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Non-conventional Patternmaking and Draping Methods: An Added Value for Apparel Design

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Patternmaking is a crucial stage in the process of apparel design. The viability of a specific design and the quality of the final outcome is often determined by the effectiveness of the patternmaking manipulation because it aids in both the design and understanding of the garment. Technical patternmaking knowledge facilitates the design process because it provides the foundation for envisioning potential design possibilities and specifically helps determine what is possible and what is not (Ahwa, 2009). Patternmaking knowledge is an important tool to generate creativity and originality for designers. Even though there is uniformity in patternmaking it can also be very personalized depending on the designer or patternmaker's techniques (idem) beyond the use of conventional systems like flat patterning or draping. The purpose of this project was to study an unconventional patternmaking process and incorporate draping methods in order to take it further to add value to two original designs using a woven and a knit fabric. The selected method was the "draping technique" that belongs to the Transformational Reconstruction (TR) pattern making system created by Japanese designer and international educator Shingo Sato.

Transformational reconstruction is a process of darts manipulation and free drafting of style-lines on a 3D pattern (fitted muslin on a form) where the darts and shaping are hidden in the seam lines (Maniac Pop, 2013). In his approach, Sato also uses origami techniques and the manipulation of layers of fabric on top of flat pattern pieces in order to create volume, texture and unique designs. He states in the TR Facebook fan page: "TR technique is a more intuitive, organic design process than the conventional +1/-1 mathematical based pattern cutting systems. TR technique allows through trial and error, the discovery of chances upon happy mistakes".





Drafting on a 3D muslin pattern (left). Final outcome of the "draping technique" (right)

Source: TR Cutting School, Facebook fan page.

The project included the development of two garments, a vest made of a woven fabric and a jumpsuit made of knit fabric. The first step was to create the muslin pattern for the desired design and fit which was made by the traditional draping technique for both outfits. The second step was different for the two garments. Style-lines were outlined freely in an asymmetrical formation

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around the vest pattern and then later cut into pieces following those lines. In the jumpsuit the draped pattern pieces were altered during the draping process. Using the new pattern pieces for both garments the next step was to cut the layers that were going to be texturized on top of the pattern pieces. These layers were bigger than the patterns and they were drawn freely following the bias of both materials. The final step was to texturize the layers and attached them to the pattern pieces to be later sewn to obtain the final products. For this project Sato's technique was altered by texturizing the layers of fabric in a gathered and pinched fashion. In this case the fabric was pinched and gathered in a more controlled manner than the way he presents this technique.

In conclusion, the experimentation of nonconventional methods is a good approach for fashion designers who are interested in expanding the possibilities of design based on patternmaking and draping. This approach has the potential to add value to garments while exploring both originality and creativity.







Style-lines in pattern

Vest asymmetrically texturized

Front Jumpsuit (knit)

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