

DIGITAL TECHNOLOGY AS A TOOL FOR THE SUSTAINABILITY OF TRADITIONAL TEXTILE MOTIFS OF ASSAM

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ABSTRACT

Handloom industry of Assam, a northeastern state in India, is one of the aged as well as important sectors of this region. In Assam it is mostly accomplished as a home based industry. Hand-woven textile is practiced here both for commercial as well as domestic purpose. Apart from economic importance, the hand-woven textile practice is also a part of traditional belief and custom. Thus the Assamese culture consists of a variety of traditional textile motifs and designs, which evolved with time and situation. These motifs are fading away with the phase of time and hence there is a need to preserve them. This paper will discuss how the digital technology can help in sustaining the age-old traditional motifs and design. Use of computer aided design, as a tool for renovation of those motifs is an idea that has been explored in this study.

Keywords: Handloom, Textile, Tradition, Motifs, Design, Technology, CAD

INTRODUCTION

The digital technology nowadays is a very common platform for designers, craftsmen and also the clients and marketers to communicate and come up with new ideas and creativity (Marion et. al., 2012). The advancement in the

technology has enabled the process of digitizing the traditional textile designs and motifs, which is beneficial maintaining a balance between culture and trade. According to Cultural or traditional aspect can prove to be an added value for the industry, since they play a very important role in generating fashion trends that comes from Asia (Shin et. al., 2015). Today the development of any product is mostly digital with increased productivity and speedy process. It is cost effective and gives wide range of options (Fixon and Marion, 2012). In Assam, which is a Northeastern state of India, textile industry is mostly a home-based traditional activity, which is turning into a global market because of the involvement of various designers, entrepreneurs, government and non-government bodies etc. The beauty of local patterns and designs, which is practiced since time immemorial in Assam, is also an added factor in the increasing demand of Assamese hand-woven fabrics and textiles. But, it becomes difficult at times to actually come up with variations due to limitation of time while fulfilling the client's requirement. Fiore mentioned that, when digital tool is used in design process, it could build strong relationship between business and consumer by creating a marketing strategy of

customization in fashion and Textile industry (Fiore, 2008). There is a major concern regarding maintaining traditional ideologies and creating amalgamation with contemporary digital technology to develop affordable fabrication techniques that can transfer ideas from the past to a contemporary context. Since the interest in digitization of designs has increased in the textile industry, many studies have looked at this subject in areas such as developing digital design processes for apparel and jacquard fabric (Ng and Zhou, 2009) The aim of this study is to explore the requirement of creating a digital platform for traditional Assamese designs using different computer aided design techniques that can be advantageous in production, customization as well as sustaining the age-old designs.

BACKGROUND STUDY

Each and every state and region of India has its own indigenous craft and design based on the traditional, cultural, religious, geographical and social needs of the area besides historical influences, trading requirements, and court and temple patronages (Goswami, 2012). Handloom weaving is a prehistoric craft practiced in North Eastern part of India, especially in Assam, that have gained an important position in global market because of various types of silk production. The beauty of handloom fabrics can be appreciated because of the ingenious mastermind of specific artisans and weavers. The spectacle in its attractive magnificence, its quality, smoothness and its comfort leads to the branding of weaving culture of Assam. This age-old tradition that has been handed down from generation to generation plays a significant role in the socio-cultural life of the indigenous population of Assam, especially in rural

areas. Nearly each female in approximately every household in the rural areas of the region carries out hand-woven practice. Contrasting in erstwhile parts of the country, weaving in Assam is the domination of womenfolk regardless of any background or community. Each woman is anticipated to learn the weaving practice, predominantly in countryside areas between both the tribal and non-tribal communities. As specified ahead handloom weaving in Assam one of the aged and extensive activity. It has been a way of life in the region since time immemorial and is not conferred to any specific group or region. Historical records provide sufficient indications of wonderful textile tradition of Assam as mentioned before. During the reign of Ahom rule in Assam, the handloom and textile culture gained an important position in the Assamese tradition. In his monograph on the cotton fabrics of Assam, F. Sammon wrote, "The Ahom Rajas kept skilled weavers to supply the royal wardrobe with cloths, and it is related how in the region of Purandar Rajah (1818-1819 A.B.) one Madhuram Tanti uncalled all the other weavers of the day and was for his services to the royal family granted land-rent free by the king" (Sharma and Barooah)

Assamese Textiles

Majority of the research reveals that the Assamese textile designs that are witnessed today are the consequence of the consequences of various other cultures. Gogoi (1985) perceives that the traditional textile designs and motifs were intricately correlated with the principles and faiths of the folks. The different religious adoption also did not change their beliefs or faiths. The sensitive and emotional motivation from the morals can be inferred from the use of special dresses different ceremonies like marriages, festivals and other social functions. Some

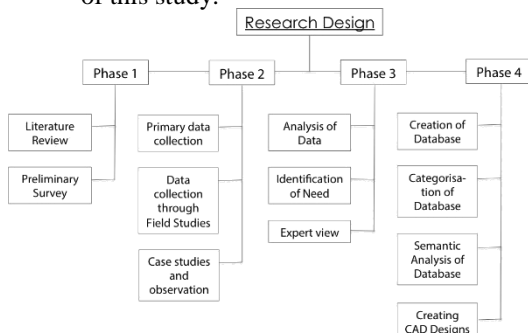
specific ornamented fabrics are decorated with established motifs and have symbolic meanings.

Assam is renowned for the weave and enhancement, both in fine fabrics and wonderful traditional textiles. (Bhavanani 1969). The former has the fragility of ornamental styles of floral parchment and lined designs of folk beautification in geometric, animals, birds and other abstract form from nature. The fabrics are ornamented with intricate motifs in different patterns.

In this paper it is tried to explore the need of the survival of the age old traditional designs as well pattern through digitization as well the need for digital platform for the weavers of remote areas for their benefit and better market opportunity.

METHODOLOGY

A research design was developed in order to cover all the aspects to be studied as identified in the Aim and Objectives of research. The research design aims in finding the current need for the sustainability of an age-old craft tradition i.e. Eri culture in the context of handlooms. Weavers and the artisans are the foundation of the pillar of this so called handloom industry. To discover the methods which could be beneficial for the weavers or the artisans is the real goal of this study.



LITERATURE REVIEW

A proper survey of literature was done in the beginning to understand the need for the sustainability of tradition in terms of craft practice in India. An ongoing debate continues between craft promoters, craft organizations and textile academics about what is termed as design intervention with traditional artisan communities. Some fear that the artisan's role will become that of only a producer and through the designer's influence, the cultural context of the craft lost when the products are developed for a consumer market unknown to the artisans. Indeed designers should attempt to understand and respect the Historical, cultural and social context of the artisan communities with whom they interact. The need of digitizing the textile motifs was tried to learn through literatures, which is a way of documentation with a vision of treasuring the traditional designs. Not only digitization can help in sustaining the designs but also it can be direct source for the artisans or the designers to come up with market opportunities. They need not rely on the designers for variations.

4.2. Area Selection: Preliminary survey of the region

Craft is a wide area and selection of a particular craft of a particular region was obligatory in the beginning of the research. Assam, one of the Indian states in the north-eastern region of India is known for its wide variety of silk like Eri, Muga and Mulberry. These silks are given a shape of beautiful hand-woven fabric by the weavers of this region.

Handloom sector of India provides employment to about 65 lakh weavers,

among which around 60% are women employees. It is really astonishing fact that, among those 65 lakh weavers, North-Eastern states comprises of 16.83 lakh of weavers, Out of which, 12.41 lakh comprises of Assamese Weavers (De and Das, 2009).

Hence, the handloom sector of Assam was selected in the beginning and thereafter one of the major Eri silk weaving regions of Assam was selected. Subsequently Kokrajhar and Mukalmua district of Assam of selected for survey and analysis to understand the weavers reaction towards the requirement of digital database. Along with weaver's survey, case studies were also conducted to understand the overall scenario.

4.3. Case studies and observation

Case study was done to understand the need, which can be implemented for the sustainability of this practice in the context of tradition and culture. Interviews were conducted with following people:

1. Anuradha Pegu, Textile designer

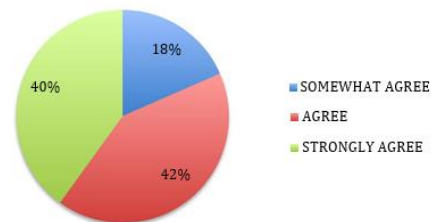
1. *Anuradha Pegu, Textile designer*
2. *Dr. Jogesh deori, Director of Sericulture, BTC*
3. *Narmohan Das, Textile exporter*
4. *Dolly Kutum, Designer at Fabric Plus*
5. *Master weaver of BRAWFED*

Overall conclusion of the above interviews results as follows:

1. There is need of Database of design, which will include traditional as well contemporary designs.
2. The database should also include CAD designs for the Weavers as well as designers and they can collect form the Handloom and Textile office of their locality.

4.4. Need identification

In the above study, it is understood that, there is need of a database of traditional textile motifs and designs of Assam along with contemporary designs. This can directly help the weaver's community because they will not have to be dependent on the designers for buyers and clients that they get in the international fairs and exhibition. When it was asked to the weavers and designers following result were obtained regarding the need of database.



In order create the Database; various places were visited like the Assam state museum, Handloom Research and Designing center. Various stores in and around Guwahati, Designers stores etc. The work is still in process and some motifs and designs had been collected with proper names. Those designs need to be categorized in traditional as well as contemporary designs.

4.6. Categorization of Database

The motifs will be categorized in the different aspects like traditional, contemporary, geometric, floral etc. the motifs and designs as mentioned before are the abstract form of the inspiration it has been taken from and henceforth it has been thought that, there is need to categorize the motifs which can be helpful for both the clients and the

weavers in the process of business communication.

4.7. Semantic analysis of database

The existing designs and motifs have a story behind their origin, which is gradually fading away with the phase of time. A semantic analysis is required in order to understand and find the stories behind the traditional motifs. It is again a future study, which is an ongoing process of this study. The database of the design should also give an insight of the origin of the design. Even if the design is given a contemporary finish, one should be able to know the original design and the hidden story and meaning behind it.

4.8. Creation of CAD Designs

In order to sustain the practice, the CAD designs for each designs is mandatory which easily can be used by the artisans and designers for developing or designing the fabric. It will also be easy for the clients to customize in terms of colors and combination of several motifs and patterns.

CONCLUSION

It can be concluded by saying that there is a necessity of a proper research towards the development of a digital database. It needs proper study and understanding of the history and origin of those intricate and abstract design forms. Another in-depth study is obligatory and that study is part of the future research of this analysis. It was understood that CAD (Computer Aided Design) tool for textile is an important part of this research. The weavers, clients and designers agreed to the need of

REFERENCES

Marion, T., S. Fixson, and M. H. Meyer. 2012. "The Problem with Digital Design." MIT Sloan Management Review 53

Shin, M. J., T. Cassidy, and E. M. Moore. 2015. "Design Reinvention for Culturally

In uenced Textile Products: Focused on Traditional Korean Bojagi Textiles." Fashion

Practice 7 (2): 175–198. doi:10.1080/17569370.2015.1045354.

Fiore, A. M. 2008. "The Digital Consumer: Valuable Partner for Product Development and Production." Clothing and Textiles Research Journal 26 (2): 177–

190. doi:10.1177/0887302X07306848.

Fixson, S. K., and T. J. Marion. 2012. "Back-loading: A Potential Side Effect of Employing Digital Design Tools in New Product Development." Journal of Product Innovation Management 29 (6): 140–156. doi:10.1111/j.1540-5885.2012.00959.x.

Ng, M. C. F., and J. Zhou. 2009. "Innovative Layered-Combination Mode for Digital Jacquard Fabric Design." Textile Research Journal 79 (8): 737–743. doi:10.1177/0040517508090482.

Goswami, 2012 (Shodh ganga thesis)

Sharma, G. and J. Barooah (ed.), Textile Tradition of Assam, Kolkata, Indian Museum

De, U. K., Das, M.: Ericulture as a Remedy of Rural Poverty in Assam: A Micro Level Study in Barpeta District. In Mukherjee D (ed) Indian Handloom and Handicrafts: Issues and Experiences. Icfai University Press. Hyderabad, pp. 170-192, 2009