Denver, Colorado



Pandemonium

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Sustainability, Textile Design, Upcycling

## **Statement of Purpose**

Pandemonium was designed to find an innovative way to upcycle fabric waste into unique textiles and ready-to-wear separates. In 2018, U.S. consumers purchased a total of more than 22 billion garments. However, this massive amount of textile/apparel production and consumption generates a large quantity of textile waste. In 2018, the U.S. generated 17 million tons of textile waste, among which only 2.5 million tons were recycled (EPA, n.d.). These textiles can be recycled either mechanically or chemically, but the industry does not use this practice on a wide scale yet. So, the purpose of this collection is to mechanically recycle clothes that were donated to me by family and friends by disassembling and shredding the clothes. Then applying these shredded scraps on a variety of black deadstock fabric sourced from FabScrap to create new textiles using needle felting, knitting, and quilting techniques. Today, some high-end designers like Eileen Fisher's Waste No More initiative are focusing on recycling post-consumer clothes into one-of-a-kind fabrics and accessories using their custom felting method (Quito). Other high-end designers like Zero Waste Daniel utilize pre-consumer deadstock fabric to create one-of-a-kind upcycled patchwork clothes (Edelson). The goal of this design is to combine these techniques and create a look that focuses on recycling both pre- and post-consumer waste.

## Aesthetic Properties and Visual Impact.

This design is made up of a distressed knitted sweater layered over a felted crop top with a quilted and slashed pants. The contrast of the different layered techniques, and a mix of rough and smooth textures and sheer and stiff fabrics were used to portray this feeling of chaos. The color palette was used to strike a balance as the rainbow colors of the shredded clothes were toned down with black deadstock fabric and black repurposed yarn. Though there are a lot of colors used in the look repetition was used to ensure the colors are cohesive in each textile created. To bring in the rainbow color into the black fabric rainbow variegated yarn was used for topstitching. To further balance the look, the textiles were applied to simple ready-to-wear silhouettes like a spaghetti strap princess seam top with a front separating zipper and a mock wrap front fly pant.

## Process, Technique, and Execution.

All the garments in this look feature different ways to repurpose textile waste. The distressed knitted sweater is knitted with repurposed yarn from FabScrap on a Silver Reed Knitting

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© 2022 The author(s). Published under a Creative Commons Attribution License (<u>https://creativecommons.org/licenses/by/4.0/</u>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. ITAA Proceedings, **#79** - <u>https://itaaonline.org</u> Machine with random decreasing stitches throughout the entire garment to create the floats and give it this distressed look (Figure 1). The sweater also has ribbed knit cuffs that are hand knitted in a 1 by 1 rib pattern from fabric yarn (Figure 3). The fabric yarn was hand cut using scissors in 1/4 inch strips from black post-consumer t-shirts and hand spun with repurposed yarn to strengthen the fabric yarn and keep it from ripping (Figure 2).





Figure 2



For the felted crop top and quilted pants, various post-consumer garments in 8 different colors were shredded using an industrial shredder (Figure 4). The shredded scraps were randomly placed on a deadstock mid-weight black cotton twill fabric (Figure 5) and then were fed through the FeltLOOM machine 40 times (10 times in each direction) to produce the nonwoven felted fabric (Figure 6). The felted fabric was then sewn into the crop top and finished with a black polyester lining from Fab scrap and a 6-inch separating zipper.





Figure 5

Figure 6

For the pants black deadstock jersey knit fabric was layered on top of the felted textile and quilted together with rainbow variegated yarn with lines 3/8 inch apart creating a random spiral like pattern (Figure 7). After the fabrics were quilted together the fabric was slashed by hand with scissors to expose the rainbow felted fabric underneath (Figure 8). This technique was applied to mock wrap right front pattern of the leg, the left pocket facing, and the two back

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© 2022 The author(s). Published under a Creative Commons Attribution License (<u>https://creativecommons.org/licenses/by/4.0/</u>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. ITAA Proceedings, #79 - <u>https://itaaonline.org</u> patched pockets. The rest of the of the pants were sewn from a deadstock black poly-cotton blend fabric.



Figure 7

Figure 8

**Cohesion.** The concept of this design is to create a ready-to-wear look from pre- and postconsumer waste and make these textiles the focal point to portray the concept of chaos and inner workings of a creative mind. This is realized by producing a variety of textiles from fabric waste using quilting, felting, and knitting techniques and then combine all these techniques and apply them to unique wearable separates. The combination of these fabrics and techniques into one look is what gets this idea of chaos across.

**Originality and Innovation.** This design is an example of how to design sustainable clothes by mechanically recycling pre- and post-consumer waste. The techniques used to create the textiles for this look can be further explored and developed into ways to create textile design from fabric waste which is has not been explored a lot in the fashion industry yet.

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