

Flora

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Contextual Review and Concept: The inspiration for the design was tree of life, which is present in multiple religions and cultures across the world carrying a great symbolic importance (Cooper, 1985). The growth of a delicate sapling into a strong tree over time represents the growth of an individual through their unique experiences. The branches of the tree of life grow upwards towards the sky just as we grow stronger and wiser through new experiences. The intricate network of branches symbolizes how a family grows. Further, the birds and flowers are a reminder that our happiness is intervened with the happiness of other living beings. The tree provides nourishment and shelter to other beings around it and helps sustain life just like how people take care of friends and family. The flowers on the tree also represent purity and love. They are linked to the Buddhist concept of mortality and living in the present (Ohnuki-Tierney, 2018).

Overall, the textures, colors and design of the ensemble help convey the idea that it is essential to embrace inner confidence and grow through every moment in one's life. The ensemble conveys meaning through unique effects created by a play of textures designed by using different fabric surface design techniques. In contrast to the elaborate experiences and opportunities of growth that life provides, and the strength that one must possess to survive and thrive through it is symbolized in the jacket design. The dark shade of purple used in the jacket along with smocking on the sleeves creates an aura of power and enhances the playful nature of the wearer. Life is also love, which is precious and delicate. This is implied by using a romantic dress design with an hourglass silhouette, strapless neckline, as well as by using a soft pink color palette, engravings of flowers and birds instead of strong laser cuts, and layers and gathers.

Process, Techniques, and Execution: First, a design sketch was made to incorporate the various messages of strength, growth, love, and the transient nature of life. Fabrics were chosen such that the colors bolster the message and give an enhanced effect when laser cut/ engraved. Basic bodice and skirt blocks were developed through draping and the patterns were digitized into Optitex PDS. The patterns were conceptualized, and the garment was draped on a virtual avatar to analyze the fit and the final look created by the combination of various fabrics and textures. After making the required modifications, the patterns were exported to Adobe Illustrator where surface textures design for laser cutting, and laser engraving were made, and the files were sent out for laser cutting along with the chosen fabric. At the same time, open-source 3D printing patterns were explored to find a suitable design for the waistband flowers. The chosen 3D-printed flowers (Anonymous, 2016) were manipulated in TinkerCAD, a 3D modeling software.

Multiple prototypes of varying sizes and thicknesses were created before a flower matching the style of the dress was developed. The flowers were then spray-painted in shades of pink.

To assemble the dress, first, all panels of the lining were overlocked and attached together. Next, the layers of flounces were attached to the skirt. Then, the various components of the shell fabric were stitched together while ensuring continuity of the design across panels. Next, the lining and shell fabrics were stitched together at the top and understitching was applied to ensure the bodice sits well on the chest. Then an invisible zipper was attached to the left side of the garment. Last, a three-dimensional effect was achieved by attaching the 3D-printed flowers onto the waistband using stretchable fabric glue. To create the jacket, first, the smocking was created on the sleeve by hand stitching. Next, the panels of the jacket were attached together. Last, the sleeve was attached to the armhole.

Aesthetics Properties and Visual Impact: Garments have always been used to express oneself. When wearing the dress filled with engravings of birds, flowers, and leaves, that symbolize life, the wearer would be reminded of the fundamental concepts of life and at the same time imparted with the confidence to relish every moment of one's precious life. Apart from the symbolic meaning of colors, the ensemble conveys meaning through unique effects created by a play of textures developed through a combination of new technologies and handwork. Symmetry was used to create a balance between the left and right sides of the garment. On the contrary, the top was created to be tight fit, and the bottom had flounces. The distinct fabric types, velour with leather, and the contrast in textures created by laser engraving gave the outfit a unique look. The 3D printed flowers attached to the waistband created a unifying effect between bodice and skirt.

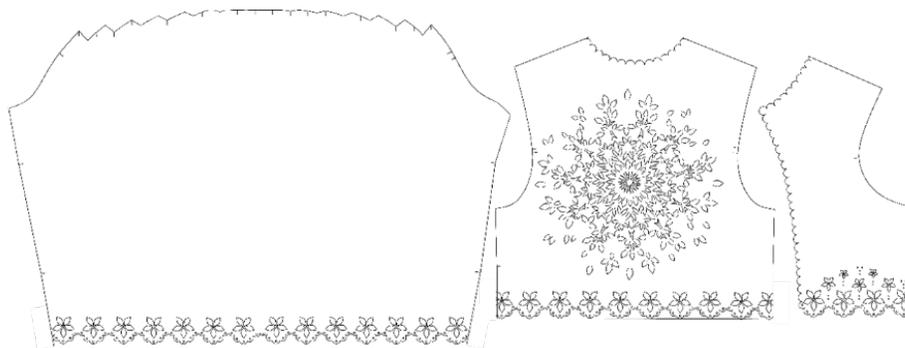


Figure 1. Laser cutting patterns for faux leather

Design Contribution and Innovation: Developing textures through laser technology was inspired by a previous work, in which lace effect was created through laser cutting (Shin, 2015). In the present design, the use of laser engraving to create a lace effect was explored (Figure 1). Additionally, engraving was applied to create a short cut pile on the surface of velour fabric to generate the most dramatic effects (Figure 2). The luster of the fabric brought out the life and

beauty of flowers. Additionally, with a synthetic fabric content, the edges of velour and leather fabric were sealed, which prevented fraying. Multiple prototypes with varying intensities were developed before the desired look could be achieved.

The engravings on the panels of velour fabric used to make the dress and smocking on the sleeve as well as the intricate motif laser cut on the back panel of the jacket were inspired by the tree of life. The front seam and neckline of the jacket were cut in a playful pattern of semi-circles. The skirt consists of alternate layers of velour and lace flounces creating an elegant look. While creating the design of engravings, continuity, and flow of design across seamlines was ensured. Additionally, silhouettes of flowers were laser cut at the hem and the edge of the sleeves which made the fall of the fabric more fluid.

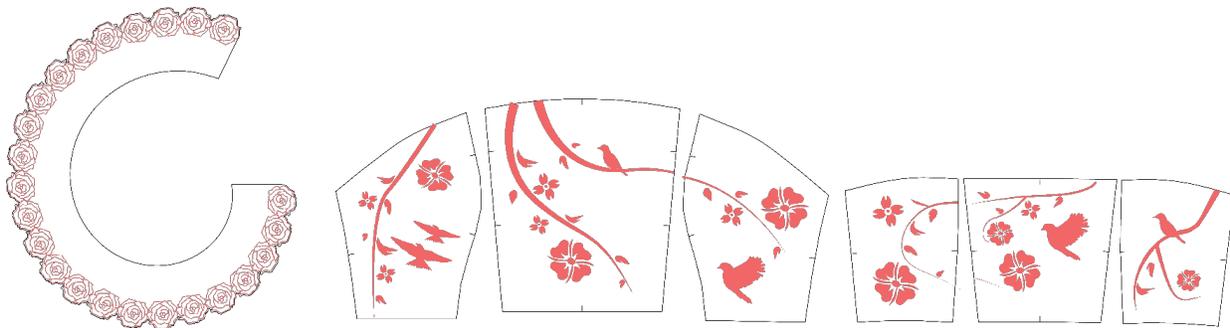


Figure 2. Laser engraving patterns for velour fabric



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