

herbin

andrea levy • senior thesis • integrated project

Introduction

It was six in the morning when the bus that picked us at the airport came to a halt in the middle of a pitch-black street. As I gathered my belongings, the bus driver yelled something at me in Danish, but I was too overwhelmed to pay attention, let alone understand what he said. I managed to throw my carry-on luggage on top of my other suitcases and wheel everything down the cobblestones to my semester-abroad home in Copenhagen. While I adjusted quickly to almost every new condition, I had trouble with the total lack of sunshine during the Danish winter. My morning walk to school was in the dark; as were my afternoon walks home from class. The lack of greenery was also really affecting me, I was getting desperate. Sensing this, my friends and I rented a car and headed to the Møns Klint cliffs. It was so reinvigorating to walk leisurely among the giant trees, overlooking what seemed to be an endless ocean and an infinite expanse of nature.

For a while I lost track of where I was—all thoughts and worries magically dissipated. An overwhelming sense of lightness and freedom washed over me, I felt re-energized by the earthy smell and the vibrant surroundings. I would not call myself a true nature lover, but I cannot deny the peace that fills me when I escape the chaos of the city. This very sense of quiet renewal is what I like to replicate with my product, *Herbin*, an indoor herb garden—a miniature green oasis that can live atop a refrigerator or on a windowsill. In order to develop this simple, functional product that would bring the essence of pure nature inside to even the most hyper-urban residences, I set out to interview potential consumers and researched similar products.

Contextual Background

1. Design Principles

In order to design an effective product, I spent a lot of time researching key design principles of which a few really stood out. Don Norman's, author of *The Design of Everyday Things*, talks about breaking down the vital principles of the product design stage. A key feature of his premise is that the product should be both discoverable (offering unheard-of possibilities for use) and understandable (easy to grasp its intended use). Another important principle relates to the theory known as the *aesthetic usability effect*, which states that people perceive more aesthetically-pleasing designs as easier to use, even when this is not the case. Additionally, the functionality of a design, as well as the space it will inhabit, are key to a product's success in an individual's daily life. "Cradle to Cradle" emphasizes that design should be beneficial in terms of cost, performance, aesthetics, and material choices, resulting in a product that is sound for both the consumer and the environment. Let's not forget Bain and Company's *Element of Value Pyramid* which stated that in order to achieve greater customer loyalty and revenue growth, one must separate all products and services into four tiers and ensure all are addressed - functional, emotional, life-changing, and social impact. Which leads me to consider Human Centered Design (HCD), an approach that puts human needs, capabilities, and behaviors first, and designs to accommodate those needs. In order to do this, one must understand the psychology of individuals and the needs that are expected to be met.

When synthesizing all the information, it was interesting to me that what Norman calls “discoverable” and “understandable.” Bain has it at the bottom of the pyramid as “functional.” Bain believes that it is important for a product to be “functional” and at the bare minimum necessary for it to be considered successful. At the end of the day, all designers believe that in order for a product to be successful, you have to put the user first and by doing that it has to be functional and aesthetically pleasing even though different designers may call it different things. When designing my product, I will focus primarily on these design principles to create a product that is functional and emotional and in turn be life changing.

2. Plants and Emotions

I began by investigating the importance of green spaces. Before I could even finish typing my inquiry into Google, suggestions such as *green spaces reduce crime* and *green spaces reduce stress* appeared on my screen. An overwhelming number of articles came up, listing the effects that nature, foliage and greenery can have on an individual. Unfortunately, these green spaces are rare and, consequently, far from crowded cities. The same study also established a direct correlation between stress and the number of green spaces around the individual. In addition, an interesting conclusion I came upon was the emotional aspect of taking care of something and seeing it thrive, something that is proven to increase happiness.

After reading about correlations like the ones above, I interviewed friends living in urban centers from New York to China to see whether they had similar experiences. I conducted in person and over the phone interviews where I asked people about their daily life and struggles of living in cramped spaces and cramped cities. I was careful in my questioning to not prompt the person to give me an answer I was looking for. The overall *emotional* consensus was that they missed the outdoors. One friend even recalled a story of gardening with her grandmother and how desperately she missed it. *All of her herbs used to be fresh*, she recounted to me, *and now she has to go to the supermarket to buy them*. As a result, I sought to create something that would bring a sense of nostalgia, that would remind her of when she used to garden with her grandmother.

3. Competitor Analysis

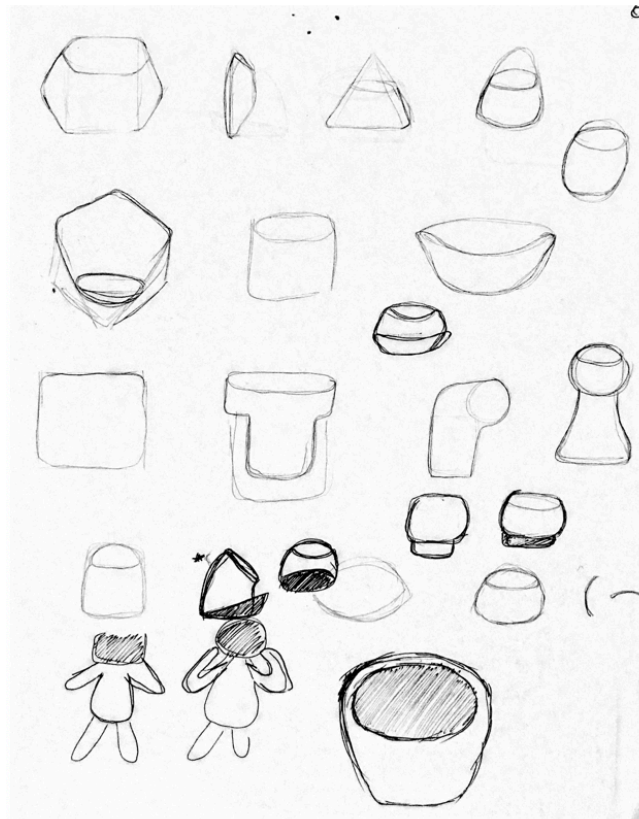
After conducting research on what makes a product successful and conducting research from users, I examined existing planters to learn what has made them so popular and how I might expand on the idea of indoor planters. Products ranged from tiny air planters on Etsy for \$9 to larger LED planters for \$200. The issue I identified with small planters was that they were all better suited for air plants because they were unable to support herb growth (herbs need approximately six inches for their roots to be successfully grow). However, if the product was made large enough to maintain rooted plants, it could cost upwards of \$200, making it less accessible for most users. I found that although plants need bright spaces, fluorescent lighting, as well as natural sunlight, is enough for sustained growth, thus eliminating the need for an LED light. Granted, LED light is an added bonus because it requires less sunlight; but it’s the main contributor to the steep prices associated with many of these gardens. The advantage of *Herbin* is that the plant can survive in it as well as it would in an LED planter for a much lower cost.

By compiling my research of design principles, precedents, and my understanding of my target market, *Herbin* will have major social impact by helping its users feel happier and less stressed through a seamless, functional design.

Methodology

For my Independent Project, I chose to continue developing a product that was initially conceived in my Integrated Product Development studio. The studio was made up of graduate students from Ross, Engineering, School of Information, as well as undergraduate Stamps students. At the beginning of the class we were divided into groups and given a design challenge – ours being to design a space saving product that exists in a hyper-urban city. Born out of this project was, *Herbin*, an indoor planter meant to infuse freshness both to the home and to the user. I firmly believed that the early iteration of the product was successful in terms of how the plant would be watered - by absorbing the water in the compartment beneath it. However, the original design was unsuccessful in the actual design because of its rough edges and sharp corners (the water compartment seemed very disconnected from the rest of the product). Recognizing that this product could have strong commercial value, I wanted to continue evolving the design to make it more attractive, sexier and more practical.

I started the redesign of *Herbin* by simplifying the design into three parts: the upper opening, the water compartment, and the bottom.

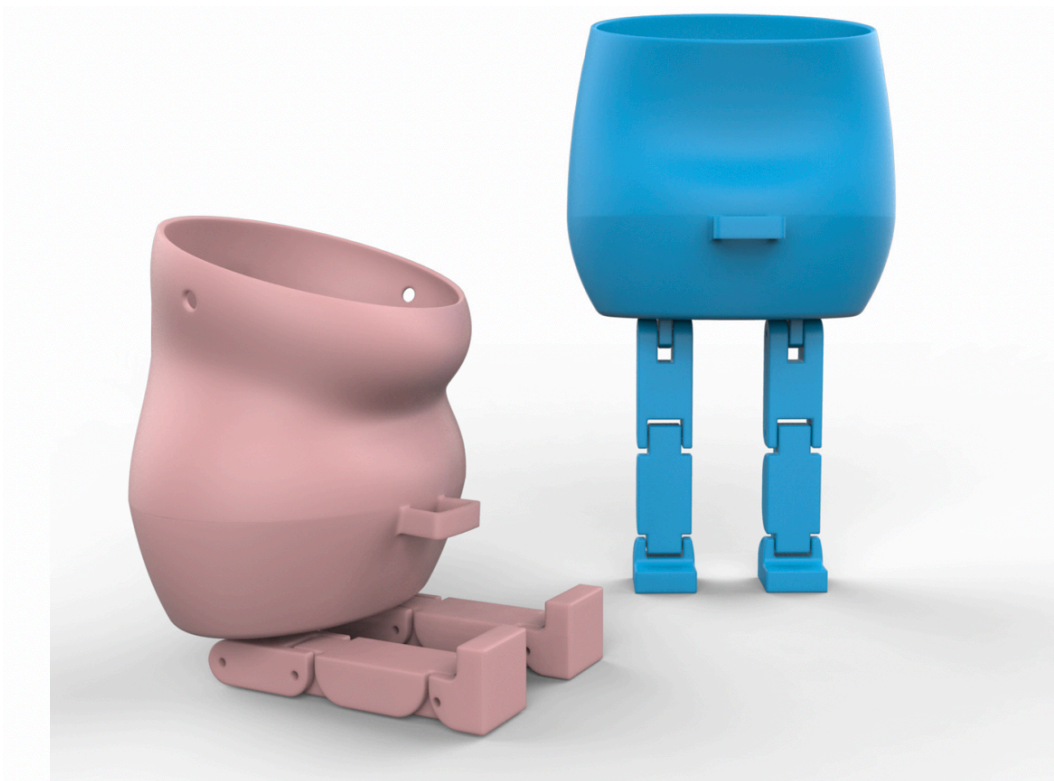


These are some of the simplified line sketches during the redesign phase. I focused on working more with smooth curves rather than sharp edges to make it more organic.

I created many simple line drawings that proposed a seamless design. I found that rather than having a flat back and a curved front, creating natural curves offered a more organic design. I thought about making my product unique, and it occurred to me to personify the planter by

giving it legs and a human-like body. Not only would greenery inside the house make you happier, but much like a pet, taking care of it would generate a sense of responsibility and companionship. Developing the notion of a “family” of planters led me to the designs of Herbert and Rose Marie. In the redesigning process, I had to consider the physical attributes of the stereotypical male, a square-like body with a rounder curve for a belly. For the female, an hourglass figure and the semblance of breasts.

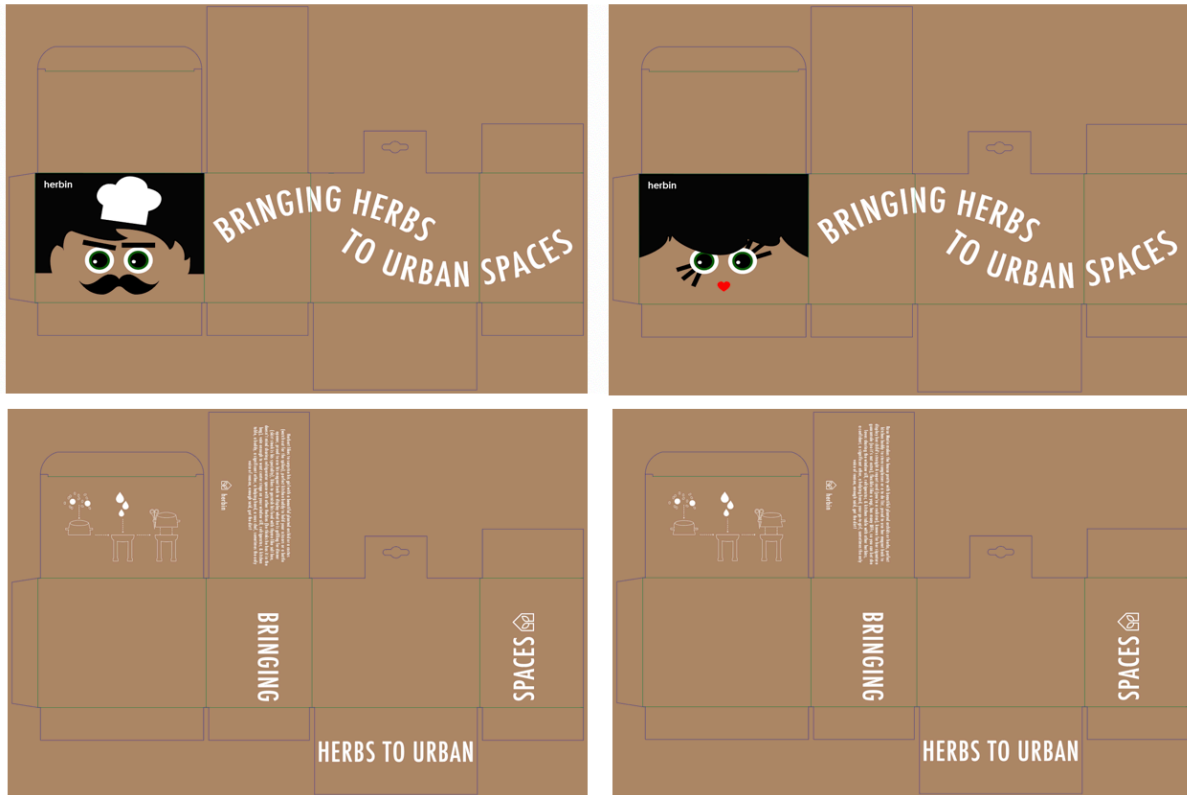
Once the shape of the planters had been designed, came the time to render and model the product. Most challenging was designing the legs to bend at the knees so legs could hang and bend at the hip so it could sit. An additional challenge was designing the planter in such a way that it would not topple over but rather stay upright. I addressed these concerns by making the legs flush with the bottom of the planter when sitting down.



This is a digital rendering of Rose Marie sitting and Herbert standing. When either Herbin planter is sitting, the product would topple back because it doesn't have enough support to rest on.

Coming up with the right brand identity is just as critical to the successful design of the product as the product itself. One must put forth and communicate effectively the common thread that best promotes all aspects of the product. For this reason, coming up with a catchy name that communicates the vision for this product was important, *Herbin* was born out of playing with the words in the phrase "bringing in herbs to urban spaces". I next had to consider the aesthetic and packaging design that would generate interest and playfully transmit the story behind the two characters I sought to create, Rose Marie and Herbert. The branding for this simple and playful gender-specific design screamed for lighthearted imagery. *He is a personal chef and she is a yoga instructor*—the packaging depicts the faces of the characters.

The inside of the box, was designed to include a brief biography of Herbert and Rose Marie and the slogan, “bringing herbs to urban spaces”. These printed visuals not only help marry the design of the package to the product itself, but also bring these “human-like” planters to life.



This is the packaging for Herbin (Herbert on the left and Rose Marie on the right). Both of the packages are meant to bring out the character through a depiction and bio of each character. There are also cut outs for the legs at the bottom of the packaging so the legs can dangle out when being hung.

The initial *Herbin* prototypes will be done using a Stereolithography (SLA) printer, a more refined version of a 3D printer. These can then be sanded to a plastic-like finish that is less expensive than other traditional manufacturing materials. The SLA printer works by filling a tank with resin, a platform is lowered into the tank and a laser traces the design one layer at a time, hardening the liquid into a solid. The SLA printer creates a seamless design that manufacturers use as a prototype before creating an injected plastic mold.



This is a picture of the final prototypes of Herbin. You can see Rose Marie standing and Herbert sitting on the edge, this positioning is possible due to the hinges at the hip but also at the knee.

Throughout the entire Independent Project, I found it most helpful to create multiple iterations of the product in both 2D and 3D, so as to achieve and create a more holistic and cohesive design. Ultimately, I wanted to create a playful, functional product that provides the user with a sense of purpose and belonging and brings a smile to their face.

Creative Work

Herbin's simple and aesthetically pleasing design makes it hassle-free. The ultimate goal of *Herbin* is to make you feel good when you bring the pretty outdoors inside, and also provide the user with an emotional connection by making them feel responsible for a living thing. The functional and playful nature of the product can strongly influence the product's viability. Thus, I intend with my product and its branding to inject the user feel a sense of happiness and fulfillment that he/she can take care of something, even in confines of a city. By focusing on the product's functionality and building on Bain and Company's design principles, I feel I have pushed my design one step further, ultimately creating a product that serves more than just its basic purpose, to be just another planter.

I plan to display *Herbin* in a gallery setting. Some planters will be sitting on a wall shelf, while others will hang inside of their packaging. My hope is that the user will interact with *Herbin* by picking them up, trying to see how the water system works and appreciating both its functional

and artistic design. I also want the user to be able to experience the variety of positions in which *Herbin* can be manipulated: sitting alone, sitting back-to-back, sitting on an edge, and hung. All planters will be filled with thriving herbs so potential customers can see *Herbin* at work.

In order for *Herbin* to be truly successful, it must evoke a sense of emotion for the user. The object needs to come to life, not just sit on a counter or shelf. Ultimately, I hope the user will develop a familial relationship with Rose Marie and/or Herbert and look forward to watering it, cooking with it, or using it to decorate their living spaces. Realizing these ideals, as well as successfully implementing the design principles of functionality, simplicity, and emotional impact, I believe that *Herbin* has unlimited potential in every individual's home.

Conclusion

Throughout the course of my independent project, I have looked at my project through the scope of Bain and Company's *Element of Value Pyramid* and throughout the year, I have learned that a well-designed product goes a long way. But a well-designed product with an emotional component goes even further. When you tap into the human psyche and really think about design for human interaction that is where the best work happens. *Herbin* is a well conceived and designed product that has social impact. The simplicity of design makes it easy to use. Plus the light heartedness behind the concept makes people happy.

Going forward, I would like to continue refining the design (making it functional for everyday use i.e. the pins not getting lose after being bent many times) and make it easy to mass produce using injection molding. Ultimately, the my idea is to sell the design to a company that values functionality and aesthetics. I have already reached out to one said company, Umbra, a leader in the field of playful design of houseware products for the modern home.

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