



Animalistic Coloration

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The purpose of designing this cut and sewn knit garment was to explore coloration through specified knit structures with an electronic circular jacquard knitting machine. This jacquard machine is limited in its design capacity since it can only hold four colors at any given time. In order to increase the colors options available, a technique of coloration may be utilized. Coloration in this sense is the mixing of yarns. Depending on what percentage of each yarn that is more visible, the more likely the overall color will resemble that particular color. Completely new colors may be achieved through coloration by the visual effect that is created when two or three colors blend together from a distance.

First in the design process, a coloration sample blanket was produced. This was achieved by developing various knit structures as motifs in the Kaledo motif library (similar to the creation of weave structures using graph paper). Each pixel within the Kaledo artboard can be translated to one loop on the knitting machine. By staying within the confines of four colors and ultimately four yarns, one is able to visualize the overall effect of the interaction of these colors. Several sample blankets were knit with varying combinations of yarn colors. The first blanket included yarns that were red, orange, neon green and purple. This achieved a wide range of hues, but very little range in value. It was then determined that in order to have an element of contrast within the piece, there must be a range of colors that contain a light, medium and dark value. The final color blanket that was developed for this design contained 100% cotton yarns, in 18/1 size that were white, canary yellow, blood orange and plum. This color scheme also was appropriate for the color forecasts and trends for Autumn/Winter 2015/16.

The long jacquard dress features an engineered design that fades as a gradient from the hem of the dress to the shoulder seam. This design was inspired by animalistic trend forecasts through WGSN for the season of Autumn/Winter 2015/16. The motif present is a translation from a snake skin print that has been scaled and repeated to create the gradient effect. Adobe Illustrator was first utilized to develop the overall snake skin motif and pattern. Kaledo Print then was used to extract specific color layers that would then be replaced with a developed knit structure. With the final knit structure blanket, it was possible to choose the appropriate knit structures that would translate to a given hue in the original snake print motif drawing. Yarn coloration allowed for the yarns utilized to interact with each other and create an overall cohesive color scheme.

Rather than only being able to achieve the basic four colors that the knitting machine allows for, seven colors were achieved through the color mixing technique.

This jacquard knit fabric was knit using a Mayer OVJA 1.6E3WT 30 inch diameter, 18 gauge machine. This cylinder and dial circular knitter contains 728 needles. Once knitting was complete, the garment was laundered in a standard home washing machine and drier to allow the yarns to bloom. The resulting fabric has a soft hand and has blended the mixed yarns well. The final dress was developed through the use of draping with a draping form. All pieces were serged by a Brother EF4-B511 Overedge Machine and edges finished with a Juki DDL-8007-80 Lock-Stitch Machine.

Garment: Bust : 32 ½ inches; Waist: 29 inches; Hip: 35 ½ inches; Overall CF Length: 58 inches ** Approximately Fits American Size 4-6

