

Computer aided designing of sarees simulate from Mewar paintings

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■ **ABSTRACT** : An attempt has been made to simulate textile designs from Mewar paintings for sarees using CAD software. 15 saree designs were developed on computer using Corel Draw software to select the best five placements and its folk embroidery, prior to actual embroidery on saree and evaluated by panel of sixty judges. The findings of present study revealed that the designs were very innovative, creative and as per the current market need and were highly appreciated by the judges.

■ **KEY WORDS** : Computer aided designing (CAD), Simulation, Corel draw, Motif

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Indian culture and its rich heritage of tradition are reflected in many of the various regions of this country and Rajasthan is famous for its profile art treasures. Indian paintings can be referred to as the mirror of India's fascinating history from the ancient times. In India, there is a great variety of folk and tribal art. Among the Indian art, Mewar is distinguished not only for its lovely landscape and romantic architecture but also for a series of distinguished rulers who were not only valiant warriors but also patrons of art and culture. Mewar paintings from Rajasthan also called as Udaipur painting, is a sub form of Rajput paintings. Mewar has covered a niche for itself in the area of paintings. From this Mewar painting, something is unique and appealing in its own way. There are two definite categories of Mewar paintings.

Miniature paintings:

Influenced by the surroundings, antique miniature paintings have their own unique style with hills and valleys. Religious festivals- processions and scenes from the life of lord Krishna- a widely devoted Hindu god in India. The major theme of these painting apart from portraits, darbar and hunting- scenes, was the Krishna legend. Miniature oil paintings have different size and material, paper, silk and wood was used for more valuable paintings and also marble and

ivory. The colours are made from minerals and vegetables, precious stones as well as texture that are pre- eminently important and therefore some motifs and ornamentation in different textile crafts lie in this country enormously.

Wall paintings:

Wall paintings are simplest and without any ornamentation. In these paintings, mainly dark red, brick red, sindury, yellow, blue and black colours were used. Examples of wall paintings include Ganpati, God Shiva etc.,

The conventional method of designing was tedious, time consuming and laborious. The entire process of designing a fabric is revolutionized where previously designers used to labour over graph paper and stencils. Now they simply have to play with a mouse or stylus pen to come out with innovative designs and the result is not only an increase in speed but greater accuracy than the manual process (Bogart, 2003). Considerable skills and experiences were required to reproduce a design. Therefore, computers have created a new room for the designers to work.

In order to keep pace with the diversity of modern generations, demand, more flexibility, dynamic and versatility techniques like Computer Aided Designings have been developed. The modern technique aims at simulation of conceived designing onto the monitor and this help in

Table A: Percentage distribution of selected motif code for computer aided designing (CAD) (n=20)

Selected Motif code no.	38	9	37	5	43	33	50	7	22	44	1	29	12	23	42
Percentage (%)	84	82	80	78	78	76	70	70	70	69	68	68	65	64	64

better visualization of a wide spectrum of textile designs. The possibilities of designing are endless with the introduction of CAD. It plays a vital role in fascinating the creation of new designs, improvising existing designs and the production process in the fast changing global trade. CAD has lead to better quality and flexibility in design development, increasing the efficiency and shortening the time between the design concept and actual marketing. All the basic components of design can be programmed in computer language and stored in computer memory.

Now, as the traditional textiles are widely used and adopted the latest trends, the designers have begun to explore more and more traditional motifs in the modern style textiles, sarees. Since the Mewar painting art currently does not find much usage on textiles, except as a few decorative wall panels, greeting cards etc., this art needs to be popularized in order to preserve its reminiscent beauty by adopting it on textiles. The objective of the present study was to collect various motifs simulate from Mewar paintings for saree design using CAD (Corel draw).

RESEARCH METHODS

Selection of motifs from the mear painting:

For the research purpose, a documentation of the Mewar design was done by survey. The researchers personally visited the museums and library located in Udaipur and 30 Mewar paintings were collected. After critical evaluation of all these paintings, only eleven Mewar paintings were considered appropriate for present study. A total no. of 50 motifs were developed or modified from eleven best Mewar paintings selected by the researchers.

Modification and evaluation of motifs:

Each selected motif was drawn on paper manually by researchers. These paper sheets were shown to 20 experts to select the best fifteen motifs for developing saree designs. The varied score obtained for (judging their suitability on saree design out of fifty modified motifs) were finally assessed to select top fifteen scores for saree designs (Table A) thus, totaling the fifteen best motifs as rated by the experts. Data in Table A reveal the selected modified motifs code number and their percentage.

Simulation of the selected motifs on computer :

These selected motifs were scanned using “Corel draw”

software on computer. Designing and editing on computer stimulate work efficiency, enable variations, improve intricacy in motif, retouch, manipulate, trace motif on to screen for enhancement and make it compact. The selected fifteen motifs for saree design as rated by experts were edited on computer using corel draw to make it more appealing and to give intricacy and fineness.

Corel draw- The best graphic design software :

In 1989, Corel introduced Corel draw as the “first graphics software for the Windows platform,” according to the Corel website. Corel draw is a graphic application suite tool is very popularly used by graphic designers, illustrators and other design professionals. There are many computer training institutions in India where one can take a course on Corel draw for professional qualification.

Corel draw is a vector based application, which differs from other graphic applications in the fact that an image does not pixelate no matter how large or small it is made. This becomes very useful for textile and fashion designers who want to scale design to different sizes. Whether it is a billboard size print or a business card sized print, a vector based programme like Corel draw can be used to ensure that the accuracy of the image remains the same. Corel draw is often used in association with other graphic software’s like Adobe Photoshop to get the final result.

Each of the selected motifs was used to develop saree design for its placement. Which embroidery design will be used was shown on the motif in all the sarees. For the placement motifs were used in border, field and in pallu in similar manner. A total of fifteen saree designs were made and evaluated by the experts in terms of suitability of the design for embroidery purpose and suitability of the folk embroidery stitches to be used.

RESEARCH FINDINGS AND DISCUSSION

The experimental findings obtained from the present study have been discussed in following heads:

Evaluation of the developed saree designs:

Majority of the experts selected placement of saree design code number 42 with 89 per cent. Modified code number 22,9,7 and 5 placement were found more appropriate by 87per cent-75 per cent (Table 1).

Table 1 : Percentage distribution of selected best placement of saree design code using CAD (n=20)

selected best placement of saree design code	42	22	9	7	5
Percentage(%)	89	87	82	80	75

On the saree designs Folk embroidery stitches of Rajasthan were also depicted. To keep the minimum effect of placement of motifs on the saree, it was decided to use the similar placement for all the sarees. Highest scored 5 best placement of saree designs were selected by the 20 experts. The folk embroidery of Rajasthan was chosen for doing embroidery on the saree. 15 modified motifs selected for designing saree using CAD software are given in Fig. 1. Best placement of modified motifs for designing saree using CAD software are given in Fig. 2.

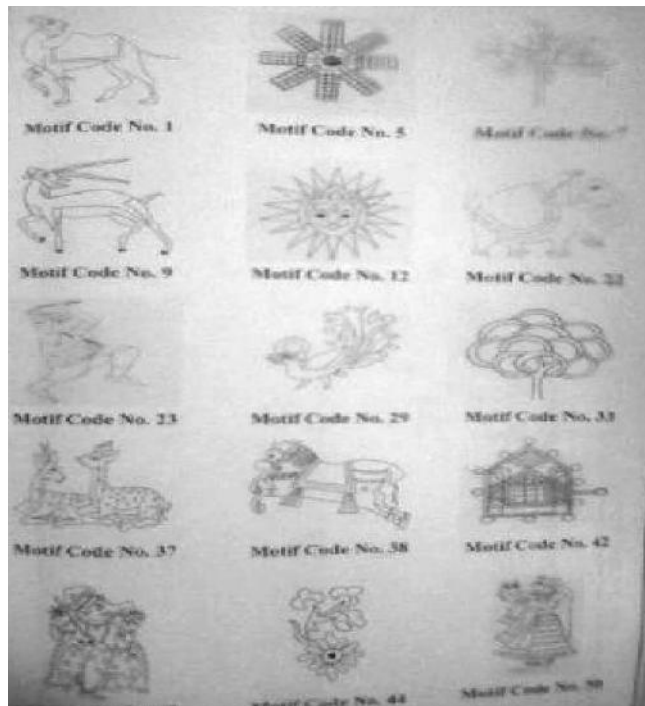


Fig. 1:

Application of folk embroidery:

The researcher used carbon paper to transfer the best

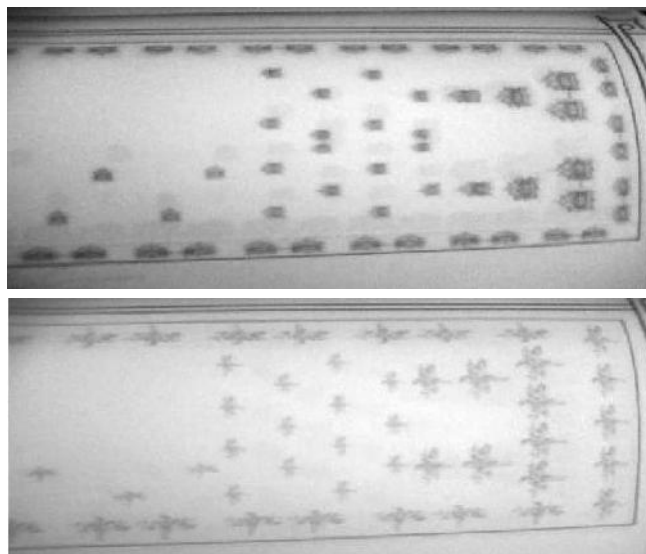


Fig. 2:

placement of CAD design on saree. After this stretching of fabric on frame, folk embroidery of Rajasthan was made on saree by the researchers. Each of the embroidered saree was independently rated using five point rating scale by 60 respondents.

Cost calculation:

Cost for each embroidered saree was calculated on the basis of cost of fabrics, cost of embroidery materials, design tracing charges and labour charges. The cost of saree ranged from Rs. 705/- to 765/- and was found very adequate and has enough market potential.

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