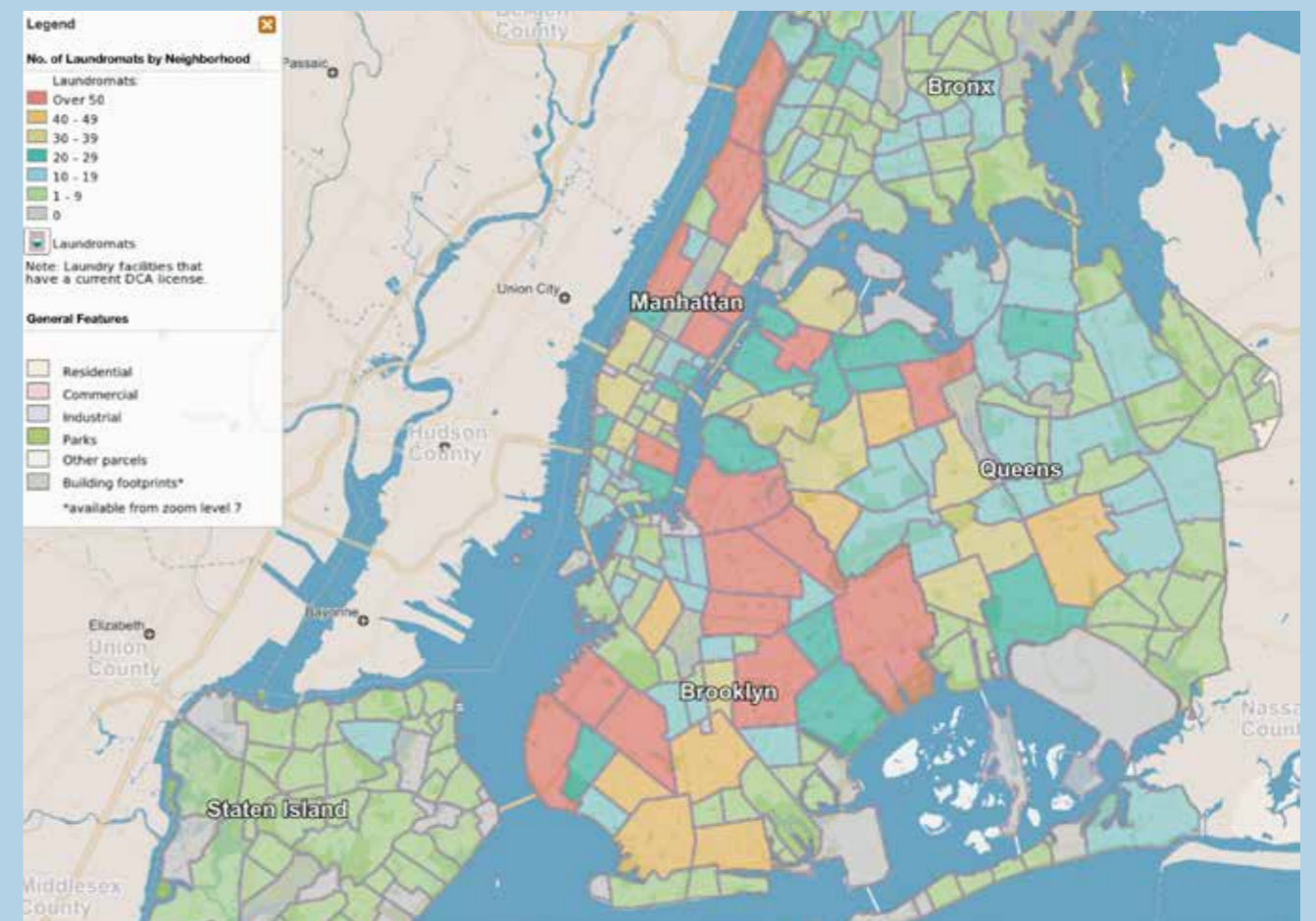
*Industrial washers use less time, energy, and water than home options.*²

Multiple loads can be done at once, saving time.

There are laundromats all over the city, some even 24HR

In 2015 there were 2,655 licensed laundromats in NYC.¹

Approximately 8 per square mile.



Concentration of laundromats, Source: Property Shark

1. Lee, Annabel. "Why I Love My NYC Laundromat: It's Large, Well-Run, and Right around the Corner." Brick Underground, July 18, 2023. <https://www.brickunderground.com/live/why-i-love-my-laundromat-washing-machine-dryer-building-laundry-room-nyc>.

2. Laundry Pop. "5 Reasons Laundromats Are More Eco-Friendly." Laundry Pop, May 13, 2022. <https://www.laundrypop.com/blog/5-reasons-laundromats-are-more-eco-friendly>.

1. Smith, Virginia K. "Is Your 'hood Sudsy or Dry? Mapping NYC's Neighborhood Laundromats." Brick Underground, April 2, 2015. https://www.brickunderground.com/blog/2015/04/neighborhood_laundromat_data_maps.

Survey & Observation

A survey of NYC laundromat users provided key insights. There were 38 respondents.

47% do laundry once a week

30% do laundry bi-weekly

83% go to a laundromat less than a 5 minute walk from their home

63% use a bag to transport their laundry

65% spend 1.5-2 hours doing laundry

Respondents favorite part of doing laundry is **having clean clothes.**

The most common complaint is **lugging laundry** to the laundromat, and **the cost.**

Users complained about difficulty packing up folded laundry.

The most common carriers of laundry are IKEA bags and the classic "granny carts"

Some users come up with their own creative ways of transporting their precious cargo. Including a basket bujeed to a dolly, suitcases, and more.



Source: IKEA Museum



Source: Amazon



Source: Chloe Tosh



Source: Chloe Tosh

Precedents

Journey Map



Hulken Bag, \$115, Source: The container store



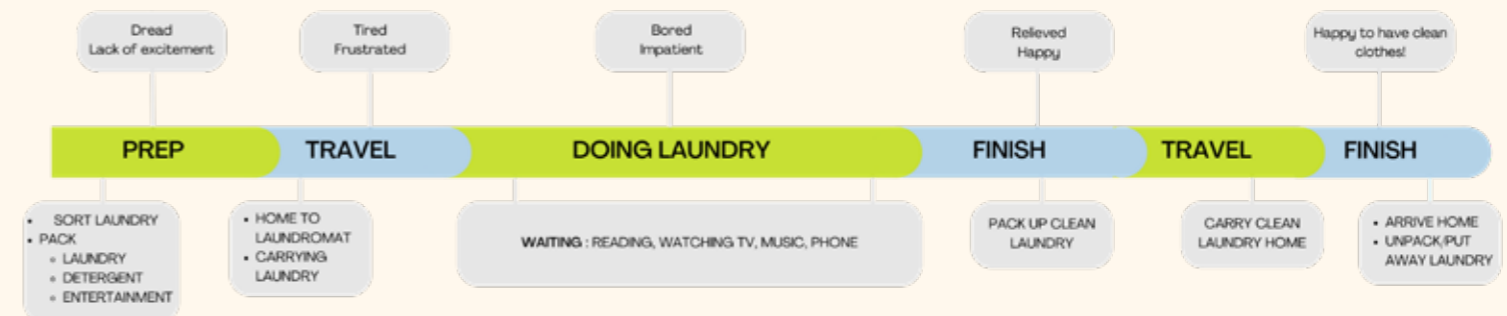
Steele, \$149 Source: Steele Canvas



Wike Inc. Voom Cart, \$350, Source: Wike Inc.



Laundry Backpack, \$25 Source: Amazon



The journey map helped define pain points for users. The most tedious part of the journey is getting to and from with heavy laundry, and waiting. Users experience frustration lugging heavy bags up and down the stairs, and on the short walk from the laundromat. Leaving them feeling tired and burntout by the time they arrive. Users also expressed concerns about cleanlines of folding tables. Getting home and having clean laundry is the most positive part of the process.

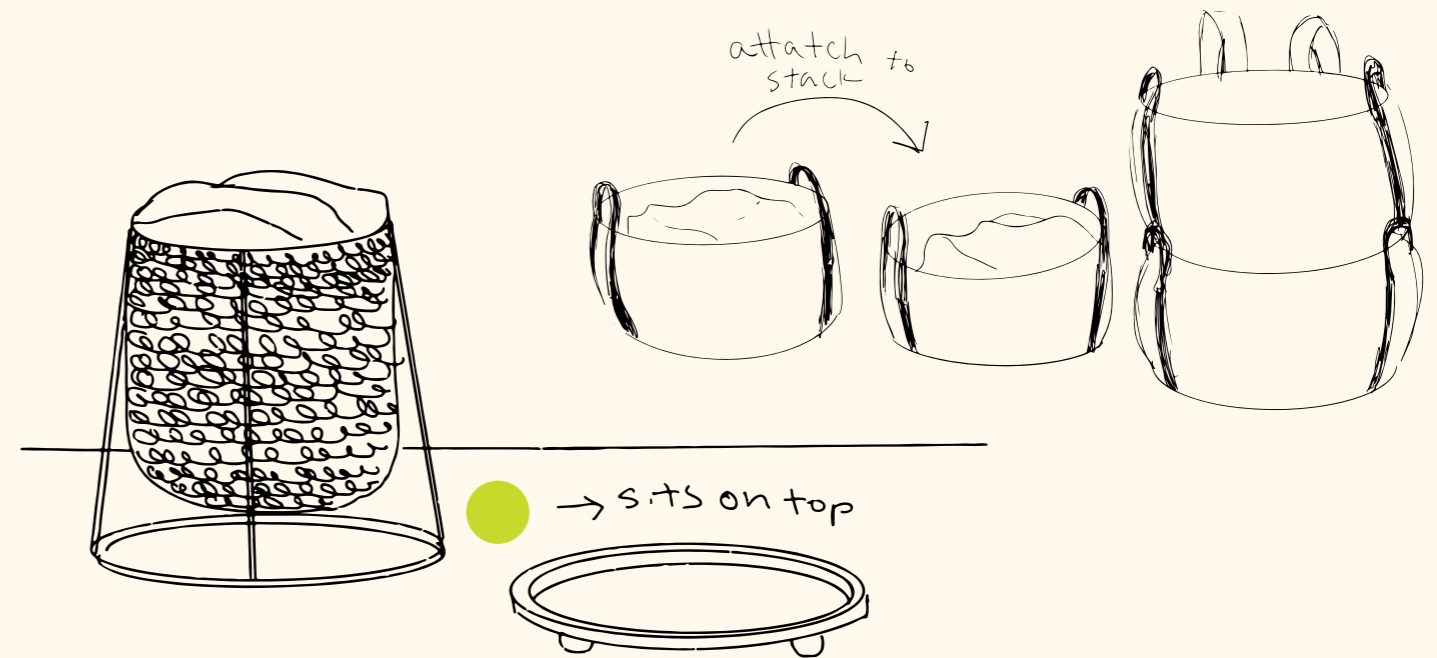
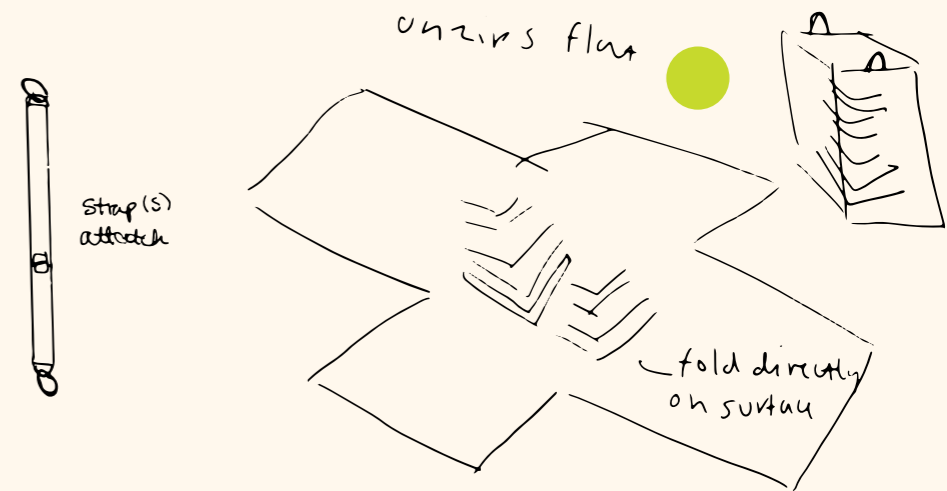
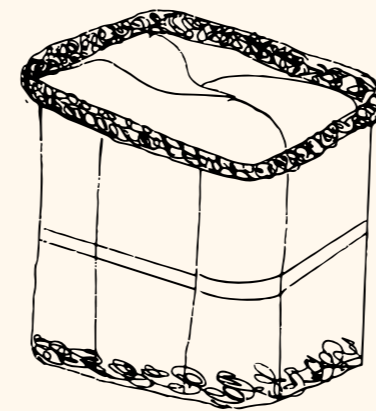
From the results of the survey (pg. 12) , observation, journey mapping, and market research, it became clear to me that a laundry bag designed for easy transport would be the most impactful.

The bag needed to be capable to easily travel 5 minutes to and from the laundromat, hold essentials (keys, detergent pods/tabs, dryer balls, etc.), be easily carried up and down stairs, and make placement of folded laundry easier.

Besides the granny cart, there are a variety of options for transporting laundry, but many of them are inaccessible due to price, or are not functional. Even the granny cart has its issues and some can be flimsy, needing to be replaced frequently. People do however, rave about strollers and their ability to navigate bumpy city streets. There are products for groceries that take the qualities of strollers but apply them to a cart for city living.

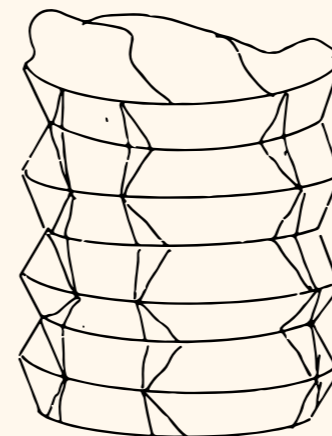
Chapter 2

Ideation



Initial ideations considered different ways of folding and stacking. Looking at how the form transitions from home to travel.

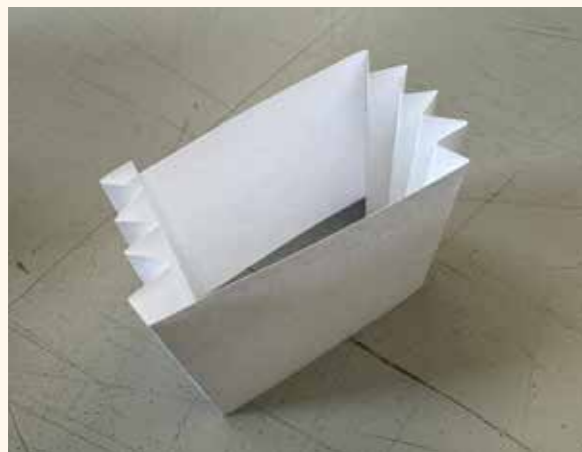
The concepts of unfolding, and a basket which is placed on a platform with wheels for transport helped inform the final result



Ideation
Materials
Prototypes
Fabrication

Sketch models

Prototyping



Paper models were used to consider different ways of folding, expanding and contracting. Models were also made to discover the overall form. The final design was developed from the "purse" shape of the sketch on the top right.

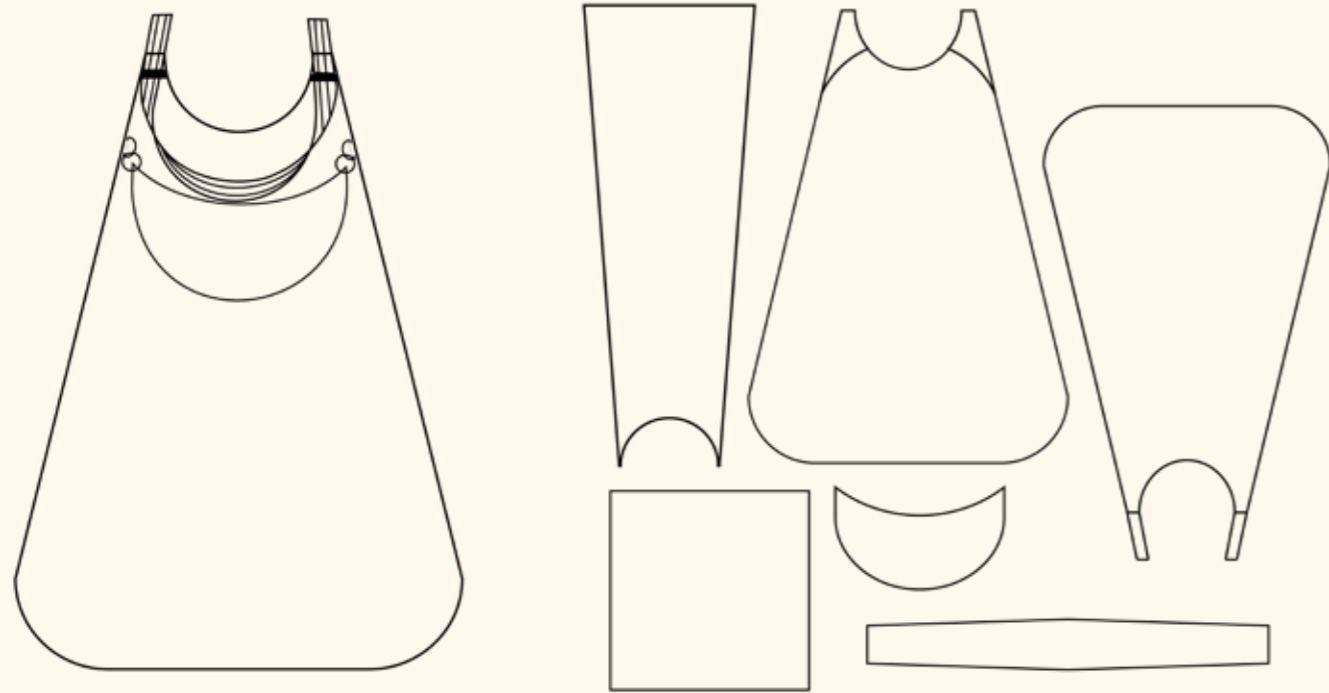


Larger models of butcher paper helped define scale and understand patterning. Mock-ups in muslin allowed me to test the pattern and understand structure and sewing construction.

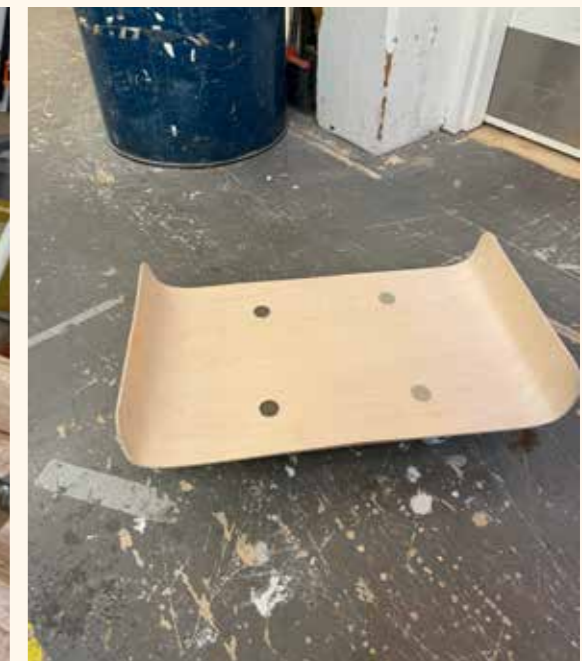


Final design

Fabrication



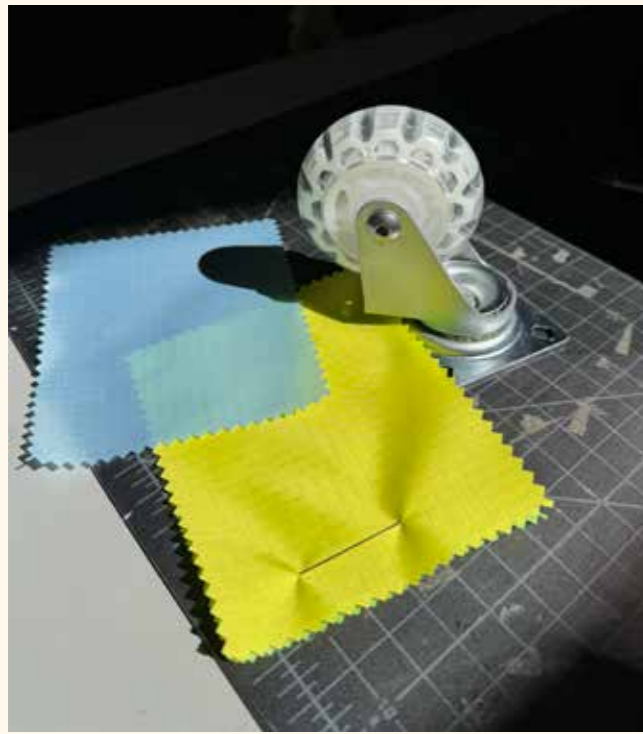
The final design features the purse style form with a detachable front pouch. On the side is a zipper pocket with a foldable mat for folding clean laundry. The skateboard style base connects to the bag magnetically to allow for easy roll to the laundromat, detaching for cleanliness in the home. A zipper down panel makes loading folded laundry easy. The overall design is made to look great on the go and in the home.



The base was made layering veneer over a mold and using the vacuum bag to form the shape. The result was thinner than expected but surprisingly strong! Magnets are attached on the underside and connect to the bag through the wood. Sewing proved to be difficult, having not sewn since childhood there was a bit of a learning curve. I learned a lot and over time the sewing construction improved, though remained imperfect despite my best efforts.

Materials

Renderers



Rounded roller blading style wheels are able to navigate cracks on sidewalks.

Nylon ripstop is water resistant, breathable, and washable.

Source: Chloe Tosh

Puffy straps make carrying more comfortable both in the hand and on the shoulder.



Source: Baggu

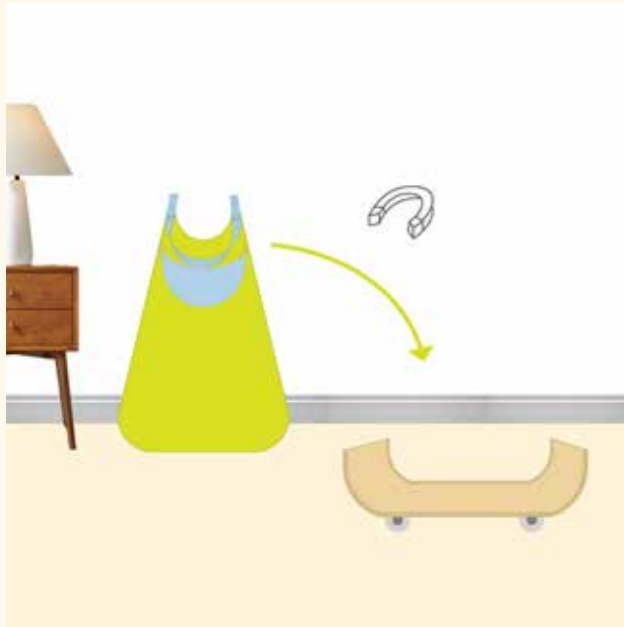


Molded plywood creates lightweight strength and durability.

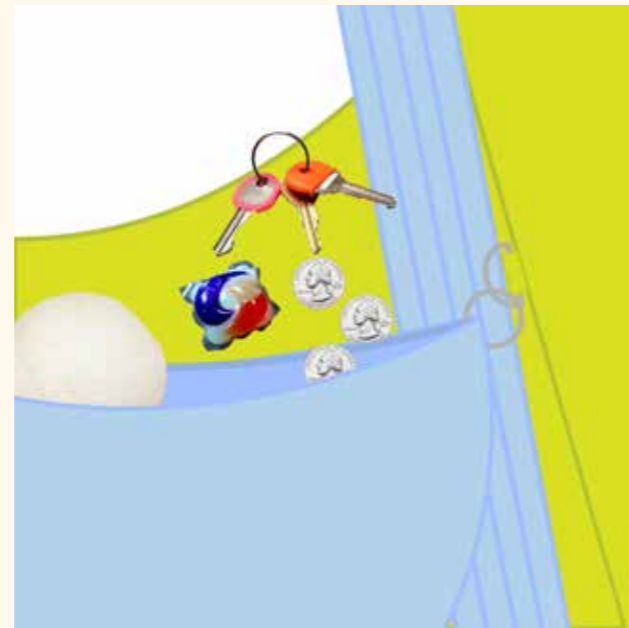
Source: Tarmeko



Storyboard



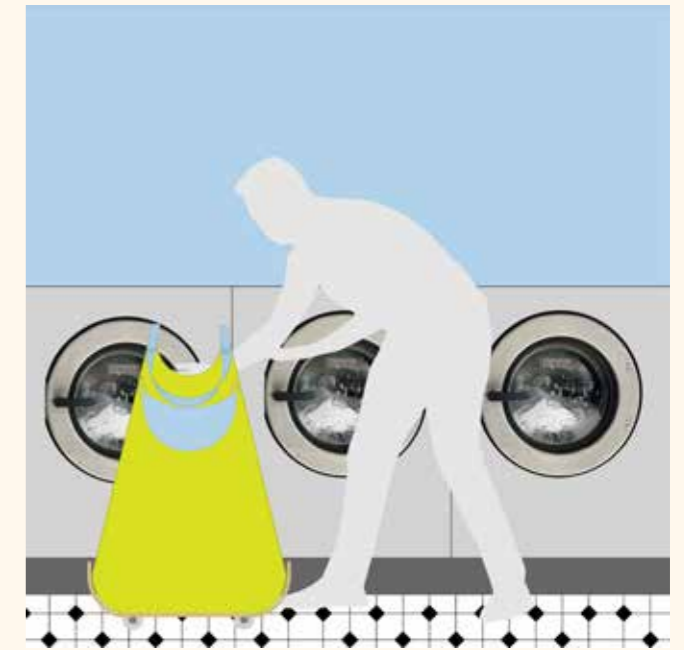
1. Laundry bag attaches to base



2. Pack essentials



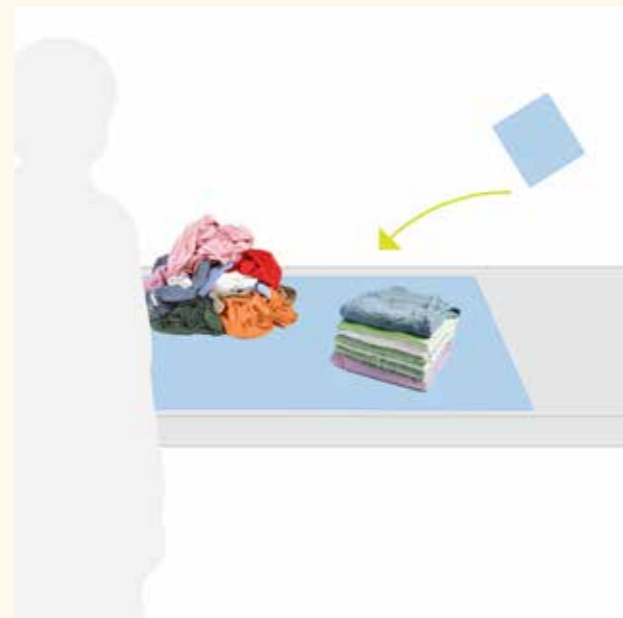
3. Go to laundromat



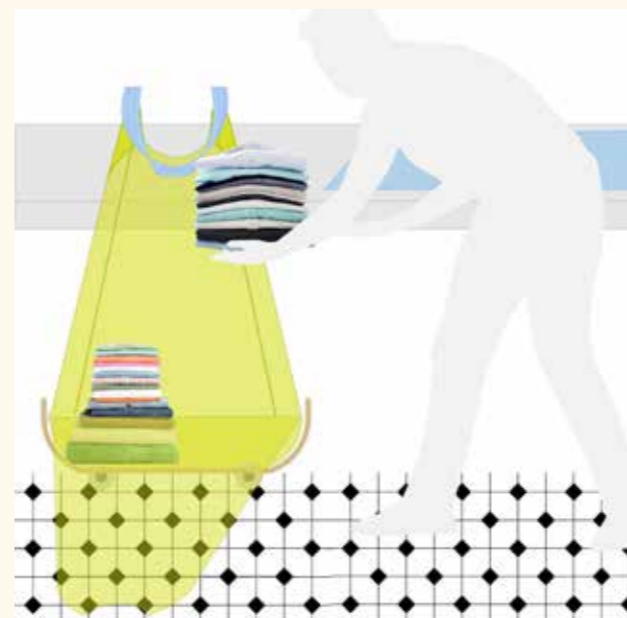
4. Run laundry



5. Lay out folding mat



6. Fold laundry



7. Pack up laundry



8. Head home

Final Model

Reflection



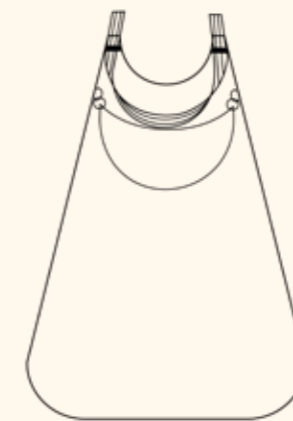
The final model successfully demonstrates the functions of the design, however the execution could be improved. This was my first time making anything with fabric. I am happy with the result, but with further development of the pattern the construction would be improved. The biggest issue with the bag is structure, I should have addressed this challenge sooner for a more refined result. The base with wheels needed more layers of veneer to achieve the desired thickness, though it is quite strong. The curve of the base does not match the bag. I altered the radius on the base so the wheels were not too close together, but the mismatch is noticeable. I am happy with the overall playful feeling of the project and it was a valuable learning experience.

Images by Caroline Frederiksen

Laundry will continue to pile up, and there will forever be new ways to improve upon the practice of doing laundry. Lugging heavy loads to the laundromat is a mundane and exhausting experience for many New Yorkers. Petal, aims to make this process smooth and efficient in new ways. Using the laundromat is practical for most, but is also better for the environment. Hopefully this project can demonstrate that going to the laundromat can be easy and simple! Through this process I discovered people are surprisingly passionate about laundry!

In the future this project could expand beyond the scope of laundry, using the base, creating other systems around it. For example, a bag which attaches for grocery shopping. The base could then serve multiple purposes in a single household.

The pattern could benefit from further testing and adjustments to perfect the sewing construction. Testing for wear and tear over time is also necessary going forward.



Thank you!

Bibliography

D'Costa, Krystal. "Spin Cycle: The Social Realm of the Laundromat." *Scientific American*, January 21, 2013. <https://www.scientificamerican.com/blog/anthropology-in-practice/spin-cycle-the-social-realm-of-the-laundromat/>.

Grylls, George. "On Laundromats." *The Brooklyn Rail*, June 26, 2018. <https://brooklynrail.org/2018/07/field-notes/On-Laundromats>.

Jackson, Paul. *Folding techniques for designers: From sheet to form*. Laurence King Publishing, 2011.

Laundry Pop. "5 Reasons Laundromats Are More Eco-Friendly." *Laundry Pop*, May 13, 2022. <https://www.laundrypop.com/blog/5-reasons-laundromats-are-more-eco-friendly>.

Lee, Annabel. "Why I Love My NYC Laundromat: It's Large, Well-Run, and Right around the Corner." *Brick Underground*, July 18, 2023. <https://www.brickunderground.com/live/why-i-love-my-laundromat-washing-machine-dryer-building-laundry-room-nyc>.

Neuman, Susan B., Maya Portillo, and Donna C. Celano. 2020. "Looking for Literacy in All the Right Spaces : The Laundromat." *The Reading Teacher* 74 (1): 29–38. <https://search.ebscohost.com/login.aspx?direct=true&db=edsj&AN=edsj.27003630&auth-type=shib&site=eds-live&scope=site>.

Ramey, Corrine. "Laundromats Shrink from Parts of NYC - WSJ." *Wall Street Journal*, August 3, 2015. <http://www.wsj.com/articles/laundromats-shrink-from-parts-of-nyc-1438631100>.

Smith, Virginia K. "Is Your 'hood Sudsy or Dry? Mapping NYC's Neighborhood Laundromats." *Brick Underground*, April 2, 2015. https://www.brickunderground.com/blog/2015/04/neighborhood_laundromat_data_maps.

Stanton, Maureen. "Laundry." *The Iowa Review* 34, no. 3 (2004): 2–20. <http://www.jstor.org/stable/20151884>.

Wedemeyer, Dee. "Up the Laundry Room!" *The New York Times*, May 21, 1978. <https://www.nytimes.com/1978/05/21/archives/up-the-laundry-room-the-laundry-room-moves-up.html>.

