

Development of garment with traditional design by improved technology

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ABSTRACT

This is a applied research based on the improvement of the traditional weaving process by using new technology in jacquard loom, which is very beneficial for making the garment and comfortable for wearer. The research is based on Arunachal Pradesh one of the beautiful state of India. Arunachal is very rich in textile design, but problem is due to the the back strap loom the fabric came out is very coarse and people find little uncomfortable to wear the cloth. The aim of this research is to make fabric in such a way that will become comfortable to wear with cost effectiveness. Research has also found the fusion technology is very much impressive in the fabric design. Through the development of new fine fabric the garment came out has been more feasible to wearer as compare to the old traditional method.

KEYWORDS : Design, Jacquard weaving, Fusion, Tribe

OBJECTIVE OF THE RESEARCH:

- To increase the marketability of traditional designed garment (Apatani design)
- To increase the marketability of traditional designed garment (Nyshi design)

LITERATURE :

In olden days Apatani people used to wear the cloth worn round the waist and brought up and secured over the shoulders whilst over this is worn a square blanket of blue and red striped cloth fastened by with a loop and buttoned round the neck.

"Endi cloths usually of the mixed silk cotton type, are worn by all the wealthier Apatanis wrapped round the body and held in position by iron pins or modern safety-pins. KENTE TASER is a traditional Apatani course shawl used during olden days by men and women alike. NII-HU ABI is a common Apatani skirt with strip design called ABI-HETE. PIISA LENDA ABI is a unique and exotic ceremonial skirt woven or embroidered with twill motif. SUPUN TARIII is a sleeveless lady ceremonial with jacket with trace of motive in the back. BILAN ABI is a ceremonial red and white skirt with a blue striped bottom. CHINYU ABI is a usual Apatani women skirt with black and white design. ZIG ZIRO is a precious Apatani shawl of an adjudicator (BULYAN) and a priest (NYIBU). (JIKHE TARIII) is a tarreled ceremonial sleeveless jacket with exotic black and white design. (JILAZI PULYE) is the priestly shawl which is the most expensive piece of ceremonial Apatani costume. (PYAMIXI PULYE) is the traditional shawl use by commoner during ceremonial festival. (ABYO) is the priestly headscarf worn during performance of rituals and indentations.

They weave only a kind of coarse cloth, which forms the universal dress for both men and women. The thread used in weaving is made of the fibers of a shrubby nettle plant locally called hyek.. To make the thread the barks of the shrub is taken out, its upper rind is removed with a knife and then dipped in water and hammered with a wooden stick over a log or stone. After some time it is again dipped in water and clean thoroughly for making it pliable. Then dried bundles are made. The fibers are then spun to make yarns which are then wrapped into ball. When sufficient yarn is prepared weaving is started. It was revealed that the Nyshi women are engaged, by and large, by their respective bangni masters to make yarns for them for which nothing is paid. Unlike the Nyshis of subansiri district or the monpas of west kameng districts they do not dye the yarn.

The weaving is as done on a single heddle tension loom which is very simple and easily portable. It can be setup in any convenient space of the house as its one end is fastened to a post or fence and the other with the waist of the weaver by means of rope. They weave normally two kinds of coarse cloths, one for the women and other for the man. This cloth is called kameyit. Besides, they also weave the lion cloth for the man.

METHODOLOGY :

Design Development

For Apatani design two different motives are taken, one of the design is taken from traditional jacket called JEEKHE and another one is from traditional cap of priest. The name of the motive is known as AMI-AGU.

Apatani Design (Graphical representation)

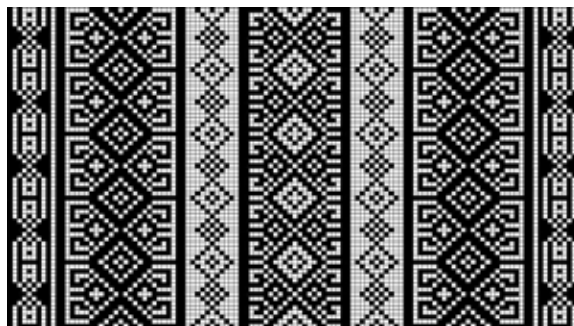


Fig: 1.i
Final effect of Apatani fabric



For Nyshi design four different motives taken from different areas, Nyshi design first one is DUMCHICK it is metal ornament used by men to support their hat, the design taken from hat is generally used in men's garment. Second one is HENBIA it is a kind of shell which is used in men's sword (daw) belt, the design taken from sword belt it is used in men's jacket. Third one is bumfur (nir), bumfer means type of cloth which is very costly, and basically nir motive is dative from a basket which is made by cane or bamboo in conical shape. Lastly giri is a metal ornament used for women's wear in back side and front side. And this design is used as women's top, jacket and gale.

Nyshi design



Apatani Design(Graphical representation)

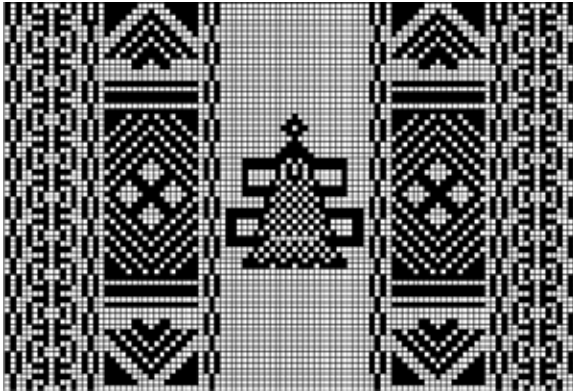


Fig 1.ii

Final effect of Nyshi fabric



2. Weaving process

2.1 Winding :

The yarn is placed in the traditional winding machine which is known as Charkha, very popular in earlier days.

Warping :

Before using in the loom, warp and filling yarns must be prepared for weaving. The essential characteristics of suitable warp and filling yarns differ. Warp yarn undergo greater stress and aberrations during weaving then do filling yarns; therefore, warp yarns must be strong enough to withstand these pressures.

Warping is done manually and traditional warping machine made by wooden

Card Punching :

According to the peg plan card are punched by the card punching machine with the help of nails and hammer. (see fig:2.i)



Fig.2.i

Weaving :

Weaving requires that the warp yarns be held under tension. The simplest interlacing is made by moving the pilling over the first warp, under the second, over the third, and under the fourth, a so on. In the second row the pilling moves under the first warp, over the second, under the third, and so on. The third row repeat the pattern of the first, and the fourth row repeats the pattern of the second row. It is known as a plain weave or tabby. The yarn was wound onto a bobbin, and the bobbin was placed into a boat like shuttle. The pointed end of the shuttle allowed the carrier to move smoothly, while the bobbin allowed the yarn to unwind as it was needed. Filling yarns tended to the somewhat loose in placement and had to be pushed into place more firmly. The earliest weaver's pain taken pushed each yarn end placed with a small stick. A later, more efficient method used a wooden stick, shaped like a sword that was slipped behind the filling yarns and pushed them tightly against the fabric that had already been woven. This weaver's sword, or batten, become a permanent part of the loom, although its shape was transformed gradually into a combed like devised called a reed that was mounted on a frame. The frame retained the name batten, and a pull of the hand on the batten frame moved the reed forward, swinging the reed against the filling yarn and pushing it (beating up) firmly into place.

As long as each warp yarn had to be raised by hand before the filling was interlaced with it, the process of weaving remained slow and tedious. Inventive weavers improvised a means of speeding up the procedure of rising and lowering warp yarns. Alternate row of warps were placed over a shed rod, A stick that lifted them above the level of their neighboring yarns. This formation of raised and lowered yarn is called the shed. The bobbin could be thrust across the entire width of the cloth through the shed without stopping to raise each individual warp yarn. The alternate set of warp yarns was threaded through a series of string loops that were tied to another rod. This rod could be raised for the second set of yarns past those on the shed rod by thrusting the bobbin under this second set of yarns that had been raised by an upward pull on the rod, (see fig.2.ii). The filling interlaced with an alternate set of yarns. Alternate raising and lowering of the rod made it possible to interlace warp and filling yarns quickly and efficiently. The rod that held the second set of warp was called as harness, the loop was called heddles.



Fig.2.ii
Weaving Method Carried For The Garments Using Apatani any Nyshi

3.i Apatani design in midi skirt with tops.

For background color we have used creamy white color, and for motif maroon color has been used. According to the garment designing the motifs are placed on the fabric. Motif size is 8" in two repeats. The design was placed in the fabric at the gap of ½ meter initially and 1 meter afterwards.

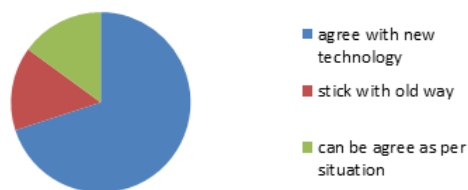
3.ii Nyshi design in Capre with Kurta

For Kurta, yarn in warp and weft is taken is of creamy white color. The total length of the fabric for kurta is 30", for front side design was divided into two parts. For upper part is full of motifs in maroon and black color. The other part contains motif in magenta and black color which are repeated after every 4" vertically and the width of each motif is 4". The back portion of the fabric was plain. For Capre yarn in the warp and weft is creamy white and the length of the fabric is 1 meter. At the end portion, motifs are applied. The width of the motif is 4" with single repeat. The motif portion was given with maroon and black color in weft. In these ways the weaving of fabric for the capre has been done.

RESULT

As per the data collected 70% of people are very much impress with the new way of wearing the traditional design with advance technology. 15% of people wants to stick with the old traditional wear. 15% believes that as per situation and condition it depends.

Public opinion



CONCLUSION

On the basis of the study of the different designs of the Nyshis and Apatanis we came to conclusion that they have beautiful and attractive designs which are unique. Moreover these designs are inspired by the today things of their life and their ornaments. Though these dresses are beautiful but due to their coarseness and heaviness we observed that they are not much popular with other people of the country.

Through this research it was tried to give them popular appeal by applying these different designs by different technology in finely woven fabric by considering all its cost and feasibility aspects. The dresses that had been designed using different motifs and designs of Apatanis and Nyshis are beautiful, comfortable to wear. They can commonly be worn by the people of most of the segments, like midi-skirt with top and Capre kurta.

Even there is vast and tremendous scope for the improvement in them in the future, provided a good research work is done. There is also scope of making them eco friendly on the basis of the indigenous techniques of extracting colors from natural sources like leaves, creepers, bark of trees etc. In this way it can be concluded that objectives seemed to be fulfilled and hopeful for further work in this field.

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