



INLAY OF THE TAJ MAHAL: AN INSPIRATION FOR SURFACE ORNAMENTATION ON HIGH FASHION GARMENTS

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ABSTRACT

India has a rich cultural heritage of costume, art and crafts. Since decades highly developed civilizations continue to produce remarkable, eminent and ornate textiles with its distinct patterns, designs and motifs having different placements and layouts. However, escalating demands of consumers requires modification in the fashion industry with respect to design, motifs, colours, style and technique. Fashion designers used to take their inspiration from architectural buildings normally to create new clothing silhouettes. The researcher attempts to connect between 'fashion' and 'architecture', which can serve as fashion element for designers.

The research attempts to document and digitize of the motifs of this architectural wonders. The purpose of the study was an attempt to interpret the technique of the beautiful inlay work of the Taj Mahal and its application to the textiles for high fashion garments. In process of designing various pictures of inlay work were documented which were classified into three categories, namely cut-away lattice, inlay and embossed carving.

KEYWORDS : Inlay, Inspiration, Surface Ornamentation, High Fashion Garments, Fashion and Architecture

1. INTRODUCTION

Today's one of the most rewarding professions is the designer working with art business. A design process involves a series of creative activities including research, analysis and decision making. The designer creates designs that are attractive, functional and uniquely suited to the human needs. In present era designers should be creative enough but to follow fast fashion.

Fast fashion emphasised on quick and expensive clothing style for mainstream consumer at lower price. Inspiration can flow via anything i.e., species, phenomenon and natural objects and so on, but generally comes from surroundings. Architectural monuments can be a fair source of inspiration for various designs, silhouette types, and motifs; as people attract towards the intricacy of design and shape of architecture.

Three-dimensional form and space is the basis of architecture and so are the most designed objects in art. In evaluating a designed object different perspective should be considered. Three dimensional designs as in architecture, sculpture, and fashion occupy a space which affects the overall form of the design. Architecture can be an inspiration for a fashion design. It may seem a little surprising to use an architectural building as an inspiration for fashion design, but all examples of architecture, whether traditional or contemporary, can cause a creative spark to the designer.

India is blessed with number of world heritage monuments showcasing the breath-taking architecture and intricate work. The ancient culture of India is reflected in its historical monuments namely; forts, palaces, temples, monasteries, caves and tombs. These magnificent buildings were built by different rulers. Each ruler had left his indelible mark on the monuments that were built during his time.

Taj Mahal, a unique master-piece is the wonder in itself, an absolute epitome of Indian culture, heritage and civilization. Behind each monument is an underlying sense of mystery, intrigue and romance. The Taj Mahal, meaning "Crown of the Palaces", is regarded as one of the Seven Wonders of the World, for reasons more than just looking magnificent. It's the history of the Taj Mahal that adds a soul to its magnificence: a

soul that is filled with love, loss, remorse, and love again. Because of it was not for love, the world would have been robbed of a fine example upon which people base their relationships.

The construction of Taj Mahal started in the year 1631. Masons, stonecutters, inlayers, carvers, painters, calligraphers, dome-builders and other artisans were requisitioned from the whole of the empire and also from central Asia and Iran, and took approximately 22 years to build what we see today. Which was brought in from all over India and central Asia. Taj Mahal was finally completed in the year 1653.

By the early part of the 17th century, smaller objects produced by the Opificio were widely diffused throughout Europe, and as far east to the court of the Mughals in India, where the form was imitated and reinterpreted in a native style; its most sumptuous expression is found in the Taj Mahal. In Mughal India, *Pietra dura* or *pietredure*, called *parchinkari* or *parchinkari* in the Indian Subcontinent, is a term for the inlay technique of using cut and fitted, highly polished colored stones to create images. It is considered a decorative art. The stonework, after the work is assembled loosely, is glued stone-by-stone to a substrate after having previously been "sliced and cut in different shape sections; and then assembled together so precisely that the contact between each section was practically invisible".

A design is a key element for preparing a new marketing foundation by raising the value of product and its competitiveness. In a design process artists use sources of inspiration as a basis to explicitly communicate new designs, style and moods.. Any objects or things we see in our daily routine are possible design sources. These may include nature, temples, famous mountains folk arts and crafts such as wall paintings, sculptures, carvings etc.

In the present research, an attempt was made to document the designs and patterns inscribed on the Taj Mahal of Agra and to create new range of high fashion garments by maintaining their beauty and originality. Here textile designs are creatively and diversely illustrated through the creative process and digitally manipulation the design with the advent of

technology and the use of computer aided CAD software to increase the productivity and improve the quality of design. Moreover, the laser cutting technique is used to make a three-dimension effect for surface ornamentation. The major reason for wide application of laser in garment industries may be due to reduced cost, flexibility and anti-counterfeiting.

2. Purpose of the Study

The Taj Mahal is among the finest in Mughal architecture. As the surface area changes, the decorations are refined proportionally. The decorative elements were created by applying paint, stucco, stone inlays or carvings. The remaining surfaces are inlaid in delicate detail with semi-precious stones forming twining vines, fruits and flowers.

From time immemorial 'THE TAJ' has inspired artists, textile designers and fashion designers alike. The eternal beauty of the TAJ has stayed relevant for application throughout the eons of time to the most modern fashion. The researcher has taken upon herself a challenge to interpret the technique of the beautiful inlays to the textiles for its application to high fashion garments.

3. OBJECTIVES OF THE STUDY

1. To study inlay work of the Taj Mahal.
2. To explore fabrics for their suitability for application to inlay work.
3. To design and construct high fashion garments by taking inspiration from inlay work of the Taj Mahal.
4. To evaluate the constructed garments in terms of:
 - i. Conformity to the inlay work.
 - ii. Appropriateness of the fabric.
 - iii. Appropriateness of the technique.
 - iv. Overall aesthetic appeal.

4. METHODOLOGY

This Descriptive Exploratory study was conducted on "Inlay of the Taj Mahal: An inspiration for surface ornamentation on high fashion garments". The inlay of the Taj Mahal has been taken as a source of inspiration for textile designing. The data on the subject was accomplished from various secondary sources like, books, research papers, articles, field visit and from net search. The libraries of Clothing and Textiles Department, Faculty of Family and Community Sciences, the Hansa Mehta library, Fine arts library, Archaeological survey of India (ASI) of Vadodara were visited. Primary information was gathered through field visit and data was recorded as photographic record. Discussion was also done with inlay artisans and industrialists to understand the technique.

The stepwise details and procedure of the study has been explained under the following heads:

3.1 Research design

3.2 Design documentation

- 3.2.1. Collection and classification of different designs
- 3.2.2. Design analysis of inlay motifs
- 3.3.3. Creating motifs inspired from inlay work through computer aided design (CAD)

3.3 Development of textile surface

- 3.3.1 selection of inlay designs for development of textile surface
- 3.3.2 Selection of best 6 garment designs for all three categories (i.e. 2 best designs from each category)
- 3.3.3 Placement of the selected designs as per individual garment layout

3.4 Construction of garments through laser cut and machine embroidery

- 3.4.1 Developing textile surface using laser cut technique on suitable fabric

3.4.2 Preparation of fabric inlay

3.4.3 Construction of 6 garments from ornamented fabric

3.5 Consumer preference

- 3.5.1 Formulation of tool
- 3.5.2. Display of various layouts of garment designs
- 3.5.3. Display of high fashion garments
- 3.5.4. Evaluation

5. RESULT AND DISCUSSION

The present study was carried out with descriptive exploratory research design. This study focuses on "Inlay of the Taj Mahal: An inspiration for surface ornamentation on high fashion garments" selected inlay designs were taken to explore the suitable fabric for laser cut to create textile surface. A few selected designs were taken to create the pattern layout of garments. To achieve the objectives of the study the results were categorized into following sub-sections.

4.1. Documentation of inlay designs

4.2. Development of textile surface

4.3. Pattern layout through hand Illustrations

4.4. Consumer preference

4.1. Documentation of Inlay Designs

Designs were analysed for their intricacy. A wide variety of inlay patterns were found the number reaching to 50 inlay designs in and out of the Taj Mahal. The researcher has captured around 30 designs from the area which were permitted to be captured as pictures, except that the grave area which is prohibited. It was observed that the designs were repeated and hence the researcher documented inlays eliminating the repeated ones. The researcher classified these designs on the basis of motif type.

Inlay designs collected through photographic documentation were classified into three categories, which includes,

1. Border designs
2. Butta designs
3. Combination of Border and Butta designs

Category – 1 (Border Designs)



Fig 1:Category – 1 Final Border designs

Category -2 (Butta Design)



Fig 2: Category 2- Final Butta design

4.2. Development of textile surface

Selected inlay design was used for development of surface into surface ornamentation technique which is known as fabric inlay.

First process was market survey. In which researcher has done a market survey for different fabrics based on the suitability of technique and theme. However, there was a limitation of the colour due to the selection of fabric and the concept of collection. The ivory colour of the fabric was purposively selected by guide and researcher. Because of the concept of them was the same appearance of the Taj Mahal.

Second process was the exploration of technique for surface ornamentation. for that, total 3 techniques were explored and final one technique which was fabric inlay was selected because of the good result to give a 3-D appearance. Fabric inlay technique was done with the help of fabric swatches which was stitched from the ground level and machine embroidery which was applied on to the base fabric to join all the parts together. And that's how the surface was created for final garment construction.

4.3. Pattern layout through Hand Illustrations

Selected Inlay designs were used for creating pattern layouts though hand illustration were used for high fashion garments. These designs were divided into three categories: - Border, Butta and combination of Border and Butta designs for the collection of evening party theme. Total 36 design layouts were created. from them 12 illustrations for each category. Final 2 designs were selected from each category through consumer preference and further used for garment construction.

Final garments

Category- 1 Border Design



Fig 3: Final constructed garments Category -1

Category-2 Butta design



Fig 4: Final constructed garments Category -2

Category-3 Combination of Border and Butta Design



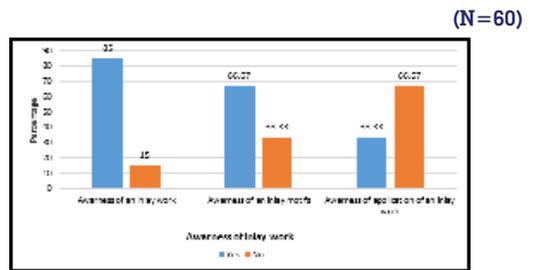
Fig 5: Final constructed garments Category -3

4.4. Consumer preference

36 design layouts and 6 garments were developed and their evaluation was done through opinionnaire. The result was analyzed on the bases of percentage, mean score and weighted mean score., the results are shown through graphs and tables.

(I) Opinion regarding Awareness of inlay work

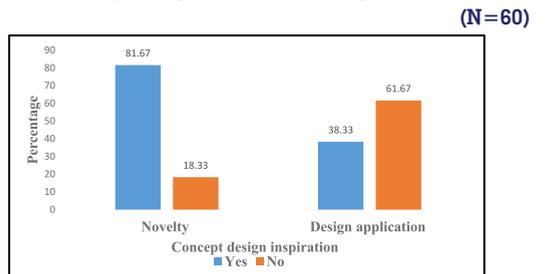
The researcher has done a detailed study on the inlay work of the Taj Mahal. Total 60 respondents gave their opinion regarding the awareness of the inlay motifs, if they are aware about the inlay work then where have they found and in which form, also the awareness of an application of an inlay work on garments.



Graph 1: Distribution of respondents regarding awareness of an inlay work

(ii) Assessment of design inspiration

The study was all about the concept of design inspiration and transferring it in to the textile.as well as, explore the different techniques which gives an appropriate appearance of stone inlay which was again a part of research inspiration.

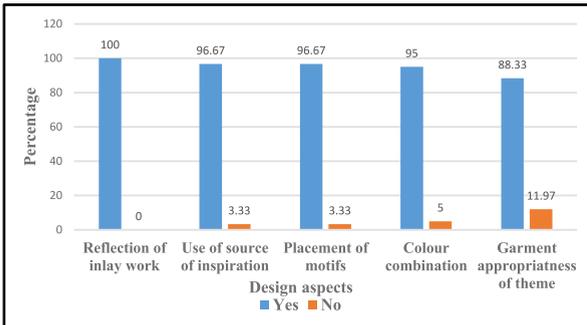


Graph 2: Opinion regarding novelty of concept by taking architecture as a design inspiration and detailing

(iii) Opinion regarding the display of high fashion garments

All the developed designs were visually evaluated by 60 respondents and their opinion regarding design aspects of developed garments were analyzed on the bases of appearance of inlay work, appropriate use of a source of inspiration, placement of motifs, colour combination, appropriate according to the theme.

(N=60)



Graph 3:Opinion regarding the design aspects of high fashion garments

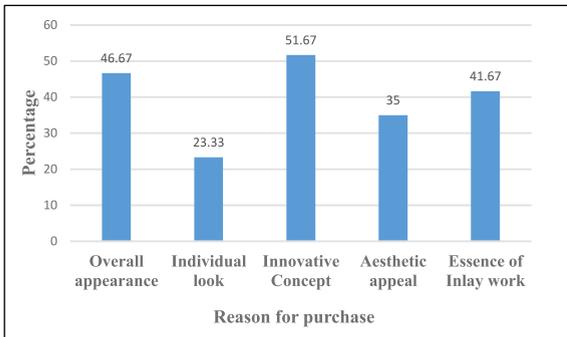
5.1. Factors affecting of purchase intention

Selection of factors affecting the preference of respondents while making the purchase of the designed products were studied.

(i) Opinion regarding reason for purchase of the displayed garments

This section includes various reasons behind purchasing garments. In terms of overall appearance, individual look, innovative concept, aesthetic appeal, essence of inlay work etc. The respondents were free to give multiple answers regarding consumer preference.

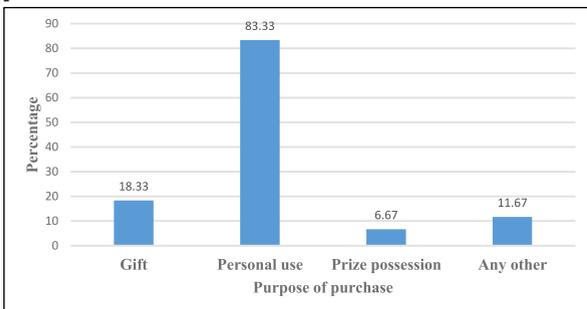
(N=60)



Graph 4: Opinion regarding the reason of purchase developed garments

(ii) Evaluation for purpose of purchase

Selection of garments depends on the different purpose of purchase.



Graph 5:Opinion regarding the purpose of purchase

From the study it would be concluded that created garments by taking inspiration from the inlay work of the Taj Mahal was very appealing, gave a unique look as a high fashion garments by laser cut technique as surface development and the machine embroidery which gave eye catching appearance as s surface ornamentation, majority of the respondents like the concept of the design and were found to be highly innovated, creative ideas, upcoming fashion trend as well as inspirable for fashion designers. All garments are fulfilled the purpose of the study. The marketability of the created textile surface was found very appreciated for its aesthetic appeal and highly acceptable by consumers. The whole idea of the study was appreciated.

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6. CONCLUSION