

Adoption of Stained Glass Designs Suitable for Textile Materials

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ABSTRACT

Stained glass was the most predominant art that gained popularity throughout history. It was used for both educational purpose basically and later to add elegance and beauty to interiors. As seen from history this art opened its way out of churches into houses of elites and aristocratic families in the 15th century. Taking inspiration from this art, designs were adopted suitable for textiles using CAD software. From a collection of 100 designs 50 were sorted based on the end use profile and they were categorised under 5 classes and later adopted suitable for textile materials. The five categories include animal, bird/insect, floral, geometric and stylized classes. All designs were number suitably with an alphabet and number for ease of identification. All the adopted designs were scored by a panel of judges for finalization of 5 designs from each category. Considering kurti materials and sarees as products for application of designs A5, B8, F5, S10 and G4 were selected with more than 70% of acceptance and A4, B6, F7, S1 and G1 scored with more than 60% acceptance was done for suitability of finalized designs by the panel.

Key words: Adoption, Churches, Kurti materials, Sarees, Stained glass and Stencil printing.

Textile design plays an important role in creating innovative products for a variety of end-user applications. Every person wishes to live unique in their appearance and this leads to more demand on innovative ideas of designs. To satisfy this urge of consumers' designers strive at evolving new designs. In any art form, it can be found that the design used or developed is from the surroundings, taking inspiration from whatever, it was felt was pertinent. Source of inspiration plays key role in the process of design execution. Besides, modifying or creating a new design from an existing object will help to restore the beauty of that particular object. Inspiration helps in the illustration of design concepts, in learning the important design features, in determining colour schemes and coordination of an overall design. The concept of designing is changing day by day to meet the existing trends and to stay in the market arena. At the juncture of developing new and innovative designs to the modern times, the art of stained glass was identified as a source to be transferred onto textile materials for surface ornamentation.

Review of Literature

The term stained glass was derived from french word "Vitre" which means "window glass". It covers the window hole and which is made of coloured glass pieces arranged and connected with composites and was stiffened by burning method (Allahverdiyev and Yucesoy, 2017). Source of inspiration plays very important role in any design process. It helps in

evolving a concept which helps in developing new design concepts, characteristics and in creating a distinct design. Design-Inspired Innovation takes a unique look at the intersection between design and innovation, and explores the novel ways in which designers are contributing to the development of products. Several fine art movements have influenced textile design, including neoclassicism, art deco, art nouveau, the Bauhaus, the art and craft movements, chinoiserie, cubism, expressionism, ethnic, folk and pop art (Godwin, 2010).

Bhasin, (2015) described that the source of inspiration in Kanchipuram sarees is from the temples of Kanchipuram. Gupta and Joseph, (2015) inspired by Greek motifs, collected eighty motifs for developing designs suitable for table cloth. Traditional designs from miniature painting of Rajasthan were used by Meenu and Rupali (2014), monumental designs were used as inspiration by Kishore *et al.* (2013), Kanta embroidery by Devi *et al.* (2018), Kasuti embroidery by Renu *et al.* (2017) and others to develop new textile designs.

In this research article, as a design inspiration object, the beautiful stained glass designs were taken and contemporized with the help of CAD software s per suitability to the end product.

MATERIAL AND METHODS

The study was undertaken to contemporized stained glass work designs into innovative/ creative motifs and implement on kurti materials during the year 2019.

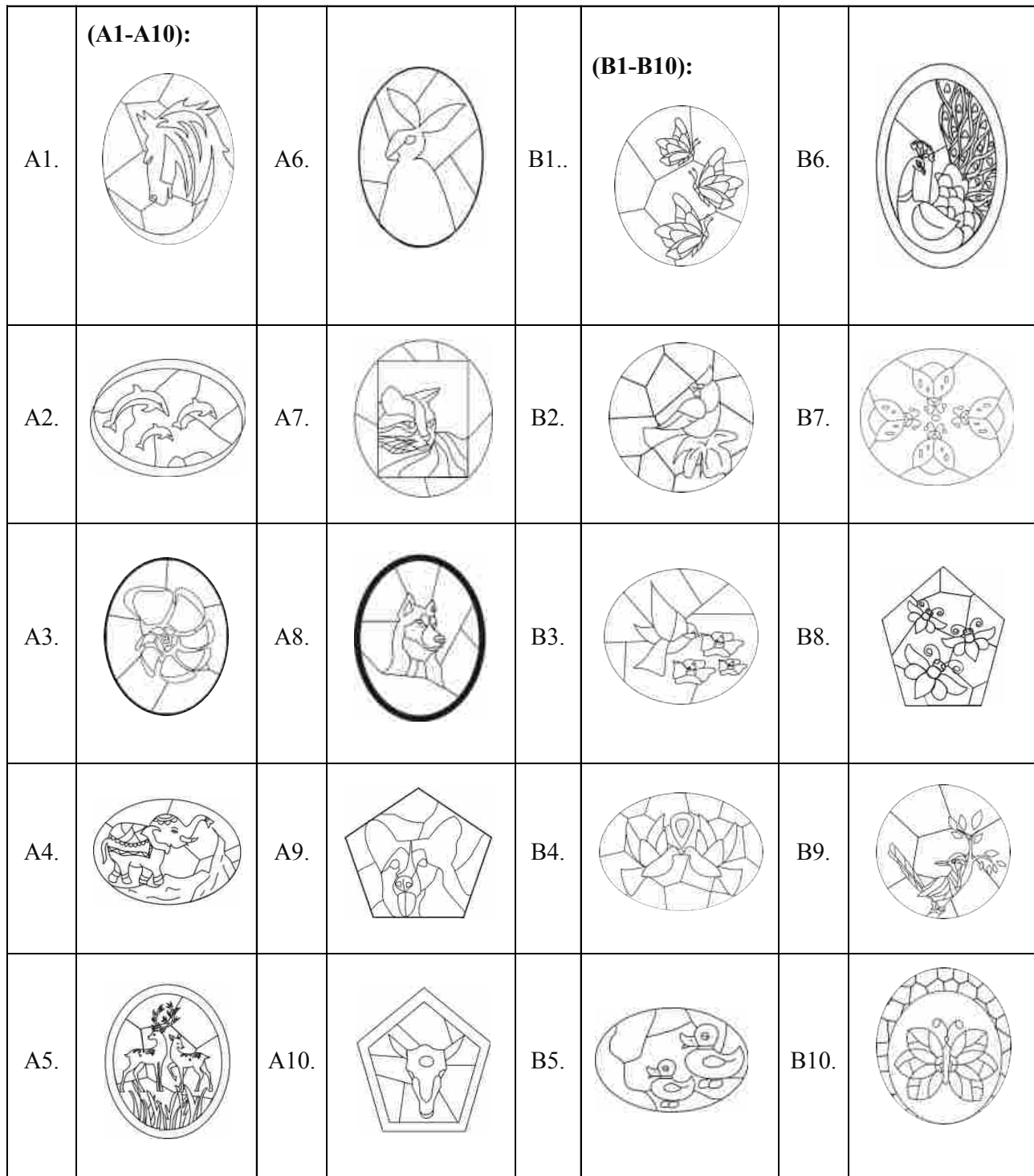


Fig. 1 Cont....

Selection of Location

Survey was conducted for the collection of stained glass designs from Churches of Guntur and Vijayawada areas. Adoption of design was done at College of Home Science, Guntur.

Collection and Selection of Motifs

As most designs are in human forms, motifs were collected from secondary sources- web and

magazines. More than 100 designs were explored and collected which were found to be suitable for textile applications. All the designs were critically analyzed by the researcher and the faculty and 50 designs were identified for adoption and development as textile designs. These 50 motifs were broadly classified under five categories viz: animal, birds/insects, floral, stylized and geometrical motifs with 10 motifs under each category. Questionnaires were developed for panel of


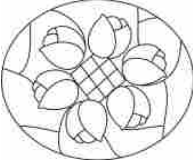
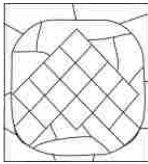






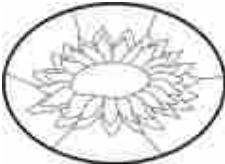
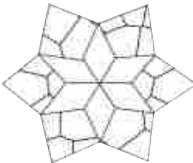




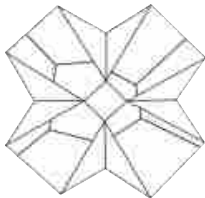
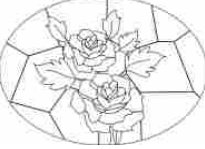

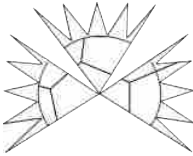

	(F1-F10):				(G1-G10):		
F1.		F6.		G1.		G6.	
F2.		F7.		G2.		G7.	
F3.		F8.		G3.		G8.	
F4.		F9.		G4.		G9.	
F5.		F10.		G5.		G10.	

Fig. 1 Cont....

judges for their preference in motif selection and design suitability.

Adaption of motifs

All the 50 selected motifs were again redrawn and refined on computer using CorelDRAW-XI and Adobe Photoshop software to incorporate certain design elements, to enhance its overall appearance. Both the softwares were used in design transformation, modification and editing until the designs appeared suitable and appropriate. Fig.1 shows all the 50 designs

from different categories. A1 to A10 from animal category, B1 to B10 from birds category, F1 to F10 from floral category, S1 to S10 from stylized and G1 and G4 from geometric category.

The mean score of each of the motif was calculated and ranks were allotted for highest scores in 5 categories. The top ranked from all categories of motifs were considered. The choice of respondents in terms of suitability of motif, the stencil printing technique was selected.

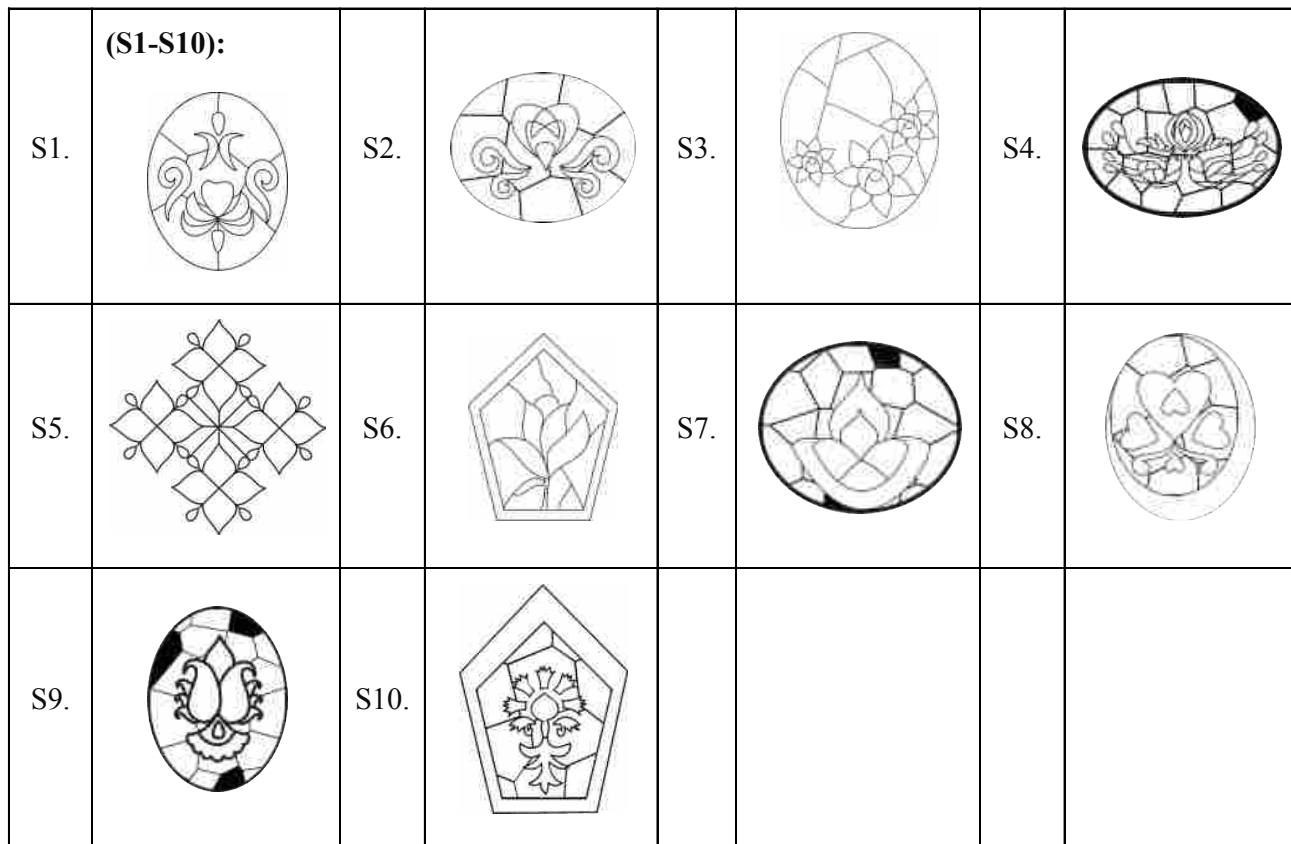


Fig. 1 Developed motifs from Stained glass motifs.

RESULTS AND DISCUSSION

A panel consisting of 30 members assessed the developed designs through their opinion and preferences.

Selection of motifs/designs

A total of 100 motifs were collected under 5 categories i.e animal, birds /insects, floral, stylized and geometrical designs. All hundred designs were scrutinized for their suitability to be applied on textile materials. After thorough discussion with the faculty of Apparel and Textiles, College of Home Science, Guntur, and the feasibility of converting them, 50 motifs were finalized for further study. Selected motifs were imported and redrawn in CorelDraw. Certain elements of design were incorporated to develop new motifs suitable for application on textiles. This resulted in 10 motifs each, under category of animal, bird/insect, stylized, floral and geometric.

Scoring of designs for suitability on textile materials

A panel of judges consisting of faculty and PG students of College of Home Science, Guntur have indicate preference of motifs under each category on a 4 point scale. Ranks were assigned based on preferences of the panel members to each of the motif.

Two top ranked motifs from each of the category were chosen as per the opinion of judges.

Results from the Table-1, it is visible that among animal and geometrical motifs 5 out of 10 motifs were ranked with an average of 2.5 and above. For floral and stylized motifs it was 6 out of 10 and among bird motifs it was 7 out of 10 motifs that received an average ranking of 2.5 and above. This indicated that bird/insect motifs were more favoured over the other class of motifs. Among all 50 motifs, the first ranked with highest average was a bird motif and the least ranking was received by stylized motif. Based on the rankings, the first and second ranked motif from each group were considered for application on products totalling to 10 motifs.

Selection of motifs based on suitability to kurti materials and sarees:

The same panel consisting of 30 members was asked to segregate the 10 selected motifs into two groups, one set for application on sarees and another set for application on kurtis based on their choice and suitability.

As seen from the above table it is evident that from each category of motifs one was selected for printing on kurti materials and the other for saree. Except for motif B6 and S1 all other selected motifs

Table 1. Ranking of motifs developed n=30

S.No	Motif No	Average	Rank
1	A1	2.6	IV
2	A2	2.4	VI
3	A3	2.5	V
4	A4	3.2	II
5	A5	3.6	I
6	A6	2.1	IX
7	A7	2	X
8	A8	2.3	VII
9	A9	2.8	III
10	A10	2.2	VIII
11	B1	3.1	IV
12	B2	2.2	IX
13	B3	2.7	VI
14	B4	2.1	X
15	B5	3.2	III
16	B6	3.9	I
17	B7	2.3	VIII
18	B8	3.5	II
19	B9	2.5	VII
20	B10	3	V
21	F1	2.6	V
22	F2	2	X
23	F3	3	III
24	F4	2.4	VI
25	F5	3.6	I
26	F6	2.8	IV
27	F7	3.3	II
28	F8	2.1	IX
29	F9	2.3	VII
30	F10	2.2	VIII
31	S1	3	I
32	S2	2.6	V
33	S3	2.8	III
34	S4	2.2	IX
35	S5	2.0	X
36	S6	2.3	VIII
37	S7	2.4	VII
38	S8	2.7	IV
39	S9	2.5	VI
40	S10	2.9	II
41	G1	3.0	II
42	G2	2.6	IV
43	G3	2.9	III
44	G4	3.1	I
45	G5	2.3	VII

S. No	Motif No	Average	Rank
46	G6	2.4	VI
47	G7	2.1	IX
48	G8	2.0	X
49	G9	2.2	VIII
50	G10	2.5	V

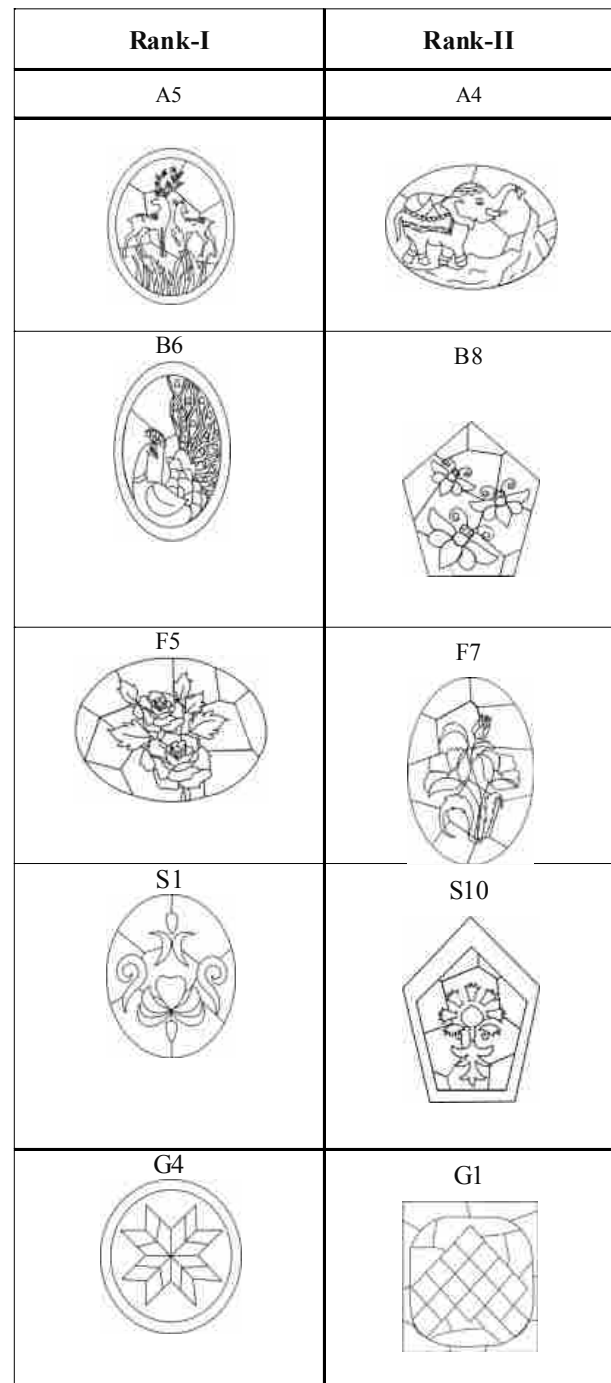
**Fig. 2 Selected motifs for kurti materials and sarees from 5 categories**

Table 2. Selection of motifs on kurta materials and sarees n=30

S. No	Motif number	Kurta materials		Sarees	
		N.R	%	N.R	%
1.	A4	4	13	26	86
2.	A5	23	76	7	23
3.	B6	11	36	19	63
4.	B8	25	83	5	16
5.	F5	22	73	8	26
6.	F7	9	25	21	75
7.	S1	12	40	18	60
8.	S10	23	76	7	23
9.	G1	6	20	24	80
10.	G4	18	75	12	25

were preferred by more than 75 per cent of consumers for application on an end use. As shown in table 4.2 five motifs selected for kurta materials were A5, B8, F5, S10 and G4 with above 70 per cent rating. The other five motifs A4, B6, F6, S1 and G1 were rated to be apt as motifs on sarees.

CONCLUSION

Designs from stained glass were successfully adopted into textile designs using CAD software. Most of the designs were well accepted by the consumers. Floral and animal motifs were most favoured based on the present trend. The research study would be helpful to the designers working in the stream of textiles

which adds new designs and also helps to depict innovation, creativity in textile designing.

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