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Multifarious Approaches to Attain Sustainable Fashion

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Abstract

Fashion is a huge industry and affects environmental, economic and social system in many ways. Exploitation of resources for ever changing trends in fashion is immense and providing these demands put enormous pressure on the environment. In such a situation sustainable practices in every human activity has become important and fashion is not less affected by this drive. Fashion professionals have to play major role to inculcate the concept of sustainable fashion with responsibility in their product line. It is important that while designing, designer should understand the benefits of sustainable operation starting with concept development level. In this paper design solutions for sustainable fashion are inferred in a design school scenario. The main idea to do so is to develop more sensible and responsible designs, which can be better solutions for sustainable fashion. The sustainable fashion was achieved to a certain extent by using available materials to its ultimate usage, using waste material, recycling of the products, planning second life for the fashion product, slowing down the fashion etc.

Keywords: slow fashion, sustainability, fashion design, haute couture, textile re-use, functional design

In 1918 Mahatma Gandhi started his movement for Khadi as relief programme for the poor masses living in India's villages. Spinning and weaving was elevated to an ideology for self-reliance and self-government. Every village shall plant and harvest its own raw-materials for yarn, every woman and man shall engage in spinning and every village shall weave whatever is needed for its own use. Khadi Movement was— A true approach for sustainable living through sustainable clothing. (Prabhu R K, et.al 1960)

Fashion is a huge industry and influences environmental, economic and social systems in many ways. It is known fact that phenomenal amount of textile waste that enters landfills each year, fashion industry's sizable water-and-energy footprint is a great concern for environmentalist today. While having many economic benefits, clothing has a significant environmental and ethical impact ranging from increased carbon emissions, waste, water usage and pollution to child labour and unfair trading conditions. In February 2009, the UK Government Department for the Environment, Food & Rural Affairs (Defra) launched the Sustainable Clothing Action Plan. The research and consultation that preceded the action plan brought together over three hundred UK fashion & textile organizations, from high street retailers, to designers and textile manufacturers to battle the environmental impacts of fashion industry. (Defra 2008)

Sustainable fashion is not a trend. It is way of designing the styles as per positive future demands. (Dickson M, et al.2012), It is a part of the larger trend of "ethical fashion".

It is a global movement that involves economic, environmental and social issues. Apart from Gandhian philosophy there are various ways with which a sustainable fashion can be achieved. As per Gill Linton buying few well-made designer pieces that can be worn many times and does not look same. (Linton G, 2012) Vivienne Westwood on BBC's Jonathan Ross show quoted her manifesto "buy less, choose well. In the year 2007 "Slow Fashion" a sustainable fashion movement, was coined by Kate Fletcher. (Fletcher, K 2007). As per Fry, design future is concerned with humanity, and more specifically, how a design can contribute to the continuation of humanity. Design is intrinsically linked and intertwined with humankind and the myriad problems facing the current state of the world. (Fry, T 2008).

Today, fashion is one of the most dynamic, challenging and fastest growing sectors and therefore, it influences environmental, economic and social system in many ways. The sustainability movement is all pervasive today and touches many elements of consumer's daily lives. Making fashion sustainable means taking into account more than just style, quality and cost. Therefore, it is important that while teaching design development, one should understand the benefits of sustainable operations starting at concept development level, thereby broadening the design aesthetics and the functionality of a product. The goal of design methods should be to gain key insights or unique essential truths resulting in more holistic solutions.

Today, a conscientious consumer covets and consumes products with certain ethics, and therefore, there is a need for complete reconceptualization of the practice of design. In such a scenario, the pedagogy for fashion requires certain amount of sensibility in terms of sustainability. Sustainable development requires radical changes in the way we design, produce, consume and socially interact. These changes will not only be technical, but also social and ethical. This paper deals with the experimentation in a Fashion design school in order to attain sustainable fashion. Fashion designing was explored to create designs by the Fashion design students with sustainable approach. The main objective of the study is to incorporate the concepts for more sensible and responsible designs that can be a better solution for sustainable fashion. It aims in imparting designing knowledge to design a sustainable fashion.

Objectives

- To design the fashion garment with concern for social, environmental and economic sustainability.

- To analyse the element that was incorporated to attain sustainable fashion.

Methodology

The experiments were conducted in National Institute of Fashion Technology, Bangalore, India. Experimental designing is being taught for last three years in the form of classroom project to the students of Fashion Design VI semester. These students are not taught about sustainable fashion as a part of their curriculum and therefore pedagogy was modified to include this aspect in the form of assignment. Assignments were formulated keeping attainment of sustainability in fashion in mind.

2010 Fashion design VI batch: Fashion with II life

2011 Fashion design VI batch: Multifunctional garments

2012 Fashion design VI batch: Slow Fashion

Weekly monitoring and final analysis at the end of the design project was done for each design. Students were encouraged to engage with innovative and radical ways to approach sustainable fashion solutions employing different perspectives on sustainability. The design project was planned for 8 weeks. Following design process was planned for achieving the design outcome.

Design Process

- Market Research
- Client Research
- Possible Second Life Product Research
- Trend Study
- Trend Study 2 (Second Life if)
- Inspiration
- Colour Generation
- Fabric Collection
- Idea Generation
- Idea Generation (Second Life if)
- Technical Detailing of Product Conversion
- Design Collection
- Technical Specification
- Pattern Making
- Prototype Development for First Life & Conversion to Second Life if planned

(Note: This assignment was not designed as an empirical experiment to test and evaluate teaching methods and models in a strict sense).



Development of Sustainable Fashion Design

The objective of this exercise was to develop strategic thinking in designing in order to achieve viable solutions for sustainable fashion designing. Since fashion caters to psychological utility than functional utility, the normal lifecycle of a fashion product lasts for one season. The idea of this exercise was to approach design formulation in such a way that the overall life cycle of the product can be increased, resulting in conservation of material, time and energy involved. For this study, few examples are analysed. The observations made are as follows:

1. **Wardrobe Staple Piece:** A rule to a wardrobe – QUALITY NOT QUANTITY!!! Clothes that liked by the consumer not only for one season but for many seasons, a garment that can be coordinated with many separates in your wardrobe, it is flattering, comfortable, versatile, well-made can be called a Wardrobe Staple Piece. Following examples are analysed under such season less wardrobe staple pieces.

Design 1A is created by intensive surface developments. The theme worked upon was transformation and therefore layered surfaces with different visual appeal were used so that the look of the garment can be changed for different occasions and therefore can be utilised for more occasions.

In Design 1B use of traditional beads which are very expensive and carries regional prosperity symbol were used to make a garment exclusive. The garment has a characteristic of cultural connect at the same time is made in very contemporary manner thus can become a staple piece in the wardrobe to be retained for years. It can be worn with various combinations with exclusivity in design and therefore makes a staple piece.

Design 1C is a very traditional silhouette of Hariyan region of India, although colours and surface created gives very noble feel to it but the garment has an cultural connect an element which does not vanishes with time. This is again an example of a designer wear which can be worn in contemporary as well as in traditional context by the wearer thus making it staple wardrobe piece.



Fig 1A, 1B, 1C: Wardrobe staple pieces

2. **Multi-Functionality of Garments:** By creating garments that do more with less, multifunctional garments (also called convertibles or transformers) are articles of clothing that can be worn in more than one way or that serve multiple purposes. They can usually be altered by utilizing attached strips of cloth, ties, buttons or other built-in modifiers. As shown in figure no. 2 a top can be altered by zipper in the form of bag for a varied utility.



Fig 2: A stylish top can be converted as sack-bag

3. **Re-Construction - second life:** For achieving the psychological and functional utility of a fashion product, the design process was modified to design two life cycles for one fashion product. Also, the transformation of one life to the other was planned in the design process itself by the students. After analysing

the recorded studies, it can be concluded that the design of a product can be done keeping its second life in consideration. A thorough research about long term fashion trends is important in designing the extended life cycle of the product. A designer can incorporate simple and convenient methods to transform a product from its first life to its second life. As shown in Fig. 3A, a tunic top after complete utility can be converted into a back pack by the user with slight manipulation. Fig. 3B, a designer tube top and smoked skirt can be used as decorative cushions and bag in second life.



Fig 3A, 3B: Reconstruction, second life of fashion products

4. Emotive Designing for Slow Fashion: For a fashion to be used for prolonged period aesthetic is important factor. The design should possess a characteristic to be called a classic product and will not have scope of being obsolete. (Abitslow, 2011). It should have expertise or virtuosity, utilitarian pleasure, style and special focus. Fashion that appeal emotionally- possessions those are close to heart, favourite and gratifies emotional needs will last for longer period with the user and can lead to slowing down the pace of fast changing fashion. Consumers can use the fashion product for longer period for various emotional needs viz; being connected to loved ones, feeling stylish every time they wear it, finding enjoyment, feeling stylish. With this aspect designs were developed are discussed below.

In design 4A an attempt was made to use father's old shirt to make a completely new dress which can be worn frequently an innovative example of emotional connect by recycling the material thus achieving slow fashion.

In design 4B, cultural and emotional values were used to design a garment. Motifs were derived from the regional folk art of Kerala in India called 'Theyyam'. Client's mother's sari was used for making complete new designer outfit. The garment since has emotional and cultural connect therefore such fashion garment can be enjoyed by the user for prolonged time thus reducing down the pace of fashion.

In design 4C inspiration is taken by a custom called papad file in Jain cult where in blessing is given in the form of papad file. This garment again carries emotional connect in the form of wishes by her family, making this garment a special to be possessed for life.



Fig 4A, 4B, 4C: Emotive designing for slow



Fig 4B



Fig 4C

5. Reduce Material & Process Using Modern Technology (seamless)

Incorporating seam less technology for the production of mass customized garment a single fabric can be varied in styles in terms of silhouette viz; A line, tulip, and with side cowl. Length of the garment can also be adjusted as per the design and size requirement of a client. By using this design intervention consumers will have access to a variety of relatively low cost, varied style, customized apparel. It is a commercially viable design intervention as it does not involve additional requirement in terms of raw material, processing time or infrastructure. Moreover unlike conventional garment construction technology where there is lot of wastage of material for pattern development, it involves no wastage, hence it certainly leads to sustainable fashion.



Fig 5: Knit plan using seam less technology for mass customized garments

6. Recycle - best out of waste: Re-cut and sew vintage clothing, or use unusual materials to create truly different fashions, recycled clothing is the greenest option. In this approach to achieve sustainable fashion designs were developed by textile materials which were of no use. In figure 6A worn out and trend out denim trousers were used to develop a jacket with trendy hood. In design 6B old phulkari suit of grandmother was redefined by developing surfaces for contemporary outfit thus using otherwise waste garment and also incorporating emotional value to the garment for prolonged utility.



Fig. 6A, 6B: Recycle; best out of waste fashion

7. Choosing Artisans Products to Support Small Craft: Poverty is the social and economic system that makes most of the artisans in India vulnerable depriving their access to basic need for their livelihood. Cultural diversity provides wide variety of art and craft product as daily part of their living. The art of making crafts can be used by the fashion designers thus contributing to an economic and social sustainability.

8. Modular Clothing: Making a garment with easily detachable finished components will give a wearer multiple options in the way it can be assembled, resulting in a feel of multiple garments without having produced that much in reality. The wearer can also modify the styling, fit and silhouette as per his/her own wish or as per the latest trend which will lead to reduced buying,

which in turn will lead to reduced manufacturing and which eventually will turn out to be less usage of raw material.

Conclusion

Few innovative thoughts applied by the students in design development to attain sustainable fashion were; by adding emotional value to the design, planning second life of the product, reusing material, able to make allied business like craft, using modern machine in certain instances and by increasing longevity of fashion etc. This understanding of sustainable design philosophy was able to develop important designer skills amongst the students which otherwise were never taken into consideration. This teaching experiment resulted in:

- Enabled logical understanding of the design process by the design students.
- Made the students understand sustainable design philosophy to comply with the principles of economic, social, and ecological sustainability.
- Developed Intuitive approach towards the extended life of a product in order to use resources to its optimum level.
- It enhances an ability to understand and apply long term fashion trends, endurance for classics.
- Develops ability to think design with a sense of responsibility
- Extend the endurance of the material used beyond the product's short life (trend).
- It was able to build an intuitive approach towards the extended life of a product thus driving momentum for slow fashion.
- Sustainable fashion philosophy enables designers to create unconventional and innovative designs against an obsolete fashion product.

After analysing the recorded studies, it can be concluded that the design of a product can be done keeping environmental concerns into consideration. A thorough research about long term fashion trends is important in designing the extended life cycle of the product. A designer can incorporate simple and convenient methods to transform a product for the best usage resulting in reduction of environmental hazards in a considerable way.

In today's scenario with global focus on sustainability, extending a fashionable product's life beyond the recognised horizon will certainly have a positive impact. Including the aspect of sustainability in teaching itself gives students a wider perspective to think design in a more holistic manner and to become sensitive and sensible towards environment while designing.

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