Exo-elegance<br>Gregory Scott Arriola, North Carolina State University, USA

Keywords: Nonwoven, thermoplasticity, morphology, ingenuity
In FTD 216 Fashion Workroom Practices earlier this spring, my professor Dr. Andre West gave our class a design challenge. He asked the class to design an over the top garment using a non woven fabric created by the Nonwoven Institute at the College of Textiles at North Carolina State University. The last item in this design challenge's parameters was to choose from the university school colors: red, white, and black.

Before we could start, we were required to illustrate our design on a full body fashion figure. My first design was deemed "Too contemporary" by my professor. As a result, I decided to exaggerate the features of my original design to come up with a second fashion. The second fashion was a black shift dress with red puffed sleeves and full hips. Dr. West reviewed my new design and gave me the green light to continue to the next portion of the project, which was drafting a pattern and prototyping.

Drafting the patterns was easily accomplished by using pattern pieces from a previous class. I joined a simple bodice and skirt to form the dress. I then removed the darts which turned out to be a mistake. The muslin prototype looked like a potatoes sack on the bust form. I tried using my skills that I acquired at a tailor shop to contour the garment to the form, but my efforts were to no avail. The second prototype turned out a lot better because I decided to keep the front and back darts. Once the dress was complete, I worked on the sleeves. The first iteration of the sleeve lacked the volume that I was expecting. I added more fullness to the cap of the sleeve by slicing and expanding the initial pattern piece. To achieve the exaggerated hips, I planned on cutting out ovals around the hip area and filling it with a bamboo pleated fabric. Unfortunately for me, I was about to hit another road block that would ultimately redirect me to my final design destination.

The fabric that we were given for this assignment was a $80 \%$ polyester and $20 \%$ nylon blend fabric that was created using hydroentanglement and cross lapping of fiber webs. Polyester fibers have a thermoplastic property which allows the fibers to maintain a shape once heat is applied. I wanted to take advantage of this by using the pleating machine at the College of Textiles. The previous year, I had experimented with using the pleating machine. I used various textiles and different pleat structures to test the limits of the machine. My favorite was the bamboo pleat because of its organic texture and aesthetic. On the day I was scheduled to pleat, I was informed by the technician operating the equipment that the bamboo pleat required a much thinner fabric. Yet again, I had to redesign my dress. I used the remainder of the class to practice using the pleater. For my first test, I inserted a thirty-eight by fifteen inch panel of the unwashed, white nonwoven fabric horizontally while the machine was performing a knife pleat. The fabric came out rigid and stiff; almost like paper. I then placed the pleated piece in the monstrous mechanism at a forty-five degree angle. The result was superb. That fabric was stiff yet fluid. The double
pleated structured allowed the fabric to be twisted and curved while displaying a geometric pattern. When the fabric's pleats where fanned out, it revealed an embossed zigzag patterned that resembled the scales of a pangolin. With the success of my experimentation, I returned to the proverbial drawing board.

At the beginning of my design process, I usually start with a sketch, but my deadline was steadily approaching and I had to take action. I used the black nonwoven fabric to create sleeveless shift dress as a foundation for my design. The pretreated black nonwoven fabric had an excellent hand; almost the same texture as delicately cut suede. After completing the shift dress, I pleated six more panels of the white nonwoven fabric. As I gazed upon my shift dress on the bust form, I had no idea what to do. I took my first step by placing a panel around the armhole while folding down the pleats and pinning the panel in place. I was pleased with the way the panel curved across the bust and how the diagonal lines created by the pleats forced my eyes toward the midriff, so I mirrored this effect on the other side. I realized at that moment that I had to listen to the fabric. Nonverbally, the fabric was telling me how to place it around the curves of the body. I draped a section of fabric around the hips and the fabric architecturally erected itself to accentuate the hips. The fabric naturally curved and positioned itself toward the center of the garment. I obliged the fabric's wishes and pinned it into place. For the last two panels, I placed them over the intersection of the first four panels, twisted them and pinned them under the front hip panels. The last two panels gracefully rested on the upper thigh. For the final detail, I fanned out the edge of the first two panels across the back and I heard a sigh of relief as I exposed the beautiful pattern within. The garments design had finally come to fruition. I had no idea the double pleated fabric had so much to say.

This project sent me through many trials that tested my creativity, problem solving skills, and my imagination. I learned from this challenge that my first idea may not be the best, to be cognizant of unforeseen obstacles and to adapt to those changes. Furthermore, my design process can be very linear. But, what this project taught me is that design problems can be approached in a multitude of different ways.

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