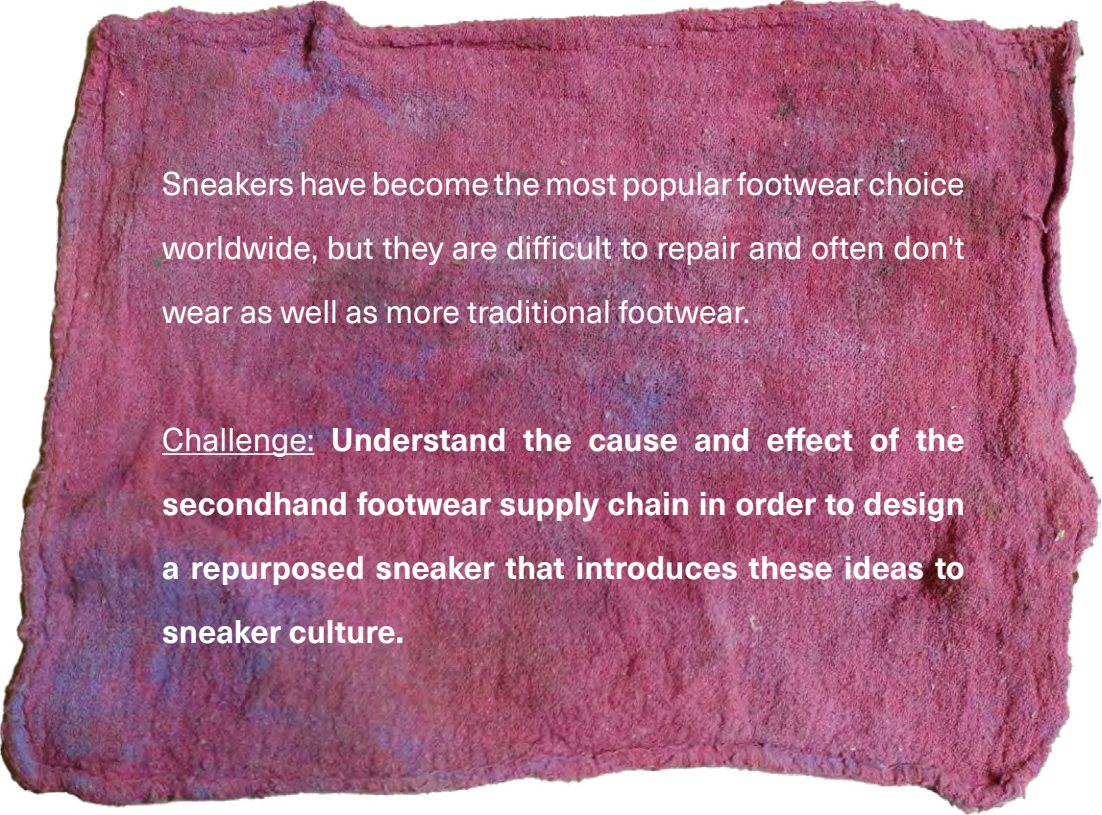


Ø Almanac

Repurposed Chuck

A rectangular piece of red, textured fabric, possibly felt or wool, with irregular, frayed edges. It is centered on a white background. Overlaid on the fabric is white text in two paragraphs. The first paragraph discusses the popularity of sneakers and their repair difficulties. The second paragraph, starting with 'Challenge:', outlines a design challenge related to the secondhand footwear supply chain and repurposed sneakers.

Sneakers have become the most popular footwear choice worldwide, but they are difficult to repair and often don't wear as well as more traditional footwear.

Challenge: Understand the cause and effect of the secondhand footwear supply chain in order to design a repurposed sneaker that introduces these ideas to sneaker culture.

This experiment melds my interest in footwear and culture with my dedication to the planet and its peoples. The result is **a thesis that manifests in a sneaker**; a physical product that embodies all of the research and systems knowledge that went into creating it. It is a collaborative effort between myself and Danny Chambers.



Me, 2009
Experimenting with Photo Booth backgrounds



Me, 2019
Shadowing waste collectors at Kpone Landfill, Ghana.

The cobbling industry in the US was built around **leather shoes with either leather or rubber soles**. It is a field that developed when only these types

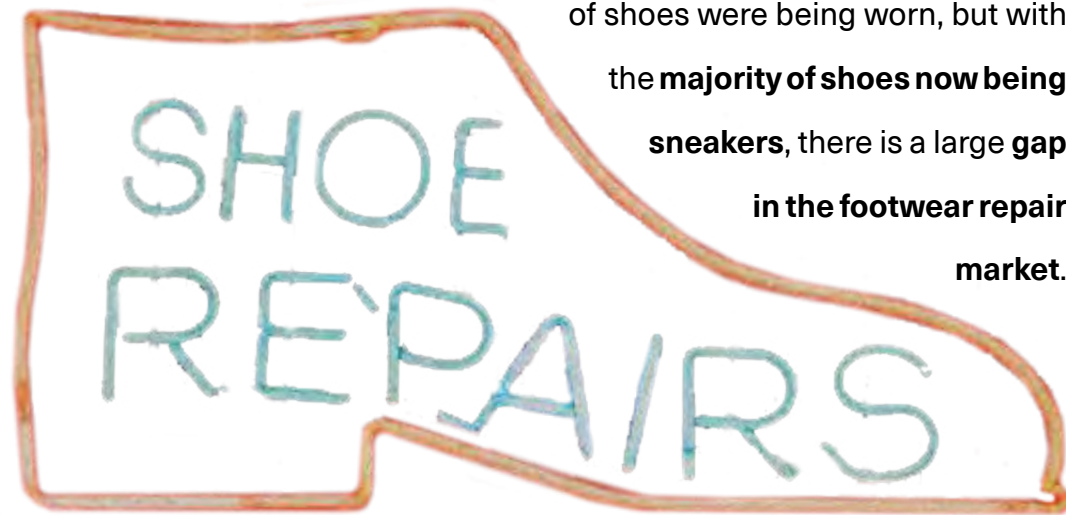
of shoes were being worn, but with

the **majority of shoes now being**

sneakers, there is a large **gap**

in the footwear repair

market.





Research on the industry around sneaker repair and resale yielded few results outside of highly desired models. We reached out to friend and vintage dealer, Cale, to conduct **firsthand research** at the Chicago rag houses he sources from. He found that the **most common sneakers were Air Force 1's, Chucks, and Sperrys**. He also sourced a selection of items for us to do initial experiments on.





Dip-dye on a Nike Zoom Vomero 5



Natural glue + ripstop repair on a Tretorn Nyite

We focused our efforts on **functional repairs** and modifications that altered the products enough to give them a **new life/look**.



Hotmelt pocket reinforcements on Levi's



Reflective hotmelt on a Brooks Brothers button-down



Natural soy paint on a Chuck Taylor



Soy dye with wax resist on a Chuck Taylor



Additional foam cushioning and outsole rubber on a Nike Flyknit Racer



To get a better understanding of
the **larger secondhand systems** at play as well as the **human impact**
of excess production, I traveled to Accra, Ghana with the OR foundation as part of their
"Absurdly Excessive Fashion Fieldwork". The focus of our research was in Kantamanto Market, **West**
Africa's largest secondhand marketplace. Here, we tracked secondhand footwear from import to end of life.

1. Donation Bin



The majority of secondhand goods found in Kantamanto **arrive from "donation" boxes** that end up being **exported from financially wealthy countries** and imported into financially poor ones.

2. Importers



In Kantamanto, we connected with a footwear importer, Joe, who showed us how he organizes and sorts shoes. The biggest issue, he said, is keeping pairs together through shipping. **Importers are often forced to buy more product than they can sell** and thus are in perpetual debt to exporters.

3. Market Sellers



After the shoes are sorted by quality and type, they are bought by the bale and sold in the market by retailers. Similar to importers, retailers often cannot sell all of their product and must get rid of stagnant product to make space for shoes they can better sell. The OR Foundation estimates that around **40% of secondhand products purchased by retailers becomes waste.**

4. Waste



Due to the overwhelming and unsustainable amount of product moving through Kantamanto, the **formal waste collection systems are overburdened**, and cannot collect all of the waste Kantamanto is forced to deal with. This causes retailers to use alternative waste collection outlets that often **dump into nearby oceans and other informal dumps.**

Through our research, we witnessed the **devastating effects of over production**, but we also found the **solution rising out of it**. While most of Kantamanto market is filled with retailers, **a significant portion is comprised of cobblers, sewers, dyers, and screenprinters** who mend and modify unwanted items to make them more viable for sale.

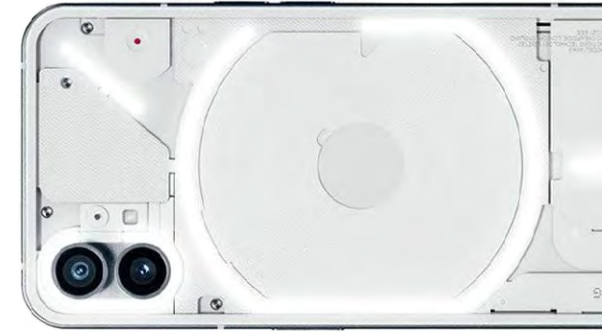


Throughout our research, we noticed what footwear styles sold well in the market, and what styles were in overabundance. We settled on the **Chuck Taylor** to continue our experiments on as there were plenty in the market, it aligned with our research back in the US, and from our footwear knowledge, we knew that it was tough to repair/recycle.

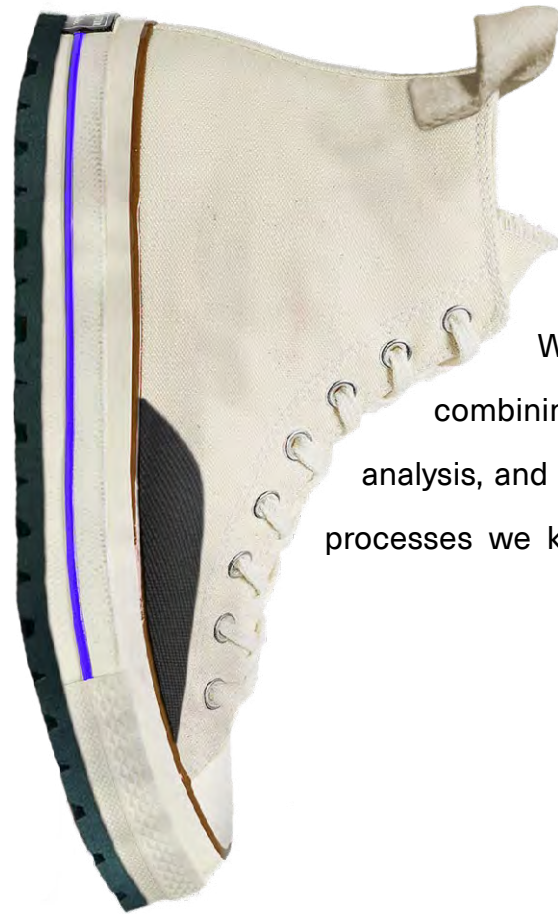




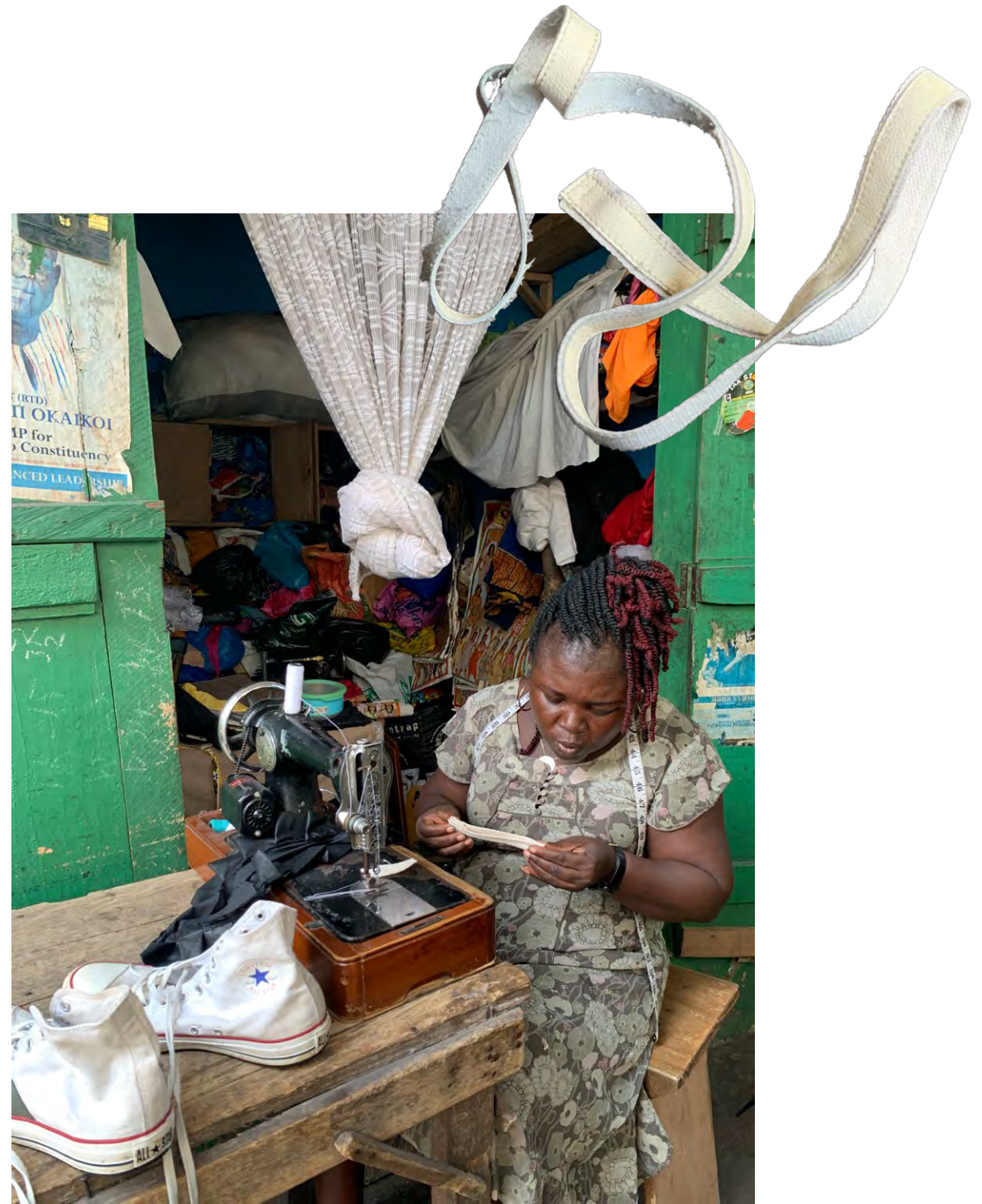
We purchased and studied wear patterns and functional flaws of secondhand Chucks in Kantamanto, ultimately identifying three areas that often wear faster than the rest of the sneaker: the **forefoot at the biteline** (Left) was often frayed and separated, the **outsole** (Center) was often worn through, particularly at the heel, and the **collar** (Right) was often heavily worn and frayed.



We combined these functional findings with future aesthetic movements within sneaker design. To our advantage, we noticed that fashion was becoming more **raw in its aesthetic** (Left); showing off the construction instead of concealing it. We also identified **thicker, layered, soles** (Center) to be a trend that would be long-lasting and easier to implement on a repurposed silhouette. And lastly, we noticed **exaggerated functionality** that became both useful and graphic (Right).



We then rendered a mock up of the silhouette, combining our systems research, wear pattern analysis, and aesthetic findings, using only materials and processes we knew to be available to us in Kantamanto.



We spent a morning in Kantamanto sourcing a **used Chuck, old motorbike tire rubber, and webbing that we found on the ground**. Then we worked with a cobbler and sewer to create the sample. All of these steps took place within 500 feet of each other.

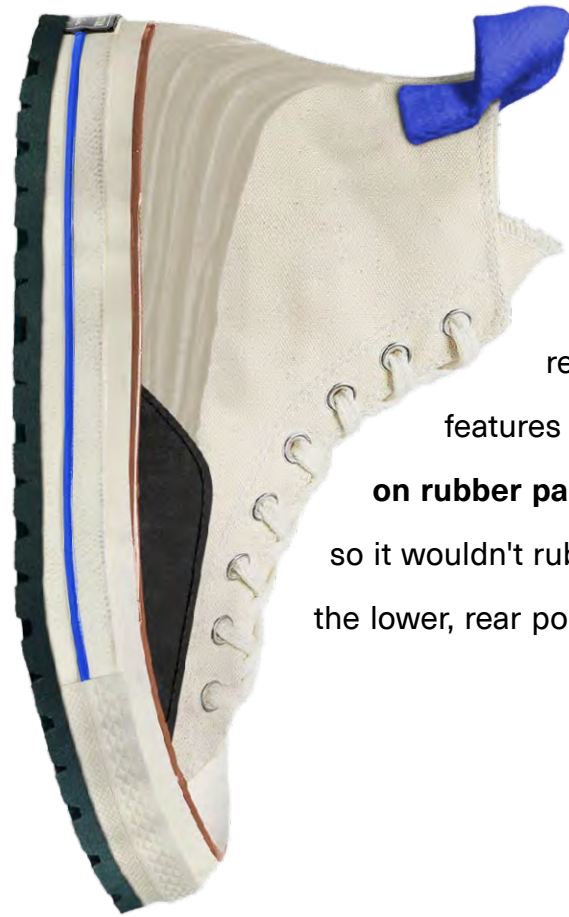
Made in china > Exported to the US > Worn in the US > Donated in the US > Imported to Ghana > Sold by retailer > Repurposed by us



The first sample features added **hard rubber along the outsole to increase durability**, a thinner sheet rubber patch to protect high wear areas at the forefoot, and a heel pull tab attached at two points to open up the collar for easier on/off and less stress on the surrounding material. Upon weartesting this sample, we found that the pull tab worked wonderfully (years of having to loosen every lace to get chucks on, forgotten!), but that there was room for improvement on both of the rubber pieces. The **thicker rubber outsole caused the shoe to get a bit too rigid** and not flex as easily, causing some discomfort when wearing. The rubber pad on the upper was constructed by peeling back the rand and tucking in the rubber piece, and we found that the area where **these two pieces of rubber overlap irritated the foot** over the course of a day wearing the shoes.



For the next sample iteration, we moved to **a thinner rubber outsole** which we knew to be readily available in Kantamanto. To combat the rubbing issue on the upper rubber pad, we utilized thinner rubber from old bicycle tire inner tubes that we wrapped around the midsole and adhered between the original outsole and our new rubber layer. At the recommendation of the cobbler, **we stitched the rubber onto the upper** instead of gluing for a better long-term hold. We found the rubber pad to be much more comfortable, but ultimately decided that having the **rubber wrap over the midsole would probably wear down the thinner rubber more quickly**. We also preferred the first iteration's rubber pad from an aesthetic perspective as all excess rubber will be black and so felt that this sample's rubber took up too much visual weight. The outsole rubber allowed the shoe to flex better but **needed heftier tread for all-purpose wear**.



As we weartest both models, we created a new rendering of what the **next iteration** could look like. It features a **thinner outsole tread with thicker lugs**, a **stitched-on rubber pad that would be skived down along its bottom edge** so it wouldn't rub against the foot, as well as some **soy painting** along the lower, rear portion of the upper for more minor abrasion resistance.



James Gall, 2022