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## FAUX leather exploration: A creative approach

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### ABSTRACT

*Fashion conscious consumers demand updated and up style look for themselves. They not only look at the functions of the product but also the aesthetics according to the current fashion. They are now more conscious of what they buy, about the style, visual appearance, etc. The use of faux leather instead of natural leather can cater the demand of fashion products as well as will also take care of the environmental, economic and religious concerns of the consumers. This research is on the utilization of faux leather as the design element for the apparels. Using different techniques, innovative designs collection is developed. Further, the selected techniques have been applied as the surface enhancement on Indo-western outfits.*

**Keywords:** *Faux-leather, Surface ornamentation, Appliqué, Layering, Quilting, Slashing, Laser cutting*

### 1. SOURCES OF LEATHER

Leather could be obtained from cattle, pigs, goats, and lamb. Creatures like alligators, ostriches, and kangaroos are slaughtered in China, which exports skin all over the world. Most of the leather comes from developing countries, for example, China and India, where animal welfare regulations are possibly non-existent or not reinforced strictly. In India, a PETA study discovered that workers break cows' tails and apply tobacco, chili peppers to their eyes in order to force them to get up and walk after they collapse from fatigue on the way to the slaughterhouse. Within the U.S., most of the other creatures that are murdered due to their skin along with the countless cattle withstand the horrors of manufacturer farming extreme deprivation and crowding in addition to castration, dehorning with no painkillers and docking. At slaughterhouses, pets regularly have their throats cut while they're conscious. Purchasing leather contributes to slaughterhouses and factory farms since the skin is the economically significant by-product of the meat industry. The leather is not environment-friendly, as it is responsible for all ecological destruction caused because of the beef industry in addition to the pollution due to the toxins found in tanning. [1], [2].

### 2. SHORTCOMINGS OF LEATHER

Natural leather has few shortcomings in its functions and also in the manufacturing process of end products. It is very difficult to launder leather because of poor resistance to watermarks after laundering. Leather has weak resistance to mildew formation. Hence, the end products require frequent maintenance treatments. Its natural origin makes it unsuitable for the mass production system, as it is very difficult to obtain consistent quality. Also, deliberate animal killing is associated with natural leather. It is of major concern due to decreasing population of these animals. Animal skin is turned into finished leather through the use of dangerous mineral salts, formaldehyde, coal-tar derivatives, cyanide-based oils and dyes, chrome, and other toxins. People who work in and live near tanneries die of cancer caused by exposure to toxic chemicals used to process and dye of leather [3].

### 3. FAUX LEATHER

Faux leather, artificial leather or fake leather is a synthetic material used for clothing, furniture, and even in cars. Faux is a French word that means fake, or not real. Faux leather is used when the use of real leather is too expensive or unsuitable or even unethical. Faux leather was created in the early years of the twentieth century, but it was very rigid and had an unpleasant smell. The major problem of past faux leather was that it was not breathable. This meant that wearing faux leather would leave a nasty smell and a nasty feeling. In the sixties, a company called DuPont invented a new way of manufacturing faux leather, by added tiny holes in faux leather, with the use of a new technique [4]. For many people, the thought of wearing animal skin is just unacceptable, that is why there are many brands that specialize in making faux leather clothing and accessories. Real leather is costly as compared to faux leather and more difficult to work than faux leather [5].

There are several different types of artificial leather materials available today, used for clothing and furniture products and other items. Artificial leather has become increasingly popular because of its appearance and flexibility, and also because of the positive effect on the environment. As more individuals shop for alternative leather products, fewer animals are killed each year, and less pollution is generated from the processing of those animals.

#### **4. FAUX LEATHER VS NATURAL LEATHER**

Leather has been used in clothing for thousands of years and is popular today as well. Natural leather has few shortcomings in its functions, such as difficulty in the laundering process because of the poor resistance to watermarks and mildew formation. Its natural origin makes it unsuitable for a mass production system as it is very difficult to obtain the consistent quality of leather to make products. It is difficult to match two or more hides of the same animal category of different origin. There may be a change in the texture of animal hide of different geographic areas.

Deliberate animal killing is associated with natural leather. It is a common misconception that leather is a by-product of the meat industry. The leather is often promoted as a natural product, but the tanning industry poses many dangers to the environment by causing extreme pollution to air, soil, and water. The primary environmental threat involves the dumping of solid and liquid waste that contains leftover chromium and other hazardous compounds. The leather sector is well known for its effluent problems. The polluting nature of tanneries is evident from the odor that characterizes tanneries and tannery zones. Workers in tanneries have been documented to suffer from skin diseases and respiratory illness caused by the chemicals used in tanning process to make leather.

Faux leather has been introduced into the leather industry to overcome the problems associated with real leather. Faux leather, which is made from plastic or vinyl-based materials, has many benefits and can be used in all the same ways that leather can. One of the most significant benefits of using faux leather is that it is much more affordable than genuine leather. Faux leather can be found at a fraction cost of real leather without sacrificing on the appearance. Faux leather is stain and fade resistant and is easy to with a cloth and warm water. Unlike genuine leather, faux leather does not retain moisture.

Faux leather is man-made, therefore it has a consistent look throughout the material. Faux leather is a better option because products made by them will look alike. Faux leather is easier to cut and sew, and needle marks are less noticeable on it. One can use faux leather for a variety of projects, from making clothing to covering headboard because it is easy to work with it. One of the varieties of faux leather is Pleather/P-Leather.

Pleather is a low-cost material that is commonly used to make artificial leather garments. Pleather is made from plastic materials and is lighter in weight compared to genuine leather products. Two common types of pleather are polyurethane (PU) and polyvinyl chloride (PVC). Pleather products can be bought in an array of colors because the dyeing process does not damage the materials [6].

#### **5. EXPLORATION AND DESIGN DEVELOPMENT USING FAUX LEATHER**

##### **5.1 General Observations**

Slight differences are observed in the texture of real leather to faux leather. The real leather had a rough surface at the back side, whereas faux leather had smooth.

PVC faux leather is available at a very cheap price as compared to PU. Most of the shops are selling PU based leather, as it is more durable therefore demand for PU leather is more than PVC. Faux leather is available in almost every color and a huge variety of textures are available from plain to emboss.

It was also observed that PU leather is soft as compared to PVC and gives more leather-like appearance. The base material is different for PU and PVC. The base material of PU leather is soft as compared to PVC. PU leather does not crack whereas PVC tends to crack with time. PVC leather gives plastic-like appearance, which is used in making cheap products. Real leather is measured as per square feet for selling. However, faux leather is measured in meters.

##### **5.2 Design Exploration**

The techniques used for exploration were leather manipulation, origami, laser cutting, patchwork and appliqué using faux leather. Fabrics such as georgette, net etc., were used with faux leather to provide a base to the design created and also to enhance the design pattern of the explorations.

The tools required for techniques were a sewing machine, hand needles, threads, hand shears, water-soluble film, laser cutting machine, and CAD (CorelDraw X5). The designs to be cut using laser cutting were made on CorelDraw X5.

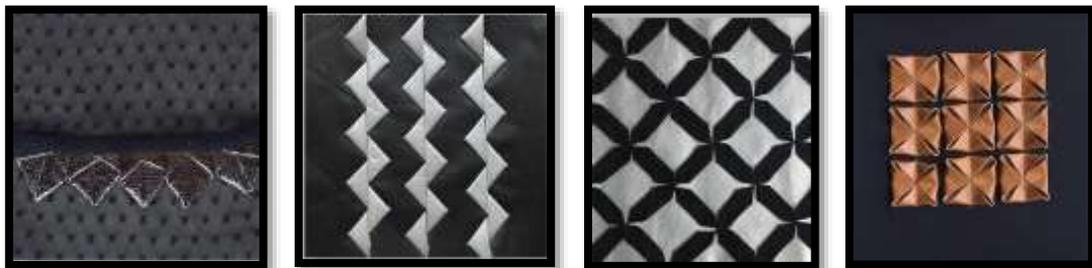




**Figure 1: Explorations using Appliqué Technique**



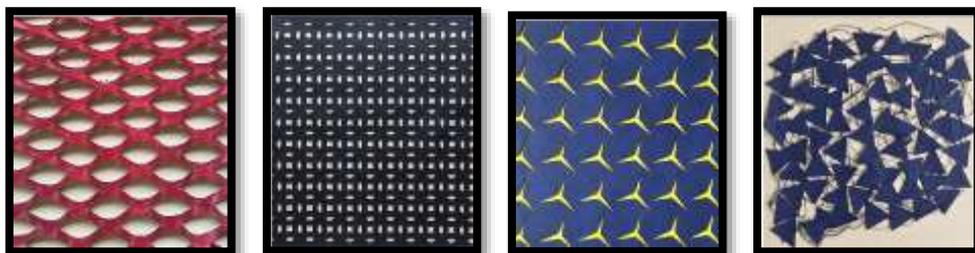
**Figure 2: Explorations with Appliqué, Layering and Quilting Technique**



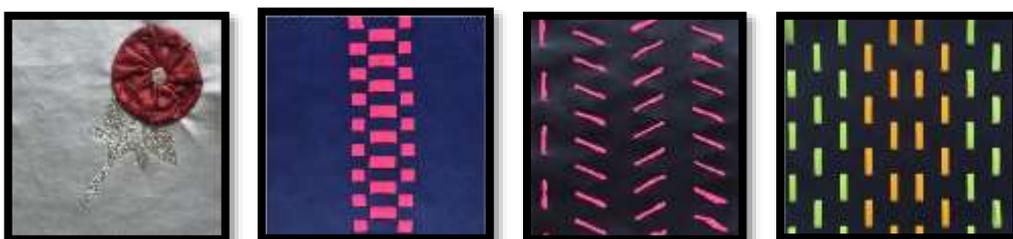
**Figure 3: Explorations with Folding Technique**



**Figure 4: Explorations with Slashing and Folding Technique**



**Figure 5: Explorations with Laser Cutting Technique**



**Figure 6: Explorations with Ruffling, Slashing and Weaving Technique**

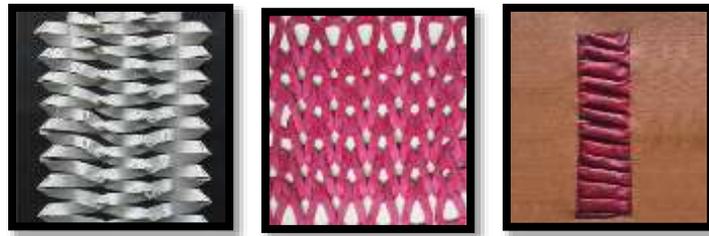


Figure 7: Explorations with Looping and Pleating Technique

### 5.3 Product Design and Development

Indo-Western fusion garments have gained acceptance and are largely bought by Indian consumers. These outfits are becoming popular amongst youngsters at formal and informal events.

This type of fusion is commonly found in garments with traditional embroidery styles from different parts of India such as phulkari, mirror work, and zardozi etc. on western garments patterns. The trend of Indo western style has also influenced bridal wear. More of western cuts can be seen in saree blouses. This amalgamation of elements from India and western look is found in accessories as well. Indo western garments have an elegant and trendy appearance without losing touch of Indian culture, which makes Indo western garments suitable for all age groups and at all kind of occasions.

#### 5.3.1 Product Design

In India, a traditional kameez is often coupled with parallel pants that replaced baggy salwars. The dupatta is used as a long scarf or stole with western look. Western cuts, shapes, and necklines are adopted in kurtas and dresses. The indo-western theme was selected to design five outfits. Indo western garments are a combination of western styles and Indian designs.

The designs made were based on selected techniques from the catalogue. Faux leather was used to enhance the look of Indo western attires. After designing and sketching the outfits, paper drafts for each outfit were developed. The designs which required laser cutting were made on Corel DRAW X5.

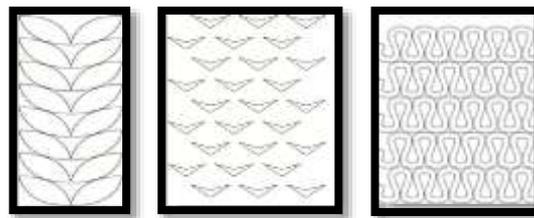


Figure 8: Designs Used for Laser Cutting

#### 5.3.2 Product Development

Fifteen Indo western garments were designed and five were finally selected. The garments selected were cigarette pants, kurtas, long skirts and jackets using various techniques. The designing of outfits were done by making sketches on adobe illustrator CC14. Each sketch includes detail of the design with colour used for the final outfit.



Figure 9: Illustrations of Five selected Designs for Product

## 6. CONCLUSION

Faux leather, artificial leather or fake leather is a synthetic material used for clothing, furniture, and even in cars upholstery. The popularity of faux leather increased with time as it was available in different colors.

Two common types of faux leather are polyurethane (PU) and polyvinyl chloride (PVC). PVC leather is a type of faux leather that is made by covering a base of natural or synthetic material with vinyl, made from polyvinyl chloride (PVC) and plasticizers.

Faux leather is easier to cut and sew, and needle marks are less noticeable on it. Different techniques such as laser cutting, patch work, weaving, origami, and leather manipulation can be used with faux leather.

The markets which are selling faux leather have a huge variety of faux leather from plain to emboss. The faux leather is available in almost half the price of natural leather. Faux leather is mainly used in making western garments. Indian garments are still not seen with any type of faux leather work.

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