

A Study on Design Elements in Craft Practices
With Special Reference to Textile and Basketry of Northeast India

Thesis submitted in partial fulfillment of the requirement for the award of the
Degree of Doctor of Philosophy

By

Utpal Barua

January 2007

Department of Design



Indian Institute of Technology Guwahati
Guwahati 781 039

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Under supervision of
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Dedicated to my parents



Utpal Barua

Certificate

29th January 2007

The thesis material presented here in by Mr. Utpal Barua, MFA, Assistant Professor, Department of Design, Indian Institute of Technology Guwahati, was undertaken under my guidance and supervision. The volume of work presented here in for the Degree of Doctor of Philosophy of Indian Institute of Technology Guwahati was not submitted by him earlier for any other degree or diploma.

He has undergone four specified courses and fulfilled all the requirements as mentioned in the rules and regulations for submitting the thesis for PhD degree of Indian Institute of Technology Guwahati.

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Acknowledgement

I am grateful to Prof. Gautam Barua, Director IIT Guwahati for providing me the most valuable suggestions in a very specific manner in different occasions and encouragement without which the entire thesis would not have been possible. I am appreciative to Prof. Sudhakar Nadkarni, former head of Department of Design and Prof. D. N. Buragohain, former Director IIT Guwahati for permitting me to carry out PhD work in the Department. Prof. K Ramachandran the incumbent head of the Department has continuously supported me to carry out my thesis work, I am thankful to him. One of my doctoral committee members Dr. U. S. Dixit of Department of Mechanical Engineering has helped me with valued suggestions that have shown me a way to organise the whole thesis. Dr. R. Tiwari, the QIP coordinator gave me an opportunity to check my research approach while permitting me to prepare a course material under Course Curriculum development. Prof. Prabin Bora, Dean of Academics Affairs has constantly supported me to carry out this thesis matter that deviates from usual technical thesis.

I am indebted to Dr. Debkumar Chakrabarti, my PhD supervisor, who has extended all possible guidance to make this thesis as the first PhD thesis of the Department of Design, IIT Guwahati.

Professor Dr. Pradeep Yammiyavar, Shri Ravi Mokashi Puneekar of Dept. of Design, and Dr. Rohini Mokashi of HSS Dept., IITG; Dr. Kishore Bhattacharjee, Head, Department of Folklore and Research, Gauhati University; and Prof. Pradip Acharya, Cotton College, Guwahati who have helped me with many valuable suggestions, I sincerely acknowledge their inputs. Royal family of Sikkim has permitted me to look into Sikkimese tradition and culture that have been preserved in the palace, from where I have collected many references, I am thankful to Mr. Bhimraj Pradhan and his family. I am also thankful to Mr. Kapil Basnet and Mrs. Sujata Basnet for their help in collecting the data and photograph of various traditional Sikkim's artifacts; and to directors and curators of state museums visited for this study, all of them have helped me while giving permission to collect age old data from the museums that have been cited in this thesis. During the thesis work I have come across many people who have provided me relevant information and insight that enriches my study, I am indebted to them, without their cooperation, this thesis would not have been possible. Lastly, it is my turn to express my gratitude to Parijat Barua, my wife, who has spared me from regular household activities to carry out this thesis work.

Utpal Barua

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January 31st to February 2nd 2005, Gauhati University, Assam.



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Chapter-I

Introduction

1.1 Overview of Design

Art and Design: tradition and transition

In the Northeast India the folk and the contemporary traditions coexist, each sustaining and transforming the other. The folk is an infinitely self-sustaining area and can accommodate all changes while maintaining its rooted character, which gives its own distinctive identity. The rich diversity of arts, crafts and artifacts of the area with its multi ethnicity provides us with fresh spectrum of colours, motifs and designs enscenced in materiality- in objects and images.

Some of these are preserved only historically whilst others are vibrant and vitally alive. The functional-aesthetic imperatives of the folk arts and crafts of the region reflect an abiding community and it is there that we have to trace the sources of the motifs. This would interest any artist or designer and this can effectively be illustrated with the craft practices and artefacts of the region. In this regard, the below may be worth discussing as various influencing aspects of design practice and development.

Traditional folk artifacts have universality and an assimilative quality despite being thoroughly local and community specific. This is equally true of the community-specific colours and motifs. When they encounter modern technology they address it from a position of assurance.

Cultural relevance and identity

Design is known to be a continuous problem solving process along with the human need. From time to time, it satisfies both functional requirements as well as aesthetics. Almost every product we use and come in contact, its worth is justified in asking exactly what it is (identity), how it looks (form and aesthetics relevance), what it does (function), and how it performs (linking these with human compatibility and reliability). This is the first impression about design that comes to mind. So, attention towards drawing elements to any design becomes very important, and these are governed by tactful considerations of various criteria of human perception.

Design perception depends on group as well as individual preferences of colour and form, habit and culture specific to retain the identity. Specific practices followed by a community forms a culture and thus with time it makes a tradition. It enriches through exchange, local influence creates local flavour. Interchanging

ideas and know-how transfer enriches the concept of universality. Selective absorption makes perfection and sometimes offers scope to rejuvenate the old ideas and thus new trend sets.

Design is normally created out of local needs, and thus carries an identity. Individuals' labeling of themselves as members of particular groups and their design of various utility items carries their own identity. It may be a man made article/object or any selection from natural existences, its function is to fulfill certain purposes. While conceiving a design, specific messages and meanings are encoded in it. While selecting and using the same, intended users decode the messages at the semantic level. After analysing the same, items are to be either accepted or rejected.

“Form follows function” of Louis Henry Sullivan, (en.wikipedia.org) has been accepted for new Architecture and design development, and the industrial production system enables to reach design to mass. It is said that application of best scientific principles and appropriate technologies may generate a design best to deliver its intended function, still its user (the prime system component), ultimately has to feel comfort while using it to qualify the same to be a good design (Chakrabarti, 1997). At the same time it is also true that the selection of design, its look that gives identity has a lot to say. People buy not only the functional products but also brand identity that carries image of its manufacturers and place of origin as a mark of reliability which assure certain standards. Development professionals strive to create products that enhance recognising ethos and emotions. How design originates and where it is standing now is a question needs to be answered. To cope with fast communication and exchange of information and material, there is a constant struggle to expand beyond own socio-political boundary and on contrary how to retain identity intact.

During industrial revolution in Europe, to attempt to satisfy the need of the people in terms of generating utility items as well as aesthetics application, a movement took place with its basis of art and influenced by many other disciplines. This period can be said as the breeding ground of modern design movement. It was the combined effort of science, technology and art in response to rapid growth in the industrialisation from the 19th century to the 20th century. During this period artists and architects join hands together to formulate a position in modern design history. It broke down the barrier between aesthetics and technology, so that an

appropriate design of the highest visual and practical quality could be practiced (Duncan, 1998). Man started practicing design to aid his survival struggle - usability design oriented form is developed based on the function, thus it termed as 'form follows function'.

Man started putting aesthetic sense to a form and due to better knowhow knowledge and production technology improvement, product takes an appreciable form and accordingly functional details are modified. This development can be said or termed as function follows form. Now functionality and aesthetics has to be optimised to fit user's limitation and aspiration to achieve better performances with optimum use of human and material resources that may be termed as human centered design. Traditional designs of daily utility artifacts, what we see today, results from constant developmental experiments with practical need blending with emotions of local people.

Change of life style

There are no more specific constraints to conceptualised design ideas. Now days, due to advent of technological development various manufacturing possibilities have come up; thus, we can easily access varieties of utility design items from the market. Creation of products to satisfy one group of people travels to others, and this can be said market driven need creation. This made us to adopt many changes in our life style (NID, Young Designers, 1991-92), and also at the same time maintaining identity of indigenous and folk origins concern us.

Upgrading design requirements from utility items to fine communication, has seen newer changes enriching its progress; examples can be cited, in the areas of

- New media design like web design,
- Digital technology, and
- Readymade food and packaging, and many other applications.

Designs for Change

Design is today recognised as a force for improving the manmade environment. Design is a created activity whose aim is to determine the physical form of objects, systems and environments at every level of industrial production and activity.

These physical forms are not merely external features, but are primarily those structural and functional relationships which convert a product, visual system and an environment into a coherent unit congenial to the user and economical to produce and use. Thus design is ultimately concerned with human happiness through creating harmonious environments, which satisfy the physical and psychological needs of people. The study of design shares common roots and aspirations with several contemporary disciplines, including architecture and engineering.

Design has a special contribution to make in the process of transition from traditional life to contemporary/modernity. Indian own experience has embraced many influences. To get maximum benefit of technology it should be modified according to our need. Many multinational companies started R&D application centers in India to cater specific need of Indian requirements. Our tradition, culture and environment, and peoples' body size and behavior need different attention than that of others. A creative person, an artist, whatever he feels makes an abstract imagination and finally he puts in 2D and 3D application; he is free to express his emotion. While designing, a designer may follow the similar procedure with some additional steps e.g. need identification, functionality, and more over its reproducibility. For this technological limitations for production comes in a big way while conceiving design concept and thereby execution. It is not artist's individualistic representation; it is the users who guide the design process (Antony, 1990) and the available technology to produce that.

Human beings and aesthetics

Aesthetics is basically an individual perception, which collectively conforms to certain philosophy of art. (GOI, Aestheticians, 1983). Human beings felt need to enrich life by their aesthetics application in day to day utilities since when they were staying in caves and still experimentation is continuing. These are done sometimes unselfconsciously and sometimes with conscious efforts to deal with theories and practices. Aesthetic considerations within the visual arts are usually associated with the sense of vision. A painting or sculpture however is also perceived spatially by recognised associations and context and even to some extent by the senses of smell, hearing, and touch. The form of the work can be subjected to an aesthetic consideration as well as the consideration of content.

In painting, the aesthetic convention that we see a three-dimensional representation rather than a two-dimensional canvas is so well understood that most people do not realise that they are making an aesthetic interpretation. Some aesthetic effects available in visual arts include variation, juxtaposition, repetition, symmetry/asymmetry, perceived mass, subliminal structure, linear dynamics, tension and repose, pattern, contrast, perspective, three dimensionality, movement, rhythm, unity, gestalt, matrix and proportion. Beyond providing functional characteristics, designers heed many aesthetic qualities to improve the marketability of manufactured products: smoothness, shininess/reflectivity, texture, pattern, curviness, color, simplicity (or usability), velocity, symmetry and naturalness.

Design perception

Few terms become essential elements while discussing human perception that has direct relation with the context specific design applications.

- **Habit and personal preferences:** It is personal way of appreciation; remains almost fixed to a person's thinking throughout.
- **Identity:** In sociology and political science, the concept of social identity is individuals' labeling of themselves as members of particular groups, -such as nation, social class, subculture, ethnicity, gender and so forth. It is in this sense which sociologists and historians speak of a national or regional identity of a particular country. The entirety of socially transmitted behavior patterns, arts, beliefs, institutions, and all other products of human work and thinking, through which a cultural identity of a particular area develops. In this context one example can be cited here. When visited few Naga villages (Appendix) it has been observed (Chapter IV) that Nagas of Northeast India can be identified with specific use of black, white and red stripes along with animal motifs in their textiles; which is also found to be similar to almost all Naga tribes with slight variations in motifs.
- **Culture and tradition:** To retain the identity, specific practices followed by a community forms a culture and thus with retaining and changes in time makes a tradition. Geographic location specific elements and environmental variations influence it. Religious and ritual practices protect the values of a

society (Mookerjee, 1998). Certain use of utility items and clothing become a part of a culture.

- **Exchange:** Local influence creates local flavour. Interchanging ideas and know-how transfer enriches the concept of universality. Selective absorption from others makes perfection and sometimes offers scope to rejuvenate the old ideas and thus new trend sets. Blue colour jeans have become a casual wear culture.
- **Present scenario:** When we are absorbing elements from other cultures, we need to know our own receiving potential, to find out strengths and Weaknesses while looking into the base reality on which the development would prosper. A balance should be made with our base reality, i.e., we need to know our roots.
- **Root:** Who are we, where from we come, what was our struggle to become what we now are at present? Reply comes; we need to know our root, which lies in long back history. Look through telescopic view to our own past, specific design thoughts that enriches today's life.

Utility and aesthetics

When we judge a work of art to be beautiful, we do not necessarily notice any utility or usefulness to our survival in that work. However, it is the utility value that is present to the extent that we combinely judge a creation to be beautiful. That is how we look at human perceptual biases and its relation to our aesthetic preferences in art and nature and in man made design.

Utility has influenced the aesthetics application to encode message for next generation and/or to pass the knowledge to others. This utility and aesthetics go hand to hand to make a design appreciated. A journey presented in Chapter II, through subsequent examples would take us to understand various periods of colour experimentations. Some selective examples from both European and Indian origins are shared therein to explore specific character of colour application and human perception and mood.

India has rich heritage of unity in diversity. Northeast India is a specific context, which is known for its ethnic diversity with myriad culture and traditional richness. How blending of utility and aesthetics in traditional craft practices and design of artifacts has taken place needs to be studied. The query, “Why do we find certain things beautiful?” is familiar to any student of Art & Aesthetics. Many philosophers have struggled with the question of where beauty resides; if it is in the object, in the beholder’s mind, or in the interrelationship of object with mind.

The question many philosophers fail to address, however, is why do humans have aesthetic preferences (e.g. beauty)? It may well be true that our aesthetic preferences are based on the mental pleasure produced by certain features of things, but why do we get pleasure from these features? Furthermore, if we understood why humans have aesthetic preferences, perhaps we would be in a better position to postulate what our preferences are; and thus what elements constitute beauty. While defining form, colour, texture, smell and overall feel, these vary from person to person. A specific perception of a person may not be that of another. Aesthetics is accepted as a common article of presentation. Abstraction and utility, everywhere aesthetics draws first hand attraction. Aesthetics deals in artistic perception and tactful application of form, colour, texture, smell and overall feel.

Elements of art and design

Six basic elements can be found in most of the design and artwork. Designers use these elements as visual alphabets (Poovaiah, 1986) for producing all kinds of design forms, and they are presented in Fig. 1 below.

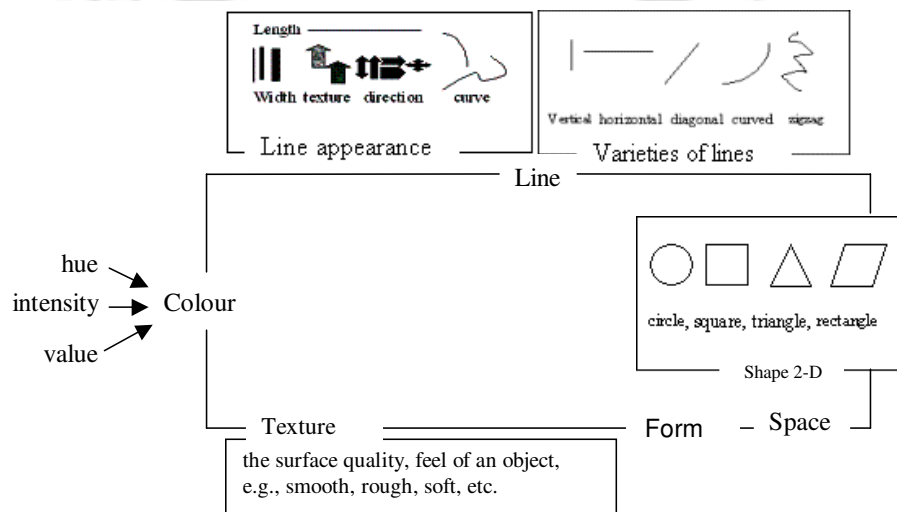


Fig. 1. Basic design elements: line, shape, space, form, texture and colour.

- Line is the most basic element of design; a continuous mark made on a surface can vary in appearance (i.e. length, width, texture, direction and curve). Five varieties of lines are vertical, horizontal, diagonal, curved and zigzag.
- Shape is two-dimensional (i.e. circle, square, triangle, rectangle) and encloses space, e.g., geometric or free form.
- Space is defined and determined by shapes and forms. Positive space is where shapes and forms exist; and negative space is the empty space around shapes and forms.
- Form is three-dimensional and encloses space.
- Texture refers to the surface quality or “feel” of an object, e.g., smooth, rough, soft, etc. Textures may be actual (felt with touch -tactile) or implied (suggested by the way a designer has created the work of design -visual), Fig 2 (source; B. Utpal).
- Colour is produced when light strikes an object and reflects back to eyes. This element of design has three properties:
 - Hue –the name of a colour (e.g. red, yellow. blue),
 - Intensity –the purity and strength of a colour (e.g. bright red or dull red),
 - Value –the lightness or darkness of a colour.

The way in which elements are organised is referred to as the Principles of Art & Design, can summarily be experienced, Fig. 3, in students’ (Bachelor of Design programme) work of Department of Design (source; B. Utpal), Indian Institute of Technology Guwahati.

Relation of art and design elements

Mostly, basic elements of art and elements of design are same with specific applications. When the elements of artistic perception are assembled together in a utility item, the same is perceived as design elements. Hence, careful selections of elements are necessary to give an identity. Items originated from one region and practiced by a certain population group gives rise to a regional identity.

In India, meaningful application of such elements is seen in earlier aesthetic practices and utilities such as yantra and religious structures like temples (Mookerjee, 1998). From time to time, design practice got influenced with many internal as well as external socio-political factors. A new Indian design movement has come up in recent years where the best principles of western designs fuse with Indian ethos. Present day design, with its continuous experimentation, is refined, which satisfies new users' utility needs as well as aesthetic feelings with humane value put in it. Thus the utility based design has come to a structured profession that deviates from art appreciation,

Fig. 4. It can also be said that a good design is a piece of good utilitarian art (New Lyn & Alicole, 2001)

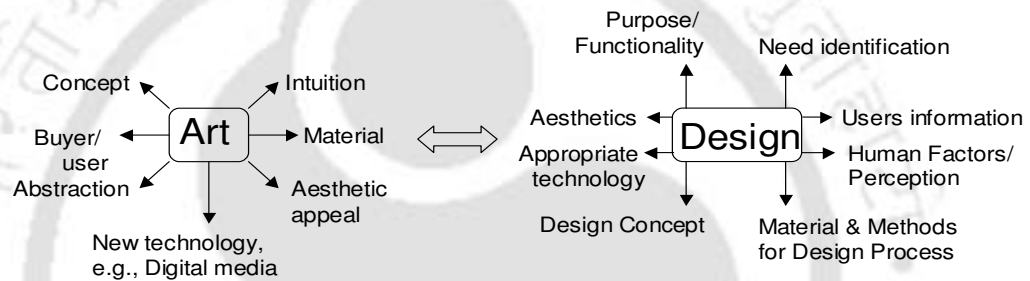


Fig 4: Interrelation between Art and Design.

Application specificity of elements

Colour may be cited as an example. Its application in design is highly determined by the cultural and social values, immediate environment, and traditional ethos of the target users; through which a set of combination of colour and styling of a design do establish, Fig. 5.

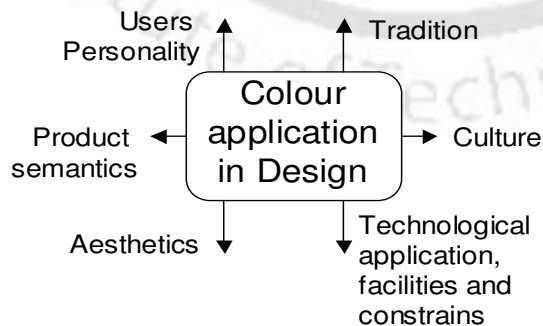


Fig 5: Colour: one of the design elements and its lateral relations that influence our life.

1.2 Motivation

Approach to study Northeast design

Many questions arise while referring daily utility items of Northeast origin which are locally designed to be mass-produced. How these products can be said Indian and carry specific identity of Northeast? We do not find enough material to support it; we have to search for information on a piece meal basis. While giving Indian regional flavour quite often we feel uneasy. We try to explain and go round and round, we feel but cannot realise the factors responsible for product imaging. Scanty studies have been reported mostly in the area of Art and Architecture but in the area of design applications there are not many.

This leaves room for research. The present work is aimed at studying the elements/ factors responsible for influencing graphical product identity and the perception of Indian regional design element. Towards this goal, regional data needs to be collected and compiled. The rich diversity of craft and textile of this region with its multi-ethnicity provides us with a scope to study specific colour usage, motifs and various physical appearances. These give a distinctive identity of design elements and their applications particularity that can represent Northeast India.

1.3 Aim and objectives

The **aim** of this study is to find the essential elements in art, crafts and artifacts so that they remain relevant to modern designs and designing. The belief in forming this thesis is that technology must be welcomed, embraced and this has become a two-way traffic: gadgets change to meet folk demands and folk artifacts become technology friendly.

Merely maintaining the pristine forms of traditional arts and artifacts would mean relegating them to static museum pieces. It is the responsibility of a designer to make the conditions possible where they continue to be functional to the modern ambience. This will continue to give a fresh look and fresh initiative to modern design activities. The search is aiming at identifying design elements prevailed in Northeast Indian culture.

The **objectives** of this study are:

1. To study design sentiments embedded in human life of prehistoric evidences, and in Indian practices as well as in western design movements.
2. To study design elements through documenting (and compiling relevant information) prevalent design practices and artifacts of Northeast region.
3. To extract common design elements and their application in particular from selected samples that can represent location and community specific identity as well as to that of respective states in this region.

Hypothesis

It is assumed that, if some selective utility items, colours and motifs of textile, forms and shapes of basketry used in daily life as well as on various occasions are studied, some common design elements will surface. Northeast with its myriad traditional design practices has not been analysed in order to get its essence of design elements. Specific design elements are found in nature and traditional practices of local people. A study through collection and compilations of these design elements to see their specificity can be made. The idea of this thesis is that the regional design elements would help to facilitate their conversion into contemporary design in the regional and national contexts.

1.5 Organisation of the thesis

The thesis is organised in a total of six chapters. The present Chapter I contains design overview, approaches and motivation to study design elements from Northeast India. Chapter II covers a review of literature on a brief historical account which includes western contributions of different design schools to analyse the specific characters of different periods of design movement as well as contemporary Indian perspective and starting of Indian design education.

The review of literature covers:

- Early age experience
- European experiments in design
- Indian design ideology

- Design elements for understanding identity, and design elements from the Northeast -a need to identify regional design elements and retention of its characters.

Chapter III presents a strategy for searching design elements in the Northeast India, a home of Indian design elements prevailing in myriad traditional heritage. A field study of traditional utility items was made and relevant information has been collected from different locations and sources. Chapter IV covers study of various crafts and artifacts in general. Textile and baskets prevailed in different parts of North-east are studied to understand their specificity. The survey covers eight states of Northeast namely Arunachal, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim in respect to understand culturally effective elements for designing.

The Chapter V comprises tradition and common design elements which covers traditional symbology and common design elements. Extractions of design element have been presented in tabular form with the samples of textiles and baskets.

The specific findings and conclusion of the whole search have been presented in Chapter VI. The bellow is the abstraction of salient observation:

- Study and analysis of various crafts and artifacts prevailed in different parts of North east typical to different ethnic groups, in general was done.
- The analyses comprising dominance of colour rating and motifs of ethnic textiles, form and shape and texture of baskets specifically considered.
- Study on the visual ratings of colour combination of textile and attire of different ethnic groups of this region through which they can be identified.
- Motifs mostly in textile of different ethnic groups have been studied to recognise their regional characters. This has got embedded in their culture.
- From the study above, community specific observations obtained is summarised in terms of extraction of form, motif and colour applications.

Design identity consists of four visual components and application of appropriate technology: ICMFT= design identity (where, I = image, C = color, M= motif, F = form and T= technology), and the identity of a design of a region or a particular place depends on the specific emphasis of these elements.

As scope for further research the findings of this thesis shows designers a way, how creativity and innovativeness explore 'New design' in terms of the findings of this thesis to the people of Northeast in particular and India in general. The thesis searched for elements from Northeast region. This is a home for many tribes and people migrated from various places who have contributed to the Northeast culture in their own way.

This study confirms that these design elements of diverse origin can be utilized by transforming or modifying through various permutation and combination with the help of new technology to get a fresh insight, which can also contribute new market value as Indian design. Possibility of using elements identified as above and use of new technologies to create an emotion out of these design elements are endless.

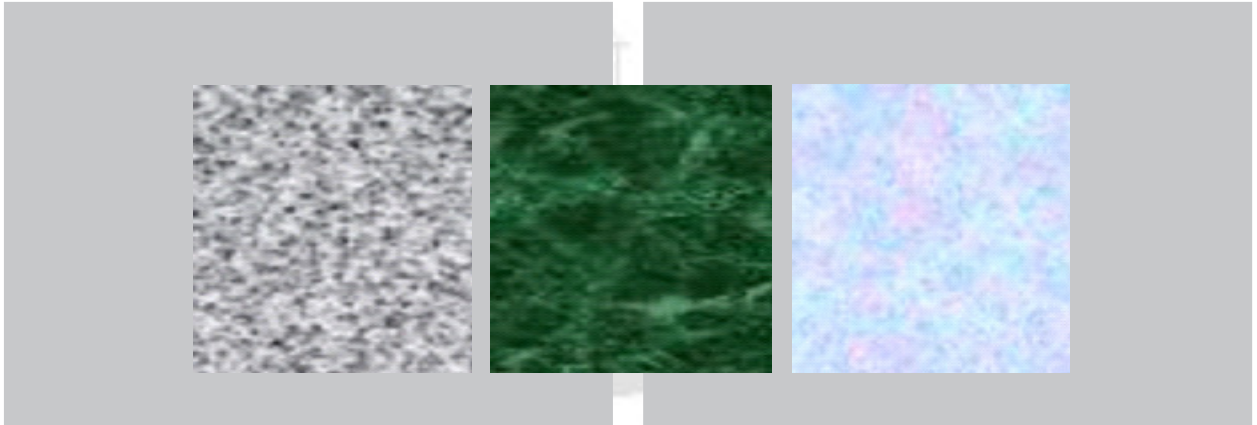


Fig. 2. Texture as design elements.

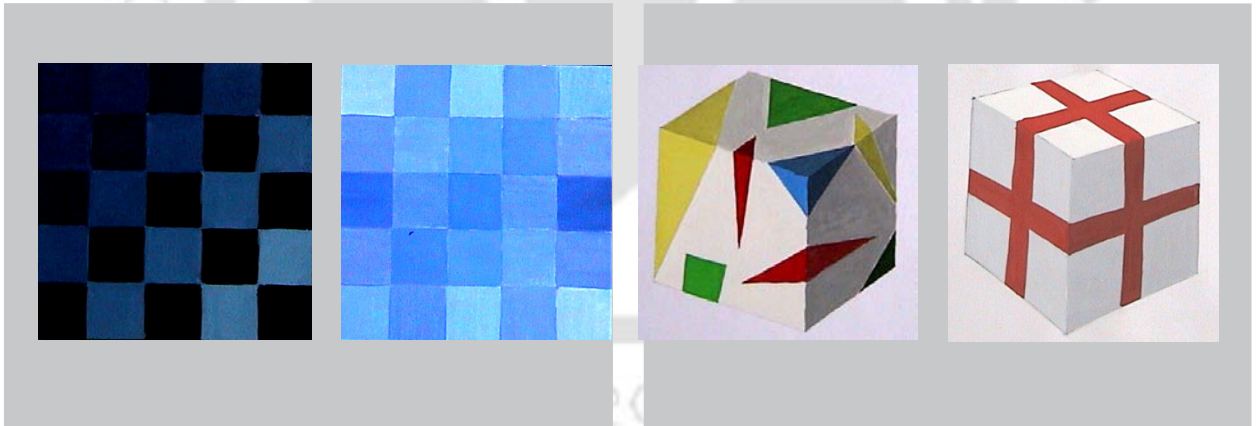


Fig 3. Organaigation of design elements (source B. Utpal)

A Study on Design Elements in Craft Practices
With Special Reference to Textile and Basketry of Northeast India

Chapter-II

Review of Literature and scope

- Early age experiences
- Western and Indian design movement
- Elements of design
- Scope for Northeast India

2.1 Introduction

This chapter comprises evidences of early age means of symbolic communication and records of various design movements of western and Indian school of thoughts. In order to comprehend the design elements and their characteristics based on functionality and aesthetics a review of history of Indian and western design practices and design education is necessary.

2.2 Early age experience

In search of root, how form and colour has become an essential part of our life, we need to see back into the history of humankind, from the early period to present day practices. This historical search would lead us to understand how elements of utility and communication developed through years and form a platform for today's development in abstract communication.

Human being had developed the sense of designing through their first creative endeavour and established a sense of aesthetics through use of different handy tools. Historical evidences of early tools shows human ability to modify what exists in order to improve human effectiveness. Utility items are made to extend human capabilities. With the same tune these stone objects, Fig. 6 (Janson H.W, 1997), found date back to pre-historic period can be said a very early utility object designed to serve specific purpose, it carries an identity of its time.

Evidences of use of certain shaped sticks and stones as “fruit knocker” and “bone crackers” suggest that early man was able to discover handier shapes and could connect form and function, and this phase of human development is known as the Paleolithic (Janson, 1997). Early evidence of creative works done by early man found in various caves, for example, Chauvet (France) dating 28,000 B.C., Lascaux, Alta Mira dating 15,000 B.C.

The most striking works of the Paleolithic art are the images of animals engraved, painted or sculpted, on the rock surfaces of caves. The Paleolithic art can be considered as a conscious effort of practicing visual presentation from direct life, which in later period transformed to abstract figures as a means of communication; and signs and symbols thus developed, Fig. 7 (Janson H.W,

1997). In Chauvet cave, southern France, we see the earliest painting known to us, dating more than 30,000 years ago. Mainly earth colour and some time bold outlines in black are used. Jean (1998) has expressed views as “To charge with meaning an abstract (visual) sign, detached from any concrete reality, is a process as powerful as that which led to the invention of writing”.

Basic characteristics

The basic characteristics of these works are vividness of the subject matter by using vigorous outlines that made the wall painting very expressive. Mainly earth colour used for these painting and usually they mixed the colour with natural glue for its long survival. Colour is used as an expressing medium, first explored by man when they did not have verbal language, Fig. 8 (Janson H.W, 1997), cave paintings, which have turned to art in later period. One of the interesting aspects of these works is that they used different colour palette to depict various moods that relate to their themes. Bold out lines, realistic approach, subdued application of colours, vividness expressiveness are some of the basic characteristics of these works, which is being used with equal effect as design elements in contemporary use as well.

Use of different colour palette

Some works of cave painting can be referred, where we find the use of bold outlines, on the surface of the stone wall, Fig. 9 (Janson H.W, 1997). While drawing animals and other images the approach of execution of the work was very realistic in order to relate and identify those images. Application of colour of these art works is subdued and visually pale and again sometimes it is seen very bright. Realistic approach of colour application is used as a tool of communicating images of life of a period.

Purpose of images

This is the period when human being started expressing their feelings through colour and image. Thus came the existence of visual language through which they could easily communicate with each other and to another group of people of their community. There are many reasons behind the cave paintings and their existence. That may be witnessed in the history. The early men hid them away in

caves to protect them from the casual intruder. These paintings must have been considered as far more serious activity rather than aesthetic decoration of their staying place. There can be little doubt that they were produced as part of a magic ritual. The traditional explanation is that their origin lies in hunting and rituals. According to some theory, in killing the image of an animal, people of the Old Stone Age thought they had killed its vital spirit; this later evolved into fertility magic. Some of the cave paintings may even provide a clue to the origin of this tradition of fertility magic (Jean, 1998). Colour had taken an important role in depicting this aspect, Fig. 10 (Janson H.W, 1997), colour used to express language visually.

In good many instances, the shape of the animal seems to have been suggested by the natural formation of the rock, so that its body coincides with a bump, and its contour follows a vein or crack as far as possible. We all know how our imagination sometimes makes us see many sorts of images in chance formation, e.g., patterns of clouds and bolts. Perhaps at first the Stone Age artist merely reinforced the outlines of such images with a charred stick from the fire. It is tempting to think that those who proved particularly good at finding such images were given a special status as artist-magician, so that they could perfect their image- hunting, until finally they learned how to make images with little or no help from chance formations, though they continued to welcome such communicative aid.

Apart from large-scale cave art, the people of the Upper Paleolithic also produced small, hand-sized drawing and carvings in bone, horn, and stone, skillfully cut by means of flint tools. The earliest of those found so far are small figures of mammoth ivory from a cave in southwestern Germany, made 30,000 years ago. Even they, however, are already so skilled that they too must be the result of an artistic tradition many thousands years old. The graceful, harmonious curves of a running horse, Fig.11 (Janson H.W, 1997), can be cited as an example. Some of these carvings suggest that the object may have originated with the recognition and elaboration of some chance resemblances. Earlier Stone Age people were content to collect pebbles in whose natural shape they saw something that apparently rendered them "magic". Echoes of this approach can

be sometimes being felt in later, more fully worked pieces. The Venus of Willendorf, Fig.12 (Janson H.W, 1997), is one of many such female figurines, has a bulbous roundness of form that recalls an egg-shaped sacred pebble. Her navel, the central point of the piece, is a natural cavity in the stone. This figure is considered as fertility icons. This is an example of early age experience of blending of human imagination and creation of abstract form.

In Paleolithic period, in the heart of the European regions, people began to make so called aesthetic biased 'useless' objects, e.g., ornaments, jewelry, and pieces of decorated stone and bone. These tokens are marked with sequences of incisions, applications of rhythmic lines and dots, which are arranged in a certain order and with regular spacing. Such marks are also seen on the walls of caves and shelters at about the same time.

A sign, in this sense, is a line, dot, rectangle, or other geometric or repeated shape thought to have symbolic value. The paintings and engraved figures in these Paleolithic sites form coherent groupings of visual signs. These clusters like a spoken or written language, express meaning in the context of the sum total of their numerous elements. It can be said, a coherent system of signs underlying these figurative and nonfigurative forms, which may express abstract ideas such as religious or mythic concept. Modern communication graphics also seem to use the similar multiple elements to express meaning.

Importance of Signs

It is generally believed that the major practices of cave art terminated gradually, something between 9,000 to 8,000 years ago. From this period onwards we find only a few rare bones painted or engraved with motifs, as well as painted loose rocks. A great quantity of these was found in a cave in the Pyrenees, Mas d' Azil, in 1889, Fig 13 (J. Georges, 1989). These stones are flat, usually oval, decorated in red and brown ocher on one or both sides, with a series of lines and dots. The number of these dots or lines, most often twenty one or twenty nine, has led some researcher to believe that these "signs" may be the phases of the moon. In the same site some stones were found decorated with more complicated designs, such as axial lines intersected by one or more other lines, and broken

lines that suggest letterforms, the signs depicted on these stones are an embryonic kind of writing. They may document the possession of property, or be related to counting and the recording of quantities; they may even be the manifestation of the mythic, religious, or social dialogue between the masculine and feminine principle. Whatever may be the reason behind the selection of elements and the manner these are putting, gives us clue to develop further non-verbal abstract communication.

Importance of stylised sign figures

True writing system had developed during Neolithic period in the Near East. At the site of Monte Bego, Europe, a highly developed wordless sign system had appeared. Decorative series of abstract signs, some of these are painted in red ochre, and others incised into the stone surface -are seen on a wall of a Paleolithic cave at El Casino near Santander, Spain. It comprises rows of dots and compartmented quadrilaterals of various sizes. Similar geometric forms and repeated patterns are found in several French and Spanish caves. Various interpretations for them have been proposed that they represent hunters' traps, or are cadastral records, or perhaps clan signs, similar to flags or blazons. Such meanings are speculative and much contested by pre historians, but we may say, at least, that they indicate a culture familiar with symbolic imagery, Fig. 14 (J. Georges, 1989).

Similar examples are also plenty available in Indian early human settlements sites, e.g., in Harappa and Mahenjadarro (now in Pakistan), Lothal (Gujarat). While studying the details of the remains found in these areas, use of many expressive elements observed therein carries the identity of the human life of that time (Craven, 1976). Non-verbal sign communication of early age human settlement has come up to the level of modern design activities through many conscious experiments, both oriental as well as western. Some of the specific features of European experiences are mentioned below which is more prominent among western experiments.

2.3 Western Experiments in Design

European experiments in design first started from British and American phases in early 19th century as a movement called Art & Crafts followed by Art Nouveau and other very important movements like De Stijl, Bauhaus, Art deco etc. A new international design vocabulary emerged and the tenets of modernism continue to inform much of today's art, design and architecture (Duncan, 1998).

With influence of design schools, high professionalism came in art, and artists have started to make things in more practical, applicable and usable manner. Thus causes deviation of art towards design. Fig.15 schematically expresses that the art and craft practices under various influences gave birth to a discipline of design keeping in mind the need to produce things for mass use. Art and design share same elements with difference of application aspects. Art is perceived as matter of greater mental analysis. It compels the mind of the Artist to transform itself into the very mind of nature and to become an interpreter between nature and art.

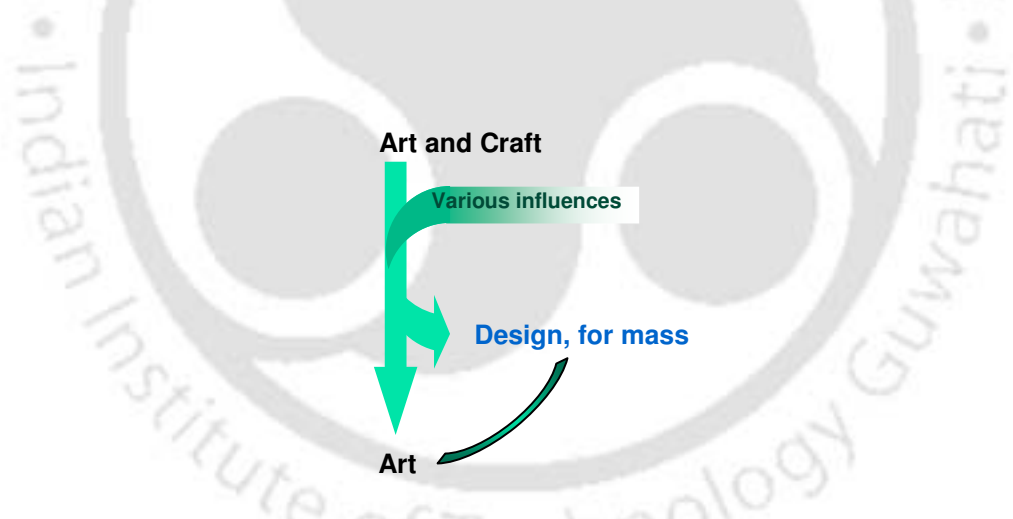


Fig.15. Schematic diagram showing interrelation between art and design as practiced till today.

European explorations

In the history of western art for the first time (late 19th century), the artists of Impressionist group used colour that has scientific basis, Fig 16 (Skira, A.1959). They followed the colour theory of Chevrule and tried to analyse it through a new pictorial language, which has turned into a very important art movement of that

time. Different ways of looking into elements responsible for creating various meanings have been experimented which are still relevant to modern design practice.

Change in Ideology

From 1870 onwards, artists like Seurat, Gauguin, Van Gogh and the Nabis had, instead of recognising the eye as the sole instrument of understanding, reduced the descriptive role of color and begun to explore its structural and symbolic possibilities. They were more concerned with expressing an idea than trying to represent the world around them (Skira, 1959).

European Design Schools: Art and Design transition

Art Nouveau (1880-1910), the “New art” became the first popular in 20th century style. It was essentially European. Organic form and decoration was largely inspired by nature, Fig. 17 (Duncan, 1998). Familiar motifs included curvilinear element, sinuous lines, etc., are the typical features of this school. Decorative element and colour applications were superfluous in furniture and in architecture, Fig.18. And botanical embellishment is present in almost all the designs as an important element (Duncan, 1998).

Publication and Poster Design

William Bradley emerged as the nation’s premier draftsman illustrator and poster designer in the Art Nouveau idiom, was also influenced by organic and botanical embodiment. The same experiments (e.g., Henry Van) have been carried out with decorative elements picked up from the nature are predominant, botanical ornamentation is a major characteristic as seen in two of his posters, Fig. 19. It has become a style of Art Nouveau (Duncan, 1998).

Art and product

Similar type of work could be seen in art and utility product of this time. Free flow of forms along with movement is the key character of Peter Behrens painting is a pure stylistic evident. Francois was a popular product designer of the time; this design shows human emotion as a users perceptible design element, Fig 20 (Duncan, 1998).

Dutch for the style

It is the name of a group of artists and architects who set out to create a universal style in architecture, graphic arts and design. Using squares and rectangles in flat planes of bold primary colours along with black, gray and white, all carefully orchestrated with straight lines. Red, yellow and blue rectangles and squares contained by thick black lines, or on a distinctly white background, is De Stijl, as we know it. The De Stijl art movement (1917-1928) included paintings, architecture, furniture, and graphic design, Fig. 21 and Fig. 22 (Duncan, 1998). "DE STIJL" is a Dutch word, which means the style.

The phenomenon we call 'DE STIJL' was not an organised movement but a frequently changing collection of artists. It's actually a name of a magazine. The painter and writer Theo van Deosburg was its editor. In 1917 the first number of the magazine 'The Style' was launched. If we look at the date of foundation, the First World War, we can point out the relevance of the society as base of the origin. The members of The Style tried to reflect in their work what in the entire social development could not be achieved, i.e., the Ideal Harmony.

Graphic Design

Interesting aspect of this particular school is that the designers used all the basic design elements of the stijl in utility items and in advertising Packaging & Poster. Melevich the painter used the Stijl basic design elements in his work. Applications are vivid in his architectural structure and in his famous painting 'House under construction', Fig. 23 (Duncan, 1998).

Form & Colour

In the contemporary art scene of this period, one of the important aspects that have played a predominating role in whole of art and design trend that was the style of the Stijl. Similar style can also be very clearly seen in some of the contemporary artists and designers' work. We can mention here the works of designer Gerrit Rietveld and artist Piet Mondrian in terms of basic structure and in colour combination, Fig. 24 (Duncan, 1998).

A design school in Germany established in 1919, which provides methodological basis of design education in 20th century. This exemplifies the modern movement and developing a design style. Bauhaus School has come to represent the refinement of the modern movement characterised by a “Form follows function” ideology. The movement represents an important bridge between the decorative arts and industrial design, Fig.25 (Duncan, 1998). The founder director of Bauhaus, Walter Gropius coined the term “Bauhaus” as the build house of design, which is a union of art, architecture, and design.

In 1950, Inge Archer-Scholl founded Ulm as a private institution. In 1955 the school opened officially in its new building with Max Bill as director. Artists and designers have contributed a lot in these movements. A new thought using straight and parallel lines used in ‘New design’ the stijl; colours experimentation was also done depicting various theme, time, mood etc. Architectural practices was influenced by varieties of structural display along with painting freedom, Cezanne, Piet Mondrian may be named as pioneer in this connection.

Various products as a result of industrialisation out put demanded new styling. Artists William Bradly, Henry Van, Peter Behrens, Kasimir Malevich, and Piet Mondrian put their efforts. These can be evident through glass and ceramics forms, packaging design, furniture design, gender application of products with artistic understanding of human body and behaviors as they use the same in their real as well as abstract art forms came to the fore ground. A shift from formal geometric application to use of organic elements was noticed.

Some people believe that at the initial stage of machine design, perhaps to camouflage the dirt, dust, grease etc., colour of machine was metallic green. With many influences and technological advances, feasibility of varieties of colour applications has been experimented to give different identity in them. The above experiences have come now as benchmark resources to the modern design. Present day design, with its continuous experimentation, is refined. These satisfy new users utility as well as aesthetic feelings, with human value put in it. The industrial utility products and communication design have come to a structured profession.

2.4. Indian design ideology

From the Vedic period design through abstract application of human thoughts was in practice mostly through geometry. Mood and seasons were depicted through various colour applications, and drawings and paintings on human body, in an around homes, in gardening style etc. Vastushastra is the traditional Indian system of architecture & design of Vedic origin (Bonner, 1982). Vaastu means the dwelling of humans & Gods.

Many Vaastu rules (i.e., architecture and interior planning) are derived from Vaastu Purusha Mandala, Fig. 26 (www.btsquarepeg.com/vastu/book). It is depicted as a man lying folded limbs with his head pointing north east and represented confined in a grid of squares. Different directions and sectors are assigned to different Gods & Guardians. A man lying face down on the site represents the energy flow diagram. His head in the Northeast indicates wisdom and God, and arms extending to the Northwest and southeast mark wind and fire. The North is kept clear for prosperity. The open east invites knowledge. Closing the south and the west blocks rain and death. This is an evidence of Indian abstract composition in tune to life and nature.

It is very interestingly observed that most of the evidences of Indian art & design have been studied and documented by foreign scholars. Inferences drawn by them are in the way they perceived. Perhaps this is an obvious of colonial inquisitiveness on Indian heritage. Indians took interest in later stage, and gradually awareness has come to know our own rich heritage of art & culture. Studying our traditional artifacts and culture has become relevant to design in Indian context (Vyas, 2000; NID, 1990-2000) in the present time.

Cave paintings of Ajanta and Elora caves can be considered as one of the surviving examples of earliest style of Indian art. The subject matter of the work covers various lives and incarnations of the Lord Buddha, as told by Jataka Tales. The important characteristics of these works are use of powerful calligraphic lines which gives a flowing action of the contours of the figures and selection of colours, e.g. burnt sienna (earth colour containing ferric oxide),

golden yellow, blue and green are the important colour palette of these works, Fig.27 (Craven .C. Roy, 1976).

Images of Gods and mythology have influenced Indian art and aesthetics. Image of elephant-headed Hindu deity Ganesh perhaps enjoys the privilege of being explored most and even has long been a part of Buddhism, Fig. 28 (The Telegraph, March 2004). There are several instances of presence of Ganesh motifs in Buddhist cave shrines (Craven, C. Roy, 1976). These give evidence how the Hindu deity has also figured into Buddhist expressions. The interchangeability of certain motifs or icons of Hindu origin is very common in Indian culture and even crossed the political boundary, e.g., the character of Ravana of Ramayana and other characters of Mahabharata are to be seen in most of the mythological depictions in Malaysia.

In Indian tradition, colour influences life, used as symbol (Mookerjee, 1998), e.g., while practicing rituals such as red colour symbolised Shakti (generative principle) and green is a symbol of fertility, Fig.29 (Mukharjee. Ajit, 1998) Three specific states of human characteristics and driving forces, i.e., (1) Sattva, the cohesive or unifying force, (2) Rajas, the creative energy, and (3) Tamas, the opposing force of mass or inertia have been expressed with specific colour coding. The colours representing the three forces are specified in the Svetasvatara Upanishad IV & V, as white for the cohesive force sattva, red for rajas, and black for tamasa. Sattva, rajas and tamasa is also seen traditionally represented by the colours red, green, yellow, Fig.30 (Mukharjee. Ajit, 1998), as evidences from a Rajasthani origin piece of work.

Where as a typical application of the same in Durga Idol of Bengal, Fig. 30 expresses:

Sattva= White and saffron

Rajas = Red, orange, yellow

Tamas= Green.

Colour application in life and mood

Colour application in house decoration bears specific symbolic representation of beliefs. Use of colour and form on the wall of houses in rural India is an essential and day-to-day activity, for performing rituals and simple house decoration. Symbolic representation of a bride and bridegroom drawn on a house wall (Bakreswar Temple, West Bengal) is considered to ensure the happiness of the marriage. Interesting visual elements of this work are the red and yellow colours which represent the happiness of the couple. The yellow piece of the cloth is protecting them both from evils. Overall this work has very strong visual elements in it, Fig. 31, (Mukharjee. Ajit, 1998), which represent the beliefs of the society.

Like other parts of India, colourful dress and ornaments are the essence of specific communities of North East. Different ethnic groups are having their own dress code and thus, their identity is vivid in Northeast, Fig. 32. This aspect in terms of characterisation of dress code has been elaborated in chapter IV.

Contrast and different semantic colour combinations is an important aspect of festivity in Northeast India. Plenty of evidences are available in Assam & Bengal and from other parts of India as well. It bears a typical character of social and ritual life of people. Enhanced human facial expression in terms of various contrast colours in Kathakali dance, and decoration on elephant's body, especially on forehead is one of the characteristics of festivals as seen in south India. Whole body paint resembling tigers is seen in some folk dances (Bagh Dance) in Bengal. Usage of specific colour and motifs identify different tribal communities of Northeast India. Thus, colours play important role in our culture, Fig. 33.

Performing arts and Indian classical music also use visual elements to express various moods through colours and symbols. Various visual elements are symbolised and taken from landscape, myths and stories, culture and festivals, rituals and beliefs to depict the different appearances of Indian mood. One can say it is a conscious effort towards making design (for mass production and use) to give an Indian essence, even in commercial practices. Audio cassette covers

of Indian classical music, Fig. 34, can be cited as examples of contemporary applications of theme and mood through graphical images on packaging and posters that are used for commercial purposes.

2.5 Design elements for understanding identity

While talking about Identity, it raises many queries. Why an art work or a piece of design item says it belongs to a particular theme, purpose, area; group, of an age, made by a person etc.; how it is understood; what elements are encoded in designed object that the common users able to decode the same and perceive the whole object with a meaning. In this process, many external positive and negative factors also influence the smooth flow of message transmission as can be seen in the communication model presented in Fig. 35 (Dept. of Design, IIT Guwahati, course material). One needs to master the message encoding skill as per the users decoding easiness and the other external factors as well ; thus it can be said that the design elements and their presentation together holds the effectiveness of a design. Colour and form are the abstract expression of a person or a group of people's state of mind that can be transferred to others for temporary or stored to be referred afterwards.

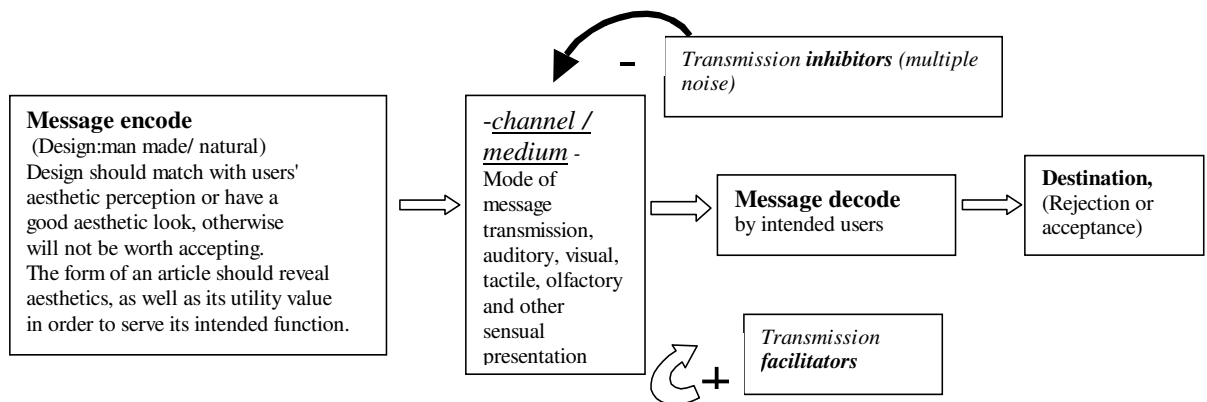


Fig. 35. Message encoding in design should follow easy to decode semiotics and influences of surroundings; it should be compatible to the anticipated users' information in designing.

We need to know what influences the cognitive analysis process when we see an object, whether it repels or creates desirability to possess. The behavioural aspect of intended users must be considered while making design goals,

Table 1.

Table 1. Design relevant aspects of information process capabilities.

<u>Aspects</u>	<u>Design goal</u>
1. Expectation	Relationship between objects and responses is compatible with user's expectations.
2. Perception	Meaningful stimuli are detectable.
3. Memory	Reliance on Short, Working, and long term memory is minimised.
4. Decision making	Mitigate maintainer's tendency towards bias in decision-making.
5. Semantic memory	in a noisy location, if any body writes something, efficiency diminishes, because of the difficulty of retrieving material from that part of long-term memory concerned with the meaning of words etc., and may be produced by a shift in the confidence with each type of material recalled. (Selective memory and forgetting.)

(Source: course material of Dept. of Design, IITG)

Colour is a medium of expression, mood and theme depend on time and space, such as spring in India resemblance with golden yellow; Bihu dance of Assam performed on any time of a year wearing golden yellow and red colour dress would give a spring feeling. Thus various application of colour gives identity to a product, a composition to express the theme attached to it, e.g., on a 'Mongol Ghot' (pitcher for puja), Fig. 36, human figure drawn with red sindur gives an auspicious ambience.

Colour gives state of functional status and indication to the users such as electric switches or machine power on switches glowing red indicates that machine is on and requires attention and thus indicates the state of functionality. Likewise, the use of gray colour and textured surface in dashboard of a car reduces light reflection and helps to navigate through easy referring the control panel even at night. Application of colour in signage helps target group to communicate easily with required information, e.g., use of yellow and blue colour makes the information more contrast and visible. This has specific value to draw attention and to make proper communication. Colour application in publication design should go along with content and illustration, and should attract the user aesthetically. If the composition of different elements does not conform to harmonious look, it may not draw users' attention and may lead to dejection at the first sight.

The communities have specific colour and form preferences that vary in different geo-physical conditions and in different seasons. The black, white and red stripes of the Naga textiles are almost uniform but the motifs they work into their fabric are strictly hierarchical; Rajasthani women, Fig.37, can be identified with their black barfi-bandhni style and Rajasthani men with their coloured headgears.

Specific practices followed by a community are, more often than not, identity specific and form a culture. With retaining, changing and inducting newer elements in time make a tradition. Geographic locations and environmental variations and life style follows thereby obviously influence the process to confirm the community specific traditions which are expected to continue to uphold. Thus many religious and ritual practices become essential to protect the character of a society.

Human intelligence begins with conception, the prime mental activity; the process of conception always culminates in symbolic expression. A conception is fixed and held only when it has been embodied in a symbol. So the study of symbolic forms offers a key to the forms of human conception. The genesis of symbolic forms – visual and verbal, artistic, mathematical, or whatever modes of expression there be- is the odyssey of the mind (Jean, 1998). Black is the hue of young unmarried women. Symbols to perform certain rituals in Naga and Mizo culture are found to be different. They use human and animal skulls, bones and horns as their symbolic representation with different colour applications. These aspects have been elaborated in the following Chapters of this document. It can be said that, an exploration of traditional elements with refined and contemporary application in relevant design theme would go along with the ethos and identity of the society.

2.6 Contemporary design movement in India

Strong nationalism and to cater specific needs to Indian requirements have inspired the national design movement in India. It emphasises business by design, and to maintain Indian identity. A need to know specific elements that contribute Indianness in design has come to fore front. While talking about Indian design elements one must go by Indian ethos of ages.

Indian design education has started little late compared to western counterparts. The National Institute of Design is internationally acclaimed as one of the foremost multidisciplinary institutions in the field of design education. It was established in 1961 as an autonomous institution under the Ministry of Industry, now known as Ministry of Commerce & Industry, Government of India. National Institute of Design (NID) has been a pioneer in industrial design education after Bauhaus and Ulm in Germany and is known for its pursuit of design excellence to make “Designed in India, Made for the World” a reality. National Institute of Design's graduates has made a mark in key sectors of commerce, industry and social development by taking role of catalysts and through thought leadership (NID, 1998 Young Designers). National Institute of Design has been recognised as a Science and Industrial Research Organisation by the Department of Science & Technology, Government of India.

This is followed by IITs (Indian Institute of Technology) entering in the design education. Industrial Design Center at Indian Institute of Technology Bombay established in the year 1969 by the Government of India under the auspices of Indian Institute of Technology, Bombay. The aim of the Industrial Design Center is to prepare students to enter into new creative activities as professional industrial designers who with experience and maturity can reach the highest level of design practice, research and development necessary for the industry. The initiatives of some young designers who educated themselves in western world's design environment at ULM, RCA and RISD combining their experiences with Indian thoughts played a major role in uplift of the Indian design domain.

Design programme of IIT Kanpur started few years back with M Des Programme. IIT Delhi also caters with M Des programme. Department of Design at Indian Institute of Technology Guwahati has come up in the year 1998 with a new vision and more technological inputs into design through a Bachelor degree course.

In addition to above, many Government institutions for various design related courses of varied levels, and many private design schools with similar views do exist to day. In general it can be said a full awareness in India has now come

towards formalising the design education. Along with the input of western design experiences and traditional motif and form of Indian origin, students started experimenting with new technology to expand the design scope; redefining the traditional design thinking base on the need of contemporary thoughts.

Northeast India experience

Academic programmes quite often emphasise the need to look into the regional design characteristics through various courses with different nomenclature, e.g., craft documentations from different parts of country. Here study of local and regional specific input to design is studied to understand the elements and features that give identity. India is a land of unity in diversity, different parts of country differ from each other, and Northeast region carries a further diversity within because of existence of many ethnic groups, which is yet to be explored for design elements responsible to make specific character.

When the formal design education was taking a shape in India and awareness developed in the mind of common people, the Northeast was quite unaware and lagging behind of the whole event, the reason may be due to geographical or sociopolitical conditions of this region. It was a crisis among the ethnic groups inhabitant here what is called 'identity crisis'. Geographically and racially, the region we now call Northeast India is situated between the two great Traditions of the Indic Asia and the Mongoloid Asia. This geographical-cultural condition of "in-between-ness" is an important factor for the crisis of identity. It was only since the British period that the entire region came to be associated with India politically.

The lack of cultural relatedness, especially of the "tribal" culture, weakens the new political association, and the racial and cultural difference, thus, came to play vital role in defining the self-identity. Most Northeasterners are caught between the racial-cultural definition and the politico-administrative definition of their identity. Whereas they are politically Indian, they are racially and culturally Mongoloid. (Bhagabati, 1982).

In this circumstances, it can be said that the whole Northeast region was separated racially, culturally, and thus mentally from rest of India. It may be due to this reason the impact of other culture of India, their art and crafts could not influence upon their ethnicity. Therefore, the artifacts and crafts of this Northeast region have a separate identity of its own. This is worth studying to understand its specificity.

2.7 Design elements from Northeast

Northeast, a home for myriad design elements

The next chapter is devoted in search of some elements that can be called or identified as regional elements from Northeast. While searching for elements prevailed in Northeast stresses should be on local culture and tradition. Colours predominated in motifs in dresses (textiles) and festivals, and form, shape & texture in artifacts of this region would give an identity of Northeast. Though modern clothing style and utility gadgets are seen in use in today's societies, these can not be considered as survey material for studying design elements of ethnic origin.

Northeast India possesses a very rich cultural heritage, unique to its diverse application, as also seen in the cases of other part of India. Specifically, North East region has experience of varied ethnic existences with community specific culture, tradition, custom, rituals, etc. This thesis work may be considered as a case study covering whole Northeast part of India where a mixed cultural prevalence with old tradition as well as contemporary need based craft and designs are seen. Attempts have been made earlier to document bamboo and cane crafts of this region (Ranjan, 1986); still there is enough scope to explore, to identify various regional design elements and their context specific application particularity.

Scope for identifying design elements

Rather documenting the crafts and artifacts of the Northeast on its design for economic benefits and marketing impact, this search is to study the typicality of the items mostly seen and used that can represent for identifying various/

specific design characters. The phenomenon of ethnic culture, in almost its entirety, is tied to beliefs, myths and legends that give them a sense of an abiding community. In Northeast textiles, as in the shawls from the Misings and the Karbis, black is the hue of the damsel who has come of age. They use human and animal skulls, bones and horns as their symbolic representation with different colour applications.

Some socio-cultural information on specific groups of people living in this part of country have been compiled to understand the base upon which various design elements can knit the value and ethos of North-east India while conceiving design ideas. From the study, community specific observation obtained is summarised and presented in separate tables comprising images of different representative items, extraction of form, motif and colour applications there in, which carries identity of the communities of Northeast.

With the elements identified herein, suggestions have been provided to utilise this knowledge in design.

- Colour and motifs, forms and shapes and textures expressing North-east; to see what is the semantic perception of design elements from myriad traditional designs of the Northeast India and how these can be presented;
- Elements explored using contemporary technology; how these elements can be explored using digital technology .to give newness of design thoughts while retaining the regional identity.

Transformation of traditional elements in the context of contemporary design activities using emerging technology

Digital precision would help in the utilization of traditional designs in the modern context. Art, design, technology and culture are rapidly converging, mixing and generating new hybrids. The chapter IV is devoted to look for the traditional elements prevailed in the Northeast regions that possibly filter specific elements of regional design.

At the same time to see the possibility of using emerging technology, it emerges as one of the tools for design innovation where the above elements may be successfully compiled to give an identity of our own flavour. Such identity is getting more and more acquaintance as design fundamentals for design education. The process of digital technology is being used to enhance the possibilities of refinement of traditional motifs. The traditional craftsmen also get an opportunity to internalise the digital techniques and give their crafts and products a fresh look with the help of their traditional expertise. Western experiences have already gone into this, Fig. 38 (Burnnet. G, 2004).

It is presume that this research may provide relevant information that designer can accommodate the traditional design elements into the world of new technology based design which would perhaps will be able to give a fresh insight in order to add a new dimension into the Indian design domain where our designers will be able to claim themselves as Indian designer in a true sense. Many references are there that has been exploring by the designers in other parts of the globe. Designer are contemplating to achieve new dimensions by extracting traditional elements and intermingle it with contemporary thoughts, this process has given a tremendous scope for inventing new design possibilities. New technology adds different new gadgets digital or analogue. One of the most important tools is rapid prototyping that has really extending and opening new track for designers.

Design elements that carry identity

Design carries not only utility and abstract application of human aesthetics; it also carries specific identity of time, space and community specificity. There is a misconception about Indian design. It is often held that Indian designs are closely link with the Architectural and Artistic design produced in the palaces. This conception has two drawbacks. The first is design of the various items used by common people in the everyday context is also part of Indian design. Secondly, designs produced in any part of Indian Territory could be regarded as Indian design.

Activities originated from India may have an identity of its own, through various influences some characteristics must be there that go along with Indian ethos, some of them are used in works of arts, and prevailed in myriad of art and artifacts and in various moods of culture, traditions, rituals and believes; we need to study and appropriately apply in design activities to give an Indian identity, to create a signature of our pride. Various artifacts have been catalogued from different places of Northeast to determine specific design elements for specific areas in order to defining their design elements.

Existence of myriad ethnic groups in the whole Northeast region having their own identical characteristics in their artifacts and in utility items in terms of size, shape, colour, motifs and semantics. It is found through observation that some elements of their artifacts are some how inter mingling or inter changing with each other in order to achieve a fresh idea in terms of new design concept but, interestingly still they reflect their original identity without losing essence.

This asserts the research possibilities of enhancing new design concept by incorporating new technology. Till now no efforts have been made to transform these traditional elements of design in the context of contemporary thoughts.

The below is covered in next chapters:

- Study and analysis of various artifacts prevailed in different parts of Northeast e.g., useable products, basketry, colour and motifs of textiles, etc.
- Home decorations as well as human body itself is a part of the culture of this region, while performing rituals they decorate their body and house with colour and motifs. House decoration is a part of regular activity in tribal societies in Northeast. Use of symbols associated with certain believe and thoughts or to perform a particular rituals they usually decorate their house wall inside or outside, and it is a tribal specific phenomenon.

- Study on the colour combination of textile and clothing of different ethnic groups of this region through which they can be identified as they hail from a particular ethnic group. This also covers the visual proportion of colour combination.
- Motifs in textile and in artifacts of different ethnic groups have been studied to recognize their regional characters. This has got embedded in their culture.
- The study also covers the form and shape of various utility items to extract their typical design identity.



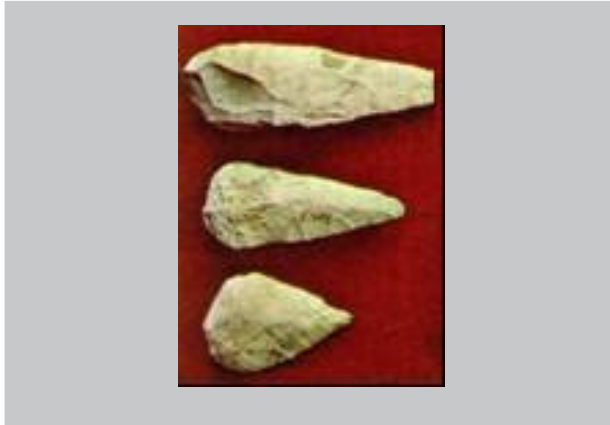


Fig 6. Utility items are made to extend human capabilities, with the same tune these stone items found date back to pre-historic period can be said a very early utility item designed to serve specific purpose, it carries an identity of its time (Janson H.W, 1997).

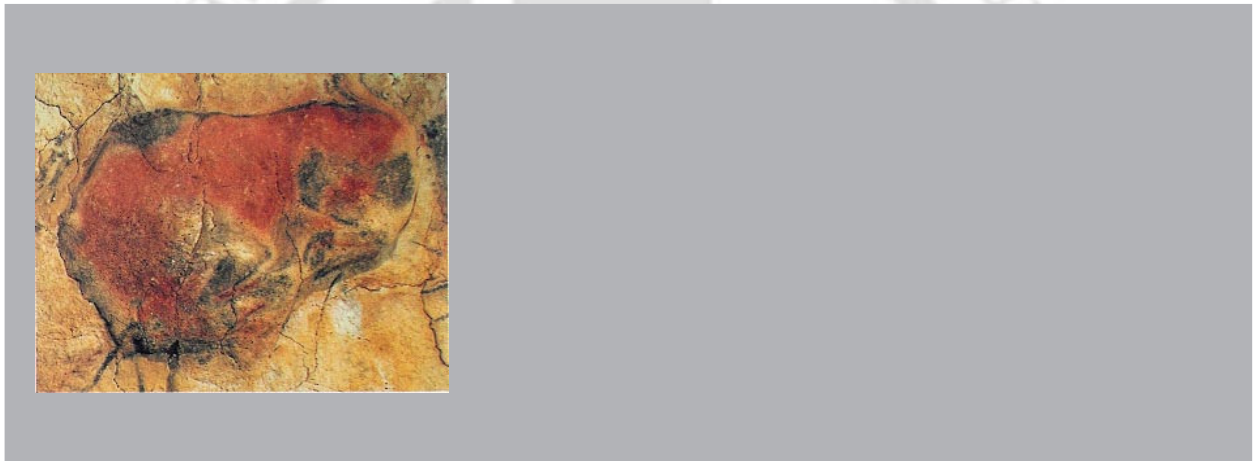


Fig 7. Paleolithic art, a conscious effort of practicing visual presentation from direct life, which in later period transformed to abstract figures as a means of communication, and signs and symbols thus developed (Janson H.W, 1997).



Fig 8. Cave painting, 15,000-10,000 B.C. Lascaux Cave, which has turned to art in latter period (Janson H.W, 1997).



Fig 9. Use of bold outlines (Janson H.W, 1997).



Fig 10. Figures showing impression of life characterises with specific identity (Janson H.W, 1997).



Fig 11. 3-D image, Horse from Vogel herd cave. C. 28,000 B.C. Mammoth ivory (Janson H.W, 1997).



Fig 12. Venus of Willendorf c. 25,000-20,000 B.C. Vienna, tells about observation details that is very essential in communicating the image (Janson H.W, 1997).

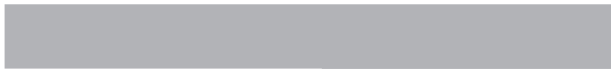


Fig 13. First elements of writing. 9000 BC. Mas d' Azil, France (J. Georges, 1989)



Fig 14. Symbolic imagery for decoding the message used in prehistoric era (J. Georges, 1989).



Fig 16. Impressionist created a different pictorial languages by using colour strokes.

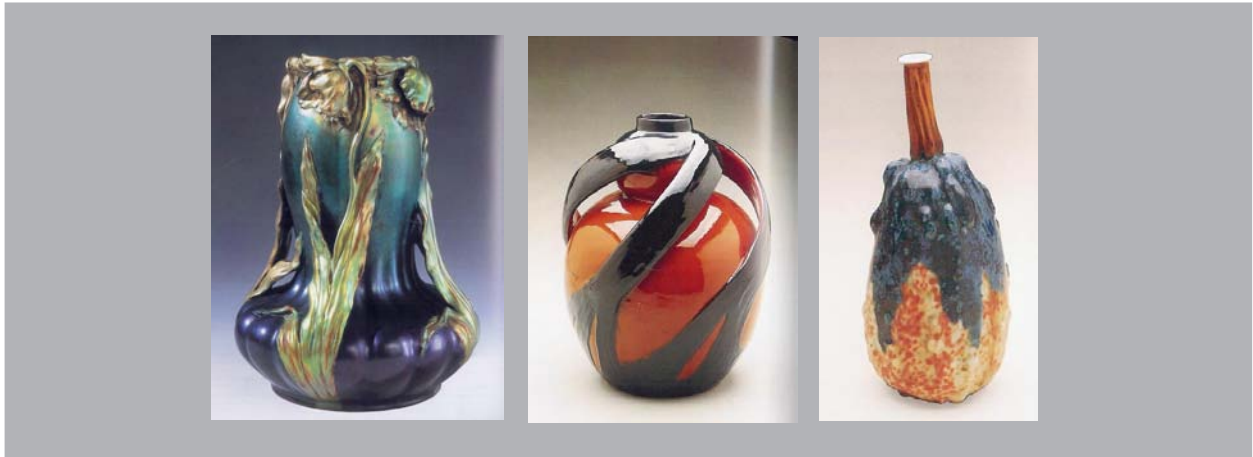
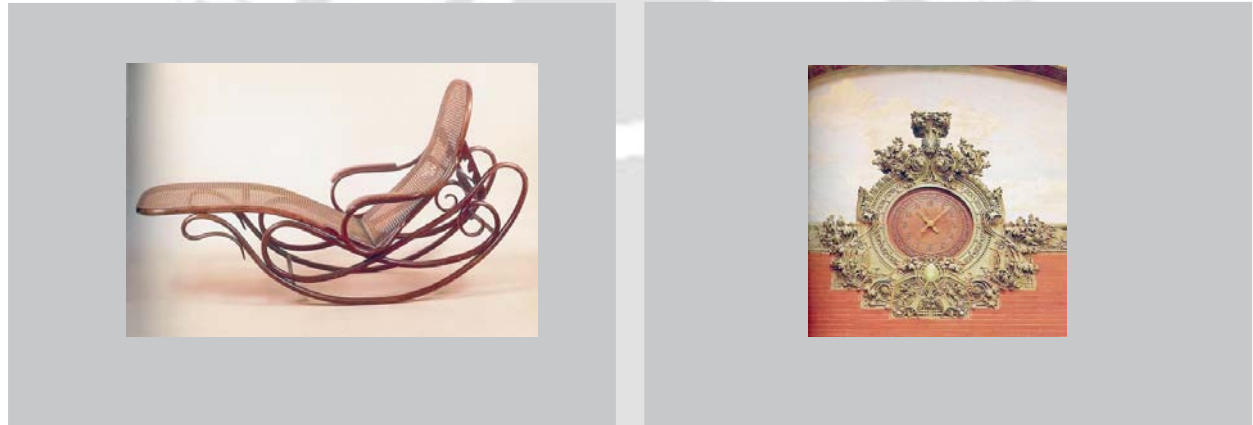


Fig 17. Organic form and decoration largely influenced by nature.



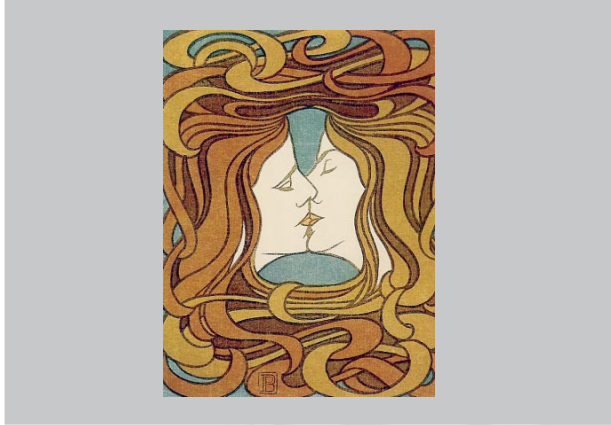
a. August Thonet

b. in architecture

Fig 18. Decorative elements in furniture (a) and in architecture (b).



Fig 19. Poster design by Henry Van: Botanical embellishment as decorative elements.



Peter Behrens painting



American dancer Loie Fuller Francois- French Table lamp.

Fig 20. Human emotion used as perceptive design elements.



Fig. 21 a. Furniture by Gerrit Rietveld

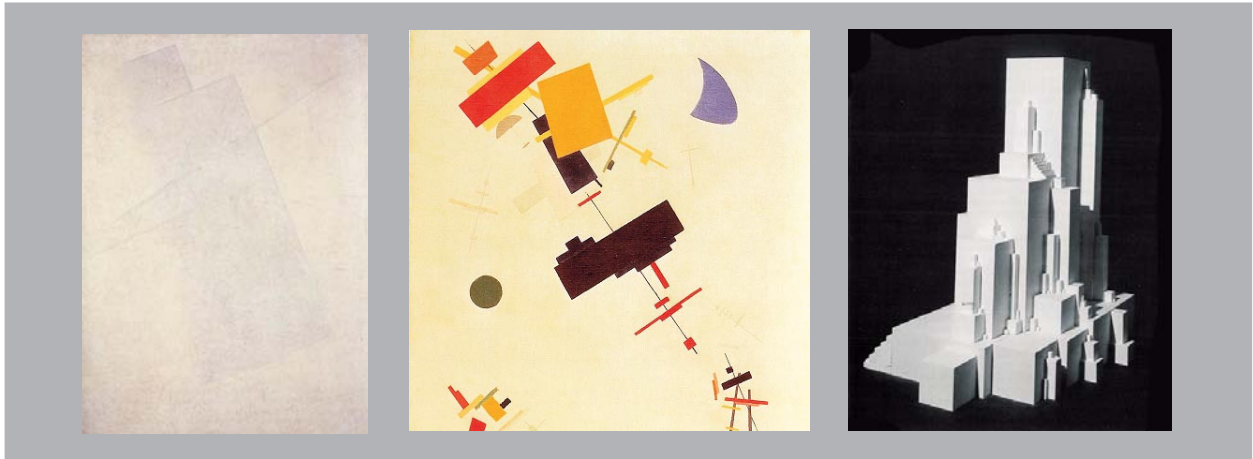
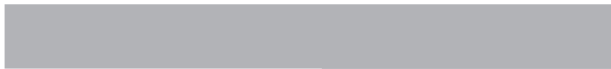


(b) Architecture

Fig 21. Using squares and rectangles in flat planes of bold primary colours along with black, gray and white, all carefully orchestrated with straight lines, (a) furniture and (b) architecture.



Fig 22. Bart Ven Der Leek - Shopping Bag and poster : New graphic design concept.



House under construction

Architectural structures

Fig 23. Concept by Kasimir Malevich using The Stijl basic elements.



By Gerrit Rietveld

By Piet Mondrian

Fig 24. Basic principles of The Stijl in furniture form and colour application.



Fig 25. Bauhaus ideology "form follows function".

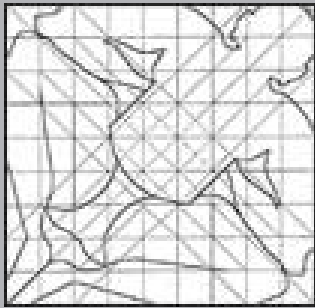


Fig 26. Vastu purusha mandala.



Fig 27. Paintings from Ajanta cave.



Fig 28. The elephant-headed Hindu deity Ganesha has long been a part of Buddhism.



Fig 29. Red colour symbolised shakti and green is a symbol of fertility.

Rajas

Tamas

Sattva



Durga idol

Ref. Rajasthan c. 1900

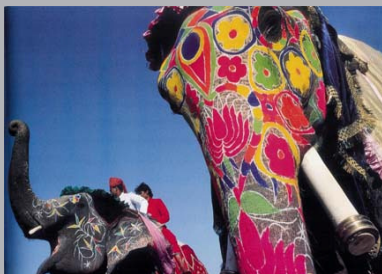
Fig 30. Expressing : Rajas, Tamasa and Sattava traditionally represented by the colour Red, Green and Yellow. In Image Durga use of these three colour application is vivid.



Fig. 31. Use of colour and form on the wall of houses in rural India is an essential and day to day activity, for performing ritual and simple house decoration.



Head gear, Arunachal Pradesh
Fig 32. Dress code and colour.



Decoration on elephant's body especially on forehead is one of the characteristics of festivals as seen in south India.

Bagh (tiger) dance

Tribal dance of NE wearing vibrant colour dresses

Fig 33. Culture specific colour in festival and body decoration.

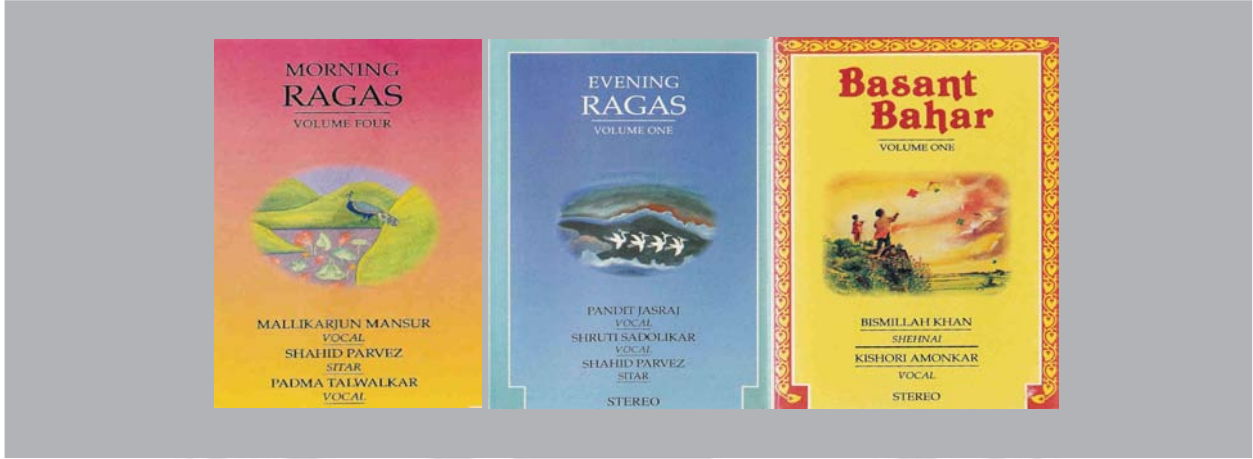


Fig. 34. Cassette covers of Indian classical music with Indian graphic elements.(Music today)

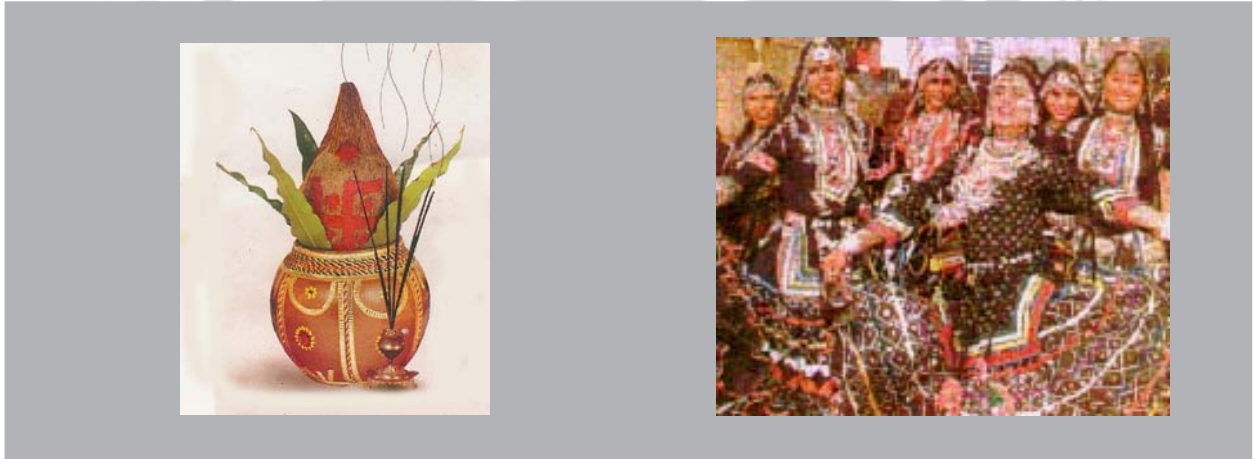


Fig 36. Mongol Ghot.

Fig 37. Rajasthani woman.

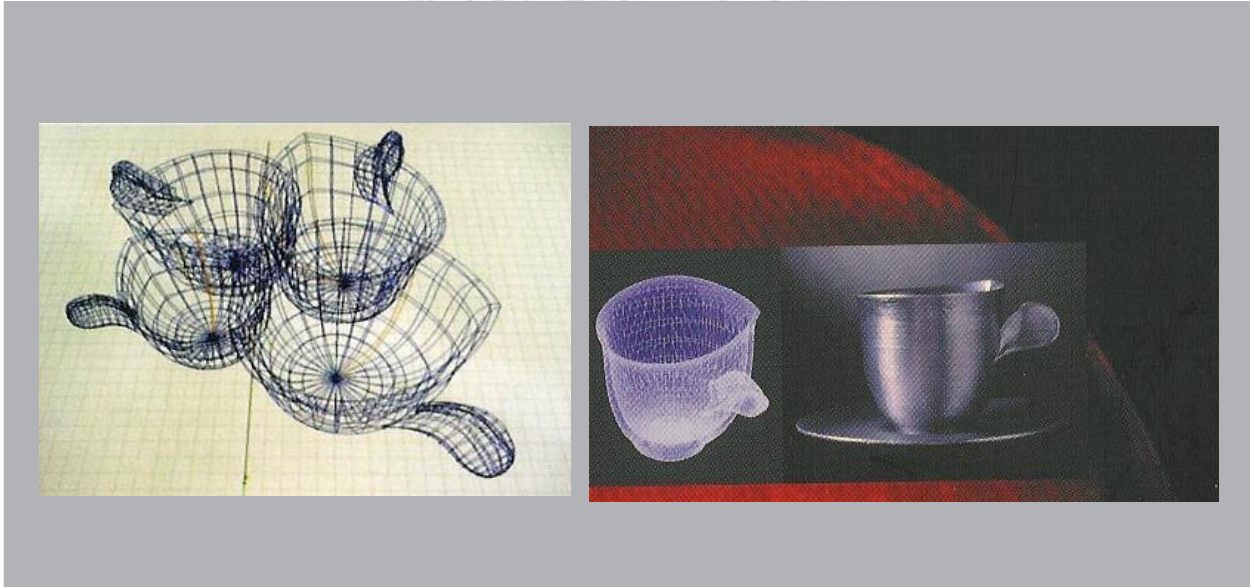


Fig 38. Gordon Burnett's creation: use of digital technology to conceive new design thoughts.



A Study on Design Elements in Craft Practices
With Special Reference to Textile and Basketry of Northeast India

Chapter-III

Strategy for search of elements in the Northeast

3.1 Introduction

Search for design elements from Northeast region

In this chapter, need and methodology to find design identity elements with varied community specific flavour prevailed in Northeast region of India is discussed. Elements are spread throughout various colourful textiles, observation of seasonal festivals moods, day-to-day utilitarian commodities. When we see some thing, we can easily recognise as this belongs to a particular place, to a particular community. This identity, which carries emotion of the people from where these belong, also helps us in selecting items.

Maintaining identity

We speak of globalisation and open trade, and one village concept. Easy availability of foreign utility items has flooded the local market. Conscious efforts are on to preserve and promote the local produces for local domestic market as well as to get international market. Special drive to preserve the local skill and expertise and to maintain the identity of the produces is necessary. Produces should carry identity of the areas of their origin not only for the trade but also to preserve the pride of originality. In the era of patent, this identity preservation has also become a struggle for survival.

It is assumed that some distinctive elements would be surfaced up if a conscious effort is made to study. These identified elements and their typical design application styles would be contributions from Northeast to overall Indian design identity, but how to go about?

Indian scenario as known today

In the traditional Indian concept, there is no clear-cut distinction between art, crafts and design. The Sanskrit term 'shilpa' includes all together. Art and craft are governed by the originality of expression and aesthetic consciousness. Artistic creation has unlimited imagination of ones mind which crosses time, space, social elements and it can go to any depth of artists own aesthetic perception. Oriental art, as evident in early historic cave paintings e.g., Ajanta-Elora, (as mentioned in earlier

section) and in recent past, works of Bengal schools of art and art movement by Abanindra Nath and Nandalal Bose of Visva Bharati, followed a special style of body proportions, (Kamrisch, 1924). The units of palm lengths measure human body. Elongated but proportionate to each human body parts that helps expressing the essence of the story or theme. Contemporary art forms, e.g., work of Yamini Roy, presented bigger than normal size body parts to express specific importance to the personality, Fig. 39.

An identity to Indian art have come to fore through depicting geographic specialty, flora and fauna, varieties lifestyle, culture, festivals, faith and rituals, and ornamentations and decorations. In Fig. 40, the Ladle with Siva-shakti form a typical Indian Hindu symbol, can be said a utility art items; similarly a mythological owl, Fig. 41, (The Telegraph Magazine, Graphiti, 2005) can be cited as typical Indian in terms of its ornamented appearance. In addition, similar approach with Indian socio-cultural emotion can be seen, e.g., in Raja Ravi Varma's creations, the theme of these works is mythological and depictions of female figures and dresses in the work have Indian character, Fig. 42. It draws our attention, what specific elements make these to perceive Indian in typical.

Buddhist influences, Fig.43 (Gangtok, Sikkim) with specific features of China, Japan and neighbourhood are also found plenty in North and Northeast region of country. This confirms that not only the origin of this land, elements from outside India have also been welcome to blend with Indian identity. Question comes, how much of these are to be considered.

Artifacts and its design for functionality

Man made objects, i.e. artifacts, for example, a tool or an ornament, especially one that has archaeological or cultural interest may not be always functional. Instead it may be used only as decorative items without any functionality. Some special artifacts or designed objects expected to be functional which we know as utility items. Therefore, the measurements and proportions of these have to be realistic and created to be functional as well as aesthetic appealing too. Question comes, when art items also serve function, create ambient suitable to different needs. Then,

if we want to identify elements to give specificity to a design how to differentiate between art elements and design elements. It would be very difficult to draw separator lines between the elements; can it be application specific? As example, T-shirt graphics depicting Ravana from Ramayana, Fig. 44, and Indian sacred symbol 'OM', Fig. 45, (The Telegraph, Graphiti, 2005) that becomes a global metaphor for peace and brotherhood, tell us about artistic modulation of ancient theme as well as direct letter imprint has become design application.

It would be good, if the prevalent art and artifacts are observed. These bear the marks of socio-cultural influences from time to time, and present various elements through product specific filtration. Appropriate use of these elements would give a regional identity of the Indian produces.

Use of design elements

Identity could not only be crude copy of the geographic specialty, flora and fauna varieties, but it also should bear the signature of lifestyle, culture, festivals, faith and rituals; and would reflect as an overall appearance. Some representative abstract forms can be developed with various permutation and combinations of these elements, and can be used as identifiable mark.

One example can be given in support of this attempt, e.g., Agricultural produces of Northeast may be represented with a simplified form of pineapple with a boundary boarder of motifs taken from Bihu dress of Assam to express its identity that it is from Assam. Similar examples of pineapple form with red and black lines to mention its Nagaland origin. Series of such symbols can be developed. These may be termed as the crude use of elements. Assam Oil's corporate symbol depicting rhino is also a crude transformation of the flora-fauna of this region with rhino predominance. National game's (scheduled for 2006 to be held in Assam) mascot with rhino-headed man carrying game torch, (source: Sports authority of India, Guwahati) and Mithun's headgear are also can be said a crude transformation, Fig. 46, (Guwahati, Imphal) of such local features.

Functional components may be adopted from various sources to achieve intended function of the product and system but some specific signature of regional flavour would bear identity of its origin. How abstraction of these applications can be made in practice?

Search for elements

Search should be on the representative elements from major contributor sub groups of the Northeast population and ways to find out how appropriately these can be used. Abstract transformation of Northeast features is not much seen. It should carry the essence and ethos of its people and environment of origin.

It would be an appropriate idea to see the different types of culture and traditional values prevalent in this region and to see various utility items; enquire about them, study their origin and their social and functional value. Try to identify elements from them, find out the commonality, and try to use them while conceptualising various possible design uses.

To fulfill this need many factors are responsible. To begin with, the below attempt was made to document representative local artifacts and various culture relevance, and to analyse these viewing to get common as well tribe specific elements that can contribute towards design specificity from Northeast region.

3.2 Survey methodology and field studies

A survey of various utility items focusing textile and basketry linked with various traditions and cultures covering the whole Northeast region have been carried out. The aim of this search was to find out the specificity of Northeast and regional design elements.

Objectives of the survey

The following objectives have been kept in mind during the search:

1. To see the character of regional crafts and artifacts as prevailed today in general,
2. To extract design specific elements from the textile & basket samples.

Survey Strategy

The following methodology has been followed for the research.

The Northeast part of India comprises seven states namely Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura. Some portion of north-east part of West Bengal and Sikkim are also now-a-days considered being in Northeast India cluster, Fig. 47.

Few alternative strategies appeared with pros and cons on their feasibility and reliability and ease of recording.

1. For convenience of recording, the survey could be conducted state wise. This has both positive and negative aspects, since states have many tribes (more than 150 communities) of different identity with individual lifestyles. Crossing the political state boundaries culture spreads. Due to differences in human settlement and specific geographic locations life style differ and thus their identity as well. This system would be good to get an overall image of whole Northeast, irrespective of variations in different tribes. Depending on concentration of population, few representative areas may be visited to record relevant information and collection of supportive material. These randomly collected material could be catalogued e.g. basketries, clothing during festivals and normal life, household items and decoration.

2. The second thought came to consider northern side and southern side of river mighty Brahmaputra, as this river has divided the whole land and population into two halves and remained separated for long. It cannot also be quite full proof division because there are many ethno-cultural groups comprising both plain Landers and hilly tribes and casts reside in each side.

3. Whole Northeast may be divided in four equal divisions as Northeast, North-west, South-west and South-east. Problem remains unsolved to have good representation of this area.

4. A criterion may be developed considering natives and people came from outside through far North. Thai group came to this part and formed Ahom Kingdome being

capital at Sibsagar and spread towards east. Koches spread areas under Koch kings, who have roots in from West Bengal side, from west to central east of this region. This does not count ancient Buddhist influence. Sikkim does not come under this division.

Considering pros and cones of various divisions and population comprising various ethno-cultural group, subgroups there in and various tribes, it was finally decided to consider the whole area as a single geographic location and art and artifacts used here in, and major cultural prevalence, the basic theme behind formation of modern states as above. Still it is assumed that state-wise survey would be good to get an overall image of the whole Northeast, irrespective of variations in different tribes. So, the first strategy was considered for the present study. Depending on concentration of population, few representative areas may be visited to record relevant information and collection of supportive material.

Focus on samples

- As a general approach, community specific artifacts have been observed to get the overall idea in order to understand what would be the basis of the thesis.
- It is important to note that the textile and basketry are more common daily used craft items with specific variations in the communities of Northeast India.
- The thesis is concentrated on these two major craft practices where culture, tradition and community specific elements are very predominant and distinct.
- Therefore, textile and baskets have been taken as basis for the search.

A community is always being identified for their traditional attire along with their customs and rituals. Traditional attire is only distinctly visible element with various colour combinations with motifs, which may be considered as one of the very strong design components prevailed in Northeast. This is not only been expressed by common people but the experts of the Northeast culture and people from the community itself (table-4). Thus, it was felt important to study them. Therefore, the visual rating is being done to analyse the colour combination of different ethnic groups.

In entire Northeast there are more than hundred different communities exist. Therefore, it appears not to be practical to go by community wise because this would be too enormous. It is also fact that if we do not cover the community specific design elements it would be difficult to realise the whole northeast design essence. So, to make a balance of the two views, in order to getting the overall idea of design elements of entire Northeast convenient basis would be to study them state wise by taking some very prominent and dominating ethnic groups in terms of there existence of a particular state, which appears to be textile and baskets.

These randomly collected material could be catalogued e.g. basketries, textile, clothing during festivals and normal life, and some household items.

There are different ethno-cultural groups, sub groups in various tribes but it was finally decided to consider the whole area as a single geographic location. State-wise compilation specific to some prominent communities therein was made.

Information collection procedure

Some information on tradition references which are no more seen plenty are collected from prominent libraries including folklore library of Gauhati University and museums of Northeast (Table-2). Eminent personalities of history, culture and traditional folklore were met for their expertise opinions. Practicing artisans and craft persons were also interviewed. Know-how of work execution, work plan like different steps of work execution, work organisation, time schedule etc., have been studied. Whatever they make, whether they were aware of the things they practiced, if this has any value specific to contribute to contemporary Indian design. It appeared that the Indian contemporary designers also ignorant of this vital source, of this very root of the tradition. The spirit of regional design characters are sometime put aside and for which, the Indian character in design is yet to be established in a true sense.

Relevant photo documentations suitable to record were made during field studies. Some items which were not available but relevant information about them were collected from various references (e.g., Table 3) that tell us about local customs and

tradition. The information were subsequently analysed to filter elements assuming that these may contribute to elements of Northeast Indian design character.

Field survey was made visiting different villages and towns, and relevant information was obtained from eight groups of specific information providers ranging from practitioners and users to subject experts (Table 3 and 4). The second stage of work involved studying the application of colour, motif, form, shape and texture from the above materials specifically in three categories:

- 1) Common Crafts and artifacts,
- 2) Bamboo and cane made baskets and
- 3) Textiles.

Practitioner's opinion

Practitioners were selected and interviewed from those who make the artifacts, crafts and textile material, to know their views: why they do traditional; if any change they wish to have, what they would like to change and while changing, what they do to keep their own identity; do they realise that what they are producing or cultivating has world market and need to make efforts to compete with contemporary international market with Indian identity.

All of them expressed unawareness and ignorant of the issue. They like to continue whatever they got traditionally. They produce according to local market demand. NGOs promoting the artifacts made of locally available material and skills are looking for exterior export market, and design development to suit various requirements of the specific countries of export, some modification and relevant packaging are done on respective need base.

Sometimes training camps are conducted by Government initiatives and NGOs to give contemporary look to their original designs and also insists to develop new design items with multi-variety material, combining local material and others. These efforts are not enough in tune to retaining identity and develop; rather it appears similar to those observations in other areas of present day Indian practices that borrow western pattern in India produces to fit in western market.

In specific to Assam traditional dresses, these are in demand in the local as well as other domestic Indian markets; people buy for the occasions like marriage, festivals and religious matter. Therefore, the weaving community also likes to continue this tradition as they learnt the skill from their ancestors. They do some modification as and whenever required or demanded by the customers, but always try to retain and remain in its own traditional character; specific input if available can also be welcome, they opined. If any new design and material combination is provided to them they would be willing to experiment, the effort would be participatory.

Material and opinion survey

Apart from fieldwork, a general opinion survey was made from the artisans came to Craft fair organised in 2004, in Bamuni Maidan, Guwahati, Assam where artisans from most of the areas of Northeast had come. Meetings and discussions with them were very useful basically to know the story behind their products being displayed and some details about their traditional crafts and artifacts.

Along with picking up information from local community and markets, especially king's palace in Sikkim was visited to document thoroughly the impressions of Sikkimese culture and tradition as followed by Chogials/ Bhimraj Pradhan of Sikkim. Kings family in Sikkim gave transformation of Sikkim culture through ages. Important Museums of seven states like Itanagar Museum, Meghalaya state Museum, Aizawl Museum, Mutua Museum of Imphal, Assam state Museum and others having specific nature, e.g., Kalakhestra museum of Guwahati (Table 2) been visited and consulted for collecting samples in the form of photographs and information. Several villages of each state of Northeast were also visited to collect samples and required information for the present study.

To get relevant information about folk culture of this region faculty members and staff of folklore research Department of Guwahati University and folklore Department of North eastern Hill University, Meghalaya were consulted.

Web publication, e.g. <eu.wikipedia.org.>. <ignca.nic.in> and related links through these sites were also referred for some relevant information.

Table No 2. Information providers for relevant information.

Purpose/ information collected from		Information obtained from
1	General opinion survey from practitioners	Craft fair organized in 2004, in Bamuni Maidan, Guwahati, Assam
2	Sikkim as associate member of NE	Visited few villages of Sikkim and kings palace and family members
3	Design teachers	Faculty members of Department of Design, IIT Guwahati, and visiting faculty members, Indian (including Industrial Design Centre, IIT Bombay and National Institute of Design, Ahmedabad) as well as faculty of foreign design schools, to this department visiting for varied durations from time to time between 2001-2005.
4	Folk culture of this region	1. Folklore research Department of Guwahati University. 2. NEHU, Meghalaya 3. All India Folklore Congress, January 2005, Guwahati, Assam.
5	Museum references	<ul style="list-style-type: none"> • Assam State Museum, Guwahati • Museum of Kalakshetra, Guwahati • Folklore Museum in Guwahati University. • Itanagar Museum • Handloom & Handicrafts of Meghalaya • Folklore Museum at North Eastern Hill University • Handloom & Handicrafts of Guwahati • Art and Culture Museum, Kohima • State Cultural Museum, Sikkim • Kalakshetra, Shilpagram, Guwahati • Dimapur Museum • Manipur State Museum, Polo ground, • Mizoram State Museum, Macdonald Hill, Aizawl • Tripura Government Museum, Agartala • Meghalaya Museum, Shillong Museum, • Tribal Research Institute, Mawlai, Shillong
6	Folklore Experts	<ul style="list-style-type: none"> • Dr. Kishore Bhattacharjee, Head Folklore Dept. Gauhati University • Mutua Bahadur, Mutua Museum, Imphal, Manipur • Prof. Deshmond Kharmaflang, NEHU, Meghalaya

While presenting a paper on a portion of this work in 27th All India Folklore Congress held in January 2005, Gauhati University, it made some of the points clear, and discussions with other participants who came from different parts of India confirmed the need of this type of study, and thus views based on folk couture have been obtained.

The information and visual recordings relevant to the objectives mentioned above were categorised in order to get a view of regional picture and were analysed to find out specific elements of regional identity. A portion of study results on myriad crafts

prevalent here was presented in International conference “Challenging Craft”, held in Scotland, August 2004 and feed back of other international participants those who have come from different parts of world have been used as intermediate international feedback to the study.

Expert’s opinion

Design experts and scholars view that the regional design elements and its representation in new applications is an ongoing process; history and contemporary application both need to be considered.

While discussing with one of the foreign design experts of German origin, who have both the experience of training and working experiences in India (National Institute of Design and IIT Guwahati as a faculty member) as well as in Germany, he expressed views on regionalness. Mostly, the festivals and relevant utility items of local origin can be considered as representative items for study.

Though North eastern cities are highly influenced by comfort of western work-cloths, specifically Saris (one piece cloth) and Mekhela-chador (two piece clothes to clad lower and upper part of body, Fig. 48), and other socio-cultural and festival specific clothing that are not seen anywhere in the world could be the best items to study and special features and motifs in those may be taken as very regional.

Summarily, the present study took a strategy to compile relevant information (from various sources e.g., libraries, Museums, web information and direct field observations) on utility items linked with tradition and culture covering the whole Northeast region have been carried out. The aim of this search was to find out the specificity of Northeast and regional design elements, it would be an identity of its own within Indian design domain. Survey conducted statewide. Depending on concentration of population, few representative areas visited to record relevant information and collection of supportive material. These randomly collected materials were catalogued in crafts and artifacts, baskets and textiles.

Direct observation, organising discussions/ meetings with local people practicing tradition (as users), interviewing relevant experts, which includes practicing artisans, various people those who are closely associated residing in Northeast to know their perception, and specific recordings of the above through photography. The detailed out come is presented in Chapter IV with eight sections consisting state specific information.



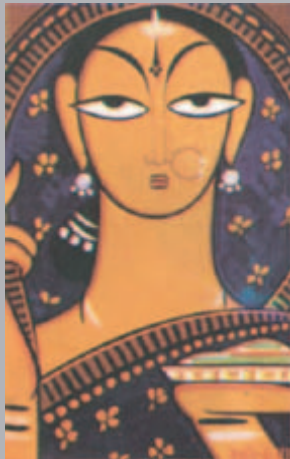


Fig 39. Yamini Roy presented bigger than normal size body parts to express specific importance to the personality.

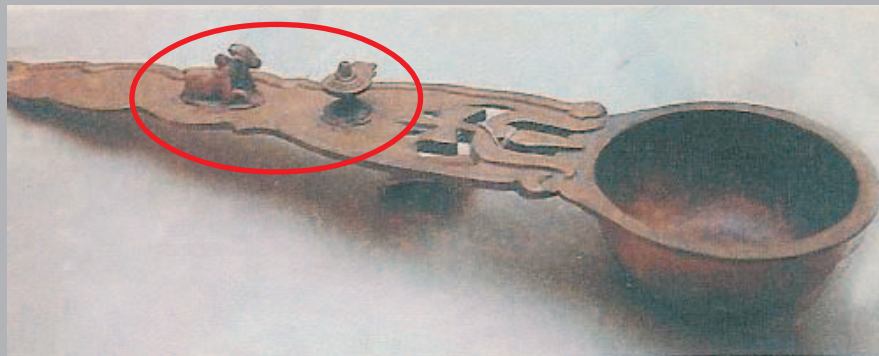


Fig 40. Ladle with Siva-shakti form as an typical Indian Hindu symbol, Graphiti, Telegraph



Fig 41. Utility art items, mythological owl. (Graphiti, Telegraph)



Fig 42. Indian figurative character in Ravi Burma's work. (Indian Painting)

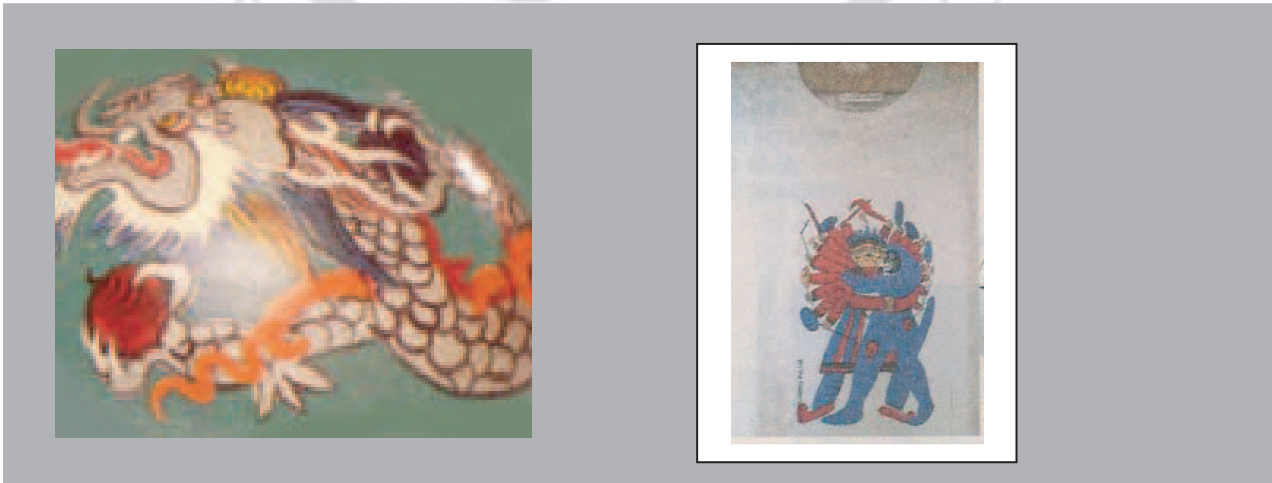


Fig 43. Chinese Buddhist influence.(Gangtok, Sikkim)

Fig 44.T-shirt graphics depicting Ravana from Ramayana.(The Telegraph)



Fig 45. Indian sacred symbol 'OM'. (The Telegraph)



(a) Mascot with rhino-headed man carrying torch, logo design for Assam national Game (left) (Guwahati)



(b) Triangular headwear with special appearance of Mithun horns. A traditional dance performed by a Kabui cultural troupe in Imphal wearing horned headgear.

Fig 46. Crude transformation of elements directly taken from nature. (Imphal, Manipur)

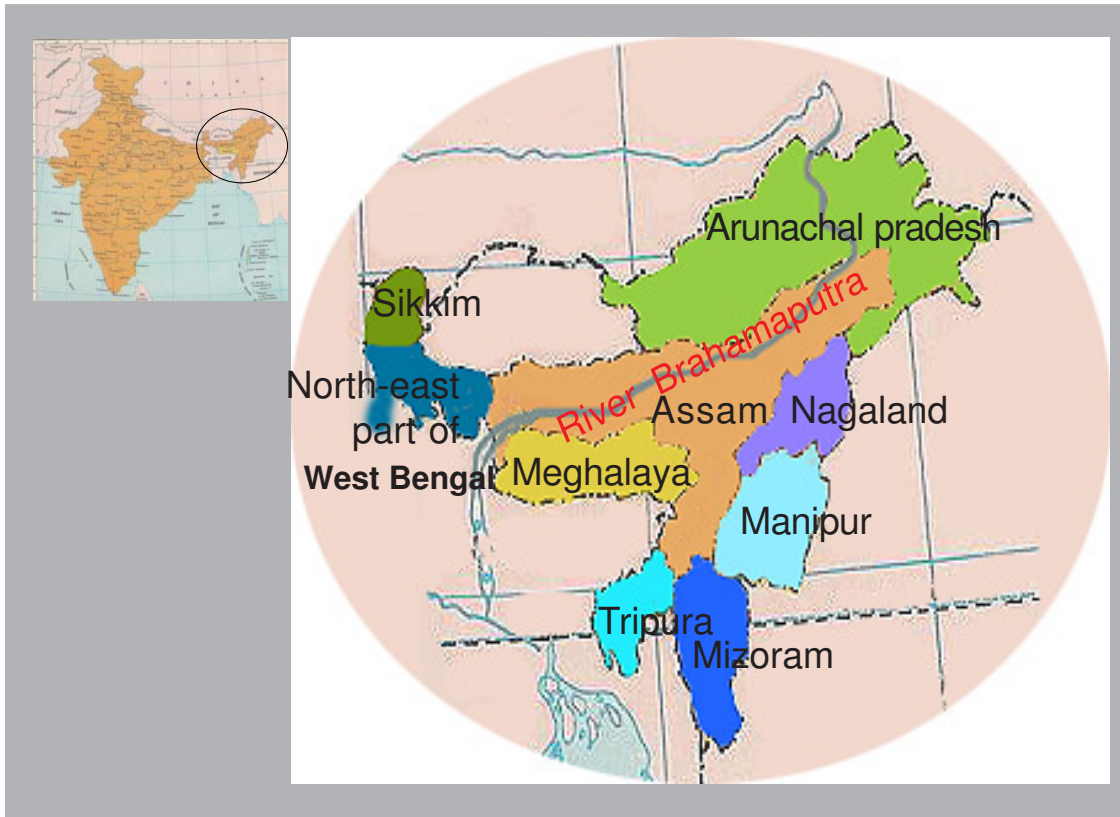


Fig. 47. Map of Northeast: study strategy.



Fig. 48. Traditional dress of Assam done on Muga silk or gold and silver wire (guna) by artisans called Gunaakatas. (Guwahati, Assam)



A Study on Design Elements in Craft practices in special reference to textile
& Basketry of Northeast India

Chapter-IV

**An account of myriad design spread across
Eight states of Northeast**

This chapter covers compilation of various designs overspread in different parts of Northeast in respect to understand culturally effective elements for designing

- Assam
- Arunachal
- Nagaland
- Manipur
- Mizoram
- Tripura
- Meghalaya
- Sikkim

4.0 Introduction

The tribes of NE were not aware of the formal aspect of design making because their designs had been evolved from various needs and daily requirements with locally available materials. The formal design education, the experiments through new technology do not have much meaning to them. They are rich in order to serve the purpose of their life; self sufficient and self content attitude towards life made them independent. As well as, geographical constraints of this location also made these people separated from the outer world (discussed in previous chapter). Now, due to gradual communicational development and need for trade their materials to others, and to cater likeliness of the new customers of other culture, a recent change in attitude of locale artisans is being observed to incorporate new ideas.

The traditional culture of Northeast faces an encounter with the inevitable forces of urbanisation and modernization, and the changes consequent upon the encounter. Still rapidly growing urban awareness makes in 'an open' individuals and they accommodate significant other realities and at the same time wishes to preserve traditional practices.

This is facilitated by the co-existence of the folk and the modern in the areas where folk traditions are still vitally alive. The intention is to explore possibilities for fresh insights for modern technology-aided practices, which will be exploited to reinvigorate the traditional ones. We are concerned here more with connections than priorities, even though to trace the journey work from functionality to aesthetic concerns still remains a challenging affair. After all, meaning or understanding meaning is a practical everyday necessity as it is an analytic concern for researchers.

This region of the Seven Sisters, as it is popularly known, is further enriched now by the entry of Sikkim, a former kingdom, within India. There is a veritable salad-bowl of communities here, in all of the constituent states of Assam, Arunachal, Nagaland, Manipur, Mizoram, Tripura, Meghalaya and Sikkim. Specifically, the

Northeast has experience of varied ethnic existences with community specific culture, tradition, custom, rituals, etc.

All the items related to the culture of this land are not available to document in a survey, hence some of the items are described herein. These have been collected while discussing with relevant resource persons. The available items have been analysed to see the prevailing design elements. "Contemporariety of the folk; Northeast Indian Craft" (Barua, 2004) may be used as a starting point. This addresses the traditional craft practices, including textiles, of the Northeast of India in their functional, aesthetic, and semantic aspects.

In order to safeguard from others, there is a strong feeling of confining community activities, ranging from know-how and skill to make and use of daily utility items to identity decoration marks within themselves. Tribal communities seem to be very possessive and thus variations in all aspects of life are observed to be community specific. Now-a-days, it is also noticed that these differences are gradually diminishing. Many community specific items are not available now, which can only be referred in other sources. Scanty and scattered documentations of lives of some of the communities of Northeast have been reported and published material is available.

This chapter compiles information from different sources during the survey conducted for the present thesis purpose as well as relevant information from contemporary publications for different aspects (e.g., Bamboo and Cane Crafts of Northeast by Ranjan, M.P., Iyer, N., Pandya, G., 1986, is one of the exclusive survey done on the area from National Institute of Design) and web resources.

Dominant Crafts and Artifacts, Baskets, and textile traditions with variations of each of the eight states is discussed below. Descriptions below intend to provide a general product features rather than production know-how. To retain local flavour of the discussion, local names of the items are maintained, wherever possible explanations on their descriptions, meanings, sources of inspiration and beliefs behind them are incorporated. Each state specific section starts with a brief description of people live there in.

- Firstly, a general approach is being taken to study the various artifacts.
- Secondly, the study has been focused on textile and baskets. The basis for which already is being referred in the previous chapter.
- In textile there are two strong design elements are predominating e.g. colour and motif and
- In baskets important design elements are their shape & form and texture through which these can be easily identified their various aesthetics and functional aspects.

State wise survey material:

- General demographic observation,
- Crafts and artifacts,
- Baskets, and
- Textile is presented below.

4.1 Assam

The ethnic origin of the Assamese varies from Mongoloid tribes to those of north Indian origin. The earliest inhabitants of Assam were probably of Austric stock. They are termed as “proto- Austroloid”. The Khasis and Jayantia appear to be descendents of the proto-Austroloids of ancient Assam. After the Austrics, the Mongoloids had entered into Assam. Among the Mongoloids, the Boro tribe appeared and established over the valley of Brahmaputra early. The Boros also known as the Kacharis and were once very powerful people. At a time, they are known to have ruled over the whole of Assam.

4.1.1 Crafts and Artifacts

No definite records are available to establish the antiquity, history and origin of this craft in Assam. However, it can be safely assumed that the craft was practiced since the misty past with the very dawn of civilization. In the early period in Assam, bamboo was held with special reference and was forbidden to cut on “auspicious days”. Perhaps religious safeguard was made to rational use of this natural resource. It is a general belief that bamboo possesses auspicious character and is of religious significance.

An idea about the flourishing state of cane and bamboo products of Assam was found even during the time of Bhaskara Varman (early part of the 7th century A.D.), the king of Assam, (reference extract from “The History of Civilization of the People of Assam” by Dr P.C. Choudhury, <ignca.nic.in>). “Early literature refers to the well-decorated and coloured sital patis (cool mats) used by the rich people. Mats were usually made of cane. The classical writers testify the abundance of cane in the forests of Assam. Ptolemy, for instance, states that to the east of Serica, which we have identified with Assam, there were hills and marshes where canes were grown and used as bridges. Evidence of the production of other cane articles is also supplied by the ‘Harshacharita’, which mentions stools of cane. The cultivation of bamboo and its use for various purposes are well known. King Bana again testifies to this highly developed craft. He states that Bhaskara sent to Harsha ‘baskets of variously coloured reeds’, ‘thick bamboo tubes’ and various birds in ‘bamboo cages’ (Das. J., 1968, Asomor lokokotha).

All these prove that various industrial arts were developed in Assam at an early period and were continued to be practiced till recent times, based on that traditions like those of the craftsmen of other parts of India” It is observed that there is no particular caste or community in the Assam valley who are exclusively connected with this traditional craft. All, particularly the peasants irrespective of caste, community or creed, generally carry it on. Umbrella handles, walking sticks, tool handles, fishing rods, tent poles, cordage, ladders, yokes, baskets, toys, hand-fans and various domestic and agricultural implements are made out of Bamboo. All these articles can be produced on a cottage and small-scale basis with small machineries.

Assam is rich in sylvan resources and most of its forests are richly stocked with bamboos and canes of various species. Bamboo is a raw material of great versatility and forms an integral part of the lifestyle and economy of Assam. Special mention may however be made of the Cachar, Mikir and North Cachar Hills, Nowgong and Lakhimpur districts. While touring in the hill districts, one sometimes wonders at the vast expanses of bamboos and canes.

The making of bamboo and cane products is perhaps the most universal of all the crafts practiced by a large number of artisans scattered throughout the State. It is practiced as a household industry and no mechanical device is used. Cane and bamboo products are used for a wide range of purposes and extensively used in every household.

There are varieties of cane and bamboo used for manufacturing of different products. A kind of bamboo locally known as 'muli bazail' is used for making umbrella handles. Two other varieties of bamboo locally known as 'Mrithinga' and 'Bethua' and different varieties of canes locally known as 'sundi', 'barjali', 'harua', 'golla' etc., are used for making furniture and baskets. Bamboo and cane works are simple, inexpensive and used throughout the state.

The toys of Assam

The toys of Assam have been broadly classified under four heads, e.g., clay toys, pith, wooden and bamboo toys, cloth and cloth-and-mud toys, etc. Human figure, especially dolls, brides and grooms, is the most common theme of all kinds of toys, as well as a variety of animal forms have also dominated the clay-toy scene of Assam. Clay toys, traditionally made by the Kumar and Hira communities, have often depicted different animals too, while gods, goddesses and other mythological figures also find importance in the work of the traditional artist.

Pith, the Indian cork, has also been used for toy making since centuries in Assam. Such toys are mainly made in the Goalpara region and they include figures of gods, animals and birds, the last of which again dominate the over-all output. Wood and bamboo on the other hand have been in use for making toys for several centuries and like the other mediums, come with birds, animals and human figures.

Toys of cloth as also with a mixture of cloth and mud too have constituted part of the rich Assamese toy-making tradition. While the art of making cloth toys have been traditionally handed down from mother to daughter in every household, the cloth and mud toys are generally used for puppet theatres. Among the household toys, the bride and groom are the most common characters, while the other varieties have animals and mythological characters as the plays demand. Basic

characteristics of these toys are; simple geometrical forms, Fig 49 (Majuli, Assam), with linear motifs used in clothing and spontaneous lines are used while drawing hairs and eyes. Colours are very bright, mainly used yellow, pink, red and black in the figures of human, animal and in bird forms (Dasgupta, 1982).

Pottery

Pottery is probably as old as human civilization itself. In Assam, pottery can be traced back to many centuries back. The Kumars and Hiras are two traditional potter communities of Assam and while the Kumars use the wheel to produce his pots, the Hiras are probably the only potters in the world who do not use the wheel at all. Again, among the Hiras, only the womenfolk are engaged in pottery works, while their men help them in procuring raw materials and selling the wares. The most commonly used pottery products include earthen pots and pitchers, plates, earthen lamps etc, and now-a-days, modern decorative items are also found in Assam.

Decorative panels in the royal Ahom palaces of the past and the 600-year old *satras*, i.e., the vaishnavite monasteries, are intricately carved on wood. A special class of people who excelled in woodcarving came to be known as Khanikar, a surname proudly passed down from generation to generation. In Sibsagar the Khanikar gaon (gaon = village) is well known for this work. The various articles in a *satra* and *naam-ghar* (place of worship) are seen to be cut on wood, e.g., depicting the guru asana, a pyramidal pedestal of the lords, Fig. 50 (Borpeta, Assam), apart from various kinds of birds and animals figuring in mythology.

Mask- body decoration

The tribal art and folk elements forming the base of Assamese culture, masks, Fig. 51 (Majuli, Assam), have found an important place in the cultural activities of the people. Masks have been widely used in folk theatres and *bhaonas*, with the materials ranging from terracotta to pith to metal, bamboo and wood. In the *bhaonas*, masks are necessary, especially for those playing the parts of mythological characters like Hanuman, Ravana, Garuda, Jatayu etc., and these are made from different materials varying from place to place. Similarly, among the tribals too, the use of masks is varied and widespread, especially in their

colourful dances, which again revolve mainly around their typical tribal myths and folklore. Such traditional masks have of late found their way to the modern-day drawing rooms as decorative items and wall hangings. The place called Majuli in Assam has a rich tradition of mask.

Ornaments

Gold has always constituted the most-used metal for jewellery in Assam, while the use of silver and other metals too have been there for centuries. Gold was locally available, flowing down several Himalayan rivers, of which Subansiri is the most important. In fact, a particular tribe of people, the Sonowal Kacharis was engaged only for gold washing in these rivers. Jorhat in Upper Assam is one place where the traditional Assamese form of manufacture of jewellery still exists, and people flock to the Jorhat sonaris (goldsmiths) to get the exquisite Assamese jewellery. Assamese jewellery includes the doog-dooqi, luka-paro, bana, thuriya, gaam-kharu, gal-pata, jun-biri, dhol-biri and keru, Fig 52 (Nowgaon, Assam). All these traditional jewellery have also encouraged modern jewellers to producing similar designs mechanically. The basic characteristics of the motifs of these designs are found to be floral, simple geometrical, cervical, linear, and along with animal and bird forms.

Japi (Bamboo / leaf head-gear)

A typical item, circular in shape to provide shade with a central protrusion to fit in head, originally to be used by farmers and this has become cultural symbol with various colour application is called Jhapi, Fig 53 (Pragjyotika, Guwahati). Bamboo and leaf headgear is the most indispensable item of the open air workers. Such ordinary headgears are produced throughout the State. Many varieties of 'Japis' such as 'halua japi' 'pitha japi', 'sorudoiya japi', 'bordoiya japi', 'cap japi', etc. are produced in the districts of Kamrup, Nowgong, Darrang, Sibsagar and Lakhimpur. Nalbari and its neighbouring villages (such as Kamarkuchi, Mughkuchi, etc.) of Kamrup district deserve special mention in respect of manufacturing of 'fulam japis' (decorated bamboo umbrellas). In earlier days, this particular type of 'japis' served as headgears for the females of noble and rich families, but now this practice are not seen anymore. Productions of

'fulam japis' are now only intended to serve as items of drawing-room decorations.

This traditional headgear (japi) is made of strips of bamboo and a special kind of dried palm leaves locally known as 'tokow-pat'. The manufacture of ordinary 'japi' does not require any special skill. First of all, the selected bamboos are split into small strips of required sizes. Then the strips are woven in open hexagonal design into a circular disc with a dome in the centre for the head to fit in, putting a few dried 'tokow' leaves (previously cut into required sizes) in between two such discs and finally sewing them securely with yarn and fine strands of cane. Thus, the manufacture of ordinary 'japi' is completed. A japi is more advantageous to the cultivators and other open air workers than the conventional umbrella, because the cultivator after putting it on can tie the strings around his chin leaving his hands free to work in any position-standing, squatting or stooping.

Metal craft

Bell metal and brass have been the most commonly used metals for the Assamese artisan. Traditional utensils and fancy articles designed by these artisans are found in every Assamese household. The Xorai and Bota, Fig. 54 (Barua.U, Guwahati), has been in use for centuries, to offer betel nut and paan while welcoming a distinguished guest and also used ban kahi Fig 55 (Kalakshetra, Guwahati), for giving meal to the guest which is now almost extinct from using as household items.

The entire populations of two townships near Guwahati, Hajo and Sarthebari, are engaged in producing traditional bell metal and brass articles. They have also used their innovative skills to design modern-day articles to compete with the changing times. Gold, silver and copper too have formed part of traditional metal-craft in Assam and the State Museum in Guwahati has a rich collection of items made of these metals. Gold however is now used only for ornaments.

4.1.2 Baskets

Baskets of various types are produced in different parts of the State. Cane baskets are used for various purposes. These are used mainly for carrying goods, storing

grains and keeping valuables Fig. 56 (Nowgaon, Assam). The Kukis and Mikirs specially use the baskets for keeping ornaments and clothes with locking arrangements. In the plain districts, also a few persons keep their clothes etc. in cane suitcases. Extensive manufacture of 'plucking baskets' (for tea leaf plucking in tea garden use) is found in all the plain districts on a commercial basis.

In Assam, baskets are prepared in different designs and by different methods. They may be prepared in combination of both bamboo and cane or alone. The different methods of production is confined to the following types, e.g. (1) Interlacing or woven work, (2) Wicker Work and (3) Coiled basketry. Interlaced basketry consists essentially of two sets of elements (warp and weft) crossing each other. The interlaced baskets are prepared in different designs such as check, twilled, twined, wrapped and hexagonal. Baskets used for keeping clothes and ornaments, cane suitcases, etc., are generally prepared in this method.

In wicker work, the warp is not pliable, but the weft is pliable and passed alternately over and under the warp. In this method, the warp is kept in a lesser rigidity. Plucking baskets are prepared in this method. The warp is arranged by cane of sufficient length. Before arrangement, such cane is soaked in water for sometime to give it a flexible character. Simply binding coiled cane while the process of weaving is in operation preserves the shape of the basket. Finally, the edge of the basket is stitched with a thin and flexible cane slip. Plucking baskets, granary baskets, baskets used for carrying earth, stone-chips, coal etc., are manufactured in this method, technically known as 'bee-skip' design which has got hexagonal weaving in bamboo stripes.

Another popular household basket, called pasi, Fig. 57 (Nowgaon, Assam), is a multipurpose basket. For carrying vegetables, rice, seeds etc., it is generally used. Another type is called khorahi, Fig. 58 (Guwahati, Assam), which is little smaller the pasi and it is some time being used in ceremonial occasion such as in the prayer hall and also in the kitchen it is also very popular utility item amongst the Assamese community. There are various types of pasi in different size and shape can be observed in Nowgaon and Jorhat district of Assam. Pasi have flat firm base but khorahi is having flexible bottom because of its roundish base. In Karbi

Anglong it has been observed that instead of pasi they used short height basket which has four leg type firm bases, Fig 59 (Hamreng, Karbi Anglong). Another peculiar type of basket is seen in terms of its shape and size at village Kheroni in Karbi Anglong, Fig. 60a, it has a bottle shaped body and a long neck and another type has a rounded body with a peculiar type of lid, available in Upper Assam, 60b.

For identifying design elements, some typical shaped baskets were considered in this study and presented in chapter V. A little detailed description of some products other than mentioned above manufactured for use in domestic purposes is given below,

Chalani (sieve)- It is woven with fine bamboo slips in a criss-cross way, keeping some open spaces between the different slips as required for different purposes. The 'chalani' is a round-shaped disc-like object and its diameter varies from 1½ ft- 3½ ft. It is used sieving rice, paddy, tea-leaves, etc. and also for washing fish.

Chepa - The chepa is made of some prepared bamboo rods according to required size. These are woven in a round fashion with jute string or soft cane slips. A bamboo-made valve locally known kal (Assamese) is fitted in the middle of the chepa to allow the fishes to enter inside with no scope for going out.

Dola (bamboo tray) - Dala is prepared out of flexible bamboo slips in twilled design. The shape of a dala is exactly like a disc with various sizes for different purposes. The edge around the dala is stitched in the same way as that of the edge of a tukuri or dukula, but the bamboo rims used in the edge of the dala is about 4 cm. The dala is used specially for rearing silk worms and for winnowing in addition to other domestic purposes.

Dhol (big measure) - The process of preparation of 'dhol' is just like that of the doon. However, it is much bigger in size. It is used for measuring paddy only. In the Cachar district, it is known as 'pura'. This is not generally bought or sold in the markets.

Doon (device for measure) - It is prepared in an almost conical shape with fine bamboo strips for measuring rice or paddy. Its holding capacity varies from 2

seers- 3½ seers from place to place. A ring is attached at the bottom to enable it to stand on the ground.

Dori - Fishermen in the rural areas of the state manufacture dories of various types. A 'dori' is generally rectangular. It is prepared out of small bamboo strips woven with flexible cane slips. A trap is fitted with a 'dori' in such a way that a bamboo-made screen is prolonged inwards from either side of the oval mouth and the pointed splints of the two sides interlock together.

Dukula / Tukuri (Big basket) - The shape of a dukula is exactly the same as that of the Khorahi, but the size and process of preparation is a bit different. The required shape of a 'tukuri' is made by bending the bamboo splits forming the warp gradually when the process of weaving with the weft is in operation. Fixing two or four flat bamboo strips strengthens the edge. The last stage is to stitch the edge along with those flat bamboo strips with some flexible cane slips. The size of a 'dukula' or a 'tukuri' is much bigger than that of the Khorahi and is used for carrying as well as keeping paddy, rice, etc

Duli (the big Basket) - The 'duli' is used for preserving paddy. The process of weaving is almost the same as that of a tukuri but the size of bamboo slips used is more flat and flexible. The dulis are much bigger than the tukuri and the shape is a bit different too.

Jakai - The 'jakai' is a species of wicker work shovel that is either dragged along the bottom or placed on the water bed to catch the small fishes which take refuge in it when the weed is trampled. It is prepared with bamboo slips, which are locally known as 'dai'. 'Jati' bamboo is specially used for making this particular implement.

Khaloi - The 'khaloi' is also prepared with bamboo strips. The strips required for the weft are very long, while those for the warp are short. The 'khaloi' is woven in the shape of an earthen 'kalasi' or pitcher with narrow neck. This is used for temporary keeping of fishes during hand-net fishing.

Khorahi (small basket) - Khorahi is made of fine bamboo splits for washing rice, vegetables, fish, etc. It is a small basket-like thing with provision to allow water and

dirt to pass out. The Khorahi is woven in plain and square form but is gradually bent in a round form at the time of final stitching by flexible cane slips.

Kula (winnowing fan) - It is prepared out of flat bamboo slips for winnowing purposes in different sizes and shapes. Twilled design is used for a kula. The edge of the 'Kula' is made strong by fixing of two sets of one-inch wide bamboo pieces wrapped up in flexible cane strips.

Paran- These are various cages or basket traps made of bamboo splits used for catching fishes. There are two kinds of 'parans', namely (i) 'uba paran' (vertical cage) and (ii) 'pora paran' (horizontal cage). These are provided with one or two valves or trap doors through which fishes can be easily trapped.

Polo - It resembles the shape of a dome with short stem of about 6" diameter open at the top. The diameter at the bottom varies from 2 ft-3½ ft. and even upto 4 ft. and the height varies from 2 ft. to 3 ft. It is prepared out of small bamboo strips fastened with fine and flexible cane slips. Polo is used for fishing in shallow water. The man who uses it hold it by the side of the stem, presses its rim on the mud, then pulls it back and lifts above or up to the level of water and again presses it as before while moving on through water. Whenever any fish is caught, he puts his hand inside through the stem to catch hold of the fish; julki is a small polo prepared in the same fashion.

Fishing Implements, Fig. 61 (Rohdholā, Bihlongoni, North Guwahati), Polo, Jakai, Khaloi, Chepa, Dori, Paran are generally used in catching fishes in shallow water. Apart from these contrivances, there are some other implements of design made of bamboo and cane, and are used for catching fishes in deep waters. These are locally known as gui, jhuti, dingaru, thupa, hogra, etc.

4.1.3 Textile

From the earlier references of textile history of Assam, which is briefed below, can be said that almost every family in Assam had looms to meet the requirement of the household. The looms were in fact the center of domestic economy, the only hope of salvation in an hour of distress or despair. Cotton manufactures, e.g., churia, chadar, barkapor, khania kapor and gamocha, were entirely in the

hands of women of all classes. Although women of respectability and position usually prepared only the finest fabrics, e.g., asu or asuli poreah, gunnah kotah, gai bonkara- resembles the muslins of Dacca. Weaving was done with handlooms. These were of the traditionally plainest kind. The different local varieties of spinning and weaving had been used in different parts of the province. Posted loom used in the plains were different from the hill tribes. The warp of hill tribes were tied up in split bamboo to the ends of which were fastened a leather strap which passed across the weavers. Comparatively the Assamese looms were in an advanced stage and suitable for the production of finer quality of fabrics of all kinds.

All manufactures were of course meant for the domestic consumption. In the absence of competition, largely quality of product was poor and export of cotton textiles was negligible. Cotton fabrics are turned out by the Assamese and some of the tribesmen. Amongst the Assamese fabrics, ornamentation were either knitted on the fabrics after the weaving or worked along with the weaving. Embroidery was done chiefly in muga silk or gold and silver wire (guna) by artisans called Gunaakatas, Fig.48 (Guwahati, Assam), but this workforce gradually disappeared with the arrival of gold and silver wires from Europe. The Assamese women knew the use of needle for ornamentation of various design and patterns from early times. They were also adept in the art of mixed raw materials; cotton mixed with silk. Endi or eri was woven with cotton. Rarely cotton was combined with pat silk, but often with muga; churi and riha of such materials were usually manufactured.

Handloom weaving forms a cultural constituent of the woman of Assam. In earlier days most of the cloth required for the family was produced in the family itself. Now the scenes have changed totally in urban areas. Mill products are gradually replacing the homemade products. Home made cloths are Mekhla and Patani (lower garment of the women), chadar (upper garment of the women), gamocha (towel), dhuti, bed sheet, eri (endi), etc. some of them have fly shuttle or throw shuttle and Assamese type loom. Throw shuttle loom antedates the fly shuttle loom. Villagers generally don't do spinning. They get mill-products yarn from the market. A few of them keep eri (endi) cocoons to produce eri (endi) cloth.

The designs of the textiles and motifs there in are tradition of the Assamese culture and they are initiated at the base level by the Sipini (weaver women) of Assam. Traditionally men folk of plains wear mill- made dhuties and small or big sized sola/fatua (shirt) and vest or eri-chadar. In villages, rich men use headgear. The Assamese young boys use on occasions headgears with their gomocha, which they tie to their hip, especially when they are dancing in Bihu to cover the waist with the dhuti. Some young men use Khaddar clothes. Assamese women use riha-mekhela-chadar. The long flowing skirt type cloth up to the ankles is known as mekhela and the upper garment is riha. The red coloured pattern at the end of the riha is graceful and symbolic to Assam tradition. Designs are also found in the pari (border) of mekhela and riha. It is said that the dress of mekhela and the riha chadar has been adopted from the Tibetan and Burmese women. However, some Assamese ladies have started using saree at home and outside, as it is cheaper than mekhela chadar. Ladies of Goalpara, Gouripur, and Dhubri area prefer sari for both outside and for home.

The below textile traditions of some communities are cited for their community specific character differences.

Boro- the Boro women of Kokrajhar, Darrang and Sonitpur use Dakhna Fig. 62 (Guwahati, Assam), which is different from Mekhela-riha-chador. Generally, dakhna has yellow green colour body with some design in red and brown colour. Ladies do not use headgear. The culture of Assam is incomplete without a description of the weaving culture among the Boros. The dress of the Boro is similar to those worn by the rural Assamese folks. The women wear Mekhela, Chadar and Riha while the men use dhoti and Chadars. In winter, they wear thickly woven endi Chadars. However, the design of their Mekhela is much simpler than those of Assamese non-tribals. Uses of colours are mainly yellow, red, black and white.

Dimasa Kochchari- The tradition of rearing silk cocoon, reeling and spinning into yarn and finally weaving into fabrics was a flourishing industry among the people of this tribe. The fabric produced by them was superior to any other Endi,

produced fabric woven elsewhere in the country. The dress reflects the culture of the people. This is true in case of the Dimasas too. A Dimasa man wears a Risha similar to Dhoti but it is deep green in colour. He uses a chadar called Rimsao beautifully designed to cover upper half of his body. Cotton or endi turban is the common headdress. A dimasa woman puts on a skirt known as Rigu similar to Assamese Mekhela or Meithei fanek. Either it is made of cotton or silk, may be white or coloured to cover her body below her waist. For covering upper part of her body, she uses a chadar very artistically designed known as Rijamphai, Fig. 63 (Kalakshetra, Guwahati). Another chador also very beautifully designed known as Rikhaosa used during dances or ceremonial occasions. The main colours they use for their textiles are green, black, and red, yellow with geometrical and animal motifs.

Mech Kachchari- is simple people. Their dresses too are simple. They use hand spun and hand woven simple dress. Men wear dhoti, turban and endi shawl or chadar. Women use a dress similar to Assamese Mekhela Chadar but much simpler than Assamese counter parts. The ornaments they use are also simple. Their dresses even during dances are also simple. Mech Kacharis are famous for rearing silkworm particularly endi or eri and the feed plant that is wild castor or Ratanjyot or era are grown as their hedge plant. While they earn by selling cocoons or converting into cloth for their own need, the worm are used as their food. They spin cocoons to get yarns and then weave yarn to get cloth. Method of spinning is however, primitive so also weaving. The loom they use is known as Kanti loom, which is made of bamboo. This loom is no doubt more productive than lion loom used by the Nagas or Kukies but certainly not as productive as fly shuttle loom. However, the spinning tradition is less among the Mech people. Main colour combination of their textiles is red, yellow, brown and white, Fig.64 (Kalakshetra, Guwahati).

Thai Phakes- In the place called Nharkatia of Assam; it is observed that the dress of the people of this tribe is used mainly for covering. There are two types of dress among the Phakes, namely general dress for every day use and special dress for particular occasions. Scanty ornaments are used. The dress of the elderly male is generally house woven chequered lungi (Fatong) of green and

black colour lined with red, yellow or white yarn, one genji, one shirt (Sho) of mill made cloth purchased from the market and a white turban (Fa Ho Ho). A white chadar (about 2 meters long and 1 meter wide) with a plain border (Fa Fek Mai) and white long sleeved shirt are worn by the elderly people when they go to the Vihar or to any distant places.

Assam is the home of several types of silks, the most prominent and prestigious being muga, the golden silk exclusive only to this state. Muga apart, there is paat, as also eri, the later being used in manufacture of warm clothes for winter, Fig. 65 (Kalakshetra, Guwahati). Every Assamese woman irrespective of caste, creed or religion is familiar to weave clothes on the loom. In earlier days most of the cloth required for the family was produced in the family itself. Now the scenes have changed totally in urban areas. Mill products are gradually replacing the homemade products. Home made cloths are Mekhla and Patani (lower garment of the women), chadar (upper garment of the women), gamocha (towel), dhuti, bed sheet, eri (endi), etc. The designs of the textiles are tradition of the Assamese culture and the Sipini (weaver women) of Assam initiates them at the base level. It has been observed in the village called sualkuchi in Kamrup district of Assam, almost 90 percent of the total population engaged themselves in weaving and spinning profession.

While conducting the field work for this present study, it has been found that some customers of today still want the traditional age old motifs, Fig 66 (Mongoldoi, Assam), for their collection, but of course, there is demand for new motifs in design from some customers. The weavers usually modify old motifs and colour applications according to choice of the customer and market demand and then try to give a new look to it; thus new motifs evolves, Fig 67 (Guwahati, Assam). For analysis, few traditional samples have been selected as visually appeared suitable to study and record their particularity details. This has been presented in Table 5.

4.2 Arunachal Pradesh

There are about 20 major tribes with a number of Sub-Tribes in Arunachal. For the convenience of the present study, few important tribes inhabitant of this hilly area of Arunachal were selected as per availability of materials to study and accessibility of them. To understand a common cultural base of this far northeast part of the Northeast region, the below references would be worth mentioning.

Mishmis form the majority of the population of Lohit, Upper Dibang Valley and Lower Dibang Valley districts. There are also the Khamtis, the Singphos and a few Adi settlements. The Mishmis are divided into three main groups namely- Idu or Chulikatas, Digarus or Taroan and Mijus or Kaman. A section of the Idu Mishmi is also called Bebejia Mishmi. Their women are expert weavers and make excellent coats and blouses. Agriculture is the main occupation of the people. By nature they are traders. Since very early days the Mishmis had relations with the plains of Assam.

The **Monpas** are friendly and possess a rich heritage of culture. They dress well in artistically designed clothes (Verrier, 1959). Their community life is rich and happy. They follow Buddhism and profess Mahayana Buddhism which centres round the Tawang Monastery. Each house has a small chapel attached to it.

The **Nishis** are the largest groups of people inhabiting the major part of Lower Subansiri district (near Zero). Their men folk maintain their hair long and tie it in a knot just above the forehead. They wear cane bands around the waist. Their dress and costumes are simple, and the religion is a form of the primitive 'spirit culture'. The Apatani and Nishis are the largest groups of people inhabiting the major part of Lower Subansiri district. A Nishi can be easily distinguished by his dress peculiar to his tribe. A neatly woven cane cap which they call as Bopa to be put on head, a knot at the forehead called Padum, with a cane basket looks like haversack call Nara, a smoking pipe in his mouth and a long Dao (long bladed knife), he looks like a proud man, proud of his race and tradition. The Nishis belong to the Indo-Mongoloid group and their language belongs to the Tibeto-Burman family. The Nishi villages are rarely found in clusters. The tribe as a whole is fond of hunting and fishing in which they perhaps excel any other

neighbouring tribes. The Nishis are almost entirely dependent on slash and burn cultivation, which is popularly known as Jhoom Cultivation. They cultivate rice in the slopes of the hills. "Apong" is the popular drink amongst the Nishis. Their life is full of rituals and festivals. A Nishi woman usually seen carrying a neatly woven cane basket for multipurpose use on her back called egin. One of the important festivals of the Nishis the Nyukum festival is observed every year with ceremonial elegance and splendour during the month of February where the people exhibit a full flavour of ethnic tradition.

The **Sherdukpens** are a small tribe. They are good agriculturist but their main interest is in trade. Their religion is an interesting blend of Mahayana Buddhism and tribal magico-religious beliefs.

The **Tagins** are main inhabitant of Upper Sunansiri district. Their main occupation is agriculture. Polygamy is appeared to be customary among them. Their dress is very simple consisting of only one piece of cloth.

The **Wanchos** inhabit in the western part of Tirap district, bordering Nagaland. They appeared to be carefree, cheerful and hard-working people. Head hunting was customary with them in the old days. It was connected with many of the social activities of the tribe. Their society is divided into four classes the Wanghams (chiefs), the Wangpana, the Wangaue and Wangaas. They have a strict sense of discipline and a village council maintains the law order of the society. The entire tribe is divided into about forty confederacies of villages. Body decoration by tattooing seems to be a social custom among them. They believe in the existence of two powerful deities, Rang and Baurang. The women are good weavers. These people are expert in wood carving also.

The **Khamtis** are believed to have migrated from the Shan states of Burma. They are the only tribe in Arunachal who have a script of their own, they are Buddhist (Hinayana cult) by religion, and bury the dead in a coffin. They include Khamyang tribe.

Arunachal Pradesh has a vibrant craft tradition and every tribe excels in artisanship. Cane and bamboo is an important craft of this area, and the

workmanship is of a very high order. Many tribesmen make their own required items; one of these is hat, which is often extremely decorative, beautified with the beaks and feathers of birds or with tufts of hair dyed usually in red. They also make varieties of baskets, bags and other containers. There is a wide range of cane belts, woven and plain, and in northern Subansiri, tribals have even elaborately woven brassieres of cane and fiber.

Facial tattoos are marks of a head taker, Fig. 68, various designs indicate the person's bravery in battle and number of heads he has taken. Head taking was considered to be 'the capture of souls, to add to the life village' bringing good health and bountiful of crops.

4.2.1 Crafts and Artifacts

A group of objects that are commonly used by the people of Arunachal can be categorised into three sections:

1. Defensive weapons: rain shield, helmets, headgear and shields
2. Items of dress: wristband, calflet, armlet, anklet, breast bands, etc.
3. Household articles: winnowing fan, hand fan, drying tray, etc.

Cane and bamboo is strictly men's craft. The most commonly made objects are baskets for storing and carrying food grains, fuel and water, vessels for preparing local liquor, rice plates, bows and arrows for hunting, headgear, mats, shoulder bags, etc., utility items. Ornaments and necklaces made of fine strips of bamboo and grass are also popular. Burnt pokerwork design too is executed on bamboo articles. The Bangnis, Apatanis, Hill Miris and Adis are experts in cane and bamboo work. They make beautiful baskets, bags, hats and even jewellery that speak eloquently of their skill.

The Nishis dye bamboo strips in black and these are specially used for making hand fans. The Noctes and the Wanchos mostly use dyed cane strips for their headgear, waistband, headband, armlet and fancy baskets used in dancing. Use of dyeing colours is limited. The most common shades are red, black and yellow. This has been found practiced in village Basti in Nirjuli. The Apatani waistband is dyed red. The Wancho and the *Nocte* headgears are invariably woven of red cane strips. Yellow and black colour occasionally noticed. The Monpas (tribe)

however paint their strips in a variety of colours of which red, pink, brown, yellow, green and blue are common. Besides, varieties of blended colours are also noticed.

The preference for a particular colour seems to depend upon the natural resources. The dyeing material is vegetable substance. The black and the red are the only colours, which could be produced out of known vegetables dyes grown wild in this region and hence their preference for these two colours. The Monpas however use modern paints and therefore varieties of blended colours are found.

It is noticed that the Apatani cane waistband or *awoo*, in spite of its constant use remains as it is without much wear and tear. To the Apatanis (tribe) dyeing not only enhances the beauty of the specimen but also it is considered as good preservative. The dyes have protective property as it keeps away insects and fungus from damaging it.

The bamboo and craft of Arunachal Pradesh is very promising. It needs an appropriate direction so that people may follow this craft; develop the capacity to produce more and more of it combining their own futuristic imagination and traditions. Exploration possibilities wait for this tribal craft to attain newness (in both design and productivity) and advent of new technology may assist in this.

The below are some typical items that are specific to Arunachal Pradesh.

Bamboo Comb

The Apatani, Hrusso (Aka) and Nishis use combs carved out of single piece of bamboo, Fig 69 (E. Verrier). Combs made of bamboo and decorated with poker-work designs. They are 7- 10 cm long. To make this a wide chip of a thin walled bamboo is used. The combs have coarse widely spaced teeth on one side and thinner closely spaced teeth on the other. A part of the nodal ring separates the two sets of teeth. The internal nodal ring is cut flat on the inside of the comb, and the outside ridge is retained as a decorative element. These combs serve both purposes, functional to comb hair as well as decorative.

Smoking pipe

Various types of smoking pipes made with different material bear different names do exist in this part of land. The Apatani smoking pipe is known as Sudhum, Fig. 70 (Itanagar Museum, Itanagar). It has a bowl to burn tobacco, which connects a tubular stem to inhale smoke through the other end. The bowl is made from a cane or wood called tarre while the stem is made from the reed bamboo called pepu. Burning, to remove the soft pulpy centre of the cane, creates the hollow of the bowl. A similar pipe is made by the Apatani where the bowl is seen to be made from bamboo.

The Nishi tribe of Subansiri District in Arunachal makes a pipe similar to the Apatani one, and is called Hutusilli. Palibos are fond of smoking and they make smoking pipes from wood and bamboo roots, but they also procure metallic pipes through barter trade from their neighbours the Bokars, the Ramos and the Membas. Elak-Tidu is smoking pipe made of wood. Ete-tidu is smoking pipe made of bamboo-root. Ra-Tidu is metallic pipe engraved and with a long neck. Ata-Tidu is smoking pipe made of silver.

Headgear & Rain Shields

The Yatee, the Apatani rain shield from Arunachal, is made in two parts, held together by long loops of twisted bamboo rope. The top part is rectangular. The second part is a flat rectangular piece that shields the back. Both parts have twisted bamboo straps that rest on the forehead. When the top part is not required, it is pushed back to hang suspended from the back shield by two long loops of twisted bamboo rope. Both parts are made with two layers of an open-hexagonal weave, sandwiching a layer of leaves between them to have an insulated effect. All the edges are held between two half splits of cane tightly bound together, Fig. 71 (Itanagar Museum, Itanagar).

The Monpa tribe uses a shallow conical hat to protect them from the sun and rain, Fig. 72 (Itanagar Museum, Itanagar). The hat is made in two layers. The outer layer is woven in close diagonal twill, while the inner layer is made in an open-hexagonal weave. To make the hat waterproof, a layer from the stem of a banana tree is dried and sandwiched between the layers. The layers are held together around the edge, which is sandwiched between two strips of cane, tightly bound

together. A braided bamboo headband is fitted inside the hat, which is held on to the head by a strap looped below the chin. Same techniques can be seen in Idu Mishimi hat, Fig. 73 (Itanagar Museum, Itanagar).

The Apatani and Nishi tribes of Arunachal use coiled hats that fit close on to the head like a skullcap is called bopa. The bopa is slightly conical in shape. These hats are decorated with twisted cane ropes, and a hornbill beak that is dyed red or black and yellow, Fig. 74 (Itanagar Museum, Itanagar).

The bolup is a hat used by the Adi tribe of Arunachal, Fig. 75 (E. Verrier). It is made by coiling lengths of cane to obtain a semi-elliptical bowl with a horizontal boat-shaped rim. The hat appears to be extremely sturdy, and follow a similar construction as seen in hats made by other tribes of Arunachal. The form and decorative elements vary, but the basic structure remains similar. In some cases, there are thick strips of cane that are tied onto the head as extra protection. In other hats, dyed wool or feathers are used as decorative elements.

Ornaments

Ornament making is another craft widely practiced in Arunachal Pradesh. Besides beads of various colours and sizes blue feathered wings of birds and green wings of beetles are also found to be used in decoration. The Akas make bamboo bangles and ear ornament which are sometimes decorated with pocker work designs. Most of the ornaments are made of beads, as the tribes seem to be very fond of it. While some people just hang strings of beads round their neck, others such as the Noctes and Wanchos weave them into very attractive patterns. The Wancho girls particularly are very expert in bead work. The designs and colour combination are superb. One Wancho girl received President's award for master craftswoman in 1985 for excellent bead work. Besides beads work the Wanchos make ear ornaments from glass beads, wild seeds, cane, bamboo and reed. Various ornaments of coloured glass beads hold a special fascination for the people of Arunachal Pradesh.

Silver ornaments are a specialty of the Mishimis, Fig.76 (Mishimi village, Along).

The Idu Mishimi women wear silver fillet necklaces with lockets and beautiful

earring. The Sherdukpens and the Khamtis at one time were also renowned for silver work. The Apatani women wear nose plugs made of cane which are an exception with the other people of the territory, Fig. 77 (Mishimi village, Along).

These are among few tribes in Arunachal Pradesh having their own colours, motifs and its legendary meanings in textiles. Functionally and in terms of design, the basketry tradition of this region is very rich. After going through the items mentioned above, it can be said that each of the artifacts possess an identity of its ethnicity and thus application of design elements are also community specific.

4.2.2 Baskets

The Monpas and Sherdukpens do make the use of bamboo but not to the extent as in other cultural areas. Bamboo is used for basketry. Basket making is a major craft in these areas. They produce baskets, grain holders, rice beer containers, haversacks, food plates, etc. from bamboo. From cane, they produce headgears, cane belts, anklets, chairs, tables, wardrobes, toys, etc. Their domestically produced articles from bamboo and cane meet all their requirements in basketry. Now of course the government to manufacture basketry on a commercial basis has established several centres. Throughout, the twill and hexagonal, both open and closed techniques of basketry are followed. Dyed cane or bamboo strips are generally used for various items of dress instead woven into a basket. It has observed while doing the field visit at Tangengso among the Apatanis, dyed cane strips are used for making a kind of waistband locally known as *awoo*.

Considering function, i.e. the utility as the basis, the whole range of basketry taken into consideration, can be conveniently classified into the following broad divisions: 1. Carrying basket, 2. Storage basket, 3. Receptacle, 4. Straining basket, 5. Decorative basket, and 6. Fishing basket.

Besides these, there are a large number of objects produced through basketry technique. These are used for miscellaneous purposes such as objects of personal adornment, dress, defence, etc. This group of objects may be classified as basketry objects of miscellaneous utility.

Classification of Baskets in respect to their shapes

- **Conical Basket**

Baskets of conical shapes are normally used for carrying purposes. These are commonly found among the Daflas, Hill-Miris, Tagins, Gallongs, Noctes and Wanchos (tribes). The dafla's conical shaped carrying basket, which is locally known as ege, Fig.78 (Itanagar Museum, Itanagar), may be regarded as one of the perfectly suited basket from technical point of view, as far as adaptation to the topography is concerned. Another feature of this Dafla basket is that it is more advantageous for carrying things.

Dafla villages are situated in the high spurs of mountain ranges. Their jhum (hill cultivation) fields, water sources and game reserves are located far away beyond the village limits. As a result, they have to carry their loads such as paddy, firewood, water tubes, etc., on their backs and climb high up the mountain. In this process with the basket on the back while climbing up, the carrier naturally has to bend in such a way as to form a 120-degree angle from the horizontal.

The portion of the wall of the basket that rests upon the back of the carrier is almost flat and straight and the portion just opposite to it bulges outward. The flat portion is slightly flexible to rest comfortably on the back.

- **Semi- conical Carrying Basket**

The carrying baskets of Padam, Miniyong, Pasi, Digaru, Mishmi, Sherdukpen, etc. (tribes), who inhabit in the foothills and flat valleys, reveal a uniformity in shape; they are neat and perfectly conical. Though these baskets have tapering outlines, yet they invariably have flat bases. Some of the baskets such as bye of the Padams and Egin of the Miniyong, Fig. 79 (Itanagar Museum, Itanagar), are provided with four short legs at the base. On the other hand, Mishmi carrying basket such as Thee, Fig. 80 (Itanagar Museum, Itanagar) has a short flat bamboo stand secured around the base by means of cane strips.

- **Cylindrical Basket**

These baskets are used for storing as well as for carrying articles. The baskets for storing grain in the granary have uniformity in shape all over in this region. These have perfectly flat bottom, round and straight outline. Normally these baskets are 3 to 4 feet in height and about 4 feet in diameter. Apatani carrying baskets are cylindrical in shape with flat bottoms. Womenfolk for carrying light loads such as vegetables, seeds, etc., normally use them.

Distribution of this type of carrying basket seems to be indicative of the influence of the climatic factor, as far as the state of Arunachal Pradesh is concerned. The best example to illustrate this point is the indigenous haversacks or flat wallets like baskets commonly found among the Tagins, Daflas, Hill Miris and Adis, Fig. 81 (Kalakshetra, Guwahati). This basket is flat and carried by means of two shoulder straps. The outer surface of some of the Adi haversacks, such as the *Nara* is slightly concave. This makes the baskets little more spacious. The very shape of this basket renders a natural protection against the rain. It prevents water from accumulation on the surface of the basket and helps the water to drip down slowly and gradually. These are sometimes lined with a kind of bark to make it doubly sure that the water is not absorbed inside.

The Dafla 'tali' is a perfect flat haversack. To make it rainproof, tama fibres are fitted on to the outer surface. Because of the flat nature of the basket, the tama fibres, Fig. 82 (Kalakshetra, Guwahati), are more effectively used to render the basket complete waterproof.

- **Basket with constricted mouth**

Most of the smaller baskets found among the Daflas, Hill Miris, Adis, Mishmis and Tangsas have usually constricted mouth in relation to the size of the body. They are almost round in shape. A good example of such a basket is the husak, of the Gallongs. The height of the basket is about 10 cm and maximum girth is about 20 cm. The diameter of the mouth is 5 cm.

The social significance of the objects of basketry-technique depends mainly on the symbolic value. All the religious structures such as altars, effigies, etc are constructed for performance of religious ceremonies and rituals are made of and decorated with objects of basketry technique. Effigies representing deities and spirits found among the Apatanis, Nishis, and Adis are made of split bamboo in basketwork.

4.2.3 Textile

It is not known when the people of Northeast learned the art of weaving. According to one of the legends, the art of weaving was learnt in a dream from the goddess *Podi Barbi* of Arunachal. A *Galo* song narrates a full story of how the cotton is grown, plucked, spun and how it is woven with cotton yarn in a loom. The song, which is sung with the dance by the village girls, narrates that in the olden days when the cotton was not grown and the people had not enough clothes, they started the cultivation of cotton. Thus weaving tradition among the people of Arunachal Pradesh is as old as the story itself. The women of this area are good weavers and they have a good colour choice and artistic designs of their own.

The colour and design have their symbolic meaning among some of the tribes of Arunachal Pradesh. The use of certain kinds of clothes and ornaments is often associated with a family's social position and achievements in the fields of hospitality and war. It is observed that though there has not been much external influence on the designs of the fabrics in Arunachal Pradesh, there has been some borrowing of motifs from the neighbouring areas. The motifs, designs and patterns, however are quite complex and their symbolic meaning and usages are rather significant. The elaborate processes of spinning, dyeing and finally weaving remind us of the rich discoveries of the women, who were supposed to weave respective clothes for their families.

While doing the field study in few villages of Apatani, Dafla and Idu Mishmi of north Siang area (Along) it has been found that Weaving is the occupation of the womenfolk throughout the territory. They are very particular about colors and have a beautiful sense of colour combination. The favourite colours are black,

yellow, dark blue, green, scarlet and madder (samples collected were discussed with few of their practitioners, which is presented in Table-5. It was done to understand their colour combination and proportion normally followed). Originally they used natural dye but now-a-days they switch over to synthetic dyes available in the market. The designs are basically geometrical type varying from a formal arrangement of lines and bands to elaborate patterns of diamonds and lozenges. These designs are sometimes enhanced by internal repetition and other decorations. The hill women are very particular of colour and insist on getting the exact shades they prefer, but dependence on outside markets inevitably modified their colour scheme in recent years. A number of natural dyes are known to be used, – black, yellow, dark blue, green, scarlet and madder. The dark blue and madder are generally fast and often give most attractive result.

A few of the woven products that deserves mention are Sherdukpen shawls; Apatani jackets and scarves; Adi skirts, jackets and bags; Mishmi shawls, blouses and jackets; and Wancho bags and loin cloths. Although fly shuttles are now being introduced particularly in the government run weaving centers, the traditional loin looms are still in use and the traditional textiles are products of these looms. Weaving designs in the hills are almost exclusively of an angular geometrical type, though they vary from a formal arrangement of lines and bands to elaborate patterns of diamonds and lozenges, enhanced by internal repetition, hatching and other decorations (E. Verrier, 1959). It has been observed that the Adis and the Apatanis concentrate on simple straight lines, while the Mishimi go for various patterns. Their designs sometime become little fussy due to break up of tribal authority and tradition in recent years, simplicity disturbed by the edition of fine elements of floral, animal and other ornamental motifs.

As mentioned before the Adis concentrate on simple lines. The Adis have great variety of patterns such as there are arrangements of red and black stripes on a white background; white and yellow stripes on a black background; alternate bands of red and black or of olive-green and brown; broad border-bands of brown with a central narrow stripe of black and white, the body of the cloth being with brown and white stripes at three inch intervals. The Adi bands, whether vertical or horizontal, are often enhanced by a sort of hatching- rows of coloured

dots, frets and single lines of different colours. Tiny vertical bars of red and black serve as space-fillers in the horizontal bands or even the narrow stripes. Different shades are achieved by mixing threads of black with other colours, and by closer or looser weaves. Red and tiny black lines on green background with cross and geometrical motifs are seen in bag design of Adis, Fig. 83 (Adi Basti, AP). Yellow stripes with geometrical motifs on red background are very common in Adi jacket design, Fig. 84 (Itanagar, AP). Accessories are observed to be social status based. Unmarried Adi girls wear a type of belt, and married women wear another. Among some of the Adi groups, there are special clothes for shamans (while acting as a medium between the visible and spirit worlds with beliefs for healing or divination), both men and women which are used only on ceremonial occasions.

The ApaTani concentrates on simple designs and simple straight lines. The ordinary Apa Tani cloth gets in effect from a use of broad bands alternating with narrow lines, nearly always horizontal. On a general base of blue-green, there may be, along the top and bottom borders, a series of bands varying from a quarter of an inch to nearly an inch in breadth, and these themselves have narrow red lines running through them. Within these borders, there are a large number of red lines woven to resemble frets, and down the center are narrow bands of black, green and yellow with red threads. Another Apatani style of cloth is green with borders of orange mixed with red lines and a few vertical stripes of yellow and diagonal stripes of green, blue and white, Fig 85 (Pasighat, AP), has been observed in an Apatani village at Pasighat.

There are hardly any curvilinear designs in tribal weaving, but in the remarkable Apa Tani priest's shawl there is genuine spirals, some of which are actually curved, Fig. 86 (E. Verrier). In general however, curves and wavy lines, which may be alternating upright and pendent triangles. There is a herring-bone design on the ApaTani Priest's shawl. Although ApaTani weaving is simple and straightforward, there is an attractive men's coat, black in colour and decorated with an over-all pattern of white diamonds and orange stripes interconnected and enhanced in various ways.

Mishmi weaving is more elaborate, though here too the straight line and band is in frequent use. In Tuensang, the most characteristic shawls generally have an essential design of stripes and bands of contrasting blacks, reds and blues. The commonest Konyak skirt gains its aesthetic effect by a combination of a large number of narrow horizontal lines of red, black and white set at varying distances from each other, or by alternating red stripes with groups of black, yellow and white lines, Fig. 87 (E. Verrier).

These single or multiple lines and band motifs are the simplest of all and naturally the easiest to weave, sometimes they serve as borders for more complicated designs; sometimes they form the entire pattern in their own right. In their simplicity and directness, there is something very satisfying, and by the rhythm of frequent repetition, they produce an effect not unlike that of the rhymed decasyllabic couplet in verse. This may not always reach the heights of the romantic lyric, but is a very serviceable means of conveying ideas. It is among the Mishmis especially the Idu Mishmis that diamond designs have been brought to the highest degree of elaboration. They are woven on shawls, skirts, coats and bags, diamond within diamond, diamond plain and diamonds decorated, diamonds arranged in every possible combination.

These designs in which the diamonds huddle, as it were, within each other seem to symbolise the strongly introverted Mishmi temperament, which draws within itself and is lacking in a social consciousness. There is an Idu Mishmi border design of alternating triangles, each with internal repetition. Rows of opposed triangles meeting at the tips and forming lozenge motifs between them are a common feature of Mishmi coats design, Fig. 88 (E. Verrier). In inexperienced hands, these pairs of triangles get separated and look like hourglasses or cane stools. The cross is a popular design among the Mishmis. On Taraon Mishmi bags and skirts, a grid pattern is so coloured to form crosses composed of five squares.

The designs of Kaman and Taraon Mishmis are of extraordinary variety. In the Khanlang Valley where every one of the five hundred inhabitants are clothed from head to foot in hand woven cloth, not even a single pattern is exactly duplicated. Some designs are interpreted as a frog, the human figure with head,

a narrow waist and legs, the head of a Dao, an eye, scales of fish, clouds trailed across the sky, a river and the rainbow. A row of chevrons signified the marks on the body of a snake, and the interesting pattern of rows of very small pink triangles with a white filling represented teeth visible when the lips are parted in a smile. The very diamond design, traditionally initiated by divine invention, is sometimes related to the markings on the cobra, and the eye design may possibly have evolved from the 'spectacles' on its hood.

The Wanchos, are learnt, allow only members of the chiefs' family to wear a certain type of blue head on the arms, legs, and have special design for their headbands (specimen not available). There are certain kinds of bags that can only be carried by members of a headhunter's family. The designs found on the Wancho bags are triangles closely associated with grid and diamond patterns. The Zigzag patterns (Verrier, 1959) are very common on the Wancho bags, Fig.89. These are made in rather loud and gaudy colours. The Zigzag patterns among the Wancho are said to represent the natural aggressive and forceful temperament of the Wanchos. On the Wancho, bags the herring-bone designs are also found. The Lozenge or the diamond patterns are found on the Wancho bags. These are either found in horizontal rows and linked together or as unconnected pieces, when they may represent leaves. Triangles are, of course, closely associated with grid and diamond patterns but they often occur by themselves. These are found rarely on the Wancho bags. Human figures are rarely woven. They are shown rather realistically on Wancho bags and sashes where the simple geometric designs are certainly associated with head hunting.

Typical designs and motifs carry some kind of mythology. On the Hrusso textiles, Chinese fence design is very common. The Hrusso say that it represents the Jana flower. This flower is said to have been named after a great Tibetan king, so great that he had the power of talking to the sun. He had an enormous palace opens on all four sides, and could accommodate the sun within it. Everyday he was born at the rising of the sun; by midday, he grew into a youth: by evening he was old and went down with the sun into darkness. The next morning he was born again. When he left the earth, the many coloured Jana flower sprang up in his place.

Among one of the typical designs of the Hrusos said to be the sun surrounded by its corona (Specimen not available). The story behind this is that when the sky and the sun were first made it was very hot, so the God made the clouds to give men shade. When sunshine is needed, the clouds give the sun food to please him and persuade him to shine brightly: this food is the corona represented by the horizontal lines extending from the central body of the design. Not everybody could wear any cloth among the Hrusos. Among the Hrusso aristocracy alone could wear the Tibetan knobbed hat, and in the past, there were restrictions of the use of silk.

The Sherdukpen women are skilful weavers. There is no fixed place for weaving, nor a fixed structure required to be used as loom. The articles woven are mainly attractive coloured bags with geometrical designs and rectangular pieces of cloth called Bogre, which are used for carrying things. The yarn is obtained from the plains and sometimes is manufactured locally from the bark of plants known as hongchong and hongche. The local yarn prepared from hongche is strong and is used for making fishing nets and bowstrings. The bark of hongchong is poisonous, and as such, women cover their hands with cloth when removing the bark, which is then soaked in boiling water, and washed several times until it decomposes and becomes pulpy.

Among the Sherdukpens some of the designs revolve around some of the stories of tales like the popular ones narrated is that "a girl falls in love with a snake, who is a handsome youth in disguise. In his snake form he coils himself in her lap as she weaves; she copies the markings on her lover's body and is soon making the most beautiful cloth that was ever seen". Among the other popular designs among the Sherdukpens are the stylized peacocks carrying a baby bird on the back, the elephants with riders, and flowers that are combined with geometric forms (specimen not available).

The Sherdukpens wear a bog cloth over the shoulder and serves as a sort of knapsack. Its central motif is always a right-pointing swastika, round which are a number of subordinate patterns which vary considerably. The colours are red, blue, black and sometimes green and yellow on a white ground. Most of the

weavers have forgotten the meaning of these symbols, but a few of the older women remember them; their interpretation varies from village to village. Several of these designs were either interpreted as flowers or as shrubs which supply the black juice used for painting beauty-marks on the faces of young girls. The lines projecting from the main design are said to be the thorns of the plant. A Chinese fence design is generally used as the upper border of the Sherdukpen bags. The Sherdukpens explain this as the fence dividing their country from China. The prevailing colours of these bags are red, white, and black, yellow with little green, Fig. 90, (E. Verrier, 1959).

The women dress themselves in loose, collarless and sleeveless shirts, which cover the body from shoulders to knees. Over it they sometimes wear small full-sleeved coats made of mill-cloth. Like men women also tie a coloured sash, known locally as muhkak, round their waist. Sherdukpens generally go bare foot, but sometimes use Monpa shoes. Some Sherdukpens, especially those who have come in contact with the outside world, have given up a part of their original dress, and are now wearing coats, collared shirts, woolen pyjamas and canvas shoes.

Weaving is also a traditional occupation of the Singpho women, and they are well versed in this art, as in the art of dyeing. A Singpho house seems to be incomplete without the loom in the front of it. All the women irrespective of their age including the young children know weaving. They grow cotton in their house and spun the yarn themselves. They use lion loom similar to those of the Khampti looms. Their most favourite yarn is Assamese Muga, purchase cotton yarn to weave their everyday use clothings. As the dresses made of muga yarn are costly, it is observed that, they use such dresses during ceremonial occasions only. Their favourite colours are red, black, green, yellow, orange and violet, Fig. 91 (E. Verrier).

Mostly Singphos use home made dress. The men's dress consists of a lungee, woven in square in check pattern, with yarns of various colour, a jacket and a turban. The men's lunges are of three different kinds:

1. Patep: woven with red and black yarn, the quality of white yarn is more;

2. Bamo: made of Muga yarn of bottle green, violet sky blue, black and green colour; and
3. Pachang: made of black, violet, white and green yarn.

The Singpho men keep their hair long, and tie it in a knot on the top of the head, when they wear the turban. The dress of the women consists of a beautiful designed scarf, a waistband, and a turban. The women skirt is called Pukang. Different kinds of skirt they weave, which have different names, depending on the size of the stripes and the colour of the yarn. The different skirts are:

1. Mikheng Pukang: this cloth is woven in red, black and green yarn. The red and black stripes are broader than the green ones. The texture is coarse.
2. Mathat Pukang: ground of this cloth is black with intermediary thin white stripes.
3. Mukiya Pukang: the ground of this cloth is black and thin stripes of green and violet. It is of Muga Yarn, and is used only on ceremonial occasions. The Singphos do not have separate ceremonial dress, but in marriage the bride and the groom, put on a huge long cloak over their dress, decorated with beautiful design. They do not make it themselves but seem to procure from neighboring Burma.

It has been observed during the field trip that the different tribes of Arunachal Pradesh have different weaving patterns and designs having their own symbolic meaning and a legend behind them. This phenomenon is almost common to all other states too. Apparently it is found that basic design elements in Arunachal are mostly geometrical in textiles of this area; those are:-

- Rhombus or diamond
- Zigzag patterns
- Straight lines or strips
- Animal and human motifs
- Floral motifs.

4.3 Nagaland

The Nagas differ widely in dress and other cultural traits, as well as in physical features. They belong to Mongoloid origin but there are great differences in the details between one tribe to other, as well as between different people of the

same tribe. Some are tall and some are short. Some are yellow in complexion and some are even brown. They speak many languages. The cultural traditions of the Nagas include features which are common to all the tribes like head hunting, common sleeping house for unmarried men which are taboo to women, a sort of trial marriage, or great freedom of interaction between the sexes before marriage, disposal of dead on raised platforms, the simple loom for weaving cloth etc., (Jacob, 1990).

4.3.1 Crafts and artifacts

Nagaland is an important part of the colourful culture of India. The forests of Nagaland are rich in bamboo and cane. Thus, naturally they are expert basket makers. Basketry among the Nagas is highly developed. However, the craft practices are restricted to men. All Naga men know how to weave mats of split bamboo, which is the chief material besides wood for constructing walls and floors of houses. They produce finely woven mats, and it appears to be very important in daily life, e.g., for drying paddy etc., household activities. The working tools are of primitive types consisting of the dao, the axe, the adze and the chisel.

The crafts and artifacts of Nagaland are inseparable for they are mostly associated despite their utilitarian aspects, with socio-religious rituals and ceremonies. Wanchos, Konyaks and Phom tribes are some of the finest wood-carvers in the entire frontier area. The practice of head hunting which was of fundamental cultural and religious importance has completely disappeared. However, substitutes have been devised. Like the Wanchos still have the custom of hiding a wooden dummy in the fields of old enemy; the young men hunt and kill it only to return in triumph and get ready for marriage.

Decoration and myth

The art of decoration follow social respect, belief and rituals. In carving the human figure as decorative piece emphasis is laid on the head by the artists. The features are carved in low relief and are realistic. The tops of the head are round and usually have some indication of haircut. Tattoo marks are carefully represented; most figures are dressed up with little bits of cloths and even ornaments, and with tufts of hair or beads in the ear.

A second important source of inspiration is the need for decorating the morung, Fig. 92a (Kohima, Nagaland), for the purpose of prestige and magic. The morung is the centre of male social life; it is a dormitory for the young unmarried men. Morungs are guardhouses, recreational clubs and centres of education and have an important ceremonial purpose. Some of the contemporary Architectures have inspired by Morung, Fig. 92b (Kohima, Nagaland). Morung may vary in function and size from tribe to tribe. There is no single pattern of architecture for the building. Morung pillars are adorned and carved in high relief in large and life size with human being, tigers, elephants, hornbills, pythons, mithuns and other designs. According to a Konyak belief carved tiger in morungs means the boys would be ferocious, elephants to make them strong and hornbill to make them fertile.

The third type of images is associated with the funerary procedure. Whichever way the tribes may find to dispose of their dead, the tomb is surely made, which is loaded with the possessions of the deceased. Wanchos, Konyaks and Phom tribes still make wooden effigies for their dead. Some of the effigies are provided with horns on either side of the head. It was the practice for the skull to be placed between them so that the soul might pass into wooden figure. The skull is removed later and given its final resting place in a special pit lined with stone or in sand -stone urn or pot carved with figures of men and animal. After the proper rites have been performed the image ceases to be `live` and can be thrown away. The mortuary art is generally crude. Only occasionally is there any attempt to carve the entire figure.

Ornaments

Traditionally, it is observed that, both sexes enjoy wearing colourful ornaments. Their creative imagination lies in amalgamating the seemingly foreign objects to their own use with admirable inventiveness and taste. It is even seen that, broken tumblers of thick glass were turned into ear ornaments and colourful glass red beads were threaded on cords of local fibers fastened by coins can also be Ao's ornaments, Fig. 93 (Jacob. J, 1990). The different coloured beads in indigo, orange and purple blend well with other ornament and give it a typically regional

flavour by Angamis, Fig. 94 (Jacob. J). Fish shaped necklace and bangles are seen to be typical ornaments of Nagas, Fig. 95 (Mon Village, Nagaland).

The beauty of Naga bracelet and bangles is exquisite. These are a fine example of excellent quality. Sawed from the wide end of tusk, then shaped and stained to bring out the superb grain of the ivory and rubbed against wearers' skin until the inner edges took on a jewel like transparency. Many traditional items of ethnic communities of Northeast are presently not available. Various items I am mentioning here of Naga uses also not available, very few may be available as antique items, e.g. the natural seed comb, Fig. 96 (Mon Village, Nagaland), combing hair.

Bamboo Dish

A cheaper, lighter dish made of bamboo is seen in every house. A section of bamboo free of nodes is cut and shaved down until it is very thin. Then it is split down on one side and warmed over the fire, until it opens out flat. Two slits are then cut at each end and the ends are folded up like the ends of a paper parcel and laced in place with cane, Fig 97 (Waromong Village, Nagaland).

Bamboo Saucers

Bamboo saucers, with legs to make the surface high, are used as appetiser dishes to hold the salted beans or hot chutney, which are eaten when drinking rice-beer, Fig 98 (Mon Village, Nagaland).

Angami Naga Bamboo Spoons

The Angami Nagas, like several other hill tribes, use spoons of varying sizes shaped from bamboo. A bamboo culm of diameter around 40 mm is shaped so that one nodal diaphragm is retained. A thick split extending from that node is shaped to form the handle and this split is bent slightly away from the axis of the culm for convenient handling. The lower part of the node and diaphragm are shaped by scraping with a dao, to create a soft rounded form.

Chang Bamboo Mugs

Among the Changs, who have an aesthetic sense more highly developed than their neighbours. The bamboo drinking mugs decorated with pokerwork designs called dobu thung- dobu means decorated, thung means mug- were originally made exclusively for the use of head takers, Fig. 99 (Longkum village. To burn the motifs on the body of the mug and the decorative pattern on the edge it takes the maker at least three hours with short intervals while working.

Since head-hunting had stopped, these decorative bamboo mugs are used only by rich men who can buy them, or it is reported that, anybody willing to exchange one for a basket of paddy weighing about 15 kg, or for labour. A maker of this kind of drinking mug may even demand the tilling of a full field of paddy in exchange of one mug.

Bamboo Combs

Small decorative combs of bamboo splits are made by Chang men as a gift normally to be given to girls, Fig. 100 (Kohima, Nagaland).

Ceremonial Headgear

The Ao Nagas use a decorative ceremonial hat, which is cone-shaped, Fig. 101 (Art and Culture Museum, Kohima). It is made in two layers, the inner layer provides the structure and the outer layer is mainly decorative. The outer layer is made from dyed strips of bamboo or cane, and decorated with yellow and black strips. The yellow strips may be bamboo or cane, but more often, they are the skin of an orchid stem, which turns bright yellow when dry. The red and black dyeing of bamboo and cane using natural dyes is the most significant aspect of these hats. The process of dyeing differs slightly from tribe to tribe.

4.3.2 Baskets

The story of the first use of baskets is lost in the remote past. The Ao folk tale about the origin and development of this craft runs as: Once, there lived a magician, who was known by the name Changkichanglangba. In his lifetime he used to perform miracles. When he was alive, he used to tell the people that if they open his grave on the sixth day after his death, they would discover there

something new. On the sixth day, after his death, when the grave was opened out, all the designs and patterns of basketry work were found here. The people copied it and started practicing it.

Baskets of very fine designs are in wide range with different shapes and sizes, used for different purposes, such as containers for crops and other house-hold goods, and packages for carrying luggages and merchandise. Baskets range from rough little receptacle made in a few minutes into which an alive chicken is rammed for a journey, to the carefully woven baskets in which rice is carried from the fields. Japa, a package with lid, hexagonal in form is popularly used all over the state for traveling. There are other kinds of baskets bearing symbolic expression and having numerous engravings.

Baskets normally are usually of two kinds, one to be kept in the house for storage purposes and the other to be carried on the back for day-to-day use. The Angamis are rather experts in producing several varieties of bamboo and cane works. Baskets are of all shapes and sizes from the rough little simple designs prepared in a few minute into a complicated pattern, carefully woven baskets for carrying rice, or keeping wine in bottles, etc.. As such there is no devoted group of people as professional basket makers. Almost every man can produce baskets for his own domestic use. Some of them are so skilled that they can make rough open-work basket for temporary use in an unbelievable short time, and throw it away aside when done with. Baskets meant for permanent use all over Nagaland are usually woven in a checker-twill pattern or open-work pattern in various sizes, resembling the cane seat of a chair.

The Ao basket is conical in shape, Fig. 102 (Art and Culture Museum, Kohima), while the Angami basket is cylindrical with the mouth wider than the base and the base has legs, Fig 103 (State Museum, Guwahati). Conical carrying baskets, akhi and akha are seen to be common. Every household possesses several flat-bottomed big baskets woven in twill pattern into which rice beer is strained. These baskets are so closely woven that can even be compared with water-tight. Chakhesang and Angami Naga carrying baskets are especially well known. The baskets used by Chang women to carry balls of thread while knitting is also beautiful. Konyak baskets are decorated with figures and hair or feather, Fig. 104

(Art and Culture Museum, Kohima). Some lidded baskets are very intricately weaved for keeping household items or valuables. These are seen to have dome shaped lid with square top with beautifully knitted structure. These baskets with lid and legs are considered as most beautiful among the Nagas, Fig 105 (Art and Culture Museum, Kohima).

4.3.3 Textile

Nagas are versatile artisans and they leave an impression of ethnicity on most of their objects of everyday usage especially in textile. The dress materials for everyday use produced on the primitive looms by the female folks are a visual delight. The process of weaving is a very slow method and tedious, and therefore the end products are usually expensive. In some tribal communities each member has the right to put on decorative attire and jewellery signifying his or her belonging to a certain ethnic group. There are others where only those who distinguished themselves by virtue of their deeds or those who desire to indicate their high social statuses are privileged to wear special attire and put on personal ornaments.

Among the Nagas two categories of clansman until the recent past had the right to adorn them in a particular way- the head takers and the givers of ceremonial feasts. In many cases not only they but their wives and even members of their families were entitled to wear distinct items of dress. The insignia and achievements fall into two categories:

- 1) Those concerned with head hunting, and
- 2) Those concerned with feast of merit that were a demonstration of an individual's level of prosperity and some gift of it to the community.

The Nagas set great value on their costume worn on ceremonies or festive occasions, though some pieces were for everyday use. The insignia (badge worn to show socio-official position within community) were highly desirable to wear. Only through specific display of achievements the right to wear them is gained. The type of body cloth worn by men and women differs from one Naga group to another. The design and colour, which varies not only between the tribes but also sometimes between clans of the same tribe and between different villages,

records the wearer's position in society. There are around 16 tribes in Nagaland and each may have its own distinctive design and colour combination. Each may have different designs for special occasions. The important tribes are: Ao, Konyak, Sema, Angami, Chang, and Rengma. Some of the designs and symbols used in textile applications are discussed below.

The designs vary from a formal arrangement of lines to elaborate patterns of diamonds and lozenge shape. Simple straight lines, stripes, squares and bands, varying in width, colour and arrangement are the most traditional design and motifs. Naga women are great experts in the choice and combination of colours. Each tribe is believed to have own patterns with simple, clean lines, stripes, squares and bands being the most traditional design motifs.

The decorative warrior shawl Tsungkotepsu, Fig. 106 (Kalakshetra Museum, Guwahati), is one of the most characteristic cloths of the Aos. This is an exclusive male shawl and could be worn only by one who has taken heads in war or offered mithun sacrifice (a feast of merit performed in Naga society by rich men). On a general dark base, the cloth has a median white band and on either side of it are horizontal bands of contrasting black, red and white. The median band is painted with a pattern in black which includes figures of mithun symbolizing wealth of the owner, elephant and tiger to symbolize valour of the man, human head representing success in head-hunting and a few other things like spear, dao and cock.

Another example of most decorative item can be cited is a shawl worn on festive occasions by rich people known as Rongsu shawl, Fig. 107 (Jacob. J.). Dog's hair dyed in red is woven at regular intervals to make the shawl appear shaggy in spots. This shawl with thick bunches of dog's hair, and edged with tassels of red and black goat's hair ornamented with cowries. These Ao cloths are the most difficult to earn the right to wear it; it only can be worn by a man whose grandfather and father have both done the mithun sacrifice feast and who has done it himself.

The Ao women's skirt type of dress consists of a cloth nearly one and a quarter meter long and about two thirds of the meter deep wrapped round the waist with the top outer corner tucked in just in front on of the left hip. It is impossible to describe all the varieties of skirts for they vary from village to village, clan to clan in the same village and even family to family. The Ao skirts include: Azu jangnup su mostly of red and black stripes with little yellow in the black stripes, Ngami su or fish tail skirt. Yongzujangau or cucumber seed skirt is woven in red on a black background, Fig.108 (Kohima, Nagaland).

Another important Sema skirt is asukeda pi, with squares of red dyed dog's hair and circles of cowrie shells (one type of tropical marine gastropods of the genus *Cypraea* having highly polished usually brightly marked shells). The large tassel worn over the shoulder is decorated with cowrie shells, interlacing yellow orchid straw, glass beads and beetle wings, which indicate the owner had taken heads as given feast, Fig. 109 (Jacob.J.). The Angami are one of the biggest Naga tribes. They are handsome and hardworking people living chiefly on the products of the fertile terraced fields generations ago on the hilly slopes and in the valleys around their villages, and by hunting. The Angami women are expert weavers. There are several varieties of cloths worn by the Angamis, the predominant pattern with white with red and black bands called Loramhoushu, Fig. 110 (Mokokchung, Nagaland), and black with red, blue and yellow bands called lohe, Fig. 111 (Guwahati, Assam). The Angamis have only one cloth distinctive of social status namely phichu-pfe worn by the priest. Another kind of cheap shawl used by men and women for rough wear is a black shawl called ratapfe, Fig. 112 (Kohima, Nagaland).

Men invariably wear a kilt type of traditional dress, which is a plain black cloth. This kilt is generally embroidered with cowries in three or four lines, the real significance of which is rapidly changing. In olden days, three lines of cowries signified that the wearer was a warrior, and four lines of cowries signified that the wearer was a celebrity. The cloths principally in vogue among the women are a plain blue cloth and a white cloth with black marginal bands of varying width, but they are more frequently seen wearing the men's cloth. The ordinary dress of

Angami women consists of a petticoat called neikhro, a sleeve less bodice called vatchi, a white skirt called 'pfemhou'.

Weaving was comparatively less practiced in Sema villages than all other neighboring tribes, in recent years the Sema women have been producing shawls and skirts that have been admired for their delicate colourful patterns even outside Nagaland. One of the commonest Sema cloths, akhum, is black and green with three or four red bands, Fig. 113 (Art & Cultural Museum, Kohima). Akhum may be decorated with several designs and can be worn by rich men. Sema warriors of note wear a cloth called avi-kiyi-phi. A rich Sema, who offered that feast of merit by killing mithun, may also wear this cloth. In some of the Sema villages a handsome cloth of broad black and white strips called nisuphi is worn. An ordinary cloth commonly worn by Sema women and girls without any restrictions is called lototsu.

Rengma Naga cloths come with various patterns. The differences of the various types of cloths are all the more important, particularly being indicative of the status and position of the weavers. A man who has neither been able to offer any feast of merit nor ever taken an enemy head wears an ordinary type of cloth called rhikho. It is white with four narrow black bands. This is worn by young and old alike, the only difference that the numbers of black bands are reduced. Another kind of cloth for which no ceremonies are required is a dark blue one with a very broad median band embroidered with a thin zigzag pattern in red at the edges. This is essentially a young man's cloth. It is called the Moyet tsu. Alungtsu is a cloth for well-to-do men. It is worn by men who have not yet offered a great feast of merit marked by setting up of monoliths. Teri Phiketsu is another Rengma shawl for which the performance of head hunting ceremony is essential.

The Konyaks have a few varieties of clothes. A remarkable shawl worn by the village elders in important meetings and conferences is called nye-myon. Another white shawl worn by women is called Nikola. In the mid portion, there are two narrow black lines at a distance of nearly 4 cms between which a lozenge pattern in red is woven. Colorful and handsome shawl called shatni normally worn by rich konyak women, Fig. 114 (Kohima, Nagaland). When a rich man's daughter

marries, it is their custom that she would be presented with a shatni shawl by her parents. She would simply preserve this particular shawl which would be used to wrap her body on death.

Another aristocrat shawl that generally used by the konyak chiefs (Ang) and elders of the village is called meyni. It is a combination of broad black and red bands alternately. Another shawl worn by village elders is called Hompani, which is nothing but a meyni cloth devoid of cowries and woolen fringes. Rich Konyaks wear a handsome cloth called nyauni, which is a combination of red bands and red lines.

Above mentioned samples of crafts and artifacts are only representative samples, selection was base on their commonality of features which has become easy to comprehend for this study and thereby these have been described to understand their basic characteristics to confirm design elements.

4.4 Manipur

Manipur is the land of rich valleys surrounded by beautiful hills and lakes. Many legends tell us the origin of Manipur (Bahadur. M., 1997). One of the legends is that Krishna requested Shiva to keep a watch while he danced the Ras with Radha and Gopis, Parvati on seeing Shiva protecting a particular spot was curious to see what Shiva was protecting. On her insistence, Shiva permitted her to see the Ras. She was so charmed by Krishna's dance that she decided to perform the Ras with Shiva. Shiva searched for a place high and low for a beautiful and a secluded place for dancing the Ras with Parvati. He saw Manipur surrounded by mountains, its beautiful valleys covered by a sheet of water. With his trident, he stuck the mountain ranges making a path for the water to flow out. The valley of Manipur emerged and Shiva and Parvati danced on it.

Manipur is a place where different groups of races and culture met through the ages, which ultimately mingled together. The territory is divided into two distinct zones- the valley and the surrounding hill areas. The main population of the Manipur is Meities and is popularly known as Manipuris. They have their own identity in respect to that of other Northeast populations. The name Meitei has been derived from the word 'me'-man and 'thei'-separate. The history of the

Meitei society, their customs, traditions, religious beliefs, art, culture and rich literature are laid down in their old manuscripts like 'Leithak Leikharol'. The Meitei speak Manipuri language, which is in Kuki chin group. They are divided into seven endogamous groups locally known as 'Salai'.

4.4.1 Crafts and Artifacts

In Manipur, cane and bamboo crafts was widely practiced by practically every household in the valley and in the hills. A variety of products in different designs and patterns for various purposes are made, covering almost everything required in a simple living. Bamboo has become an integral part of a villager's life, as it is associated in all ways with the everyday life of the rural people. Unfortunately, the practice of this craft has now diminished considerably. Generally, people make only those things that are required in their day-to-day life. It is normally after the sowing and the harvesting seasons that people sit down in making those few things essential to them. These items of general use are normally not for sale in the markets. However, with the changing times and a need for earning money to survive, local craftsmen have begun to make and sell in the markets those things that are required in everyday life, plus other decorative items.

Headgears and Ornaments

Bamboo and cane splits are compulsory components for structuring the basic forms of the headgears and ornaments, Fig. 115 (Imphal, Manipur). Tribal men folk use a headgear, woven with cane splits, which is made to fit neatly like a cap and which they wear when dancing. The Kharam tribals decorate their ears with flowers made of bamboo. The tribal people also decorate their arms and legs with Khudangyai or wristlet and Khubomyai or anklet respectively. Both the Khudangyai and Khubomyai are made of cane. Besides being a form of decorative ornament, the Khudangyai and Khubomyai both serve as protective gear in battles, fights, etc.

Musical Instruments

The tribal people in the hills use a wide range of wind musical instruments made of bamboo. These are mainly played with the mouth. Conch shells are seen to be used in auspicious occasions, (Fig. 115). The Lambang tribal devised cut tubes of

a small variety of bamboo to make a flute-like-wind musical instrument called Puleh, Fig.116 (Manipuri Basti, Guwahati). This instrument has 4 to 7 holes. The Maring tribe too uses a similar musical instrument called *Tour*. The Koms call it Theibe. The Thadou tribal cut three tubes of different lengths from the same bamboo stem and the tubes are separately blown with the mouth to produce different musical notes. The Thadous call such musical instrument Theiphit. The Lambang tribal use a peculiar musical wind instrument called Relru, which is a one-meter long hollow bamboo tube with an attached projection in the middle, through which one blows with the mouth to produce musical notes.

Almost all the tribal groups use a musical instrument made of four to five bamboo tubes of uneven sizes that are joined together, the smaller tubes being partly inserted into the bigger tubes. The instrument is played like bugle. The Lambang tribal make use of both the hard outer layer or skin of the bamboo and the pulpy inner layer to make a musical instrument. The necessary length of both the layers is around 30 cm. Many of the tribal groups configure fine bamboo splits or Playa to make an interesting musical instrument that is played with the mouth. The paya dimensions are 15 cm long and 1.5 cm broad.

Pottery

Pottery in Manipur is closely related with social, cultural and religious life. Women practice the art of pottery making in Manipur without using wheel in a similar fashion as in the other near states. The pottery is used for ritualistic and domestic purpose. Ritualistic-During childbirth, the placenta of the newly born child is cut-off and kept inside a small earthen pot (Chaphu). The Chaphu symbolises purity and sanctity, (Bahadur. M., 1997). Present day pottery has excelled in shape, size and decorations with varieties of colour applications, Fig. 117 (Imphal, Manipur). Colour of the pottery in Manipur may be categorised specific to tribes as under:

1. Nungi village in Ukhrul district, Tangkhul tribe: glossy black;
2. Oinam village in Senapati district, Poumai tribe: dull black in colour;
3. Andro village in Thouble district, Chakpa tribe: brick red with coat of blackish maroon colour;
4. Nangpok Sekmai village in Thouble district: red ochre colour;

5. Chairel and Thongojao village in Thouble district: red ware;
6. Ningthemeha Karong village in Imphal west district, Meitei: Grey ware; and
7. Leimaran village in Bishnupur district, Chakpa makes pots for ritualistic occasion.

As per mythological belief the earthen pot metaphors the womb for creation.

4.4.2 Baskets

Manipur is also well known for its beautiful baskets made by the tribals for their own use. Intricate patterns with dyed bamboo are worked on these baskets. A special feature of Manipuri basketware is the variety of bamboo fish traps, which are so exquisitely crafted as to be almost sculptural. One cannot imagine the cultural life of the people living in the valley and the hills of Manipur without bamboos and their products. Manipuri baskets are very intricately designed compared to other parts of North east. Below are some examples of the traditional basketry.

Chengbon- basket has a domed lid made of bamboo and has square body of checks and squares in black and white, and rest on four prominent legs, Fig.118 (Manipur State Museum). It is used for storing clothes. It is very elegant, intricately weaved and sophisticated in look and very sturdy by its structure.

Thuk- a storing bamboo make basket is very popular among Manipuries that is thuk, Fig. 119 (Imphal, Manipur). It is Lidded square dome shaped and has rigid four legs. It is beautifully designed with black and white stripes. This basket is more squarish than chengbon.

Phiruk- is another example of this segment. This basket is elongated in size and arched shaped with rhombus and zigzag patterns, Fig.120. It has a very wide and firm square base and roundish structure with plenty of space inside. The Manipuries use it for storing various expensive items along with cloths.

Tabu- is a beautiful example of Manipuri basket and one of the most beautiful designs among all the baskets they have in this region. It has a lid like other baskets have, roundish in shape and having a firm squarish base with four legs. It

has a provision of carrying things unlike other baskets already mentioned about. The cover of the basket has a holder on the top so that cover can be opened easily. The lower part of the basket has a beautiful tapering structure which makes the basket more exotic, Fig.121.

Ciru- is a carrying basket. They use it for carrying things from one place to another, specially carrying vegetables and food grains to the local market. It has elongated look with firm square base with a beautifully weaved strap, Fig. 122.

(Source: Fig. 120,121,122,123, 124, State Museum, Manipur)

One interesting point to be noted is that the craftsman of a particular ethnic group will make items only that are traditionally of his own people. It is an accepted but unsaid code. No trespassing is done, that is; a craftsman keeps to his ethnic craft and generally does not venture to make something that belongs to another ethnic group.

It would be worth mentioning that the container basket has no fixed size and it is determined by the purpose that it is particularly going to be used for. Meites use such baskets to keep cotton meant for making cloth; wares meant for selling at the market; fruits, betel nuts, betel leaves, etc., meant for marriage ceremonies, religious ceremonies, and also grain, rice and vegetables. Other tribal groups also use container baskets for the similar purposes, and also seen to keep rice-beer contained in Tumba or dried hollowed-out gourd.

4.4.3 Textile

The art of weaving has developed more in Manipur as compared to any other part of India. Unlike weaving in other parts of India, the Manipur weaving is entirely the work of women. Weaving is a part of their domestic duties. In fact, it is a primary qualification of a Meitei woman. Originally, the raw material used was cotton yarn (usage of woolen yarn was not known to the Manipuris before the Second World War). This craft is also known by the name of Laichamphi which mean cotton cloth. The designs, embroidered as well as woven, have now been commercialised on fly-shuttle looms; every house has a loin loom or a fly-shuttle loom in Manipur. However, loin loom weaving caters to the local demands and requirements only. It is observed that In Manipuri textiles the mixer of geometrical

and floral motifs are vivid and this can be said as typical characteristics of their dresses, Fig. 123.

There are reports about existence of different types of embroideries, which used to be specially made for warriors and to be presented by the king as a mark of distinction. References collected through remembrance of local people, as could also be said the same for the items, e.g., Lamphie, Ningthoupee, Saijounba, Phirananba, Fig. 124, Namthang-khut-hut, Khamenchatpa, Phiranji given in Table No. 3, are rarely seen today. From these information one can search for colour symbology and semantics in textile practiced in Northeast once upon a time.

Table 3. Items remembered but lost in time, now is only a source of past (Source: Mutua Museum Manipur).

Name of Items/ Design	Uses as	Specification
Lamphie	War cloth	A special type of shawl embroidered by the women at home is used by the warriors at the time of going out for war.
Ningthoupee	Waistcoat	Which is presented by the king to the warriors of the country
Saijounba	Long coat	These were prepared with special embroideries for the very trusted courtiers of the king.
Phirananba	Small flags/badges	Delicately embroidered and used by the warriors as plumes on their turbans. (Fig. 124)
Namthang-khut-hut	A design derived out of the head of Pakhangba on the wrapper	Meant to be used only by the ladies of the royal family.
Khamenchatpa	Dhotis	Embroidered on the dhotis and are presented to the people of distinction.
Phiranji	A red coloured blanket	Presented to the persons of merit. The colour of the blanket is very red and is believed to have been copied from the blood with the placenta.

Among other important designs the below may be mentioned.

Moirang phe- is actually in red, white, black and blue colours, and is woven in the borders of chadars and sari. This design, Fig. 125, is believed to have been invented by the princess of Thoibi of Moirang.

Lashing phe- a quilt cloth, literally means lashing-cotton and phe- cloth. The usual shades are golden, orange, green, blue and red. This quilt replaces blankets during winters, Fig 126 (Handicraft Center, Imphal).

Likli Design- is popularly known as the bottle design, Fig. 127 (Kalakshetra Museum, Guwahati), and usually is used on shoulder bags, bed covers etc.

Maibung design- is common on the bed-covers and has green, maroon, pink and chocolate shades, Fig 128 (Handicraft Center, Imphal).

Shamilami design- is embroidered with motifs of horses, elephants, butterflies etc. Shades of orange, green, blue and red are very common in these designed shawls, Fig 129 (State Museum, Manipur). The shawls with this design are popularly known as the Naga chadar as the Angami Nagas used the design. It has observed that some time they use these motifs in bags also.

Chum design- is used on a cloth designed after a pattern that is exclusively meant for a presentation. This presentation made by the king to the people of high proficiency in dance and song. Pundits and heroes receive this cloth as recognition of their deep knowledge and heroism. This design is now woven not for the same purpose as in the beginning but on the ordinary door curtains, cushion cover and mats, etc. The shades commonly found are orange, brown, blue and chocolate, Fig. 130 (Kalakshetra Museum, Guwahati).

Leirong design- is a traditional floral design of Manipur and is said to be the mother design of all floral designs of Manipur. Among the Meities 'lei' means flower and 'rong' means design. This is a common design for the bed cover and

tablecloths with several variations. The blue, green, orange and red are the common shades used for the design, Fig.131 (State Museum, Manipur).

Bakey Design- was named after a Kuki woman who invented this design. This is a tribal design and it was woven originally for skirts but now this design is practically found on any type of shawl and bed covers. The common shades are blue, green and maroon, Fig. 132 (Kalakshetra Museum, Guwahati).

Kudam Manbi- is known by several names. The most common one is, button design but the other popular one is known as Mitlaobi design or broad-eye design. The idea of this design is said to have originated from the patterns made of beads and cowries by the Kukis, the use of cowries also seen in popular Naga textiles, Fig. 109.

The designs of the Kabui tribe

Kabui, it appears, has very little handloom clothes for their daily use. Most of handloom products dealt here are ceremonial dance dresses. It is very difficult for them to say anything about the legends of the origin of the design on their handloom cloth. (Curator, Mutua Museum)

Pheishoi- Phei means cloth; *shoi* means skirt or lower garment for the women. Usually it is of black, red and pink colour with a broad red border, Fig. 133. This is a ceremonial dress and also used as daily wear.

Lejing Phel shoi- is a skirt with grey base and red borders on two sides. The red border contains interlacing of various colours. The body has three white stripes flanked on two sides by a narrow black strap. Each white stripe contains three sets of black and red arrow-shaped structures. The skirt is used both for daily use and for ceremonial occasions.

Langu Pheihoi- A skirt, used during ceremonial occasions only. The two borders are broad and of bright red colour. The red borders also have two white narrow stripes separated from one another. Narrow yellow and green straps often follow the border. The rest of the body of the cloth is of black containing three broad

straps and are separated from one another. Throughout the length of the cloth, there are lines made of interlacing of yarns of various colours, which extend from the middle of the red coloured side border to some portion of the black body, which hang freely at this end.

Nai- is a longoti (underwear) type cloth used by the men folk for covering their private parts. But it is gradually going out of use.

Ranglan- is a red coloured and striped ceremonial lower garment for male, worn during the dance. It is made up of four pieces, which are joined together.

Song Nai- is a dancing dress. The adolescent boys use it as lower garment during the dance. The Song Nai cloth is woven in two pieces and stitched together. At the two ends of the cloth there are flower petal design embroidered by tying cotton yarns and wool.

Phaingao- is a ceremonial wrapper made of four pieces. The two side borders are red and boarder than the others. This is followed by narrow stripes of yellow. Green and black respectively. The base of the cloth is white. The end borders are quite broad and have interlacing of different colours.

Philak- is a kind of belt used by the boys and the girls during the ceremonial dances. It is of white colour. This white coloured belt, side borders of which start with a narrow red stripe followed by yellow and green borders. Coloured tassles are tied in two free border ends of red and white threads.

Thiam Phai- is a common black wrapper for daily use and is made of two pieces. It forms a part of the customary present to the parents of the bride, besides the bride price.

Kharam Phai- is a common black wrapper having only white stripes near the border and is used mainly by the old people. This, like the Thiam Phai, is also an item used normally to be presented to the parents of the bride.

Not all the traditional textile items described above are in use today as traditionally they were used and samples of many of them are not available. Few samples presented here in as figures are to get a visual idea on their common wears and designs.

4.5 Mizoram

Historians believe that the Mizos are a part of the great wave of the Mongolian race spilling over the eastern and southern India centuries ago. Mizo is not just one tribe as normally presumed but the term represents several tribes taken together. The term Mizo means the men who live in the hills (Mi- men; Zo- hills) or the Highlanders. Mizo comprises of 5 major tribes and 11 minor tribes known under the common name Awzia. The 5 major tribes are- Lushei, Ralte, Hmar, Paihte, Pawi (or Poi). While major tribes maintained their respective dialects, the 11 minor tribes either lost their distinctive dialects as a result of association with larger tribes. Mizos are fast to giving up their old customs and adopting the new mode of life that is greatly influenced by the western culture. Many of their present customs are mixtures of their old tradition and western pattern of life. Two major and distinctive groups, that are Lushei and Hmar, have been chosen for this study because other three groups are having almost similar patterns in terms of their crafts practices and artifacts are concern.

4.5.1 Crafts and Artifacts

Mizoram is the land of a number of artisans and skilled artisans excelling in various crafts. Bamboo and Cane related crafts are a major source of income to the people as well as the state. The Mizo's skill in wickerwork and basketry is well known. Bamboo and Cane have their multifarious uses in turning out various commercial crafts and items of furniture. The Mizo women excel at weaving, whereas men are expert at cane and bamboo work. They make fine cane hats and uncommonly beautiful baskets. The traditional Mizo hat is known for its workmanship. It looks as if the hat is woven out of fine bamboo as fine as cotton yarn. Besides their typical hat or caps, domestic baskets are all made from plaited bamboo and these are reinforced by stout cane, which is very strong and durable.

Other items made are chairs, sofas, tables, bamboo screens and cages, umbrella-handles, knitting needles and hats. All types of traditional baskets and decorative articles are produced today in the Handicrafts Centres situated in three districts they are Aizawl, Lunglei and Chhimgai (Sailha). The Handicraft Centres at Luangmual, Aizawl produces typical Mizo Cane Hats Fig. 134.

Traditional ornaments too use bamboo in it. On celebrations, Mizo women use a headgear of a bamboo band with parrot feathers stuck in it, the ends of which are decorated with beetles. Other bamboo products include fish and animal traps, rain bamboo hat seen with the formation of a flat thin layer on its top, japis, cones, circular boxes and other materials serving as reservoirs and containers of goods, crops and other things.

As far as the bamboos in the Mizo Hills are concerned, it is available in large quantities but at present it has not been utilized to the maxim. However, it seems that the constituted authorities have envisaged the feasibility of introducing in Mizoram better vocational trades in spinning and weaving, cane hats and cane baskets, bamboo chairs, tables, teapots, racks, safes, etc as well as bamboo screen cages and umbrella handles.

The below are the examples some typical craft items specific to Mizo culture.

Smoking Pipes

Mizos, both men and women, are inveterate smokers. They love their locally made pipes. The women's pipe is like a small hukkah, small enough to be easily held in the hand and carried about. The men's pipe is of western type. These are made out of bamboo and weed. Provided with selected and seasoned bamboo, and given proper training in carving pipes for export, the Mizo artisans could possibly introduce a new range with sufficient prospects.

The Lushai tribe of Mizoram makes a bamboo pipe called *vaibel*. The species of bamboo used is locally called *tursing*. It is a solid bamboo upto 50 mm in diameter and it is very strong, even it does not break when dropped. A part of the culm including a node is used to shape the bowl. The hollow of the bowl is bored in the centre passing through the node in a small hole. The bamboo stem passes

through the shaped branch segment to enter the hollow created below the node. The hole at the bottom is sealed with a piece of dried gourd. Locally grown tobacco is used and only men use this pipe. Lushai women use a pipe called tuibur. The tuibur is made in an interesting combination of bamboo and clay. It consists of five parts connected to respective elements in housed joints fixed tightly together. The joint between the water container and the central element is covered and strengthened by a fine braided band made from a palm fiber. The central element is solid and is shaped from a part of a rhizome.

Native furniture

The Mizo stool uses both bamboo and cane as raw material. Local name of the cane and bamboos are mitperh and phulrua respectively. The stool is a short cylinder made of two rings of cane held apart by a series of vertical bamboo splints located around the circumference of the rings. These splints have both ends shaped to form tenons, which are firmly driven into corresponding holes provided in both rings. The seat surface is made of rawhide stretched over the upper rings and simultaneously held in place by the bamboo verticals. The cane rings are held in shape by overlapping the free ends by an inclined cut, which is then bound by leather thongs.

The most fascinating feature of this stool is the manner in which the rings are formed. The Mizo artisans have found a unique way of bending cane. As freshly harvested cane is flexible, a length of cane is tie around a cylindrical post of selected diameter into a tight coil and left to dry in the sun. The cane is left in the sun for three to four days before being removed from the mould and cut to form rings of the required size.

Rain Shield and Head Gear

The lukhum, Fig. 135 (Handicraft Center, Aizaol, Mizoram), is the traditional hat commonly worn by Lushai men. Its shape is like a peaked cap and retains its shape even when not in use. It is formed in two layers, each made from strips of bamboo woven in an open-hexagonal weave. The inside layer is generally coarser than the outside layer and is woven first, spinning at the top. This hat is made extremely delicately, with a high quality of artisanship. The recent trend

however is to make the hats a little coarser, with paper or plastic replacing the palm leaves between the layers.

Ornaments

Ornaments are one of the essential adornments of Mizos, Fig 136 (State Museum, Aizawl, Mizoram). There are many types of ornaments. Both men and women wear ornaments. These ornaments are worn not just to decorate oneself but sometimes not wearing them may convey some deeper message. Like the widows remove their earrings and slit the lobes of their ears when they abandon all thoughts of remarrying. The Lushai people are very fond of wearing ornaments. The Lushai wears a variety of articles in his hair knot. The most common is a brass two-pronged pin with projecting pointed ends with a head shaped like "G". Skewers of ivory, bone and metal about six to eight inches long are also worn. The hair comb is also an ornamental article; it consists of a piece of ivory or wood about three inches long, half an inch thick and an inch or so wide, into which are inserted, very close together, teeth of strips of bamboo about two inches long. The back of wood is generally crescent-shaped and lacquered red and inlaid.

Earring -Most men have their ears pierced and wear either small wooden studs, with flat heads about half an inch in diameter, and coloured red suspended by a piece of strings. The stones used normally appear to be barrel shaped and unpolished, the surface being pitted with minute holes and circular marks. These are valued very highly, and are passed on from father to son, or given as daughter's dowry. Some of them have names connecting them with story of bygone days. The earring of Lushai women is quite distinct from the men. It is ivory disc some inch or inch and half in diameter, with a hole in its centre.

Necklaces -Both sexes are fond of necklaces; those of amber are most valued. Besides amber, agate, carnelian, and various sorts of bead necklaces are worn, or, failing all these, white shirt buttons are also reported acceptable. A tiger's tooth is often hung round the neck as an ornament and is also thought to have magical properties. Some times tufts of white goat's hair are bound together with red thread to use as ornament.

4.5.2 Baskets

A variety of baskets is catered by the village artisans to serve a variety of needs, e.g., to serve as body panniers for placing head-loads, carrying baskets, cages, fishnets, etc. They take different shapes and vary from slim or even flat (like rice winnowing fans) to broad, elongate sizes and the traditional size with regard to proportion from rim to base is retained. Panniers or cones accommodate the bigger loads whereas the other baskets of course do not support heavy weight.

A typical Mizo basket is broad at the rim and tapers at the bottom. There are baskets for carrying firewood, water, paddy, rice and vegetables. Baskets made of cane and bamboo together with leaves and grasses, for storing ornaments, clothes and other valuables are made.

Basketry among the tribes is a delicate work. They are experts in making etches and notches from the soft fibres of cane and bamboo. Baskets with lids Fig.137a (State Museum, Mizoram) and without lids, smoothly surfaced, strongly floored, gently fenced from mouth to base and modeled into oval, square, flat structures, revealing a considerable skill in slitting, folding and inserting are seen. They serve various purposes such as cages, containers, baskets of different articles, etc.

Open Weave Carrying Basket

Paikawng -is an open-weave carrying basket made and used by the Lushai tribe of Mizoram. Women generally use the basket as a rough workbasket for carrying firewood, bamboo water tubes, etc., Fig.137b (State Museum, Aizawl, Mizoram). The basket, made entirely of bamboo outer splits, is carried over the back with a strap resting on the head. The basket has a very strong construction, which is resistant to vertical loads. This is because of the construction pattern as well as the fact that thick strips of bamboo are used for this. The packing has a square base of diagonal dimension of around 25 cm from where it gradually transforms into a circle of diameter 40 cm at the rim. The height of the basket is 40 cm. To the artisans making this basket, the height is assumed to be the one hand-measure known as tawngkhat in Lushai. The main elements are those that form the base,

sides and rim of the basket. The basket is carried by means of a braided head-strap, Fig. 138 (Aizaol Market).

Emsin- is almost similar in construction to the paikwang. In fact, it is an ornamental version of the work basket. Lushai women use this basket for marketing or carrying belongings to the fields. It is used for light work. The young girls feel proud in taking this basket on evening walks to the bazaar. It is carried over the back with a strap resting on the head. The emsin, Fig. 139 (Ranjan, M. P. 1986), has a square base, whose diagonal measures around 20- 25 cm, the rim diameter is 37 cm and its height is 37 cm. The main elements are about one-third the width and thickness of the paikawang but more elements are used. The rest of the structure is similar to that of the paikawang except at the rim.

Closed Weave Basket

Paiem- is a closed-weave carrying basket, Fig. 140 (State Museum, Aizaol, Mizoram), used by the Lushais to carry grain and other fields produce. In Lushai, the word em means “basket” and pai means no holes. This basket is also called empai. The Lushai women also use this basket for marketing. It is made from bamboo outer splits from a species locally known as *rawnal*. Split cane is used in the rim as strengthening element; the weft elements of the side weave near the base; in bindings at the rim; and for strengthening the corners of the basket. The cane species used is locally known as *mitperh*. The basket has a square base whose diagonal measures 20 cm and the cross-section of the basket goes through a gradual transition till it reaches a perfectly circular rim of diameter 40 cm. Its height is about 45 cm. All elements made from cane are smoked to a rich red-brown colour before they are used in the basket.

Tlamen- is a Lushai product, larger than the paiem, which is carried by men to bring in produce from the fields. The basket has a square base and a circular rim. The diagonal of the base square is 20 cm and the sides flare outwards sharply to a rim diameter of 50 cm. The height of the basket is 50 cm.

Dawrawn- is another closed-weave carrying basket used by the Lushais, both for storage as well as to bring in field produce. This basket is made in two sizes, the

men's size and the women's size. It is a tall, narrow basket with a square base and circular rim. The diagonal of the base square measures 20 cm; the rim diameter is 42 cm and its height 75 cm. The structure and method of construction is similar to that of the paiem, except that slightly coarser strips are used for the warp and weft elements.

Small Storage Baskets

Fawng- is a shallow, square-based basket with a self-strengthened square rim and is used by the Lushai tribe of Mizoram. The diagonal measure of both base and rim appears to be around 40 cm and the height of the basket is 16 cm. The basket is woven in the diagonal-weaving method with two mutually perpendicular sets of elements interlacing in either a 2-up-2-down twill structure or a 3-up-3-down twill structure. The corners of the base square are in some cases strengthened by split-cane binding. Smaller baskets of a similar construction are made by the Lushai to store yarn for making the loin-loop warp. These are called fawng-te-laivel. "Fawng" refers to the square-based basket described above, while te means "small", and "laivel" refers to the "concentric square pattern" generated by the twill-weave structure used in the basket.

Storage container

Thul- is shaped as other carrying baskets, have a double-walled structure and legs located at the corners of their square base. A lid either shaped like a semi-spherical dome or like a cane covers the mouth of the basket.

Fish Baskets

There are baskets that are used specifically to store fishes. These are either carried by the fishing folks in their hands or tied to a belt around their waist, Fig. 141 (State Museum, Aizawl, Mizoram).

Paikur- is a bottle-shaped structure with a conical spiked valve at the mouth. This again only allows the fish to enter the bottle. The fish can be collected by removing the spiked cone when required.

4.5.3 Textile

Weaving is an integral part of the Mizo culture and the women learn how to weave at an early age. They produce Puans, Fig. 142 (State Museum, Aizaol, Mizoram), in numerous designs on traditional lion looms. These are somewhat like lungis, usually about 115 cm to 120 cm in width and about 90 cm in length, worn by the women, and are their native dress; *Puans* are noted for their beautiful design and intricate embroidery, which is invariably worked out along with the weave. Mizos have a wealth of motifs. The patterns of traditional puans are now being adopted with many fresh combinations. Mizo women also turn out shawl and their shoulder bags, which are quite attractive, and not too expensive considering their quality. There is a combination of the Lion Loom and the fly shuttle loom in the development of the handloom industry of Mizoram.

During Khuangchawi ceremony it is said that when they invite guests from the other villages at the Khuangchawi ceremony and when guests enter the arena of dancing Khuallam they all wear traditional hand woven Mizo cloth known as Puandum, Fig.143 (State Museum, Aizaol, Mizoram), which is wrapped over the shoulders and the dance is performed by swaying the cloth. Puandum has the colours black, red, yellow and green stripes. Significantly Puandum is an indispensable item which every girl has to take along with when she gets married. It is used when her husband dies to cover the dead body.

In Mizoram, dyeing is a women's job and it is forbidden for men to take part in the operation, it is believed that any man who touches dye or a cloth that is being dyed becomes liable to suffer bad luck. For dyeing, the people of Mizoram use blue and yellow colours generally.

Men and women wear a common costume; e.g., a dark blue cotton cloth, just long enough to go round the wearer's waist with a slight over-lap, and held up by a girdle of brass wire or string, serves as a petticoat which only reaches to the knee, and only other garments being a short white jacket. On festive days, the only addition to the costume is a picturesque headdress worn by girls while dancing. This consists of a chaplet made of brass and coloured cane, into which are inserted porcupine quills, and to the upper ends of these are fixed the green

wing-feathers of the common parrot, tipped with tufts which hang strings of glistening wing covers of green beetles.

The Designs of Hmars tribe

The Hmars weave many designs and some of the important ones are:

Thangsuo Puon- in Hmars language, Thangsuo Puon means famous cloth. It is a handloom cloth for the persons who earned the right to wear this by killing the maximum number of enemies in a war. Their wives are also allowed to use this cloth.

Puon Laisen- is a red striped cloth. In Hmar language, it means cloth with middle in red colour, but the center has two to three black stripes. The cloth has several motifs like zigzag, triangular, simple stripes etc., Fig. 144 (Kalakshetra Museum, Guwahati).

Hmarm- the females use the lion cloth, but gradually it is going out of use. It has only three designs, Varoul (means flocks of birds). This symbol represents the eye of the bird. Ngaruzie means bones of fish. The last one is Kokpuizik Zie looks like a plant intertwined.

Zakuolaisen- this is a blouse piece used mainly by the unmarried girls, Fig. 145 (State Museum, Aizawl, Mizoram). Among the Hmars Zakuo means blouse, Lai means middle and Sen means red. Thus, it means a piece having a red stripe through the middle of the cloth.

The Designs of Paiteis tribe

Paiteis do not weave many indigenous designs in their cloth but whatever little designs are woven seems to be indigenous and seems they attach distinctive value to those.

Thangou Puon- the most important cloth among the Paiteis is Thangou Puon. There are some restrictions imposed on the use of this cloth. It is said that unless a Paitei kills his enemies either in inter-tribal feud or in general war, he is not entitled to wear a cloth with this design. The other alternative is to harvest the largest quantity of crop in the village and the Paitei who actually performs this is allowed to wear the Thangou Puon.

Puon Dum- appears to be National cloth of Paiteis and is used at the time of condolence, official meetings, observance of National Day, etc. *Puon Dum* actually means a black cloth, but the cloth has only stripes of black along the white, yellow, red and green stripes.

Jawl Puon- In Paitei language Jawl means friend and betrothed lover. The cloth is also named Shashengsin Puon; it means a cover cloth for a basket with meat carried by a married girl going first time to her husband's house. Either the girl presents this cloth to her husband or husband's married sister. The Jawl Puon design consists of nine red stripes and eight black stripes alternately arranged running vertically throughout the length of the body against black background, Fig. 146 (State Museum, Aizawl, Mizoram).

Puon Pie- is a type of quilt woven cloth; it is compulsory for every girl to bring one such cloth to her husband's house after her marriage.

The Designs of Riang tribe

The Riang also have the same dresses as the people of the other communities of Mizoram. Apart from the other dresses, the Riang during the marriage ceremony give the following clothes as the bride price during the marriages-

1. Khutai- a kind of upper garment,
2. Arnai- a kind of lower garment, and
3. Marki- fifteen feet of white cloth.

The Mizos, blessed as they are with a beautiful environment and rich culture, are a vibrant and sociable people. Most of the traditional textiles are presently not available, thus some specimens as visuals could not be incorporated in this discussion, and only available descriptions are presented above.

4.6 Tripura

Tripura has a distinctive historic past with its unique tribal culture and a fascinating folklore. Some scholars opined that in the distant past it was known as Kirat Desh (land of tribals). There are references of Tripura in the Mahabharat. Tripura was the ruler on whose name the land took the name. Another

explanation says that the territory is named after the temple of Tripuri Sundari, located at Radhakrishnapur. The local population has always held this deity in high esteem.

Many myths and legends are associated with it. One version traces its link with the Puranic tradition (old tradition), to the times of Yajati and Pratit when the 71st Raja Tripura was bonded by a Boro alliance with Kachar. Another version in the Rajmala (Rajmala is one of the important sources of Tripura history generally datable to the 15th century) states that the ruler of Tripura belongs to lunar race and traces their descent from the Rajput Kshatriyas, and Tripura was one of the 84 mercantile tribes of Rajathan. Probably a synthesis thus occurred between the culture of the Aryans and Boros (tribal culture). Bengalis and Riangs are the most prominent people today to express cultural prevalence in state, and other small tribes found to struggle with their ethnicity against modernity.

4.6.1 Crafts and Artifacts

The hilly frontier state of Tripura has a unique tradition in arts and crafts, sculpture and architecture, textiles, woodcarving, basketry and cane and bamboo work. Bamboo and Cane is one of the most important craft of the state. It would not be overstated that it is a land of bamboo and cane handicraft that are exported out side the state boundary and artisans are constantly bringing newness in their designs. The crafts spread all over the state with concentrations in the sub-divisions of Kailasahar, Dharmanagar, Khowai, Sadar, Sooamura and Belonia besides Agartala capital town (where Bengali population is noteworthy).

At Agartala, private societies, Govt. initiatives and several other units have taken up the production of popular handicraft items. The articles normally produced in the state include mats, bags, moorahs, fruit-baskets, vases, bamboo screens, lamp stands, tablemats and many decorative pieces. A large number of structures using bamboo as a primary material are built in the plains of Tripura. These structures may be houses, granaries, shops, workspaces or even large warehouses. They are of lightweight construction to withstand severe earthquakes; at the same time, they are also wind resistant. The state of Tripura is famous for her bamboo screens made from split bamboo, so finely woven that

they look almost like ivory. They are delicately appliquéd with coloured bamboo chips.

Native furniture

Tripura mudah- Fig. 147 (Agartala Market, Tripura), is a low stool made of bamboo and split cane. Bamboo is used in the body and rim structure; while split-cane is used in binding all elements and in the seat weave. The body of the mudah has a structure suitable for the use of relatively thin members to support the huge loads. This is achieved with the help of a large number of thin members supporting each other. Elaborate binding detail gives the mudah strength of construction and decorative weaves are also used in the seat and the rim covering.

Rain shields & headgear

Pathla- is a rain shield. The top cone has a base of around 25 cm with a height of around 10 cm, and the circular shade that is angled slightly downwards, has a diameter of 55 cm. A pentagon made up of five elements, each of which has three strips of bamboo, encircles the apex of the cone. The subsequent hexagons on the cone are also made with three strips to each element. Five wide interlocking strips of bamboo strengthen the apex of the cone. These strips are held in place by introducing them into the weave on the cone.

Smoking pipes

Riang hookah- The Riang tribe of Tripura uses a large hookah to smoke tobacco. It is made of three parts. A short bamboo tube to a bamboo water container connects a clay bowl. The container part is a large diameter completely calm and the length includes two internodes. The central nodal diaphragm is knocked out, while the lower node is retained to become the water container. The short bamboo tube made from a small diameter bamboo penetrates into the container to end below the water level. The other end on the other hand, receives the clay bowl in which the tobacco is burnt.

Along with fineness in handicrafts, handloom weaving is also an important craft in the state. The handloom items include riha, lungi, sari, Fig.148 (Agartala Market,

Tripura), chadar, and scarves with Tripuri motifs peculiar to the Chakma, Kuki, Lussai and Reang tribes. The main feature of Tripuri handlooms is vertical and horizontal stripes with scattered embroidery in different colours. It has rich heritage in designs that differ from tribe to tribe.

The handloom industry plays a vital role in the economy of the state and provides a secondary means of employment and income to tribal cultivators. Popular handloom items sold are lasingphee (a quilt like weave in which the cloth is wadded with cloth during weaving), scarves, bedspreads, cotton saris and shoulder bags. Tablemats, cushion covers and canvas for holding chairs are also now made from woven tribal fabrics.

4.6.2 Baskets

- Closed weave carrying baskets:

Jamatia firewood basket- The Jamatia of Tripura usually for carrying firewood uses Jamatia firewood basket. The basket is made entirely of bamboo outer splits. The basket has a square base. Above the square base the sides narrow down slightly into a waist before flaring outward to the rim.

Riang carrying basket- is a closed-weave basket used by the Riang tribe of Tripura to carry grains and for general-purpose marketing. Both men and women use this basket, though the sizes may vary in each case. The female basket is however smaller. This is made from bamboo splits while small quantity of split cane is used in the binding details. The basket has a square base of diagonal 35 cm and the sides flare out near the rim. The rim diameter is around 50 cm and the basket is 45 cm in height. The base of the basket is woven in twill pattern.

- **Shallow carrying baskets**

Tukri is a shallow basket used by the Bengalis of Tripura. The basket has a square base, and the sides flare out sharply to a large circular rim. The corners of the square are not that pointed and the base square is quite flat,

Fig.149 (Agartala Market, Tripura). The tukri has a rim diameter of around 40 cm and the diagonal of the base square measures 20- 25 cm. The height of this basket goes to 15 cm.

Karawala Tukri- is also a Tripura Bengali product. It is identical in construction to the tukri of Agartala with the exception that four strong handles are attached to this basket. The karawala tukri is mostly used for carrying construction materials. This basket is made from split bamboo, while the handles are of split cane. It has a square base of diagonal 20 cm and the sides flare up sharply to a circular rim of diameter about 40 cm. The height of this basket, excluding the handles, is 15- 20 cm. The handles are called Kara, is made by using a pair of stout cane splits.

Laii- is a small bamboo basket used by Tripura Bengalis for washing rice. It has a square base of diagonal 20- 25 cm and the sides flare outwards to a circular rim of diameter around 30 cm. The height of this basket is 15 cm. Two sets of warp elements, made from wide splits of bamboo interlace to form the base square. The weft is a double-start spiral interlacing the warp in a 2-up-2-down twill structure. The rim is strengthened by a single ring of split bamboo bound to the inside surface of the side weave by split-cane binding.

- **Small storage baskets**

Sempa Khari- is a small basket shaped like a square-based prism and used by the Tripura Bengalis to store small objects, Fig. 150 (State Museum, Guwahati). The basket has a square base of diagonal 16 cm with vertical sides forming a square rim. The height of this basket is around 7 cm. It is woven from coarse inner splits of bamboo using the diagonal weaving method.

Date basket- used to store dates and is carried suspended from the waistband. The basket is woven from coarse bamboo inner splits using the diagonal-weaving method. It is shaped like a deep rectangular pouch open at the top. The base is a straight line from which the sides bulge out.

- **Small baskets for other functions**

Turi- is a small semi-spherical basket made from bamboo and used by the Tripura Bengalis to contain puffed rice. It has a diameter of around 17 cm and is 8 cm in height. Sandwiching between rings made from thick bamboo splits strengthens the rim and this rim is bound in a decorative manner using split-cane binding.

Cattle muzzles- In the plains of Tripura, muzzles woven from bamboo are used to restrain cattle from grazing in the rice fields, Fig. 151 (Agartala, Tripura). These are woven like dish-shaped baskets using a variety of construction methods. It has wide bamboo splits forming the warp, which is arranged to radially overlap at the base. The weft uses three splits of bamboo taken together and twisted to hold the warp elements between twists, as it spirals steeply around the side. The rim is self-strengthened.

- **Large storage baskets**

Grain storage basket- has a large square base with the sides tapering out to a large circular rim, Fig. 152 (Agartala, Tripura). These baskets are made by professional artisans and seen to be sold at weekly markets. They are plastered with a mixture of cow dung, clay and rice husk before being used to store grain.

- **Fish trap & fish basket**

Sudha- is a fish trap used by the Jamatia tribe of Tripura. It is a net suspended from crossed splints and is held in both hands so that the front of the net is inclined towards the body and against the flow of water. Fish that swim into the net is scooped up out of the water and stored in the basket. The net is a rectangular bamboo mat woven in an open-twill weave. The longer edges of the mat are held between two pairs of splints and these extend beyond the mat on one side. The splints are crossed at an angle of about 30 degree and the short arms of the cross form the handles.

Dulla- is also a fish basket used in Tripura, which has a square base and is woven in an open basket weave with 15 strips of bamboo, 7 in one direction

and 8 at right angles to them. The strips extend outwards from all sides of the base so that they can be turned up to form the stakes for the body of the basket. The distance between the stakes is varied according to the required shape. This basket has a narrow neck.

4.6.3 Textile

Other than Bengali and Riang domination in Tripura (textile samples presented and analysed in chapter V) it is noticed that other lesser-known tribal groups prefer to wear clothes made by them. The texture of such clothes is thick. The men folk wear turbans and a narrow piece of cloth as a lower garment. Most of the time, the upper part of the body remains uncovered. However, they wear shirts when they go out. The women wear a long piece of cloth as the lower garment, which is known as pachra, Fig.153 (Riang village, Tripura). They cover their breasts with a small piece of cloth called *risha*, which is embroidered with various simple designs. Present day scenario for young boys and girls present quite a different picture as far as the dress is concerned. The boys prefer to wear shirts and pants. The girls feel shy of wearing the risha, and prefer to wear the blouses, which they purchase, from the market. However wearing risha in the marriages is still customary among many of the tribal.

The Khakloo is a small, little known tribe who claim relationship with the Purnim Tipra- a dominant community that ruled the Tripura state for several centuries. They make their own clothes. The cotton is grown in the jhoom. Women do spinning and weaving only. It is forbidden for men to take any part in the operation, as it is feared that any man who participates in spinning or weaving will be struck by lightning. Similarly, there is a taboo on women in basket making: it is believed that if any woman makes a basket, the man will be idle and timid and as a result he will not be successful in hunting. In dress, the Khakloo do not differ from their neighbours. The typical dress of the Khakloo and their neighbours is simple but suitable for the hilly habitat. The infants are hardly given clothes except when it becomes essential in the winter and rainy season. The children put on a lion cloth. The working dress of an adult male is a napkin (Rikutu gamcha), a self-woven shirt (Kubai), Fig, 154 (Riang village, Tripura). When the sun is very strong, a pagri (turban) is sometimes used. In the winter, a

wrapper is used. The woman covers her lower part with a larger piece of cloth called Rinai. This cloth is fastened round the waist and falls down to the knee. She covers her upper part with a short piece of cloth. This is breast cloth called Risa passing under the arms and drawn tight over the breasts, Fig.153. Women folk also are found to use some kind of headdresses while at work outside. The necks of women are profusely decorated with strings of beads and coins.

4.7 Meghalaya

Meghalaya, a Sanskrit word meaning "the abode of cloud", was created as an autonomous State on 2nd April 1970. The full-fledged State of Meghalaya came into existence on 2nd January 1972. Meghalaya has precise historic, geographic and strategic significance for India. It is bound on north and east by the state of Assam, and on south and west by Bangladesh. The three physical divisions in the state are Garo (Western), Khasi (Central) and Jaintia (Eastern) hill divisions. The Khasi, Garo and Jaintia are people with a rich cultural heritage.

There are different legends, beliefs and findings about the Khasis, Jaintias and Garos. It is said that Khasis were the earliest immigrants who made their way across northern Myanmar to Khasi in the plain of erstwhile East Assam (undivided) where they established new centre. The early history of Garos is shrouded in mystery, most traditions express that Tibet was their home from where their forefathers spread to different places. The Jaintias tribe belongs to the Hynniewtreps of the Austric race. The people who reside in the Garo hills call the people who inhabit the Jaintia hills Syntengs. It is believed by the scholars that they had migrated from Tibet-China from Mohkmer groups in search of food and shelter.

The important crafts of the Khasi and the Jaintia districts are artistic weaving, wood-carving and cane and bamboo work. Carpet and silk weaving and the making of musical instruments, jewellery and pineapple fiber articles are among its crafts practices. The popular handicrafts of the Garo hills district are artistic weaving, cane and bamboo work including poker work (in which designs are burnt into the bamboo with a red-hot pointed rod), wood carving, jewellery and making of clay toys and dolls and musical instruments. Though these three

groups possess separate cultural identity, the below are the descriptions of artifacts that commonly prevailed in the state.

4.7.1 Crafts and Artifacts

Hills are rich in bamboo and cane. The semi-tropical climatic condition of this region characterise the bamboo culture and influence the growth of a rich variety of bamboo. Cane and bamboo craft occupies an important place in the economy of the state, next only to agriculture. The artisans attend to the craft when they are free from agriculture. The products of bamboo and cane are mostly of two types, namely:

- Items required for day-to-day use and of medium quality, more suited to local requirements; and
- Items of finer quality, both decorative and functional, to meet the requirements and tastes of more sophisticated markets.

The Khasis are known for creating attractive cane baskets and sieves. The Garos are also rich in the various forms of bamboo culture. There are many kinds of constructions and craft made from bamboo such as various kinds of basket and mat making.

Articles such as baskets (locally known as khok or thugis) are popular. Baskets known as meghum khoks, Fig.155 (Shillong, Meghalaya), are very artistic in appearance and are seen to be made in the Garo Hills. The tribal to store valuable items including clothes normally uses these. Pokerwork, in which designs are burnt into the bamboo with a red-hot pointed rod, is also done by the Garos. Khasi women in Meghalaya wear an attractive large round hat composed of a circular bamboo frame with a thick brim that is covered with cloth. The crown is worked with an ornamented lattice design of cane at the edge and the top, each triangle in the pattern being tipped with a small circular blob (now it has been replaced by metalwork like aluminium), Fig. 156 (Polo ground, Shillong, Meghalaya). Khasi umbrellas (locally known as kurup) are made very artistically.

Other than the above items, traditional Khasi artifacts which they used in their day to day life were made of wood, copper besides cane and bamboo. The present

day scenario has changed and it is difficult to find any of the traditional Khasi items like ethnic utensils and other containers because those are now being replaced by steel and aluminium. Therefore, to collect few of the specimens and to know about them visits to interior villages of Jayantia hills were made.

Rain shields and headgear

Knup- is a Khasi rain shield used in Meghalaya. The knup is shaped like a hollow, shallow cone, with half the circumference of the base greatly elongated to terminate at a point Fig.157 (Moulai, Shillong, Meghalaya). The rim of the rain shield therefore, looks like an inverted water drop. When it is worn, the curved surface of the cone rests on the head, the apex protrudes behind the head and the elongated surface completely covers the back. The knup is made in two layers, each woven in an open-hexagonal weave. Two layers of palm leaves are sandwiched between the woven layers to provide the waterproofing.

Garos headgears are beautifully weaved with colourful feathers and wear by females, Fig. 158 (Garos hills, Meghalaya), which adds colour to the festival moods.

Domestic products

Bamboo comb- The Khasi comb is intricately assembled from several splits of bamboo. A number of fine teeth are shaped from individual bamboo splits. These teeth are held sandwiched between a pair of thick splits and this assembly is bound firmly with cotton thread. The thread passes between the teeth to create the required gap. The two teeth at either end of the comb are specially shaped from thick bamboo split to protect the fine teeth between them. The thread binding is coated with a thick sticky resin to permanently set the teeth in place. The teeth elements extend below the sandwiching binding and these are covered by two wide splits of bamboo to form the handle. Beyond these, a single whole column length of a very small diameter is used to finish the upper edge of the handle.

The entire assembly is now bound with cotton thread to complete the product. The resultant product is an extremely neat construction, intricately designed yet

sturdy and functional. One can see in another variation made by the *Khasis*, the handle carved from soft wood and the bamboo teeth assembly bound with thread is set into a groove at the bottom of the handle with the use of resin.

Bamboo pipes

The Khasi pipe is a simple construction incorporating a bamboo bowl is connected with a small thin bamboo pipe inserted into a thicker bamboo pipe stem, Fig.159 (Serrarim, Meghalaya). The surfaces of both bowl and stem are decorated with motifs scored on the outer skin by a sharp instrument. The traditional pipe has elevated to its recent versions incorporating a ceramic lining on the inner surface of the bowl after the hollow of the bowl has been sufficiently enlarged.

Weaving is an ancient craft of the tribals of Meghalaya - be it weaving of cane or cloth. The Khasis are famous for weaving cane mat, stools and baskets. They make a special kind of cane mat called 'Tlieng', which guarantees a good utility to last around 20-30 years. The Garos weave the material used for their costumes called the 'Dakmanda'. Khasis and Jaintias also weave cloth. The Khasis have also been involved in extracting iron ore and then manufacture domestic knives, utensils and even guns and other warfare weapons using it.

4.7.2 Baskets

The basket making tradition of Khasis are remarkable. They make all kinds of baskets to make their life easy and comfortable while carrying things from place to place for marketing and for other work. Baskets are believed to be the most functional items for the people of Meghalaya. Below, samples and utility of such baskets are described along with its design specialty and making.

- **Carrying basket (Open weave)**

Khasi pig basket- as the name suggests is a basket used to transport pigs and is seen being used in the Khasi Hills. There is no local name attached to this basket. Instead of using the term “pig-carrying basket”, Fig. 160 (Barabazar, Shillong, Meghalaya), the term “pig-packing basket” expresses the manner in which this basket is used more appropriately. Live pigs are

restrained within the basket in order to facilitate easy transportation to the market. After its forelegs are tied against its body, the pig is lowered into the basket with the head first so that its snout sticks out of the opening at the base of the basket and its hind portion protrudes above the rim. The pig's hind legs are bound together and the binding at the rim holds the animal gently but firmly within the basket.

This basket incorporates an extremely interesting structural concept. It is shaped like a short length test-tube, the diameter increasing gradually towards the rim. It is woven in an open-hexagonal weave using intermittent thick and thin construction. Elements used in the weave are taken in multiples and this work together to make the whole basket much stronger. The bamboo splits used to make this basket are fairly wide but thin to 1 cm in width and 1 mm in thickness. The diameter of the basket at the rim is around 30 cm and it is 50 cm in height. The inner layer of the basket is completed first and the outer layer is woven tightly over this, using the formed inner layer as a mould. An interesting detail that is repeated in this basket is the manner in which stiff splits of bamboo are bent sharply without breaking the fibers in the element.

- **Carrying basket (Closed- weave)**

Khoh- is a coarse, closed-weave basket used by the Khasi tribe of Meghalaya for general-purpose marketing, Fig. 161. This basket is carried on the back by a head-strap. The rim is a circle of diameter 40- 45 cm and the sides taper down sharply along a straight line to form a point at the base. The height of the basket is 60- 65 cm. The warp elements in the side weave are bent sharply at the base, before continuing up the opposite side. The weft element is made from bamboo outer splits, which are half the width and thickness of the warp elements. In the weft, the outer layer of bamboo faces the outer surface of the basket. Four splints of bamboo strengthen the base. The upper edge of the rim is self-strengthened

Khasi fruit basket- is used for packing and transporting fruit and vegetables. It is similar in structure to the *khoh*. The form of this basket is like a parabolic dome. The circular rim has a diameter of 35 cm and its height is of 30 cm.

wide outer splits of bamboo are used in the warp, overlapping radially to form the base. The first few turns of the weft spiral are made from fairly thin bamboo splits, Fig.162. Subsequent turns use weft elements that are almost the same width as the warp, though the thickness is less. The rim is self-strengthened.

- **Shallow carrying baskets**

Shang- is a shallow storage and shop-display basket used by the Jayantia tribe and made from split bamboo. It has a square base of diagonal around 25 cm and the sides spread out to a circular rim of diameter around 45 cm. Its height goes to 25 cm. The base is woven in a twill weave in four-fold symmetry around the centre, Fig. 163. A spiraling weft element forms the side weave that has an inverted herringbone pattern along the centre line of each side. (Source: Fig. 161, 162, 163, Police Bazar, Shillong, Meghalaya).

Khasi shallow basket- is woven from split bamboo and the weave structure is identical to the Jayantia Shang. The difference lies in the rim-strengthening detail and the side-strengthening structure. The diagonal of the base square measures 25 cm, the diameter of the circular rim is 35 cm and its height is 25 cm. A wide, thick split of bamboo, bent to form a square band, on which the basket rests, strengthens the base. This split is 3- 4 cm wide and 4 mm thick and made from bamboo of large wall thickness. Eight side-strengthening elements of wide bamboo splits are attached to the band, four at the corners and four at the centre of each side. These splints are shaped at both ends. The concept of reducing the width or thickness to achieve flexibility in an otherwise rigid bamboo member is an interesting structural feature of Khasi and Jayantia products.

Small Khasi storage baskets- The Khasi tribe of Meghalaya use small double-walled baskets to store valuables and other small articles. These articles have a square base with the sides moving up vertically and ending in a circular rim. The inner layer is woven with wide bamboo inner splits. While the outer layer uses thin bamboo outer splits. In both layers, the warp elements interlace to form the square base.

Some of these baskets are left open at the top, while others are provided with lids woven in the same structure as the container and hinged to the side by loops of split-cane. These baskets are of three types, Fig.164 (Kalakshetra Museum, Guwahati).

1. It has a lid and a base square of diagonal 13 cm and is 17 cm in height. The diameter of the circular rim of the container part measures 11 cm, Fig.164a.
2. This basket has no lid but is provided with loop of split-cane at the rim. This is done so that it can be suspended, either from the waist while being carried or from a hook when stored, Fig.164b.
3. This one is wide but shallow. The diagonal of the base square measures 22 cm, the rim diameter is 21 cm and its height is 12 cm. The basket is provided with legs made from spike-shaped splints of bamboo, using a part of the node at the lower end of the leg. Four of these are inserted into the side weave at the corners of the basket, Fig.164c.

- **Coiled cane containers**

This container is in the form of a cylinder of diameter 20 cm and its height is 15 cm. It has a lid of the same diameter, which has a rim that overlaps part of the container side at the top. At this part, the coiled rim has a smaller diameter than the sides, with a band being slightly recessed. This part receives the rim of the lid. Both the container and the lid are made from coiled whole-cane elements. A flat circular base is first formed by a single whole-cane element coiled as a tight spiral. At the centre of the base, this element is thinned down so that it can be bent easily into the small spiral. Split-cane binding holds consecutive turns of the spiraling whole-cane element, being wrapped around the pair as they move around the container. This construction results in a very rigid container and the texture created on the surface by the binding tends to form a pattern of inclined lines. These containers are sold in sets of three or four nesting one inside the other.

- **Large storage baskets**

Khasi storage basket- is a rectangular box with a lid and is woven from split bamboo. It is used by the Khasis to store clothes and valuables. The basket

has a rectangular base, which is about 50 cm by 30 cm, and its height is about 32 cm including the lid. Both the container and lid have an identical double-walled structure. The lid overlaps the mouth of the container. The loops of split cane are bound to the rim of the lid and these loops act as hinges linking the lid to the container, Fig. 165 (Shillong, Meghalaya). A hasp made of split cane, which is wrapped around by split-cane binding, is attached to the rim of the lid in front of the basket and a staple of a similar construction is attached to the sidewall of the container in a corresponding position. Four legs shaped like spikes and made from lengths of whole bamboo are introduced into the side weave to extend below the base at the corners of the basket. These keep the woven base away from the ground.

4.7.3 Textile

Three major tribes of Meghalaya have distinct costumes and jewellery. With the change of time, as in the rest of the country, the males have adopted the western code of dress and the women seem to be continuing with the tradition of ethnic textile and tailoring elegance. The Khasi women wear a dress called 'Jainsem', Fig. 166 (Shillong, Meghalaya), which flows loose to the ankles. The upper part of her body is clad in a blouse. Over these, she ties both ends of a checkered cotton cloth on one shoulder, thus improvising an apron. On formal occasions, worn over the 'Jympien' is a long piece of Assam muga silk called 'Ka Jainsem Dhara' which hangs loose below the knees after being knotted or pinned at the shoulders. The 'Tapmohkhlieh' or head-shawl is either worn by knotting both ends behind the neck or is arranged in a stylish manner as done with a shawl.

The Jaintia unmarried girl's dresses like her Khasi counterpart but with the addition of a 'Kyrshah' - a checkered cloth tied round the head during harvesting. On formal occasions, however, she dons a velvet blouse, drapes a striped cloth called 'Thoh Khyrwang', sarong style round her waist and knots at her shoulder an Assam muga piece hanging loose to her ankles. In contrast, the Garo woman wears a blouse, raw cotton 'Dakmanda', Fig.167 (Meghalaya State Museum, Shillong), which resembles a 'Lungi' and the 'Daksari', which wrapped like a 'Mekhla' as worn by Assamese women. The jewellery of the Khasis and the Jainties are also alike and the pendant is called 'Kynjri Ksiar'. The Khasis and

the Jaunties also wear a string of thick red coral beads round their neck called 'Paila during celebrations, Fig. 168 (Shillong, Meghalaya). The Agro women wear Rigitok, which are thin fluted stems of glass strung by fine thread.

4.8 Sikkim

The Sikkim has newly become the part of Northeast region and we find having equal weightage of its own while we look at its culture, its tradition and its design tradition. It enriches the Northeast as a whole. The population of the region is rural and tribal.

Sikkim lies in the Eastern Himalayas. Being a region which had its geophysical uniqueness owing to its location and climate conditions, human inhabitation was sparse. The populations inhabiting this area were of Indo-Mongoloid, Tibetan or Nepalese origin. The influence of the Buddhism has created a unique culture, different from other parts of the country. The tribals had little contact with the other parts of the country. Agriculture through jhum cultivation besides animal rearing formed their important occupation. The Lepchas and the Bhutias who came from the regions of Tibet settled in Sikkim. Though there are three ethnic groups, e.g., Lepcha, Bhutia and Nepali, all the three groups have been combined together in due course of time and form a single group called Sikkimese and become single culture.

There are numerous festivals celebrated in Sikkim through out the year. As people of Sikkim mostly follow Buddhism, the festivals celebrated here are associated to the Buddhist festivals. Mostly the festivals are celebrated in the Gompas or Monasteries of Sikkim, where people gather in large number to commemorate the occasion. In these festivals from dress code to decoration has its own identity, similarly is also seen in Arunachal where far eastern design elements are very much present. The much of the artifacts of Sikkim are not properly documented, hence during the thesis work a special effort was made to collect information and relevant photographs visiting specifically king's family and the hill people villages to get the age-old Sikkim's tradition, which is discussed below in brief.

Music and dances of Sikkim

The Dances of Sikkim are accompanied with Songs and Music. Folk dances and songs are an ingrained part of Sikkimese culture. Most of the dances related to the amazing beauty of the natural surroundings, some signifies the harvest season and others are performed for prosperity. Many of the musical instruments that accompany the dances are unique to Sikkim. Almost all the dances are accompanied by the musical instruments. Some of the popular dances are described below, which would lead us to know the cultural background on which the design of crafts and artifacts flourish.

Lu khangthamo dance- is dedicated to this day - a day of thanks giving to all Gods and deities of the three worlds, Heaven, Earth and Hell. This age-old folk dance is performed regularly by the young and old folk alike in their traditional costumes and ornaments accompanied by the pleasing song and music on the occasion like warming and New Year celebrations. It is a Bhutia folk dance, Fig. 169 (Gangtok, Sikkim).

Gha to kito- is a song cum dance which describes all about the treasures of Sikkim like Mount Khangchendzonga and the snow covered Himalayan ranges, rhododendrons and primulas, holy places, caves and minerals. It is a Bhutia folk dance.

Chi rimu- is a popular Bhutia folk dance performed in praise of Sikkim by young and old folks. This dance is a regular feature in every happy occasion when Bhutias express reverence to great teachers and sacred places of worship.

Gnungmala gnunghey- is a typical Bhutia folk dance performed in praise, by both male and female to the accompaniment of devotional hymns and song of the multi purpose majestic bamboos, describing its use, Fig. 170 (Gangtok, Sikkim).

Rechungma- is typical Sikkimese dance performed during the happy occasions like childbirth, marriage and other social gatherings, offer paying their sincere thanks to the god for His blessings.

Be yu mista- is a popular Bhutia folk dance performed in praise of Sikkim by group of males and females with pleasing songs and prayers.

Tashi zaldha- is a dance depicting the Bhutia custom of offering scarves, performed by boys and girls.

Mask dances of Sikkim

Enchey chaam- Sikkim's famous mask dances provide a spectacle, perhaps nowhere to be experienced in the entire world. Performed by lamas in the 'Gompa' courtyard to celebrate religious festivals, dances demonstrate perfect footwork and grace. Costumed lamas with gaily-painted masks, Fig.171 (Gangtok, Sikkim), ceremonial swords and sparkling jewels leap and swing to the rhythm of resounding drums, trumpeting of horns and chanting of monks. It is the annual puja celebrated with religious masked dances.

Kagyed dance- is performed symbolizing the destruction of the evil forces and hoping for peace and prosperity to flourish in every Sikkimese home. The solemn nature of the dance is interspersed with comic relief provided by the jesters. Kagyed dances enact various themes from the Buddhist mythology and culminate with the burning of effigies made of flour, wood and paper.

Rumtek chaam- is the most important chaam (religious masked dance) performed on the 10th day of the 5th month of the Tibetan calendar, corresponding to the month of June. It presents eight manifestations of the Guru Rimpoche. This is highly colorful and spectacular and draws many pilgrim and visitors.

In the above mentioned dance forms we have experienced presence of Buddhist elements in different motifs with curvilinear line and decoration and in various colour application, Fig 172 (Rumtek Monastery), which give us the flavour of far eastern design through similar elements.

4.8.1 Crafts and Artifacts

Sikkim is famous for woven woolen carpets, table called "Choktse"; hand made paper, leather works, variegated applique work, batiks, an exquisite selection of dolls are among the specialties of the state. Foremost among Sikkim's products are the beautiful hand woven woolen carpets with traditional Sikkimese motifs and unique. These attractively designed carpets are in great demand in Sikkim

and abroad. The handsome woolen texture is durable, plush and they are dyed not with synthetic dyes but traditional vegetable Sikkimese dyes.

Choktse, the foldable table from Sikkim is one of the well known products in India and abroad. Choktse are prepared in varying designs and dimensions. The traditional Sikkimese weaves and woolen blankets, which can be designed into bags, shawls, jackets, opulent Sikkimese thankas (traditional tapestry).

Wood Carving

Monasteries and many buildings in Sikkim are richly decorated with symbols and icons. These symbols are painted or embossed on the walls, Fig. 173 (Rumtek Monastery), or on *thankas* (paintings), or depicted in the exquisite woodcarvings that adorn these monasteries. Sikkim's famous mask dances also display the expertise of the locals with wood. Costumed Lamas with gaily-painted masks, ceremonial swords and sparkling jewels, leap and swing to the rhythm of resounding drums, trumpeting of horns and chanting of monks. The masks they wear are either wooden or made of papier-mâché and they are all hand made. Many monasteries are also decorated with wooden carvings. For instance, the Pemayangtse monastery, surrounded by mountains, glaciers and passes, has a number of elegantly carved wooden sculptures.

Thangka Paintings

Known as thankas, the typical paintings of Sikkim were originally a medium of reverence through which the highest ideals of Buddhism were evoked. Thankas are created on cotton canvas and often framed with silk. They depict images of different Gods, Goddesses, and philosophies related to Buddhism. Traditionally, thankas were made by Buddhist priests and monks and specific ethnic groups. The skills were passed from generation to generation. Today commercialisation has helped spread this art form among a larger group of people. The revenue earnings from this art have also helped the monasteries and its practitioners keep it alive.

There are three types of thankas.

One depicts the life of Buddha, his birth, his disillusionment with life, his search for enlightenment and his understanding of life.

- The second type of thangka is more abstract and represents the Buddhist beliefs of life and death. One example could be the Tibetan Wheel of Life, which symbolizes the Buddhist belief of transmigratory existence.
- The third type of the thangka consists of paintings that are often used as a tool for meditation or as offerings to the deities.

These paintings are usually done against a white background. The colors used are all vegetable dyes and each has a special significance. White stands for serenity, golden for the birth or life, enlightenment, and parinirvana, red for the intensity of passion both love and hatred, black for anger, yellow for compassion and green for consciousness. The colors used in making a thangka are all vegetable or mineral dyes extracted from the nature. Buddhism is the predominant religion in this state and its monasteries are treasure troves of frescoes and thangkas.

4.8.2 Baskets

Baskets are not very common to be seen in Sikkim like other parts of Northeastern states do have. They have very good products in bamboo for their day to day use and also many age old utility items (ethnic) now almost extinct, and only samples and references can be seen in Museums and other personal collections here and there, few of which are discussed bellow.

Classification of Baskets in respect to their shapes

- **Conical basket**

Baskets of conical shapes are invariably used for carrying purposes. These are commonly found among the Sikkimese. There are sufficient reasons to show that here is definite relationship between the topography and the conical shape of these baskets. These baskets are very rarely seen.

- **Semi- conical carrying basket**

A dome shaped small bowl having hexagonal double sided weaving pattern with round base was also very popular utility items among the Lepachas, Fig. 174. It has the base secured around by means of horizontal bamboo strips. Another open weaved small round base basket where upper portion is

horizontally weaved and the lower portion is hexagonal weaved pattern, Fig. 175. It does not have a firm base like the previous one.

- **Cylindrical basket**

Cylindrical big basket, having flat base with little tapering towards an oval shaped mouth, Fig. 176, was very popular among Lepchas. It has diagonal weaving pattern. Now a day these kinds of bamboo baskets are very rarely seen and this has been replaced by still and aluminium utensils in the local market. These baskets are of curve outline and have flat bottom with legs. They are used for storing as well as for carrying articles. The baskets used for storing grain in the granary have uniformity in shape all over in this region. Normally these baskets are 2 to 3 feet in height and about 1.5 feet in diameter. Womenfolk for carrying light loads such as, seeds, etc., normally use them.

- **Small squarish basket with open mouth**

Most of the smaller baskets found among the Sikkimese have usually open mouth. They are almost squarish in shape, Fig. 177. The height of the basket is about 20 cm and maximum girth is about 40 cm. It is seen that the angular and cross, some time hexagonal weaving patterns are popular among Sikkimese.

- **Small bamboo container with open mouth**

This is an unusual bamboo container design of Sikkim which can not be found or evident in any other part of Northeast. With a single 6 cm. strap of bamboo the Sikkimese made small roundish with flat base bowl like container, Fig. 178. The edge of the bamboo stapes are nicely tied with small bamboo string to give a circular form. Same kind of container with doubled straps is also seen made with same techniques.

It may be worth mentioning again that the basketry patterns are extremely limited in Sikkim and the patterns are invariably geometric among the baskets.

(Source: Fig. 174, 175, 176, 177, Art & Cultural Museum, Sikkim)

4.8.3 Textile

Textile is a vital part of Sikkim's tradition where colour and motifs, Fig 179 (Gangtok Sikkim), attached a vibrant visual experience. In traditional Sikkimese dress mostly they use primary colour combination. Sikkimese jackets are very intricately designed with typical floral motifs, Fig.180 (Gangtok Sikkim), which are found to be very common in Far East. Another important design where lot of Far Eastern motifs can be seen like dragon and other geometric and floral design is Sikkimese bag, Fig. 181 (Gangtok, Sikkim), which are very attractive and execution manner is bit complicated.

Carpet weaving

The women of Sikkim practice what is perhaps the oldest form of carpet weaving in the world. The tradition is essentially Central Asian and a frame loom is used for the purpose.

The women of the Bhutia community are believed to be expert weavers. The warp is prepared from cotton and is stretched on a frame. A small section is woven in plain weave. After this the woolen thread is introduced and a long metal rod is laid along the warp threads. Different colors of wool are introduced into the pattern and so are a number of rods. After about 3-4 rods, the loops are cut with a knife and a pile is created.

The patterns commonly woven onto the carpets are a dragon holding a ball in his mouth or stylized floral motifs. Patterns are also borrowed from Buddhist iconography. Geometrical patterns are popular too, Fig.182 (Gangtok Sikkim). Most patterns draw heavily on the surrounding beauty of the landscape and remind one of snow clad mountains surrounded by the sky and the brown and red earth and flowing waters.

Even today, young students are taught the traditional art of carpet weaving as well as that of making thangkas, the traditional painting art of Sikkim. A variety of fashionable garments for modern people are the other specialties of the state. For the development of these industries government has set up an institute of cottage industries. The locally made handicrafts are sold at the institute.

4.9 Remarks

Northeast India is an example in true term of diversity with various ethnic cultures as mentioned above, e.g., Arunachal Pradesh itself has 28 communities such other states also bear the same. Hence, this thesis work covers some selective items that are mostly used and appeared to be prominent among the similar items of their kinds. The references and findings presented herein give an overall culture and design domain of Northeast. Handloom items were studied specifically to understand the design elements relevant to the local identity. While conducting survey of distinctive feature of local artifacts, some other relevant items have also been observed that carry specificity of the local culture. In depth study covering more community specific samples would give a finer understanding. In the next chapter V, few samples of textile design and motifs, and baskets are analysed to see the specific usage of design elements by the communities live in this region as well as the region as a whole.



Fig 49. Basic characteristic of these toys is simple geometrical forms. (Majuli, Assam)



Fig. 50. Guru Ashana- Thapona. (Borpeta, Kamrup)



Fig. 51. Mask. (Majuli, Assam)



Fig. 52. Assamese jewellery. (Nowgang, Assam)



Fig. 53. A typical item originally to be used by farmers and this has become cultural symbol with various colour application. (Pragjyotika, Guwahati)



Fig. 54. Bota and Sarai which are used in rituals and also to offer betel-nut and pan while welcoming a distinguished guest. (Barua, U, Guwahati)

Fig. 55. Ban kahi for giving meal to the guest which is now almost extinct from using as household items. (Kalakshetra, Guwahati)

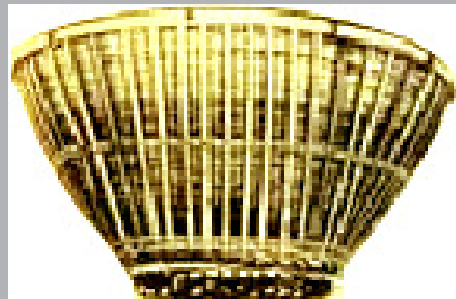


Fig. 56 Cane Bamboo Basket lidded with dome shaped lid & square shaped bottom. (Nowgaon, Assam)

Fig. 57. Pasi basket.(Nowgaon, Assam)



Fig. 58. Khorahi of Assam (Guwahati, Assam).



Fig. 59. Basket. (Hamreng, Karbi Anglong).



Fig. 60a. Unusual shaped basket.(Kheroni Karbi Anglong)



Fig. 60b. The basket is called Jopa.(Upper Assam)



(a)



(b)



(c)



(d)



(e)



(f)

Fig. 61. (a) Polo, (b) jakai, (c) Kulla, (d) Chepa, (e) Dori and (f) Khaloi. (Rohdhola, Bihlongoni, North Guwahati)



Fig. 62 Generally, dakhna has yellow green colour body with some design in red and brown colour.(Guwahati, Assam)



Fig. 63 Dimasa chadar very artistically designed known as Rijamphai. (Kalakshetra, Guwahati)

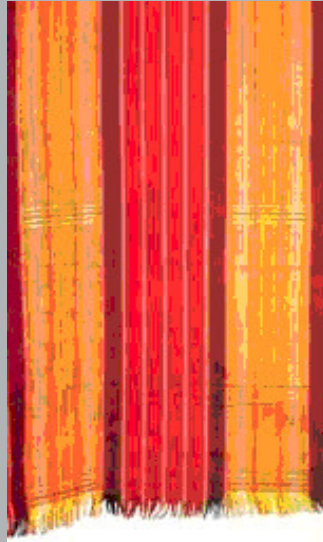


Fig. 64 Main colour combination of mech textiles is red, yellow, brown and white. (Kalakshetra, Guwahati)



Fig. 65. Eri, warm clothes for winter.
(Kalakshetra, Guwahati)

Fig 66. some costumars of today still want the traditional age old motifs.(Mongoldoi, Assam)

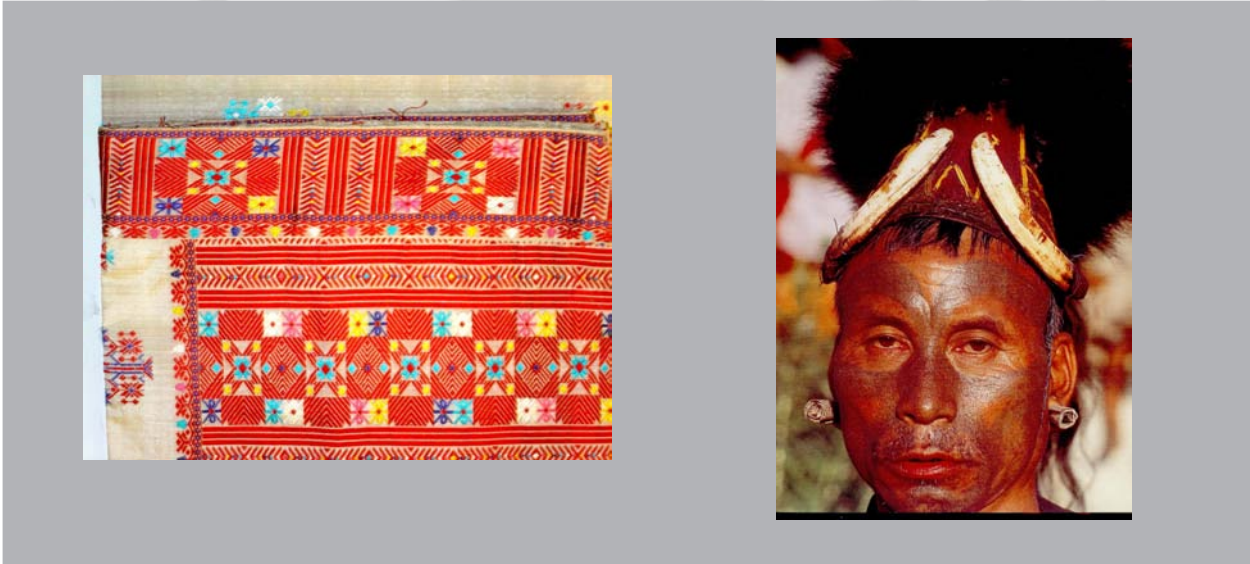


Fig 67. Customar and market demand and then try to give a new look to it thus new motifs evolves.
(Guwahati, Assam)

Fig. 68. Facial tattoos are marks of a head taker. (Jacob.J)

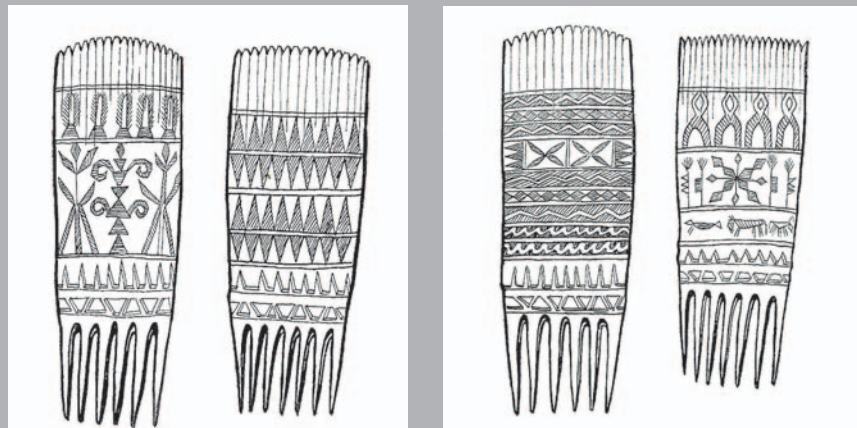


Fig. 69. Combs made of bamboo and decorated with poker-work designs. They are from 7- 10 cm long. (E.Verrier)



Fig. 70 Various smoking pipes of Apatani, Palibos, Bokars and Ramos (Itanagar museum).

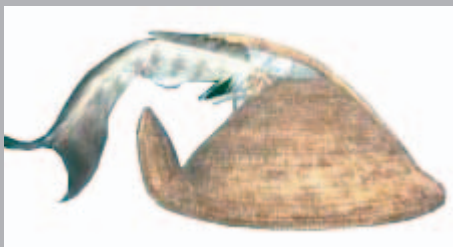


Fig. 71. Yatee, Headgear of Apatani. (Itanagar Museum)



Fig. 72. Monpa Headgear. (Itanagar Museum)



Fig 73. Idu mishmi Headgear. (Itanagar Museum)



Fig. 74. Bopa Headgear , with hornbill beak, hair & cane (Itanagar Museum).

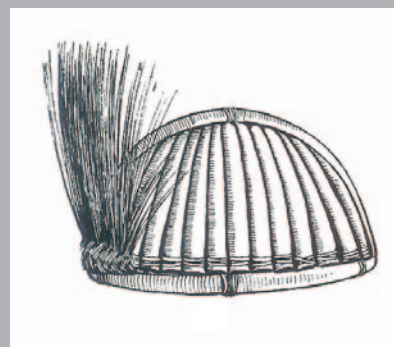


Fig. 75. The bolup is a hat used by the Adi tribe of Arunachal. (E.Verrier)



Fig. 76. Silver ornament of Mishmis (Mishmi village, Along).



Fig. 77. Apatani women wearing cane nose plug. (Mishmi village, Along).



Fig. 78. Ege Conical Basket of Dafla (Itanagar museum).



Fig. 79. Egin of Miniyong. (Itanagar museum).



Fig. 80. Thee of Mishmi.



Fig. 81. Haversacks or flat wallets like baskets commonly found among the Tagins and Adis. (Kalakshetra, Guwahati)

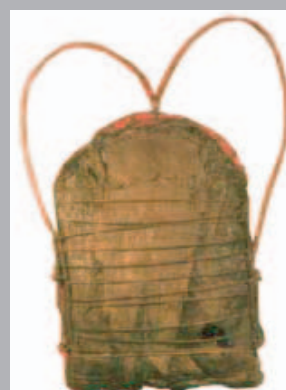


Fig. 82. The Daflas 'Tali' are more effectively used to render the basket complete waterproof. (Kalakshetra, Guwahati)



Fig. 83 Adi bag.
(Adi Basti and Itanagar town, AP)



Fig. 84 Adi jacket.(Adi Basti and Itanagar town, AP)



Fig. 85 Apatani style of cloth is green with borders of orange mixed with red lines and a few vertical stripes of yellow and digonal tripes of green, blue and white (Pasighat, AP).

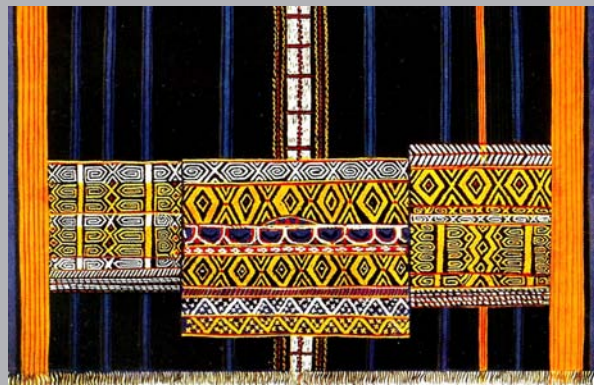


Fig. 86 Apa Tani, priest's shawl there is genuine spirals, some of which are actually curved, curves and wavy lines (E. Verrier).



Fig.87 Mishimi skirt design (E. Verrier).



Fig.88 Typical Mishimi design (E. Verrier).



Fig. 89 Wangcho bags (E. Verrier).

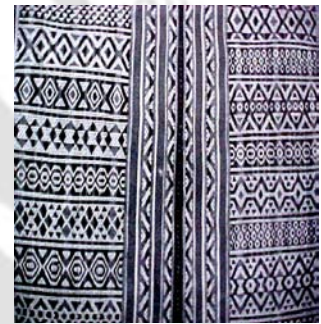
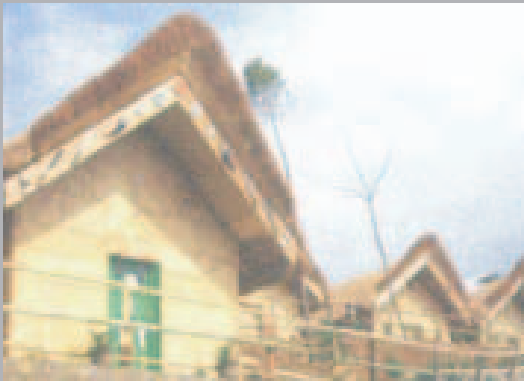


Fig. 90 Bag design of sheducpens (E. Verrier).



Fig. 91. Singhpoh's favourite colours are red, black, green, yellow, orange and violet (E. Verrier).



a



b

Fig. 92. a) Morung, the traditional house and (Kohima, Nagaland)

b). A contemporary architecture with morung style (Kohima, Nagaland)



Fig. 93 Ao women necklace.(Jacob.J)



Fig. 94. Typical Angami bead necklace.(Jacob.J)



Fig. 95 Fish shaped necklace (Mon village, Nagaland).



Fig. 96. Seed comb of Naga.(Mon village, Nagaland).



Fig. 97 A cheaper, lighter dish made of bamboo is seen in every house. (Waromong Villag, Nagaland)



Fig. 98 Bamboo saucers. (Mon village, Nagaland).



Fig. 99 drinking mugs decorated with poker work designs. (Longkum Village, Nagaland)



Fig. 100 Small decorative combs of bamboo. (Kohima, Nagaland)



Fig. 101 Ao Nagas use a decorative ceremonial hat, which is cone-shaped. (Art & Cultural Museum, Kohima, Nagaland)



Fig. 102 The Ao basket is conical in shape. (Art & Cultural Museum, Kohima, Nagaland)



Fig. 103 Angami basket with legs. (State Museum, Guwahati)



Fig. 104. Konyak baskets are decorated with figures and feather.(Fig. 104 and 105 Art & Cultural Museum, Kohima, Nagaland)



Fig.105 These baskets are considered as most beautiful among the nagas.



Fig. 106 The decorative warrior shawl Tsungkotepsu.(Kalakshetra, Guwahati)



Fig. 107 A wealthy man's shawl, Rongsu. (Jacob.J)

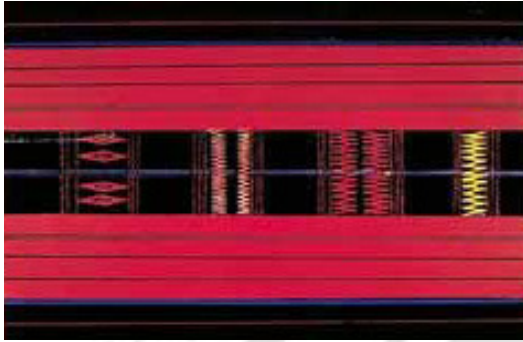


Fig.108 Yongzujangau or cucumber seed skirt is woven in red on a black background.(Kohima, Nagaland)



Fig. 109 Another important Sema skirt is asukeda pi. (Jacob.J)



Fig. 110 the predominant Angami pattern with white with red and black bands called Loramhoushu. (Mokokchung, Nagaland)



Fig. 111 black with red, blue and yellow bands called lohe. (Guwahati, Assam)

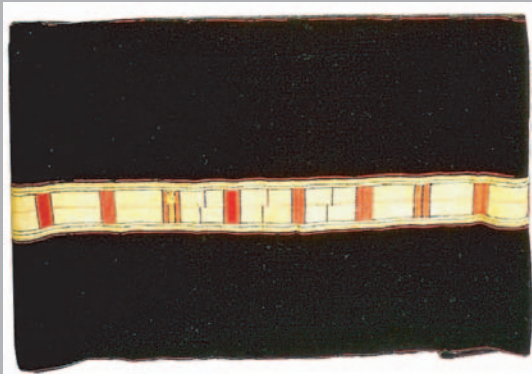


Fig. 112 Shawl used by men and women for rough wear is a black shawl called ratapfe.(Kohima, Nagaland)

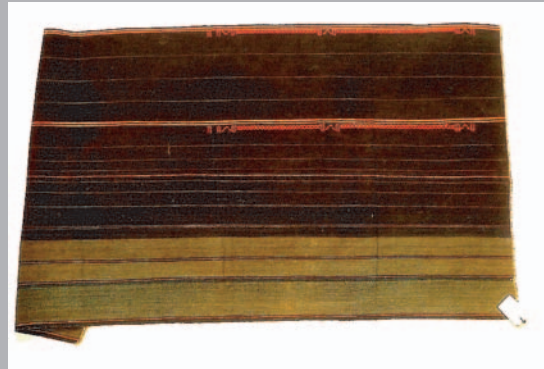


Fig. 113 Sema shawl akhum, is black and green with three or four red bands is very common. (Art & Cultural Museum, Kohima, Nagaland)



Fig. 114 Colorful and handsome shawl called shatni may be worn by rich konyak women.(Kohima, Nagaland)



Fig. 115. Manipuri conch shell blower wearing headgear and bangles marking auspicious occasions. (Imphal, Manipur)



Fig. 116 A flute-like-wind musical instrument called Puleh. (Manipuri Basti, Guwahati)



Fig. 117. Pottery samples of Manipur.(Imphal, Manipur)



Fig. 118 Chengbon basket.



Fig. 119 Thuk basket.(Imphal, Manipur)



Fig. 120 Phiruk basket.
Traditional Container Basketry,
(State Museum, Manipur).



Fig. 121 Tabu basket.



Fig. 122. Chiru basket.

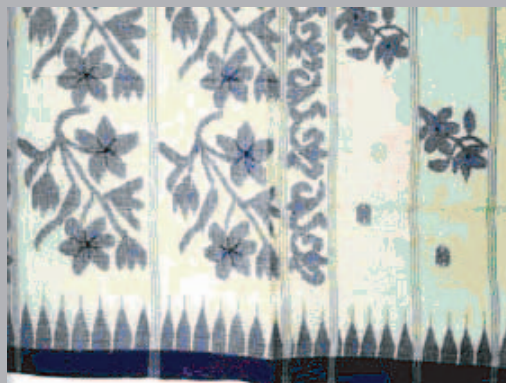


Fig. 123 In Manipuri textiles the mixer of geometrical and floral motifs is vivid.



Fig. 124 Phirananba embroidery.

Fig.118,, 120, 121,122,123,124, State Museum,Imphal, Manipur)

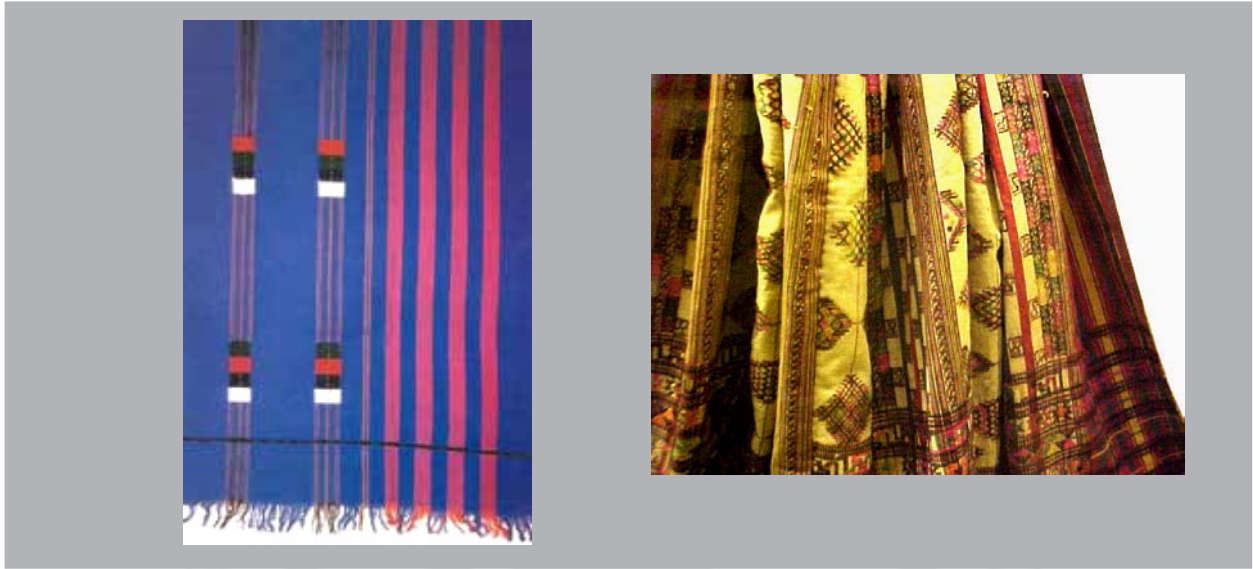


Fig. 125 Moirang pheii design. (Handicraft center, Imphal, Manipur)

Fig. 126 Lashing pheii design.(Handicraft center, Imphal, Manipur)



Fig. 127 Likli Design. (Kalakshetra, Guwahati)

Fig. 128 Maibung design.(Handicraft center, Imphal, Manipur)



Fig. 129 Shamilami design. (State Museum, Manipur)



Fig. 130 Chum design.(Kalakshetra Museum, Guwahati)

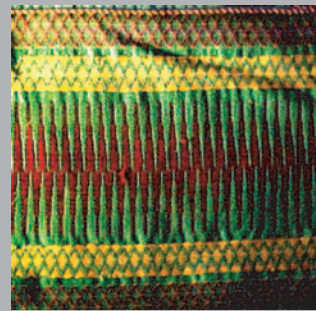


Fig.131 Leirong design (State Museum, Manipur).

Fig.132 Bakey Design. (Kalakshetra Museum, Guwahati)



Fig. 133 Pheishoi design (State Museum, Manipur).

Fig. 134 Mizo Cane Hat (Handicraft Center, Mizoram).

Fig. 135 Iukhum-Rain bamboo hat (Handicraft Center, Mizoram).



Fig. 136. Ornaments, Mizoram (State Museum, Aizaol, Mizoram).

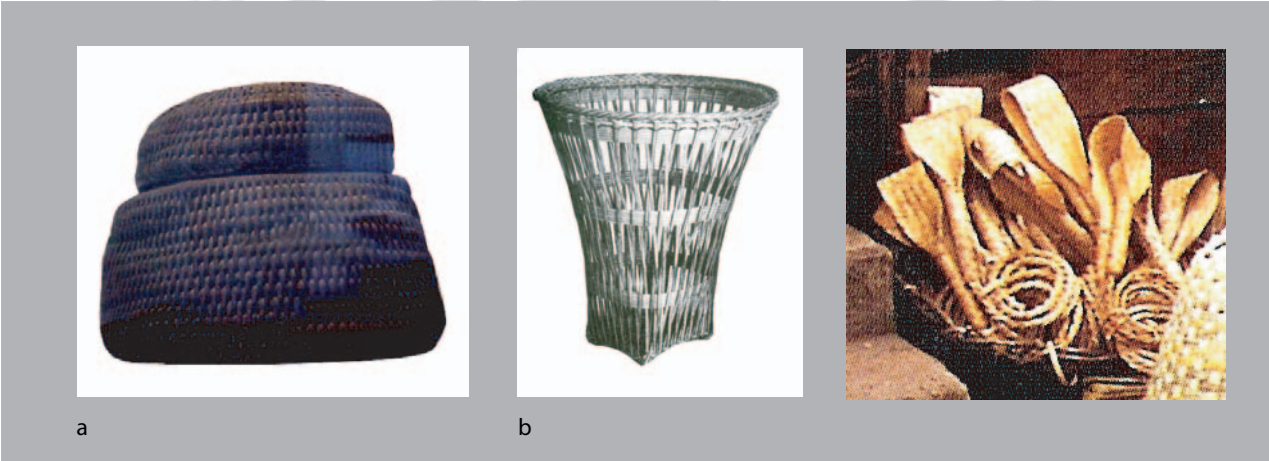


Fig. 137 Mizo baskets, (a) Storage basket and (b) Paikawng Carrying basket (State Museum, Aizaol, Mizoram).

Fig. 138 The basket is carried by means of a braided head-strap. (Aizaol Market)



Fig. 139 The emsin has a square base. (Ranjan. M.P)

Fig. 140 Paiem Basket. State Museum, Aizaol, Mizoram).

Fig. 141 Baskets that are used to store fishes. (State Museum, Aizaol, Mizoram).



Fig. 142, Mizo Puan. (State Museum, Aizawl, Mizoram).



Fig. 143. Phandum design. (State Museum, Aizawl, Mizoram).



Fig. 144 Puon Laisen is a red striped cloth. (Kalakshetra, Guwahati)



Fig. 145. Zakuolaisen: this is a blouse piece used mainly by the unmarried girls (State Museum, Aizawl, Mizoram).

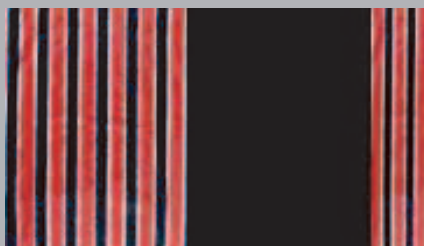


Fig. 146. The Jawl Puon has nine red stripes and eight black stripes alternately arranged running vertically throughout the length of the body against black background. (State Museum, Aizawl, Mizoram).



Fig. 147. Murha, Tripura (Agartala Market).



Fig.148, Handloom items. A typical Tripura sari (Agartala Market).



Fig. 149. The tukri is a shallow basket used by the Bengalis (Agartala Market).



Fig. 150. The sempa khari is a small basket shaped like a square-based prism. (State Museum, Guwahati)



Fig. 151. Muzzles woven from bamboo are used to restrain cattle from grazing in the rice fields (Agartala, Tripura).



Fig. 152. The grain storage basket of Tripura (Agartala, Tripura).



Fig. 153. Women wear along piece of cloth as the lower garment, which is known as pachra and cover their breasts with a small piece of cloth called risha. (Riang Village, Tripura).



Fig, 154. Working dress of an adult male is a napkin (rikutu Gamcha), a self-woven shirt (Kubai).(Riang Village, Tripura).



Fig.155. Khoks basket (Shillong, Meghalaya).



Fig. 156. Crown is worked with a pretty lattice design (Pologround Shillong, Meghalaya).



Fig. 157. Khasi rain shield used in Meghalaya (Moujai, Shillong, Meghalaya).



Fig. 158. Garo headgear is beautifully weaved with feather and wear by females (Garo Hills).



Fig.159. The Khasi pipe is a simple construction incorporating a bamboo bowl connected to a bamboo pipe stem made from a length of branch (Serrarims, Meghalaya).



Fig. 160. The “pig basket” as the name suggests is a basket used to transport pigs and is seen being used in the Khasi Hills. (Barabazar, Shillong, Meghalaya)



Fig. 161. closed-weave basket used by the *Khasi* tribe of Meghalaya for general-purpose marketing. (Source, Fig. 161,162,163, Policebazar, Shillong, Meghalaya)



Fig. 162. This basket is used for packing and transporting fruit and vegetables.



Fig. 163. The Shang is a shallow storage and shop-display basket.



(a)



(b)



(c)

Fig. 164. Khasi storage baskets. (Kalakshetra Museum Guwahati)



Fig. 165. The Khasi storage basket is a rectangular box with a lid (Shillong, Meghalaya).



Fig. 166. Khasi women wear a dress called Jainsem.



Fig.167. Garo woman wears a blouse, raw cotton 'Dakmanda' (Meghalaya State Museum).



Fig. 168. The Khasis and the Jaintias also wear a string of thick red coral beads round their neck called 'Paila' during celebrations (Shillong, Meghalaya).



Fig. 169. Lu Khangthamo, Sikkim's folk dance (Gangtok, Sikkim).



Fig. 170. Gnungmala Gnunghey, folk dance of Sikkim (Gangtok, Sikkim).



Fig. 171. Enchey Chaam, folk dance of Sikkim (Gangtok, Sikkim).



Fig. 172. Far eastern influence in motifs and colour application. (Rumtek Monastery, Sikkim).



Fig. 173. Symbols are painted or embossed on the walls (Rumtek Monastery, Sikkim)..



Fig. 174. A dome shaped small bowl having hexagonal double sided weaving pattern with round base.



Fig. 175. open weaved small round base basket where upper portion is horizontally woven and the lower portion is hexagonal woven pattern.



Fig. 176. Very old cylindrical big basket is having flat base with little tapering towards an oval shaped mouth.



Fig. 177. They are almost squarish in shape.



Fig. 178. Unusual bamboo container design of Sikkim



(Fig. 174-178, Art & Cultural Museum, Sikkim)



Fig. 179 Traditional colourfull dress of Sikkim. (Gangtok, Sikkim).



Fig.180 Sikkimese jackets are very intricately designed with tipical floral motifs.



Fig. 181 Geometric and floral design in sikkimes bag.



Fig.182 Geometrical patterns are very popular in carpet design.

(Fig. 180-182, Handicraft Center, Sikkim)

A Study on Design Elements in Craft Practices
With Special Reference to Textile and Basketry of Northeast India

Chapter-V

Tradition and common design elements

5.1 Introduction

Shift in traditional functions

To facilitate the graduation of the native artifacts that we had already referred, explorations with refined and contemporary application of traditional elements are necessary. The vitality of ethnic forms and their unabashed functionality can make room for the inherently aesthetic items of present day urbane décor. Some example can be cited here. The *Kula* used in winnowing and the *Khaloi* – creels, Fig, 61, to store the day's catch of fish are efficient in their function and had always been. It is observed that utility of *khaloi* has been expanded by local small industry and they are now part of an urban drawing room décor as lampshades. People started using these items as decorative piece. The stylized design lampshade is mass-produced, in the case of traditional Assamese implements or utility items the form, the material, the technique and the structure remain rigorously traditional but their functions and meanings are being radically transformed with a change of context. Some of these enhanced items are available at Pragjyotika, a centre for handloom and handicrafts of Assam at Guwahati, and are in demand, not only by the tourists who wish to have mementos of the place; local people also accepted such modifications. In their original context they still serve the traditional function.

When the trained designer steps in with his experimentation, he effects certain modifications through abstractions and items are made to fit into the changed functionalities. This itinerary is necessary not only for the native artifacts in that they may survive in an alien milieu but it can, equally adroitly, give a fresh lease of life to emaciated modern mass produced crafts which are often seen to adorn insensitive walls. However, the knowing elite often chooses right and traditional/ ritualistic items, which would not have survived otherwise, can exploit the unwarranted patronage and create its own private space.

Most of the original art, craft and artifacts representing Northeast culture are preserved in museum; some are still available in private antique collections. The rich tribal tradition is on the verge of extinction due to many influences of

modern civilizations. Still its essence is alive in the works and practices of the contemporary life of the region.

There are over 150 communities in the region and they have their own language, mores, beliefs, and rituals. The Assamese and the Manipuris had always had their own script while the others made do with either the Assamese script or the Roman. Some are using Devnagari now. Assamese had served as the link language until some thirty years when the whole area was virtually one political unit.

The faiths of the people range from Animism to Buddhism but the process of Indication inevitably informs all. The unity and integration of the diverse peoples in the Assam valleys came primarily not through religion but through the secular festival of Bihu or Spring Festival. All the communities in the valley have their own version of it though they are variously called and celebrated. The various harvest festivals are another meeting point.

The other rites and rituals of the communities are distinct without really being separate and they afford connections. The hill communities within and outside Assam offer a differently arresting spectacle as they had lived in long isolation. Some are isolated even now. Another unifying factor is the brewing of rice beer, a commonality encountered all over the region.

The Missing community of the plains of Assam, for instance, has priestly chants that they call Mibu. A bang, which are only traditionally handed down and even the priests cannot take any liberties with them. Their Oi-Ni: toms, on the other hand, are a species of folk music and they can accommodate all changing realities with aplomb. Some survive only as unmeaning gestures, as shadows, and modern researches into them have sometimes succeeded in retrieving lost meanings. They, therefore, cease to have little cognitive hold on their performers and audiences.

The rich diversity of arts, crafts and music of the area with its multi ethnicity provides us with fresh spectrum of colours, motifs and designs ensconced in materiality-in objects and figures. This exploration of the possible transformations in the proposed modern adventure of colours and motifs in designs empowered by historical and ethnographic studies of the extant and continuing arts and crafts of the communities of the area is already making inroads into traditional bastions.

The communities have specific colour and form preferences that vary in different geo-physical conditions and in different seasons. The black and red stripes of the Nagas are almost uniform but the motifs they work into their fabric are strictly hierarchical in society norms.

5.2 Traditional symbology

The inter-tribal transmission and combination is a new phenomenon. Craft practices in the Northeast have throughout history and legend been exploiting traditional motifs maintained through rites and rituals giving distinct identities to diverse ethnic communities. The rigours of town and city living and the pressures of market economy are invading the customarily sacrosanct spaces. Their realms are no longer inviolate. Consequently, these motifs are changing while remaining true to the original impulses.

The traditional rhombus of the Boros' textile motifs travels to the apparel of the Missings unobtrusively because of the continuing admixture and yet the dress is unmistakably 'Missing' in its colour and texture. The culture of Assam is incomplete without a description of the weaving culture among the Boros. The dress of the Boro, Fig. 183 (Guwahati, Assam), is similar to those worn by the rural Assamese folks. The women wear mekhela, chadar and riha, while the men use dhoti and chadars. In winter, they wear thickly woven endi chadars. However, the design of their mekhela is much simpler than those of Assamese non-tribals.

A love song is a love song in any language, but the Karbis, as the story of Sher-di-hun (message transformation through application of colours that depicts mood and meaning and context) tells us a love colour is also equally unmistakable in its urgent message. The girl weaves a shawl to tell of her love and her colours are received and apprehended in the spirit it was meant. This is the process of abstraction, which was present even then, without the blessings of digital precision.

In Assam, they predominantly use white with red ornamented borders, which is perhaps natural in the land of the Mother Goddess as red is not only a symbol of shakti, it also, at the same time, serves as an auspicious mark, of fertility, strength, and well-being. The Nagas, like most other ethnic communities use primary colours, Fig. 184 (Kalakshetra, Guwahati), e.g., Black, red and white, (see Table 5) not only because they are close to nature as they are actually immersed in it, but because they extract all their colours from nature both physically and metaphorically as it is also seen in case of the Boros, they use predominantly yellow, red, green and black.

The Monpas and the Sardkpens from Arunachal, being of the Buddhist dispensation, exploit secondary colours, as they use them more ideationally than naturally. The Maroon-yellow of the Buddhists is not only a pan-Indian phenomenon but also a global Buddhist reality. Non-Buddhist Arunachalies, exploit both primary and secondary colours in their apparels of Green and yellow because they cannot deny the proximity to Buddhist mores. Karbis mostly use red and black stripes. Textiles of different communities of Northeast carry specific motif information. Traditional ornaments of Naga, Manipuri, Karbi and other tribes of this region are mostly vibrant and beautiful in terms of colour application and designs, Fig. 185 (Jacob. J).

Interchanging ideas and know-how transfer enrich the concept of universality. Selective absorption not only underlines the imperatives of exchange but also sometimes offers scope for rejuvenating old ideas and thus can set new trends rolling. Because of fast communication and exchange of information and

material there is a constant struggle to expand beyond given parameters coupled with the inherent urge to keep the identity inviolate.

The intrepid Naga male had had many a human head up his totem pole during the head-hunting days of the recent past, but mithun (local bison) horns equally asserted themselves in his house decorations. The motifs and the manner here are so akin to the African masks and other non-functional artifacts from the south of the Dark Continent; that raises an obvious question, what are the basis of this similarities (not all communities live in this Northeast region have this background) needs a separate enquiry.

The folk is an infinitely self-sustaining area and can face and accommodate holistic changes of material, shape, form and colour. And in the process not only the aesthetics but the semantics also change radically. A balance is often to be arrived at. For this when we are absorbing significant elements from other cultures, we need to know our own. Who are we, where we come from, what was our struggle to become what we are now at present; we need to know our roots, which are often in our accessible history. In earlier chapters general account of Northeast tradition and culture has been mentioned. The below is some of the typical observations.

Decoration and background analysis

House decoration is a part of household activity in tribal society here in Northeast. To perform rituals they do house decoration, use of symbols associated with certain believe and thoughts or to perform a particular rituals they usually decorate their house wall inside or outside, Fig. 186 (Mokokchung, Nagaland). Mithuns horn is very auspicious among the Nagas, which they usually place in front door of the house. When the trained designer steps in with his experimentation, he effects certain modifications through abstractions and items are made to fit into the changed functionalities as evident in contemporary architectures, Fig.187 (Kohima, Nagaland), inspired by traditional Morang, Fig. 92 (Kohima, Nagaland), of Nagas. Similarly many new ideas (derived from traditional as well as taken from other sources) are being experimented now as house decoration.

Religious faith and rituals

Specific practices followed by a community are, more often than not, identity specific and form a culture and with retainment and changes in time make a tradition. Geographic locations and environmental variations obviously influence the process to give them the values the community will continue to uphold. These religious and ritual practices protect the character of a society. The phenomenon of ethnic culture, in almost its entirety, is tied to beliefs, myths and legends that give them a sense of an abiding community. 'Human intelligence begins with conception, the prime mental activity; the process of conception always culminates in symbolic expression.

The genesis of symbolic forms – verbal, artistic, mathematical, or whatever modes of expression there be- is the odyssey of the mind.' In Indian tradition colour used as symbol while practicing rituals such as Red colour symbolised Shakti and Green is a symbol of fertility. But in northeastern textiles, as in the shawls from the Misings and the Karbis, black is the hue of the young unmarried woman who has come of age.

Specific symbols are in use to perform certain rituals in Naga and Mizo culture. They even found to use human and animal skulls, bones and horns with different colour applications as ritual items, Fig.188 (Jacob. J). Direct use of all these are not in use now but it tells us about an ethnic character of a practice.

A myth is no more and no less than an explanatory account, which may or may not be historically accurate, but seeks to give ultimate significance to some event. Myths are the product of man's unceasing effort to interpret meaningfully the world around him. This is further evidence of the contention that man cannot live for very long without meaning.

Items chosen for design element study

This chapter covers design elements that perceived as regional identity, based on colour application of textile motifs and basketry as one of the most daily utility items which is seen very prominent among the various ethnic groups

residing in Northeast. Artifacts used by different groups (reference chapter IV) are too enormous in volume to study to arrive at a single finding. Thus the above mentioned items, e.g., textiles and baskets have only been chosen for the present study. The elements which have been extracted those items are tried out to explore in terms of new application to comprehend regional identity for new design thoughts. The idea is that search for regional design elements would help to facilitate their conversion into contemporary design in the regional and national contexts.

5.3 Common design elements

Question comes when we refer daily usable items that are designed, to be mass produced; how it can be said that this product is Indian and has identity of Northeast. We do not find enough material to support it; we have to search for information in a piece meal basis. While giving Indianness with regional flavour quite often we feel uneasy. We try to explain and go round and round, we feel but cannot identify the factors responsible for product imaging. I have mentioned it earlier that, scanty studies have been reported mostly in the area of Art and Architecture but in the area of design applications are not many.

Would it be possible to identify the common and specific features that can be used as Northeast design elements and perceived in the context of contemporary design? Can there be any single prescription? Whether there be application specific set of suggestions or some common ideas that can be used with making context specific permutation and combination of various design elements. And moreover what is the right way that others also perceive? What would be the appropriate media of exploration? Today's digital media can be successfully used to compile the theme and elements contributing in an easier way? Using simple and single element or combination of elements to create a specific emotion would be appropriate? There are lots of queries that cannot be answered immediately. It would also be immature to say what is the basic search and if some amicable solution is possible to attain.

In this context the observations presented in chapter VI give an account that can be explored further:

1) Colour and motifs expressing North-east; to see what are the elements surfaced up from myriad traditional textile designs of the Northeast Indian as seen in the above chapter, how these can be presented;

2) Common form and shape of basketries and other artifacts along with product identity texture, and

3) How these elements can be explored using contemporary and emerging technology to give newness of design thoughts while retaining the regional identity.

Detailed observations and findings are presented in Tables 5 to Table 15, which has been summarised in Chapter VI.



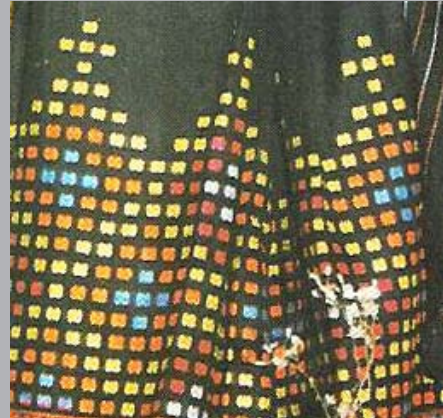


Fig. 183 Bodo and Mising dress.
(Guwahati, Assam)



Fig 184 Nagas of Northeast India are identified with specific use of black, white and red stripes along with animal motifs in their textiles (Kalakshetra, Guwahati).



Fig. 185 Traditional ornaments from different communities of Northeast (Jacob.J).



Fig.186 House decoration (Mokokchaung, Nagaland).



Fig. 187 Contemporary architectures inspired by traditional Morang of Nagas (Kohima, Nagaland).



Fig 188 Human and animal skulls used for rituals of nagas; now not in use but gives ethnic character of a practice (Jacob.J).

Table – 4 Field study information.

4a. Assam

Languages of Assam: Boro, Karbi, Assamese, Missing

Name of the Villages/ Town/ Museum in Assam	Duration of stay	Number of visit	Name of the persons met	Sex	Age	Language	Occupation
1) Mogroi	2 days	Once	1) Ghanashyam Gogoi 2) Jiten Borgohain	M M	52 50	Assamese Assamese	School Teacher Farmer
2) Bolimora	2 days		1) Jibon Lahan	M	50	Assamese	Farmer
3) Cinatoli	2 days		1) Dibaker Barua 2) Rajani Barua 3) Gangadhar Barua	M M M	45 60 50	Assamese Assamese Assamese	Farmer Farmer Farmer
4) Nokochari	2 days		1) Pawan Phukan	M	48	Assamese	Farmer
5) Morongial	2days		1) Jitu gogoi	M	25	Assamese	School Teacher
6) Diphu	3days		1) Dhaniram Tisu	M	50	Karbi	Village council
7) Morigaon	2 days		1) Dharani Kakati	M	45	Assamese	member
8) Sualkuchi	2 days		1) Jibon Deka 2) Lakshmi Haloi 3) Kumkum Deka 4) Hitesh Kalita	M F F M	25 30 18 30	Assamese	Weavers
9) Khanikor gaon	1 day	Once	1) Poroma Gogoi 2) Sumeshwar Gogoi	M M	50 65	Assamese	Villagers
10) Assam state Museum	2 days	Once	Samiran Barua	M	45	Assamese	Staff
11) Kalakshetra, Shipagram, Guwahati	2 days	Once	Gautam Sharma Monika Gogoi	M F	50 24	Assamese	Secretary Staff
Item studied	Number of distinctive specimen studied		Classification of items	Traditional/ Contemporary		Available/ extinct	
Baskets and Artifacts	17 (Fig. 49-61)		Various Carrying, storage basket, container, Headgear, smoking pipe etc	Traditional		Available	
Textiles	36		Shawl, Bags, Traditional Dress	Traditional		Available	
Ornaments	7		Earrings, Bangles, west band, and Necklace	Traditional		All are not available	

4 b Arunachal Pradesh

Languages of Arunachal Pradesh: Monpa, Miji, Sherdukpen, Nishing, Apatani, Hill Miri, Adi, Mismi, Idu, Khamti, Wanche

Name of the Villages/ Town/ Museum in Arunachal Pradesh	Duration of stay	Number of visit	Name of the person /s met	Sex	Age	Language	Occupation
1) Bandardwa	5 days	Once	Ratan Nabum	M	45	Nishi	Craftsman
2) Thimpu Basti,	2days	Once	Madur Thechi	M	32	Nishi	Craftsman
3) Naharlagun,	2days	Once	Rohen Tali	M	41	Nishi	Farmer
4) Itanagar Museum	1day	Once	Madop Tana	M	23	Nishi	Craftsman
5) Dambuk	1 day	Once	Siur Ette	M	40	Adi	Craftsman
6) Along	1 day	Once	Undisclosed	M	35	Apatani	Villager
7) Along	1 day	Once	Undisclosed	F	25	Idu Mishimi	Villager
Item studied	Number of distinctive specimen studied	Classification of items			Traditional/ Contemporary	Available/ extinct	
Baskets and Artifacts	13 (Fig. 69-82)	Various Carrying, storage basket, container, Headgear, smoking pipe etc			Traditional	Available	
Textiles	33	Shawl, Bags, Traditional Dress			Traditional	Available	
Ornaments	5	Earrings, Bangles, west band, and Necklace			Traditional	All are not available	

4 c Nagaland

Languages of Nagaland: Angami, Ao, Chang, Konyak, Lotha, Sangtam, Sema, Chakhesang

Name of the Villages/ Town/ Museum	Duration of stay	Number of visit	Name of the persons met	Sex	Age	Language	Occupation
1) Waromong	5 days	Once	1) K. Ozukum 2) Longkumar	M M	25 32 35	Ao Naga	Craftsman
2) Ungma	1day	Once	1) Ozukum 2) Longkumar 3) Longchar	M M M	30 42 48 25	Ao Naga	Artisan
3) Mopongchukit	1day	Once	1) Jamir 2) Pongen 3) Ozukum 4) Kechu 5) Insong	M M M M M	55 24 56 62 45	Ao Naga	Artisan
4) Longkum	1day	Once	1) Longchar 2) Pongen 3) Longkumar 4) Aier 5) Insong	M M M M M	35 24 30 32 54	Ao Naga	Villager
5) Aonokpu	1day	Once	1) P. Longchar 2) I. Longkumar 3) C. Tzuder 4) R. Insong 5) P. Inchen	M M M M M	42 23 34 41 40	Angami	Artisan
6) Art and Culture Museum, Kohima	1 day	Once	1) A. Jamir	M	52	Angami	Care taker
Item studied	Number of distinctive specimen studied		Classification of items		Traditional/ Contemporary		Available/ extinct
Baskets and Artifacts	14 (Fig. 92-105)		Various Carrying, storage basket, container, Headgear, smoking pipe etc		Traditional		Available
Textiles	30		Shawl, Bags, Traditional Dress		Traditional		Available/extinct
Ornaments	5		Earrings, Bangles, west band, and Necklace		Traditional		All are not available

4 d Manipur

Languages of Manipur: Manipuri

Name of the Villages/ Town/ Museum in Manipur	Duration of stay	Number of visit	Name of the persons met	Sex	Age	Language	Occupation
1) Imphal	4 Days	Twice	Taibi Shing	M	40	Manipuri	Teacher
2) Manipur State Museum, Pologround, Imphal	-	Once	T. Henba Shing	M	35	Manipuri	Care taker
3) Imphal	-	-	Lalit Shing	M	37	Manipuri	Employee
4) Imphal	-	-	Mrs. Manurama Shing	F	28	Manipuri	House wife
5) Imphal	-	-	Mrs. Shakuntala Shing	F	65	Manipuri	House wife
6) Imphal	-	-	Parnam Shing	M	42	Manipuri	Artist/craft man
Item studied	Number of distinctive specimen studied	Classification of items			Traditional/ Contemporary	Available/ extinct	
Baskets and Artifacts	8 (Fig. 115-122)	Various Carrying, storage basket, container, Headgear, smoking pipe etc			Traditional	Available	
Textiles	14	Shawl, Bags, Traditional Dress			Traditional	Available	
Ornaments	5	Earrings, Bangles, west band, and Necklace			Traditional	All are not available	

4 e Mizoram

Languages of Mizoram: Mizo

Name of the Villages/ town/ Museum in Mizoram	Duration of stay	Number of visit	Name of the persons met	Sex	Age	Language	Occupation
1) Mizoram State Museum, Macdonald Hill, Aizawl	5 Days	Once	-	-	-	Mizo	staff
Item studied	Number of distinctive specimen studied	Classification of items			Traditional/ Contemporary		Available/ extinct
Baskets and Artifacts	8 (Fig. 134-141)	Various Carrying, storage basket, container, Headgear, smoking pipe etc			Traditional		Available
Textiles	18	Shawl, Bags, Traditional Dress			Traditional		Available
Ornaments	5	Earrings, Bangles, west band, and Necklace			Traditional		All are not available

4 f Tripura

Languages of Tripura: Bengali

Name of the Villages/ town/ Museum in Tripura	Duration of stay	Number of visit	Name of the persons met	Sex	Age	Language	Occupation
1) Agartala	2 days	once	Gokul Biswas	M	52	Bengali	Teacher
2) Tripura Government Museum, Agartala			Shahadeb Biswas	M	45	Bengali	Museum staff
Item studied	Number of selected Items studied		Classification of items		Traditional/ Contemporary		Available/ extinct
Baskets and Artifacts	6 (Fig. 147-152)		Various Carrying, storage basket, container, Headgear, smoking pipe etc		Traditional		Available
Textiles	12		Shawl, Bags, Traditional Dress		Traditional		Available
Ornaments	5		Earrings, Bangles, west band, and Necklace		Traditional		All are not available

4 g Meghalaya

Languages of Meghalaya: Khasi, Jayantia, Garo




Name of the Villages/ town/ Museum in Meghalaya	Duration of stay	Number of visit	Name of the persons met	Sex	Age	Language	Occupation
1) Meghalaya State Museum, Shillong	2 Days	Twice	Julias Marak	M	50	Khasi	Curator
2) Tribal Research Institute, Mawlai, Shillong			Mr. k. Pakhentas	M	42	Jayantia	Staff
3) Northeastern Hill University, Mawlai, Shillong			Dr. D. Kharmaflang	M	45	Khasi	Academician
Item studied	Number of selected Items studied	Classification of items			Traditional/ Contemporary	Available/ extinct	
Baskets and Artifacts	11 (Fig. 155-165)	Various Carrying, storage basket, container, Headgear, smoking pipe etc			Traditional	Available	
Textiles	18	Shawl, Bags, Traditional Dress			Traditional	Available	
Ornaments	5	Earrings, Bangles, west band, and Necklace			Traditional	All are not available	

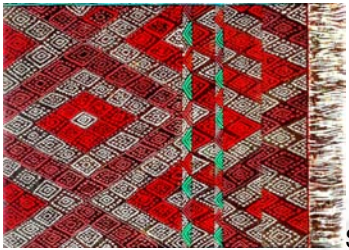
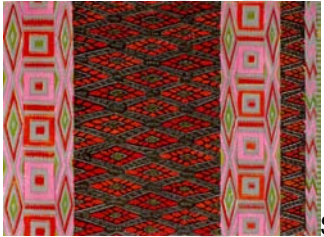

4 h Sikkim

Languages of Sikkim: Lepcha, Nepali and Sikkimese




Name of the Villages/ town/ Museum in Sikkim	Duration of stay	Number of visit	Name of the persons met	Sex	Age	Language	Occupation
1) Gangtok	6 Days	Twice	1) Kapil Basne 2) Bhimraj Pradhan	M M	45 60	Nepali Nepali	Service Other
2) Lachen (Bhutia Village)			1) Palzor Lachenpa 2) Tenzing Nangyal Lachenpa 3) Yanchen Lachenpa 4) Sonam Lachenpa	M M M F	35 45 25 20	Bhutia Bhutia Bhutia Bhutia	Weaver Weaver Weaver Service
3) Lachung (Bhutia Village)		Once	1) Hishey Lachungpa 2) Tenzing Sonam Lachungpa 3) Bechen Lachungpa	M M M	25 31 23	Bhutia Bhutia Bhutia	Weaver Weaver Weaver
4) Gnon Samdong (Lepcha Village)		Once	1) Ninkit Lepcha 2) Normit Lepcha 3) Dzong Pshering Lepcha 4) Onchi Lepcha 5) Kartuk Lepcha 6) Phuden Lepcha 7) Pankit Lepcha 8) Songmit Lepcha	M M M M M M F F	24 43 23 25 27 38 23 25	Lepcha Lepcha Lepcha Lepcha Lepcha Lepcha Lepcha Lepcha	Farmer Farmer Farmer Farmer Farmer Farmer Farmer Farmer
				5) Nazitam (Nepali Village)	Once	1) Kishan Chetri 2) Lalman lama Tamang 3) Kalusing Rosaili 4) Dhankumari Bania 5) Pahalman Gurung 6) Hang Chubba 7) Chandra Roy	M M M M M M
Item studied	Number of distinctive specimen studied		Classification of items	Traditional/ Contemporary		Available/ extinct	
Baskets/Container	6 (Fig. 173-178)		Various Carrying, storage basket, container, Headgear, smoking pipe etc	Traditional		All are not available	
Textiles	20		Shawl, Bags, Traditional Dress	Traditional		Available	
Ornaments	5		Earrings, Bangles, west band, and Necklace	Traditional		All are not available	


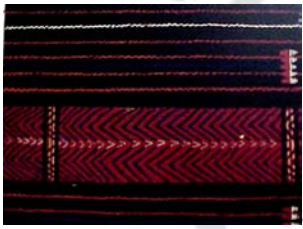

Table- 5 Dominant Colour and Motifs of specific and selected representative textile samples, state-wise.




Arunachal (visual ratings) Dominant Colour and Motifs of specific and selected representative textile samples are presented here					
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (visual ratingscale 5 to 1, most prominent one is 5, next 4,3,2, after that all rated as 1, * rating score followed as shown in S3 Shawl)	Basic geometrical patterns used in Motifs
Dress	 S1	Idu Mishmi	E. Verrier	Red Black Yellow Pink Green	Rhombus
Shawl	 S2	Idu Mishmi	E. Verrier	White Red, Black Pink, Green	Zigzag Rhombus
Shawl	 S3	Idu Mishmi	Jawaharlal Nehru State Museum, Itanagar	Black * e.g., 5 Red 4 Pink 3 Light Brown 2 Blue 1 Purple 1	Rhombus Strips

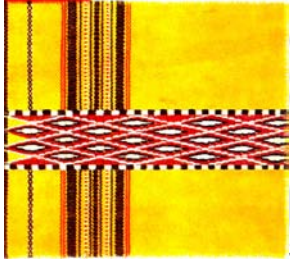


Dress	 S4	Idu Mishmi	E. Verrier	Red White Black Pink Green	Rhombus
Dress	 S5	Idu Mishmi	E. Verrier	Red Pink Black Green	Rhombus Square
Shawl	 S6	Idu Mishmi	Jawaharlal Nehru State Museum, Itanagar	Black Red Sky Blue Pink White Green	Rhombus Stripes



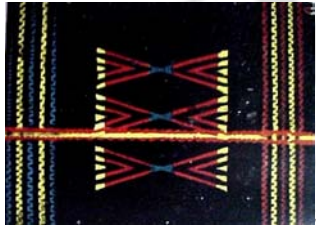
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Bag	 <p style="text-align: right;">S7</p>	Adi	Adi Basti	Green Red Yellow Black	Rhombus Stripes
Dress	 <p style="text-align: right;">S8</p>	Adi	Adi Basti	Yellow Orange Red Black	Zigzag Rhombus
Bag	 <p style="text-align: right;">S9</p>	Adi	Adi Basti	Pink Red Black White Maroon Yellow	Rhombus Stripes

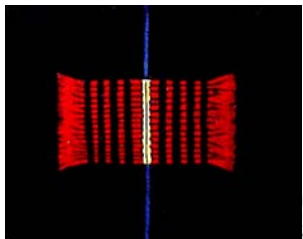
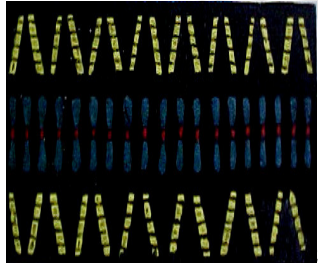
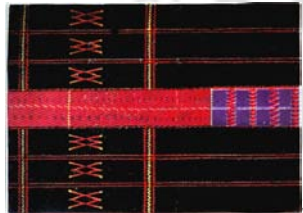
Bag	 <p>S10</p>	Adi	Adi Basti	Green Red Black	Stripes Triangles
Jacket	 <p>S11</p>	Adi	Adi Basti	Red Yellow Brown	Hexangular Stripes
Jacket	 <p>S12</p>	Adi	Kalakshetra Museum, Guwahati	Red Orange Green White Black Yellow	Rhombus Stripes




Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Skirt	 <p>S13</p>	Konyak	Kalakshetra Museum	Red White Black Yellow Green	Rhombus Stripes
Shawl	 <p>S14</p>	Konyak	Kalakshetra Museum	Black Red White	Stripes Zigzag
Shawl	 <p>S15</p>	Konyak	Kalakshetra Museum	Red Yellow White Black	Stripes

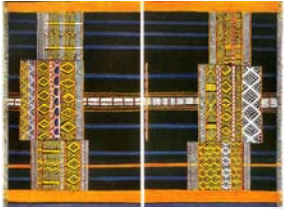


Skirt	 <p>S16</p>	Konyak	Kalakshetra Museum	Black White Red Yellow	Rhombus Stripes
Shawl	 <p>S17</p>	Konyak	E. Verrier	Brown White Yellow Black	Zigzag Rhombus Stripes
skirt	 <p>S18</p>	Konyak	E. Verrier	Black White Red Yellow	Stripes Triangular




Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Dress	 S19	Gallong	E. Verrier	Yellow Red Black White	Zigzag Rhombus Stripes
Dress	 S20	Gallong	E. Verrier	Red Yellow Black White	Zigzag Rhombus Stripes
Shawl	 S21	Gallong	E. Verrier	Brown Yellow White	Stripes

Shawl	 S22	Gallong	Itanagar	Red Black Purple green	Rhombus Stripes
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Shawl	 S23	Chang	E. Verrier	Black Red Blue Yellow	Zigzag Rhombus Stripes Triangular
Shawl	 S24	Chang	E. Verrier	Black Red Yellow Blue	Zigzag Rhombus Stripes

Shawl	 <p>S25</p>	Chang	E. Verrier	Black Red Blue Yellow	Zigzag Stripes
Wrapper	 <p>S26</p>	Chang	E. Verrier	Black Yellow Blue Red	Zigzag Stripes
Dress	 <p>S27</p>	Chang	E. Verrier	Black Red Blue Yellow	Zigzag Rhombus




Waist Wrapper	 S28	Chang	E. Verrier	Black Red Blue	Zigzag Rhombus
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Dress	 S29	Apatani	Itanagar Museum	Black Pink White Green	Zigzag Rhombus Stripes Spiral
Dress	 S30	Apatani	Itanagar Museum	Red Orange Yellow White Green	Zigzag Rhombus Stripes

Shawl	 <p>S31</p>	Apatani	E. Verrier	Black Yellow White Blue Red	Zigzag Rhombus Stripes
Shawl	 <p>S32</p>	Apatani	Museum Itanagar	Black Red White Blue Green	Stripes Rhombus
Dress	 <p>S33</p>	Apatani	Museum Itanagar	Red Black Yellow White Green	Rhombus Stripes



Kind of Textiles	Selected samples	Same of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Riha Chador	 <p>S1</p>	Assamese	Palashbari	White Red Black	Rhombus Stripes
Mekhela Chador	 <p>S2</p>	Assamese	Sualkuchi	Yellow Green, Red White	Square Rectangular
Mekhela Chador	 <p>S3</p>	Assamese	Sualkuchi	Blue, White Pink Yellow Green Maroon	Rhombus




Jacket	 S4	Assamese	Guwahati	Red, Black Yellow pink, White, Blue,	Zigzag Rhombus Stripes
Mekhela Chador (Dress)	 S5	Assamese	Mongoldoi	Yellow Red Black	Bird Floral Rhombus
Black Chador	 S6	Assamese	Mongoldoi	Black Yellow Red	Bird Floral Animal Stripes

Bad Cover	 <p>S7</p>	Assamese	Kalakshetra Museum	Golden Yellow Black Red	Bottle design
Mekhela Chador (Dress)	 <p>S8</p>	Assamese	Guwahati	Red White Yellow Blue	Stripes Zigzag Floral Rhombus
Mekhela Chador (Dress)	 <p>S9</p>	Assamese	Guwahati	Golden Yellow White Blue	Bird (peacock) Rhombus Stripes

Red Chador (Dress)	 S10	Assamese	Kalakshetra Museum	Red Yellow Black	Floral Zigzag
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Shawl	 S11	Karbi	Diphu, Karbi Anglong	Black Red Yellow White	Stripes Rhombus
Shawl	 S12	Karbi	Diphu, Karbi Anglong	Red Black White	Stripes

Turban	 <p>S13</p>	Karbi	Kalakshetra Museum	Yellow Red Black	Animal Bird Aeroplane Rhombus
Chador (Dress)	 <p>S14</p>	Karbi	Kalakshetra Museum	Yellow Red Green	Zigzag Stripes
Jacket	 <p>S15</p>	Karbi	State Museum	Red Yellow Blue	Stripes Rhombus

Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Waist Band	 <p style="text-align: right;">S16</p>	Missing	Kalakshetra Museum	Red Black Yellow Green	Stripes
Chador (Dress)	 <p style="text-align: right;">S17</p>	Missing	Guwahati	Red White Black	Stripes
Jacket	 <p style="text-align: right;">S18</p>	Missing	Junai, Lakshimpur	Red Yellow White Black	Zigzag Stripes

Dress	 <p>S19</p>	Missing	Guwahati	Black White Red Yellow Blue	Zigzag Stripes Floral
Dress	 <p>S20</p>	Missing	Kalakshetra Museum	Black Yellow Red White	Rhombus Zigzag
Dress	 <p>S21</p>	Missing	Kalakshetra Museum	Red Yellow Black	Rhombus Zigzag Stripes

Mekhela (Dress)	 S22	Missing	Guwahati	Red Yellow White Black	Rhombus Stripes
Mekhela (Dress)	 S23	Missing	Guwahati	Red Black White Yellow	Zigzag Stripes
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Dress	 S24	Rabha	Guwahati	Maroon Yellow White Blue	Zigzag Stripes

Shawl	 <p>S25</p>	Rabha	Guwahati	Red Black Yellow Green	Rhombus Zigzag Stripes
Chador (Dress)	 <p>S26</p>	Rabha	Guwahati	Red White Black	Stripes
Shawl	 <p>S27</p>	Rabha	Guwahati	Black Pink Red Yellow White	Stripes Zigzag

<p>Black Chador</p>	 <p>S28</p>	<p>Rabha</p>	<p>Kalakshetra</p>	<p>Black Yellow Red</p>	<p>Stripes</p>
<p>Shawl</p>	 <p>S29</p>	<p>Rabha</p>	<p>Kalakshetra</p>	<p>Red Black Yellow</p>	<p>Zigzag Stripes</p>
<p>Dress</p>	 <p>S30</p>	<p>Rabha</p>	<p>Kalakshetra</p>	<p>Yellow Red Green</p>	<p>Rhombus Zigzag Stripes</p>



Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Dress	 S31	Boro	Rohdhola, Guwahati	Yellow Red	Floral Zigzag Stripes
Chador (Dress)	 S32	Boro	Guwahati	Yellow Red Black	Rhombus Stripes
Chador (Dress)	 S33	Boro	Guwahati	Yellow Red Green	Stripes Rectangular
Dress	 S34	Boro	Guwahati	Orange Red	Floral Zigzag Stripes

Waist Wrapper	 S35	Boro	Guwahati	Orange Red	Floral Rectangular
Dress	 S36	Boro	Guwahati	Yellow Green Red	Stripes
Nagaland (visual ratings) Dominant Colour and Motifs of specific and selected representative textile samples are presented here					
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Skirt	 S1	Ao	Mokokchung	Red Black Yellow	Stripes

Skirt	 <p>S2</p>	Ao	Julian J, The Nagas	Orange Red Black (Gray)	Stripes
Skirt	 <p>S3</p>	Ao	Kalakshetra	Red Black White	Animal Stripes
Shawl	 <p>S4</p>	Ao	Julian J, The Nagas	Red Green Black	Stripes




Shawl	 S5	Ao	Julian J, The Nagas	Orange Black (Gray)	Stripes
Skirt	 S6	Ao	Julian J, The Nagas	Red Black	Stripes
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Shawl	 S7	Angami	Guwahati	Black Blue White Red	Stripes



Dress	 S8	Angami	Mokokchung	White Black Yellow Red	Stripes Square
Dress	 S9	Angami	Mokokchung	White Black Orange	Stripes Square
Shawl	 S10	Angami	Mokokchung	Yellow Black	Stripes
Shawl	 S11	Angami	Mokokchung	Yellow Black White	Stripes

Shawl	 S12	Angami	Mokokchung	Yellow Black	Stripes
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Body cloth	 S13	Sema	Jacob. J, The Nagas	Black White Red Yellow	Circular Square Stripes
Skirt	 S14	Sema	Jacob. J, The Nagas	Black Red White Yellow	Circular Square Stripes




Skirt	 <p>S15</p>	Sema	Mokokchung, Nagaland	Black White Orange Yellow	Square Stripes
Skirt	 <p>S16</p>	Sema	Mokokchung, Nagaland	Black Orange Red Yellow Green	Circular Square Stripes Zigzag
skirt	 <p>S17</p>	Sema	Mokokchung, Nagaland	Black Red Green	Square Stripes




Skirt	 <p>S18</p>	Sema	Mokokchung, Nagaland	Black Orange Yellow	Square Stripes
Skirt	 <p>S19</p>	Sema	Mokokchung, Nagaland	Black Red Yellow	Square Stripes
Skirt	 <p>S20</p>	Sema	Mokokchung, Nagaland	Black Orange Red Yellow	Stripes




Skirt	 S21	Sema	Mokokchung, Nagaland	Orange Yellow Black Brown	Square Stripes
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Skirt	 S22	Chang	Mon, Nagaland	Orange White Black	Rhombus Stripes
Skirt	 S23	Chang	Mon, Nagaland	Red White Black	Rhombus Stripes




Skirt	 <p>S24</p>	Chang	Mon, Nagaland	Red Black Yellow	Stripes
Skirt	 <p>S25</p>	Chang	Mon, Nagaland	White Red Green Black	Circular Stripes Zigzag
Skirt	 <p>S26</p>	Chang	Mon, Nagaland	Yellow Black	Circular Stripes

Skirt	 S27	Chang	Mon, Nagaland	Red White Black	Circular Stripes Square
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Skirt	 S28	Lahote	Mokokchung, Nagaland	orange Black White	Stripes
Skirt	 S29	Lahote	Mokokchung, Nagaland	Black Blue	Stripes




Skirt	 S30	Lahote	Mokokchung, Nagaland	Black Orange Yellow	Stripes Square
Manipur (visual ratings) Dominant Colour and Motifs of specific and selected representative textile samples are presented here					
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Dress	 S1	Meitie	Manipur State Museum, Imphal	Orange Green White Black Pink Red	Stripes Bottle motif
Dress	 S2	Meitie	State Museum Manipur	Red Black Orange White Yellow	Stripes Bottle motif Zigzag Rhombus

Bag	 <p>S3</p>	Meitie	Kalakshetra Museum	Red White Yellow Blue	Zigzag Stripes
Bag	 <p>S4</p>	Meitie	Kalakshetra Museum	Red White Black Green Yellow	Zigzag Stripes
Shawl	 <p>S5</p>	Meitie	Assam State Museum	Green Brown Yellow Black	Stripes

Dress	 <p>S6</p>	Meitie	State Museum Manipur	Red Green Black Yellow	Stripes Floral
Dress	 <p>S7</p>	Meitie	State Museum Manipur	Green Red	Stripes Floral Bottle motif
Dress	 <p>S8</p>	Meitie	State Museum Manipur	White Red Green Pink Yellow	Stripes Floral Bottle motif




Cushion cover	 <p>S9</p>	Meitie	State Museum Manipur	Green Yellow Black Red	Stripes Floral Animal Butterfly
Dress	 <p>S10</p>	Meitie	State Museum Manipur	Orange Purple Green Black Red White	Stripes Floral
Dress	 <p>S11</p>	Meitie	State Museum Manipur	Red Yellow	Stripes Floral

Dress	 <p>S12</p>	Meitie	Handicrafts, Manipur	Yellow Pink Black Red	Floral Stripes Zigzag Rhombus
Dress	 <p>S13</p>	Meitie	Handicrafts, Manipur	Red Black Yellow Pink White	Stripes
Dress	 <p>S14</p>	Meitie	Handicrafts, Manipur	Red Black Yellow White Blue	Floral Triangular Stripes




Mizoram (visual ratings) Dominant Colour and Motifs of specific and selected representative textile samples are presented here					
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Puanchei	 S1	Mizo	Aizaol Museum	White Red Black Pink Yellow	Stripes Rhombus
	 S2	Mizo	Aizaol Museum	Black White Purple Pink Blue Red Yellow	Rhombus Floral Stripes
Bag	 S3	Mizo	Aizaol Museum	Blue Red Yellow White Green	Rhombus Floral Stripes




Dress	 <p>S4</p>	Mizo	Shilpagram, Guwahati	Black Yellow Red White	Stripes
Dress	 <p>S5</p>	Mizo	Shilpagram, Guwahati	Black White	Stripes
Bag	 <p>S6</p>	Mizo	Kalakshetra Museum	Black Yellow Red	Zigzag Rhombus Stripes

Dress	 <p>S7</p>	Mizo	Shilpagram, Guwahati	Red Pink Black White	Rhombus Stripes
Bag	 <p>S8</p>	Mizo	Kalakshetra Museum	Red Yellow Green Blue White	Rhombus Stripes
Dress	 <p>S9</p>	Mizo	Shilpagram	Blue Black White Green Yellow	Rhombus Zigzag




Dress	 <p>S10</p>	Mizo	Shilpagram, Guwahati	Blue White Pink Red	Square Stripes
Dress	 <p>S11</p>	Mizo	Shilpagram, Guwahati	White Green Yellow Red	Stripes
Dress	 <p>S12</p>	Mizo	Shilpagram, Guwahati	Red Pink Blue Yellow Green White	Rhombus Stripes




Dress	 <p>S13</p>	Hmar		Black Red White Green Yellow	Rhombus Stripes
Dress	 <p>S14</p>	Hmar	Shilpagram, Guwahati	Pink White Red Yellow	Floral
Dress	 <p>S15</p>	Hmar	Shilpagram, Guwahati	Red Black Yellow White	Rhombus Stripes

Dress	 <p>S16</p>	Hmar		Purple Yellow Red	Floral
Dress	 <p>S17</p>	Hmar	Shilpagram, Guwahati	Black Red Yellow	Rhombus Stripes
Dress	 <p>S18</p>	Hmar	Shilpagram, Guwahati	Red Yellow Green	Rhombus Stripes




Tripura (visual ratings) Dominant Colour and Motifs of specific and selected representative textile samples are presented here					
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Shawl	 S1	Riang	Agartala	Red Black White Blue	Stripes
Dress	 S2	Riang	Agartala	Black Red Blue	Rhombus
Dress	 S3	Riang	Kalakshetra	Blue Yellow	Floral




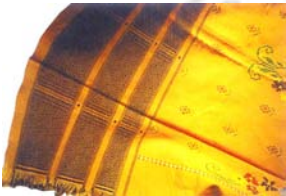
Dress	 S4	Riang	Agartala	Black Red Yellow Blue White	Floral
Dress	 S5	Riang	Agartala	Green Red White Yellow	Stripes Floral
Dress	 S6	Riang	Agartala	Red Yellow White	Rhombus Stripes
Dress	 S7	Riang	Agartala	Pink Yellow Black	Floral Stripes

Dress	 <p>S8</p>	Bengali	Agartala	Red Pink Yellow Green	Stripes Animal
Dress	 <p>S9</p>	Bengali	Agartala	Red Orange Yellow Black White	Stripes
Dress	 <p>S10</p>	Bengali	Agartala	Black Red Orange Yellow White Blue	Floral Stripes




Dress	 S11	Bengali	Agartala	White Red Blue Green	Floral Stripes
Dress	 S12	Bengali	Agartala	Green Pink Red	Stripes
Meghalaya (visual ratings) Dominant Colour and Motifs of specific and selected representative textile samples are presented here					
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Shawl	 S1	Khasi	Shilpagram, Guwahati	White Black Green Brown	Floral Animal Zigzag Stripes

Dress	 S2	Khasi	Shilpagram, Guwahati	Blue White Red	Zigzag Stripes
Dress	 S3	Khasi	Shilpagram, Guwahati	Red White Green Pink Yellow Black	Zigzag Rhombus Stripes Floral
Dress	 S4	Khasi	Shilpagram, Guwahati	Blue Red White Brown	Zigzag Stripes Rhombus
Dress	 S5	Khasi	Shilpagram, Guwahati	Blue White Brown	Zigzag Stripes Rhombus

Dress	 S6	Khasi	Shilpagram, Guwahati	Red White Yellow Pink Black	Floral Stripes
Dress	 S7	Khasi	Shilpagram, Guwahati	Red Yellow Black White	Floral Stripes
Dress	 S8	Jayantia	Shillong	Black Yellow Pink White	Floral Stripes




Dress	 S9	Jayantia	Shilpagram, Guwahati	Red White Yellow Green	Floral
Dress	 S10	Jayantia	Shillong	Yellow Black White Green Brown	Stripes Zigzag
Dress	 S11	Jayantia	Shillong	Blue White	Rhombus
Shawl	 S12	Jayantia	Shillong	Yellow Black Red	Rhombus Floral Stripes



Dress	 S13	Garosho	Shillong	Green Red Yellow Blue White	Floral Stripes
Dress	 S14	Garosho	Meghalaya State Museum, Shillong (Meghalaya)	White Yellow Red Green Orange	Floral Stripes
Dress	 S15	Garosho	Meghalaya State Museum, Shillong (Meghalaya)	Black Red White Yellow Green	Floral Stripes
Dress	 S16	Garosho	Meghalaya State Museum, Shillong (Meghalaya)	Red Yellow White	Floral Stripes
Dress	 S17	Garosho	Meghalaya State Museum, Shillong (Meghalaya)	Black Yellow Pink Green	Floral Stripes

Dress	 S18	Garo	Meghalaya State Museum, Shillong (Meghalaya)	Green Orange Yellow Blue White	Floral Stripes
Sikkim (visual ratings) Dominant Colour and Motifs of specific and selected representative textile samples are presented here					
Kind of Textiles	Selected samples	Name of the ethnic Group	Place/ source	Colour dominance in descending order, (scale 5 to 1)	Specific Motifs used
Dress	 S1	Sikkimese	Gnon Samdong, Sikkim	Red Black White Green Blue	Stripes Rhombus Floral
Dress	 S2	Sikkimese	Cultural affairs & heritage dept. Sikkim	Yellow Red Green Black	Stripes Rhombus Floral

Jacket	 S3	Sikkimese	Cultural affairs & heritage dept. Sikkim	Black Yellow Green Red Purple	Floral
Bag	 S4	Sikkimese	Handicrafts center, Gangtok	Red Black White Yellow	Stripes Rhombus Zigzag
Bag	 S5	Sikkimese	Handicrafts center, Gangtok	Purple Black Red Yellow Blue	Stripes Rhombus Floral

Carpet	 <p>S6</p>	Sikkimese	Handicrafts center, Gangtok	Blue White Yellow Red	Stripes Floral
Carpet	 <p>S7</p>	Sikkimese	Handicrafts center, Gangtok	Blue White Red	Animal
Jacket	 <p>S8</p>	Sikkimese	Handicrafts center, Gangtok	Blue White Red Green Yellow	Floral
Jacket	 <p>S9</p>	Sikkimese	Handicrafts center, Gangtok	Black Red Yellow White	Floral

Dress	 <p>S10</p>	Sikkimese	Gangtok, Sikkim	Green Black White Blue	Floral Stripes
Dress	 <p>S11</p>	Sikkimese	Lachung, Sikkim	Red Pink Black	Stripes
Dress	 <p>S12</p>	Sikkimese	Gangtok, Sikkim	Orange Yellow Black Red Green	Stripes Rhombus Zigzag

Dress	 <p>S13</p>	Sikkimese	Nazitam, Sikkim	Maroon Purple Blue White	Stripes
Dress	 <p>S14</p>	Sikkimese	Gangtok, Sikkim	Blue White Black	Floral Stripes
Dress	 <p>S15</p>	Sikkimese	Gangtok, Sikkim	Black White	Floral Stripes

Frock	 <p>S16</p>	Sikkimese	Mr. Bhimraj Pradhan, Sikkim	White Pink	Floral
Bag	 <p>S17</p>	Sikkimese	Mr. Bhimraj Pradhan, Sikkim	Maroon Pink Red	Floral Stripes
Dress	 <p>S18</p>	Sikkimese	Mr. Bhimraj Pradhan, Sikkim	Pink Black Yellow White	Floral Zigzag



Dress	 <p>S19</p>	Sikkimese	Mr. Bhimraj Pradhan, Sikkim	Orange Red Blue Green	Floral
Dress	 <p>S20</p>	Sikkimese	Mr. Bhimraj Pradhan, Sikkim	White Black Red	Floral

Table- 6, Dominant colour chart

Dominant colour ratings (ref. Table No.5), statewise and with different communities.

Arunachal Pradesh

Visual dominance ratings of eleven prominent colours, 1 to 5, 1=least in comparison to 5=most on 33 samples (o= colour not found)

Colour	Idu Mishmi						Average	Adi						Average	Konyak						Average	Gallong						Average	Chang						Average	Apatani					Average	Total State Average
	S1	S2	S3	S4	S5	S6		S7	S8	S9	S10	S11	S12		S13	S14	S15	S16	S17	S18		S19	S20	S21	S22	S23	S24		S25	S26	S27	S28	S29	S30		S31	S32	S33				
Red	5	4	4	5	5	4	4.5	4	3	4	4	5	5	4.2	5	4	5	3	0	3	3.3	4	5	0	5	3.5	4	4	4	2	4	4	3.7	0	5	1	4	5	3	3.741		
Blue	0	0	1	0	0	3	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	3	3	3	3	2.8	0	0	2	2	0	0	0.8	0.75	
Green	1	1	0	1	2	1	1	5	0	0	5	0	3	2.2	1	0	0	0	0	0	0.2	0	0	0	2	0.5	0	0	0	0	0	0	0	2	1	0	1	1	1	0.811		
White	0	5	0	4	0	1	1.7	0	0	2	0	0	2	0.7	4	3	3	4	4	4	3.7	2	2	3	0	1.8	0	0	0	0	0	0	0	3	2	3	3	2	2.6	1.678		
Purple	0	0	1	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0.129		
Black	4	3	5	3	3	5	3.8	2	2	3	3	0	1	1.8	3	5	2	5	2	5	3.7	3	3	0	4	2.5	5	5	5	5	5	5	5	5	0	5	5	4	3.8	3.469		
Pink	2	2	3	2	4	2	2.5	0	0	5	0	0	0	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0.8	0.719	
yellow	3	0	0	0	0	0	0.5	3	5	1	0	4	1	2.33	2	0	4	2	3	2	2.17	5	4	4	0	3.25	2	3	2	4	4	0	2.5	0	3	4	0	3	2	2.0724		
Brown	0	0	2	0	0	0	0.3	0	0	0	0	3	0	0.5	0	0	0	0	5	0	0.8	0	0	5	0	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.471	
Orange	0	0	0	0	0	0	0	0	4	0	0	0	4	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0.8	0.351	
Maroon	0	0	0	0	0	0	0	0	0	1	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.031	

This table shows the colour dominance in various groups as below.

Five colour dominance in Idu Mishimi are Red, Black, Pink, White and Green with respective visual rating of 4.5, 3.8, 2.5, 1.7 and 1.

In Adi the Red, yellow, Green, Black and Orange with respective visual rating of 4.2, 2.3, 2.2, 1.8, and 1.3.

In Konyak the Black, White, Red, Yellow and brown with respective visual rating of 3.7, 3.7, 3.3, 2.1 and 0.8.

In Gallong Red, Yellow, Black, White and Brown with respective visual rating of 3.5, 3.2, 2.5, 1.8 and 1.3.

In Chang Black, Red, Blue, Yellow (only four colour observed) with respective visual rating of 5, 3.7, 2.8 and 2.5.

In Apatani Black, Red, White, Yellow and Green with respective visual rating of 3.8, 3, 2.8, 2, 1.

In this analysis total state average of dominance has come up as Red, Black, Yellow, White and green with respective visual rating of 3.7, 3.4, 2.0, 1.6 and 0.8.

Table- 6 cont.

Assam

Visual dominancy ratings of eleven prominent colours, 1 to 5, 1=least in comparison to 5=most on 36 samples (o= colour not found)

Colour	Assamese										Ave rag e	Karbi					Ave rag e	Missing						Ave rag e	Rabha						Ave rag e	Boro						Ave rag e	Total State Average					
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10		S11	S12	S13	S14	S15		S16	S17	S18	S19	S20	S21		S22	S23	S24	S25	S26	S27		S28	S29	S30	S31	S32	S33		S34	S35	S36			
Red	4	3	0	5	4	3	3	5	0	5	3.2	4	5	4	4	5	4.4	5	5	5	3	3	5	5	5	4.5	0	5	5	3	3	5	4	3.6	4	4	4	4	4	3	3	3.7	3.82	
Blue	0	0	5	1	0	0	0	2	3	0	1.1	0	0	0	0	3	0.6	0	0	0	1	0	0	0	0	0.1	2	0	0	0	0	0	0	0.3	0	0	0	0	0	0	0	0	0	0.48
Green	0	4	1	0	0	0	0	0	0	0	0.5	0	0	0	3	0	0.6	2	0	0	0	0	0	0	0	0.3	0	2	0	0	0	0	0	3	0.7	0	0	3	0	4	4	1.8	0.7	
White	5	2	4	1	0	0	0	4	4	0	2	2	3	0	0	0	1	0	4	3	4	2	0	3	3	2.4	3	0	4	1	0	0	0	1.1	0	0	0	0	0	0	0	0	0	1.46
Purple	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Black	3	0	0	4	3	5	4	0	0	3	2.2	5	4	3	0	0	2.4	4	3	2	5	5	3	2	4	3.5	0	4	3	5	5	4	0	3	0	3	0	0	0	0.5	2.43			
Pink	0	0	3	2	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0.25
yellow	0	5	2	3	5	4	5	3	5	4	3.6	3	0	5	5	4	3.4	3	0	4	2	4	4	4	2	2.9	4	3	0	2	4	3	5	3	5	5	5	0	5	5	4.2	3.372		
Brown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Orange	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0.8	0.13			
Maroon	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0.7	0	0	0	0	0	0	0	0	0	0.19

This table shows the colour dominancy in various groups as below.

Five colour dominance in Assamese are Yellow, Red, Black, White and Blue with respective visual rating of 3.6, 3.2, 2.2, 2 and 1.1.

In Karbi the Red, Yellow, Black, White, Blue and Green with respective visual rating of 4.5, 3.4, 2.4, 1, 0.6 and 0.6.

In Missing the Red, Black, Yellow, White and Green with respective visual rating of 4.5, 3.5, 2.9, 2.4 and 0.3.

In Rabha the Red, Black, Yellow, White and Green with respective visual rating of 3.6, 3.0, 3.0, 1.1 and 0.7.

In Boro the Yellow, Red, Green, Orange and Black with respective visual rating of 4.2, 3.7, 1.8, 0.8 and 0.5 .

In this analysis total state average of dominancy has come up as Red, Yellow, Black, White and Green with respective visual rating of 3.8, 3.3, 2.4, 1.4 and 0.7.

Table- 6 cont.

Nagaland

Visual dominance ratings of eleven prominent colours, 1 to 5, 1=least in comparison to 5=most on 30 samples (o= colour not found)

Colour	Ao						Average	Angami						Average	Sema						Average	Chang						Average	Lahote			Average	Total State Average			
	S1	S2	S3	S4	S5	S6		S7	S8	S9	S10	S11	S12		S13	S14	S15	S16	S17	S18		S19	S20	S21	S22	S23	S24		S25	S26	S27			S28	S29	S30
Red	5	4	5	5	0	5	4	2	2	0	0	0	0	0.7	3	4	0	3	4	0	4	3	0	2.3	0	5	5	4	0	5	3.2	0	0	0	0	2.299
Blue	0	0	0	0	0	0	0	4	0	0	0	0	0	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1.3	0.255
Green	0	0	0	4	0	0	0.7	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0.4	0	0	3	0	0	0.5	0	0	0	0	0	0.371
White	0	0	3	0	0	0	0.5	3	5	5	0	3	0	2.7	4	3	4	0	0	0	0	0	0	1.2	4	4	0	5	0	4	2.8	3	0	0	1	1.683
Purple	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black	4	3	4	3	4	4	3.7	5	4	4	4	4	4	4.2	5	5	5	5	5	5	5	5	3	4.8	3	3	4	2	4	3	3.2	4	5	5	4.7	4.082
Pink	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
yellow	3	0	0	0	0	0	0.5	0	3	0	5	5	5	3	2	2	2	2	0	3	3	2	4	2.2	0	0	3	0	5	0	1.3	0	0	3	1	1.737
Brown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.2	0	0	0	0	0	0	0	0	0	0	0	0.065
Orange	0	5	0	0	5	0	1.7	0	0	3	0	0	0	0.5	0	0	3	4	0	4	0	4	5	2.2	5	0	0	0	0	0	0.8	5	0	4	3	1.536
Maroon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

This table shows the colour dominance in various groups as below.

Five colour dominance in Ao are Red, Black, Orange, Green and White with respective visual rating of 4.0, 3.7, 1.7, 0.7 and 0.5.

In Angami the Black, Yellow, White, Red and Blue with respective visual rating of 4.2, 3, 2.7, 0.7 and 0.7.

In Sema the Black, Red, Yellow, Orange and White with respective visual rating of 4.8, 2.3, 2.2, 2.2 and 1.2.

In Chang the Black, Red, White, Yellow and Orange with respective visual rating of 3.2, 3.2, 2.8, 1.3 and 0.8.

In Lahote the Black, Orange, Blue, White and Yellow with respective visual rating of 4.7, 3, 1.3, 1 and 1 .

In this analysis total state average of dominance has come up as Black, Red, Yellow, White and Orange with respective visual rating of 4.0, 2.2, 1.7, 1.6 and 1.5.

Table- 6 cont.

Manipur

Visual dominance ratings of eleven prominent colours, 1 to 5, 1=least in comparison to 5=most on 14 samples (0= colour not found)

Colour	Meitie														Average
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	
Red	1	5	5	5	0	5	4	4	2	1	5	2	5	5	3.5
Blue	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0.214
Green	4	0	0	2	5	4	5	3	5	3	0	0	0	0	2.214
White	3	2	4	4	0	0	0	5	0	1	0	0	1	2	1.571
Purple	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0.286
Black	2	4	0	3	2	3	0	0	3	2	0	3	4	4	2.143
Pink	1	0	0	0	0	0	0	2	0	0	0	4	2	0	0.643
yellow	0	1	3	1	3	2	0	1	4	0	4	5	3	3	2.1429
Brown	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0.286
Orange	5	3	0	0	0	0	0	0	0	5	0	0	0	0	0.929
Maroon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

This table shows the colour dominance as below.

Five colours dominance in Meitie are Red, Green, Yellow, Black and White with respective visual rating of 3.5, 2.2, 2.1, 2.1 and 1.5.

In this analysis total state average of dominance has come up as Red, Green, Yellow, Black and White with respective visual rating of 3.5, 2.2, 2.1, 2.1 and 1.5.

Table- 6 cont.

Mizoram

Visual dominance ratings of eleven prominent colours, 1 to 5, 1=least in comparison to 5=most on 18 samples (o= colour not found)

Colour	Mizo												Average	Hmar						Average	Total State Average
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12		S13	S14	S15	S16	S17	S18		
Red	4	1	4	3	0	3	5	5	0	2	2	5	2.8	4	3	5	3	4	5	4	3.202
Blue	0	1	5	0	0	0	0	2	5	5	0	3	1.8	0	0	0	0	0	0	0	1.197
Green	0	0	1	0	0	0	0	3	2	0	4	1	0.9	2	0	0	0	0	3	0.8	0.89
White	5	4	2	2	4	0	2	1	3	4	5	1	2.8	3	4	2	0	0	0	1.5	2.355
Purple	0	3	0	0	0	0	0	0	0	0	0	0	0.3	0	0	0	5	0	0	0.8	0.434
Black	3	5	0	5	5	5	3	0	4	0	0	0	2.5	5	0	4	0	5	0	2.3	2.447
Pink	2	2	0	0	0	0	4	0	0	3	0	4	1.3	0	5	0	0	0	0	0.8	1.118
yellow	1	1	3	4	0	4	0	4	1	0	3	2	1.9	1	2	3	4	3	4	2.8	2.2061
Brown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orange	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maroon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

This table shows the colour dominance in various groups as below.

Five colour dominance in Mizo are White, Red, Black, Yellow and Blue with respective visual rating of 2.8, 2.8, 2.5, 1.9 and 1.8. In Hmar the Red, Yellow, Black White and Green with respective visual rating of 4.0, 2.8, 2.3, 1.5 and 0.8.

In this analysis total state average of dominance has come up as Red, Black, White, Yellow and Blue with respective visual rating of 3.2, 2.4, 2.3, 2.2 and 1.1.

Table- 6 cont.

Tripura

Visual dominancy ratings of eleven prominent colours, 1 to 5, 1=least in comparison to 5=most on 12 samples (o= colour not found)

Colour	Riang							Average	Bengali					Average	Total State Average
	S1	S2	S3	S4	S5	S6	S7		S8	S9	S10	S11	S12		
Red	5	4	0	4	4	5	0	3.1	5	5	4	4	3	4.2	3.55
Blue	2	3	5	2	0	0	0	1.7	0	0	1	3	0	0.8	1.36
Green	0	0	0	0	5	0	0	0.7	2	0	0	2	5	1.8	1.13
White	3	0	0	1	3	3	0	1.4	0	1	1	5	0	1.4	1.42
Purple	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black	4	5	0	5	0	0	3	2.4	0	2	5	0	0	1.4	2.03
Pink	0	0	0	0	0	0	5	0.7	4	0	0	0	4	1.6	1.05
yellow	0	0	4	3	2	4	4	2.4	3	3	2	0	0	1.6	2.11
Brown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orange	0	0	0	0	0	0	0	0	0	4	3	0	0	1.4	0.54
Maroon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

This table shows the colour dominancy in various groups as below.

Five colour dominance in Riang are Red, Yellow, Black, Blue and White with respective visual rating of 3.1, 2.4, 2.4, 1.7 and 1.4. In Bengali the Red, Green, Yellow, Black, Pink and White with respective visual rating of 4.2, 1.8, 1.6, 1.6 and 1.4.

In this analysis total state average of dominancy has come up as Red, Yellow, Black, White and Blue with respective visual rating of 3.5, 2.1, 2.0, 1.4 and 1.3.

Table- 6 cont.

Meghalaya

Visual dominancy ratings of eleven prominent colours, 1 to 5, 1=least in comparison to 5=most on 18 samples (o= colour not found)

Colour	Khasi							Average	Jayantia					Average	Garo					Average	Total State Average	
	S1	S2	S3	S4	S5	S6	S7		S8	S9	S10	S11	S12		S13	S14	S15	S16	S17			S18
Red	0	3	5	4	0	5	5	3.1	0	5	0	0	3	1.6	4	3	4	5	0	0	2.7	2.54
Blue	0	5	0	5	5	0	0	2.1	0	0	0	5	0	1	2	0	0	0	0	2	0.7	1.36
Green	3	0	3	0	0	0	0	0.9	0	2	2	0	0	0.8	5	2	1	0	2	5	2.5	1.33
White	5	4	4	3	4	4	2	3.7	2	4	3	4	0	2.6	1	5	3	3	0	1	2.2	2.92
Purple	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black	4	0	1	0	0	1	3	1.3	5	0	4	0	4	2.6	0	0	5	0	5	0	1.7	1.79
Pink	0	0	2	0	0	2	0	0.6	3	0	0	0	0	0.6	0	0	0	0	3	0	0.5	0.56
yellow	0	0	1	0	0	3	4	1.1	4	3	5	0	5	3.4	3	4	2	4	4	3	3.3	2.477
Brown	2	0	0	2	3	0	0	1	0	0	1	0	0	0.2	0	0	0	0	0	0	0	0.46
Orange	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0.8	0.25	
Maroon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

This table shows the colour dominancy in various groups as below.

Five colours dominance in Khasi are White, Red, Blue, Black and Yellow with respective visual rating of 3.7, 3.1, 2.1, 1.3 and 1.1.

In Jayantia are Yellow, White, Black, Red and Blue with respective visual rating of 3.4, 2.6, 2.6, 1.6 and 1.

In Garo are Yellow, Red, Green, White and Black with respective visual rating of 3.3, 2.7, 2.5, 2.2 and 1.7.

In this analysis total state average of dominancy has come up as Red, Green, Yellow, Black and White with respective visual rating of 2.9, 2.5, 2.4, 1.7 and 1.3.

Table- 6 cont.

Sikkim

Visual dominance ratings of eleven prominent colours, 1 to 5, 1=least in comparison to 5=most on 20 samples (o= colour not found)

Colour	Sikkimese																				Average
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	
Red	5	4	2	5	3	2	3	3	4	0	5	2	0	0	0	0	3	0	4	3	2.4
Blue	1	0	0	0	1	5	5	5	0	2	0	0	3	5	0	0	0	0	3	0	1.5
Green	2	3	3	0	0	0	0	2	0	5	0	1	0	0	0	0	0	0	2	0	0.9
White	3	0	0	3	0	4	4	4	2	3	0	0	2	4	4	5	0	2	0	5	2.25
Purple	0	0	1	0	5	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0.5
Black	4	2	5	4	4	0	0	0	5	4	3	3	0	3	5	0	0	4	0	4	2.5
Pink	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	5	0	0	0.85
yellow	0	5	4	2	2	3	0	1	3	0	0	4	0	0	0	0	0	3	0	0	1.35
Brown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orange	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	0	0.5
Maroon	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0.5

This table shows the colour dominance as below.

Five colours dominance in Sikkimese are Black, Red, White, Blue and Yellow with respective visual rating of 2.5, 2.4, 2.2, 1.5 and 1.3.

In this analysis total state average of dominance has come up as Black, Red, White, Blue and Yellow with respective visual rating of 2.5, 2.4, 2.2, 1.5 and 1.3.

Table- 7 Summarised dominant colour rating of textile design of Northeast India.

	Arunachal	Assam	Nagaland	Manipur	Mizoram	Tripura	Meghalaya	Sikkim	Northeast average
Red	3.741	3.817	2.299	3.5	3.202	3.549	2.537	2.4	3.131
Blue	0.75	0.478	0.255	0.214	1.197	1.363	1.357	1.5	0.889
Green	0.811	0.702	0.371	2.214	0.89	1.132	1.333	0.9	1.044
White	1.678	1.463	1.683	1.571	2.355	1.418	2.916	2.25	1.917
Purple	0.129	0	0	0.286	0.434	0	0	0.5	0.169
Black	3.469	2.428	4.082	2.143	2.447	2.033	1.794	2.5	2.612
Pink	0.719	0.252	0	0.643	1.118	1.055	0.559	0.85	0.649
yellow	2.072	3.372	1.737	2.143	2.206	2.11	2.477	1.35	2.183
Brown	0.471	0	0.065	0.286	0	0	0.46	0	0.16
Orange	0.351	0.125	1.536	0.929	0	0.538	0.25	0.5	0.529
Maroon	0.031	0.193	0	0	0	0	0	0.5	0.09

This Summarised table shows the colour dominancy in overall Northeast as below.

In this analysis total Northeast average of dominancy has come up as Red, Black, Yellow, White and Green in order with respective visual rating of 3.1, 2.6, 2.1, 1.9, 1.0

Table- 8 Dominant colour chart of all States based on Visual dominancy ratings of eleven colours, 1 to 5, 1=least in comparison to 5=most; Ethnic samples expressing the identifiable motifs and its colour dominance considered for this ratings as presented.

11 colours were noticed present in the samples	Descending order of dominance of colours in six prominent communities of Arunachal						As a whole colour dominance (Total 33 samples)	
	Idu Mishmi (6 samples)	Adi (6 samples)	Konyak (6 samples)	Gallong (4 samples)	Chang (6 samples)	Apatani (5 samples)		
Red	Red	Red	Black	Red	Black	Black	Red	Maroon is
Blue	Black	Yellow	White	Yellow	Red	Red	Black	not
Green	Pink	Green	Red	Black	Blue	Yellow	Yellow	significant
White	White	Black	Yellow	White	Yellow	Green	White	
Purple	Green	Orange	Brown	Brown		White	Green	
Black	Blue	Pink	Green	Purple		Blue	Blue	
Pink	Yellow	White		Green		Pink	Pink	
Yellow	Brown	Brown				orange	Brown	
Brown	Purple	Maroon					Orange	
Orange							Purple	
Maroon								

11 colours were noticed present in the samples	Descending order of dominance of colours in five prominent communities of Assam					As a whole colour dominance (Total 36 samples)	
	Assamese (10 samples)	Karbi (5 samples)	Missing (8 samples)	Rabha (7 samples)	Boro (6 samples)		
Red	Yellow	Red	Red	Red	Yellow	Red	Purple and
Blue	Red	Yellow	Black	Black	Red	Yellow	Brown are not
Green	Black	Black	Yellow	Yellow	Green	Black	significant
White	White	White	White	White	Orange	White	
Purple	Blue	Blue	Green	Green	Black	Green	
Black	Maroon	Green	Blue	Maroon		Blue	
Pink	Green			Pink		Pink	
Yellow	Pink			Blue		Maroon	
Brown						Orange	
Orange							
Maroon							

Table- 8 cont.

11 colours were noticed present in the samples	Descending order of dominance of colours in five prominent communities of Nagaland					As a whole colour dominance (Total 30 samples)	
	Ao (6 samples)	Angami (6 samples)	Sema (9 samples)	Chang (6 samples)	Lahote (3 samples)		
Red Blue Green White Purple Black Pink Yellow Brown Orange Maroon	Red Black Orange Green White Yellow	Black Yellow White Red Blue Orange	Black Red Yellow Orange White Green brown	Black Red White Yellow Orange Green	Black Orange Blue White Yellow	Black Red Yellow White Orange Green Blue Brown	Purple, Pink and Maroon are not significant

11 colours were noticed present in the samples	Descending order of dominance of colours in the most prominent community in Manipur	As a whole colour dominance (Total 14 samples)	
	Meitie (14 samples)		
Red Blue Green White Purple Black Pink Yellow Brown Orange Maroon	Red Green Yellow Black White Orange Pink Purple Brown Blue	Red Green Yellow Black White Orange Pink Purple Brown Blue	Maroon is not significant

Table- 8 cont.

11 colours were noticed present in the samples	Descending order of dominance of colours in two prominent communities of Mizoram		As a whole colour dominance (Total 18 samples)	
	Mizo (12 samples)	Hmar (6 samples)		
Red Blue Green White Purple Black Pink Yellow Brown Orange Maroon	White Red Black Yellow Blue Pink Green Purple	Red Yellow Black White Green Pink Purple	Red Black White Yellow Blue Pink Green Purple	Brown, Orange and Maroon are not significant

11 colours were noticed present in the samples	Descending order of dominance of colours in two prominent communities of Tripura		As a whole colour dominance (Total 12 samples)	
	Riang (7 samples)	Bengali (5 samples)		
Red Blue Green White Purple Black Pink Yellow Brown Orange Maroon	Red Yellow Black Blue White Green Pink	Red Green Yellow Pink White Orange Black	Red Yellow Black White Blue Pink Green Orange	Purple, Brown and Maroon are not significant

Table- 8 cont.

11 colours were noticed present in the samples	Descending order of dominance of colours in three prominent communities of Meghalaya			As a whole colour dominance (Total 18 samples)	
	Khasi (7 samples)	Jayantia (5 samples)	Garos (6 samples)		
Red Blue Green White Purple Black Pink Yellow Brown Orange Maroon	White Red Blue Black Yellow Brown Green Pink	Yellow White Black Red Blue Green Pink Brown	Yellow Red Green White Black Orange Blue Pink	White Red Yellow Black Blue Green Pink Brown Orange	Purple and Maroon are not significant
11 colours were noticed present in the samples	Descending order of dominance of colours in the most prominent community in Sikkim		As a whole colour dominance (Total 20 samples)		
	Sikkimese (20 samples)				
Red Blue Green White Purple Black Pink Yellow Brown Orange Maroon	Black Red White Blue Yellow Green Pink Purple Orange Maroon		Black Red White Blue Yellow Green Pink Purple Orange Maroon		Brown is not significant

Table- 9 Dominant colour chart of Northeast India as emerged from the above findings of all States

<p>11 colours were noticed present in the samples</p>	<p>Descending order of dominance of eleven colours found in the samples (total 181 samples) observed from different communities of Northeast</p> <ul style="list-style-type: none"> Red Black Yellow White Green Blue Pink Orange Purple Brown Maroon
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Table- 10 Dominant motifs and pattern, statewise and with different communities, Ref. Table 5

Arunachal Pradesh

Visual dominancy of thirteen prominent Motifs and patterns

Motifs	Idu Mishmi						Do	Adi						Do	konyak						Do	Gallong						Do	Chang						Do	Apatani					Do	Do total
	S1	S2	S3	S4	S5	S6		S7	S8	S9	S10	S11	S12		S13	S14	S15	S16	S17	S18		S19	S20	S21	S22	S23	S24		S25	S26	S27	S28	S29	S30		S31	S32	S33				
Rhombus	1	1	1	1	1	1	6	1	1	1			1	4	1			1	1	3	1	1		1	3	1	1		1	1	4	1	1	1	1	1	5	25				
Zigzag		1					1		1				1		1			1	2	1	1			2	1	1	1	1	1	6	1	1	1			3	15					
Stripes			1			1	2	1		1	1	1	5	1	1	1	1	1	6	1	1	1	1	4	1	1	1	1		4	1	1	1	1	1	5	26					
Floral																																										
Animal/Bird																																										
Spiral																													1						1	1						
Square					1		1																																			
Triangle										1			1					1	1					1					1													
Hexagonal											1		1																													
Recangle																																										
Bottle																																										
Aeroplane																																										
Circle																																										

Do= Dominancy, number of samples found positive

This table shows the dominancy of motifs and patterns in various groups as below.

Dominance in Idu Mishimi is Rhombus, Stripes, Zigzag and Square with respective visual presence of 6, 2, 1 and 1, out of 6 samples

In Adi- Stripes, Rhombus, Zigzag and Triangle with respective visual presence of 6, 3, 2 and 1, out of 6 samples

In Konyak -Stripes, Rhombus, Zigzag, Triangle and Hexagonal with respective visual presence of 5, 4, 1, 1 and 1, out of 6 samples

In Gallong Stripes, Rhombus, Zigzag, with respective visual presence of 4, 3 and 2, out of 4 samples

In Chang -Zigzag, Rhombus, Stripes and Triangle with respective visual presence of 6, 4, 4 and 1, out of 6 samples

In Apatani- Rhombus, Stripes, Zigzag and Spiral with respective visual presence of 5, 5, 3 and 1, out of 5 samples

In this analysis out of total 33 samples observed, the dominancy of presence has come up 26, 25, 15, 3, 1 which respectively represent motifs and patterns namely Stripes, Rhombus, Zigzag, Triangle and Spiral.

Table- 10 cont.

Assam

Visual dominancy of thirteen prominent Motifs and patterns

Motifs	Assamese										Do	Karbi					Do	Missing										Do	Rabha										Do	Boro						Do	Do total
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10		S11	S12	S13	S14	S15		S16	S17	S18	S19	S20	S21	S22	S23	S24	S25		S26	S27	S28	S29	S30	S31	S32	S33	S34	S35		S36							
Rhombus	1		1	1	1			1	1		6	1		1		1	3					1	1	1	3		1					1	2		1					1	15						
Zigzag				1				1		1	3			1		1	1			1	1	1	1	1	5	1	1		1		1	1	5	1			1			2	16						
Stripes	1			1		1		1	1		5	1	1		1	1	4	1	1	1	1		1	1	1	7	1	1	1	1	1	1	1	7	1	1	1	1	1		5	28					
Floral					1	1		1		1	4										1			1								1					1	1	3	8							
Animal/Bird					1	1			1		3			1			1																							4							
Spiral																																															
Square		1									1																													1							
Triangle																																															
Hexagonal																																															
Recangle		1									1																										1	1	2	3							
Bottle							1				1																													1							
Aeroplane														1			1																							1							
Circle																																															

Do= Dominancy, number of samples found positive

This table shows the dominancy of motifs and patterns in various groups as below.

Five dominance in Assamese is Rhombus, Stripes, Floral, Zigzag and Animal/ Birds with respective visual presence of 6, 5, 4, 3 and 3, out of 10 samples

In Karbi- Stripes, Rhombus, Zigzag, Animal/ Bird and Aeroplane with respective visual presence of 4, 3, 1, 1 and 1, out of 5 samples

In Missing -Stripes, Zigzag, Rhombus and Floral with respective visual presence of 7, 5, 3 and 1, out of 8 samples

In Rabha- Stripes, Zigzag, and Rhombus with respective visual presence of 7, 5 and 2, out of 7 samples

In Boro -Stripes, Floral, Zigzag, Rectangle and Rhombus with respective visual presence of 5, 3, 2, 2 and 1, out of 6 samples

In this analysis out of total 36 samples observed, the dominancy of presence has come up 28, 16, 15, 8, 4, which respectively represent motifs and patterns namely Stripes, Zigzag, Rhombus, Floral and Animal/ Birds.

Table- 10 cont.

Manipur

Visual dominancy of thirteen prominent Motifs and patterns

Motifs	Meitie														Do
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	
Rhombus		1										1			2
Zigzag		1	1	1								1			4
Stripes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14
Floral						1	1	1	1	1	1	1		1	8
Animal/Bird									1						1
Spiral															
Square															
Triangle														1	1
Hexagonal															
Recangular															
Bottle	1	1					1	1							4
Aeroplane															
Circle															

Do= Dominancy, number of samples found positive

This table shows the dominancy of motifs and patterns as below.

Dominance in Meitie is Stripes, Floral, Zigzag, Bottle, Animal/ Birds and Triangle with respective visual presence of 14, 8, 4, 4, 2, 1 and 1, out of 14 samples

In this analysis out of total 14 samples observed from the most prominent population group Meitie, dominancy of presence has come up 14, 8, 4, 4, 2, 1 and 1, which respectively represent motifs and patterns namely Stripes, Floral, Zigzag, Bottle, Animal/ Birds and Triangle.

Table-10 cont.

Mizoram

Visual dominancy of thirteen prominent Motifs and patterns

Motifs	Mizo												Do	Hmar						Do	Do total
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12		S13	S14	S15	S16	S17	S18		
Rhombus	1	1	1			1	1	1	1			1	8	1		1		1	1	4	12
Zigzag						1			1				2								2
Stripes	1	1	1	1	1	1	1	1		1	1	1	11	1		1		1	1	4	15
Floral		1	1										2		1		1				2
Animal/Bird																					
Spiral																					
Square										1			1							1	1
Triangle																					
Hexagonal																					
Recangle																					
Bottle																					
Aeroplane																					
Circle																					

Do= Dominancy, number of samples found positive

This table shows the dominancy of motifs and patterns in various groups as below.

Dominance in Mizo is Stripes, Rhombus, Zigzag, Floral and Square with respective visual presence of 11, 8, 2, 2 and 1, out of 12 samples
 In Hmar- Rhombus, Stripes, and Square with respective visual presence of 4, 4 and 1, out of 6 samples

In this analysis out of total 18 samples observed, the dominancy of presence has come up 15, 12, 2, 2, 1 which respectively represent motifs and patterns namely Stripes, Rhombus, Zigzag, Floral and Square.

Table-10 cont.

Tripura

Visual dominancy of thirteen prominent Motifs and patterns

Motifs	Riang							Do	Bengali					Do	Do total
	S1	S2	S3	S4	S5	S6	S7		S8	S9	S10	S11	S12		
Rhombus		1				1		2							2
Zigzag															
Stripes	1				1	1	1	4	1	1	1	1	1	5	9
Floral			1	1	1		1	4			1	1		2	6
Animal/Bird									1					1	1
Spiral															
Square															
Triangle															
Hexagonal															
Recangle															
Bottle															
Aeroplane															
Circle															

Do= Dominency, number of samples found positive

This table shows the dominancy of motifs and patterns in various groups as below.

Dominance in Riang is Stripes, Floral and Rhombus with respective visual presence of 4, 4, and 2, out of 7 samples
 In Bengali- Stripes, Floral and Animal/ Bird with respective visual presence of 5, 2 and 1, out of 5 samples

In this analysis out of total 12 samples observed, the dominancy of presence has come up 9, 6, 2, 1 which respectively represent motifs and patterns namely Stripes, Floral, Rhombus and Animal/ Bird.

Table-10 cont.

Meghalaya

Visual dominance of thirteen prominent Motifs and patterns

Motifs	Khasi							Do	Jayantia					Do	Garo						Do	Do total		
	S1	S2	S3	S4	S5	S6	S7		S8	S9	S10	S11	S12		S13	S14	S15	S16	S17	S18				
Rhombus			1	1	1			3				1	1	2										5
Zigzag	1	1	1	1	1			5			1			1										6
Stripes	1	1	1	1	1	1	1	7	1		1		1	3	1	1	1	1	1	1	1	1	6	16
Floral	1		1				1	4	1	1			1	3	1	1	1	1	1	1	1	1	6	13
Animal/Bird	1							1																1
Spiral																								
Square																								
Triangle																								
Hexagonal																								
Recangle																								
Bottle																								
Aeroplane																								
Circle																								

Do= Dominancy, number of samples found positive

This table shows the dominancy of motifs and patterns in various groups as below.

Dominance in Khasi is Stripes, Zigzag, Floral, Rhombus and Animal/ Birds with respective visual presence of 7, 5, 4, 3, 1 and 1, out of 7 samples

In Jayantia- Stripes, Floral, Rhombus and Zigzag with respective visual presence of 3, 3, 2 and 1, out of 5 samples

In Garo- Stripes and Floral with respective visual presence of 6 and 6, out of 6 samples

In this analysis out of total 18 samples observed, the dominancy of presence has come up 16, 13, 6, 5, 1, which respectively represent motifs and patterns namely Stripes, Floral, Zigzag, Rhombus and Animal/ Bird.

Table-10 cont.

Sikkim

Visual dominance of thirteen prominent Motifs and patterns

Motifs	Sikkimese																				Do
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	
Rhombus	1	1		1	1							1									5
Zigzag				1								1						1			3
Stripes	1	1		1	1	1				1	1	1	1	1	1		1				12
Floral	1	1	1		1	1		1	1	1				1	1	1	1	1	1	1	15
Animal/Bird							1														1
Spiral																					
Square																					
Triangle																					
Hexagonal																					
Recangle																					
Bottle																					
Aeroplane																					
Circle																					

Do= Dominancy, number of samples found positive

This table shows the dominancy of motifs and patterns as below.

Dominance in Sikkimese is Floral, Stripes, Rhombus, Zigzag and Animal/ Birds with respective visual presence of 15, 12, 5, 3 and 1, out of 20 samples

In this analysis out of total 20 samples observed from the most prominent population group Sikkimese, dominancy of presence has come up 15, 12, 5, 3 and 1, which respectively represent motifs and patterns namely Floral, Stripes, Rhombus, Zigzag and Animal/ Birds.

Table- 11 Summarised dominant motifs and pattern of Northeast India, Ref. Table 10

Motifs	Ar, S 33	As, S 36	Na, S 30	Ma, S 14	Mi, S 18	Tr, S 12	Me, S 18	Si, S 20	NE, S 181
Rhombus	25	15	2	2	12	2	5	5	68
Zigzag	15	16	2	4	2	0	6	3	48
Stripes	26	28	30	14	15	9	16	12	150
Floral	0	8	0	8	2	6	13	15	52
Animal/Bird	0	4	0	1	0	1	1	1	8
Spiral	1	0	0	0	0	0	0	0	1
Square	1	1	12	0	1	0	0	0	15
Triangle	3	0	0	1	0	0	0	0	4
Hexagonal	1	0	0	0	0	0	0	0	1
Rectangle	0	3	0	0	0	0	0	0	3
Bottle	0	1	0	4	0	0	0	0	5
Aeroplane	0	1	0	0	0	0	0	0	1
Circle	0	0	6	0	0	0	0	0	6

Ar, S 33 Arunachal, 33 samples studied
 As, S 36 Assam, 36 samples studied
 Na, S 30 Nagaland, 30 samples studied
 Ma, S 14 Manipur, 14 samples studied
 Mi, S 18 Mizoram, 18 samples studied
 Tr, S 12 Tripura, 12 samples studied
 Me, S 18 Meghalaya, 18 samples studied
 Si, S 20 Sikkim, 20 samples studied

Numericals in table showing number of samples found positive

NE, S 181 = statewise as a whole motifs/pattern dominancy, number showing samples found positive out of total of 181 samples.

In this analysis out of total 181 samples observed from 8 states covering 25 major communities, the dominancy of presence has come up 150, 68, 52, 48, 15, 8, 6, 5, 4, 3, 1, 1 and 1, which respectively represent motifs and patterns namely Stripes, Rhombus, Floral, Zigzag, Square, Animal/ Birds, Circle, Bottle, Triangle, Rectangle, Spiral, Hexagonal and Aeroplane.

Table- 12 Dominant motifs/ pattern chart (from ethnic samples expressing the identifiable motifs) based on visual dominance ratings out of thirteen motifs, Ref. Table 10

13 motifs were noticed present in the samples	Descending order of dominance of motifs/ pattern in six prominent communities of Arunachal						As a whole motifs/ pattern dominance (Total 33 samples)	
	Idu Mishmi (6 samples)	Adi (6 samples)	Konyak (6 samples)	Gallong (4 samples)	Chang (6 samples)	Apatani (5 samples)		
Rhombus	Rhombus	Stripes	Stripes	Stripes	Zigzag	Zigzag	Stripes	Found absent: Floral Animal/Bird Rectangle Bottle Aeroplane Circle
Zigzag	Stripes	Rhombus	Rhombus	Rhombus	Rhombus	Rhombus	Rhombus	
Stripes	Zigzag	Zigzag	Zigzag	Zigzag	Stripes	Stripes	Zigzag	
Floral	Square	Triangle	Triangle		Triangle	Triangle	Triangle	
Animal/Bird		Hexagonal					Spiral	
Spiral							Square	
Square							Hexagonal	
Triangle								
Hexagonal								
Rectangle								
Bottle								
Aeroplane								
Circle								

13 motifs were noticed present in the samples	Descending order of dominance of motifs/ pattern in five prominent communities of Assam					As a whole motifs/ pattern dominance (Total 36 samples)		
	Assamese (10 samples)	Karbi (5 samples)	Missing (8 samples)	Rabha (7 samples)	Boro (6 samples)			
Rhombus	Rhombus	Stripes	Stripes	Stripes	Stripes	Stripes	Stripes	Found absent: Spiral Triangle Hexagonal Circle
Zigzag	Stripes	Rhombus	Zigzag	Zigzag	Floral	Zigzag	Zigzag	
Stripes	Floral	Zigzag	Rhombus	Rhombus	Zigzag	Rhombus	Rhombus	
Floral	Zigzag	Animal/Bird	Floral		Rectangle	Floral	Floral	
Animal/Bird	Animal/Bird	Aeroplane			Rhombus	Animal/Bird	Animal/Bird	
Spiral	Square					Rectangle	Rectangle	
Square	Rectangle					Square	Square	
Triangle	Bottle					Bottle	Bottle	
Hexagonal						Aeroplane	Aeroplane	
Rectangle								
Bottle								
Aeroplane								
Circle								

13 motifs were noticed present in the samples	Descending order of dominance of motifs/ pattern in five prominent communities of Nagaland						As a whole motifs/ pattern dominance (Total 30 samples)
	Ao (6 samples)	Angami (6 samples)	Sema (9 samples)	Chang (6 samples)	Lahote (3 samples)		
Rhombus	Stripes	Stripes	Stripes	Stripes	Stripes		Found absent: Floral Animal/Bird Spiral Triangle Hexagonal Rectangle Bottle Aeroplane
Zigzag	Animal/Bird	Square	Square	Circle	Square		
Stripes			Circle	Rhombus			
Floral			Zigzag	Zigzag			
Animal/Bird				Square			
Spiral							
Square							
Triangle							
Hexagonal							
Rectangle							
Bottle							
Aeroplane							
Circle							

13 motifs were noticed present in the samples	Descending order of dominance of motifs/ pattern in the most prominent community in Manipur						As a whole motifs/ pattern dominance (Total 14 samples)
	Meitie (14 samples)						
Rhombus	Stripes						Found absent: Spiral Square Hexagonal Rectangle Aeroplane Circle
Zigzag	Floral						
Stripes	Zigzag						
Floral	Bottle						
Animal/Bird	Rhombus						
Spiral	Animal/Bird						
Square	Triangle						
Triangle							
Hexagonal							
Rectangle							
Bottle							
Aeroplane							
Circle							

13 motifs were noticed present in the samples	Descending order of dominance of motifs/ pattern in two prominent communities of Mizoram					As a whole motifs/ pattern dominance (Total 18 samples)
	Mizo (12 samples)	Hmar (6 samples)				
Rhombus	Stripes	Rhombus				Stripes
Zigzag	Rhombus	Stripes				Rhombus
Stripes	Zigzag	Square				Zigzag
Floral	Floral					Floral
Animal/Bird	Square					Square
Spiral						
Square						
Triangle						
Hexagonal						
Rectangle						
Bottle						
Aeroplane						
Circle						

Found absent:
Animal/Bird
Spiral
Triangle
Hexagonal
Rectangle
Bottle
Aeroplane
Circle

13 motifs were noticed present in the samples	Descending order of dominance of motifs/ pattern in two prominent communities of Tripura					As a whole motifs/ pattern dominance (Total 12 samples)
	Riang (7 samples)	Bengali (5 samples)				
Rhombus	Stripes	Stripes				Stripes
Zigzag	Floral	Floral				Floral
Stripes	Rhombus	Animal/Bird				Rhombus
Floral						Animal/Bird
Animal/Bird						
Spiral						
Square						
Triangle						
Hexagonal						
Rectangle						
Bottle						
Aeroplane						
Circle						

Found absent:
Zigzag
Spiral
Square
Triangle
Hexagonal
Rectangle
Bottle
Aeroplane
Circle

13 motifs were noticed present in the samples	Descending order of dominance of motifs/ pattern in three prominent communities of Meghalaya					As a whole motifs/ pattern dominance (Total 18 samples)
	Khasi (7 samples)	Jayantia (5 samples)	Garo (6 samples)			
Rhombus	Stripes	Stripes	Stripes			Stripes
Zigzag	Zigzag	Floral	Floral			Floral
Stripes	Floral	Rhombus				Zigzag
Floral	Rhombus	Zigzag				Rhombus
Animal/Bird	Animal/Bird					Animal/Bird
Spiral						
Square						
Triangle						
Hexagonal						
Rectangle						
Bottle						
Aeroplane						
Circle						

Found absent:
Spiral
Square
Triangle
Hexagonal
Rectangle
Aeroplane
Circle
Bottle

13 motifs were noticed present in the samples	Descending order of dominance of motifs/ pattern in the most prominent community in Sikkim					As a whole motifs/ pattern dominance (Total 20 samples)
	Sikkimese (20 samples)					
Rhombus	Floral					Floral
Zigzag	Stripes					Stripes
Stripes	Rhombus					Rhombus
Floral	Zigzag					Zigzag
Animal/Bird	Animal/Bird					Animal/Bird
Spiral						
Square						
Triangle						
Hexagonal						
Rectangle						
Bottle						
Aeroplane						
Circle						

Found absent:
Spiral
Square
Triangle
Hexagonal
Rectangle
Bottle
Aeroplane
Circle



Table 13 Dominant motifs/ pattern chart of Northeast India as emerged from the above findings of all eight States

Descending order of dominance of thirteen motifs/ pattern found in the samples (total 181 samples) observed from different communities of Northeast
Stripes Rhombus Floral Zigzag Square Animal/Bird Circle Bottle Triangle Rectangle Spiral Hexagonal Aeroplane



Table - 14

Thirty one selected representative basketry and samples of utility items were observed and common visual characteristics of their various forms and shapes have been obtained and presented according to their commonality from the study.

	Square/circular/ flat base	Conical	Square base with legs	Round base
Arunachal Samples 1, 2, 3, 4				
Assam Samples 5, 6, 7, 8				
Nagaland Samples 9, 10, 11, 12				
Meghalaya Samples 13, 14, 15, 16				
Mizoram Samples 17, 18, 19, 20				
Manipur Samples 21, 22, 23, 24				



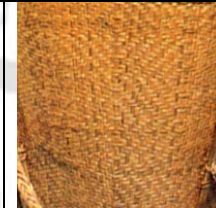
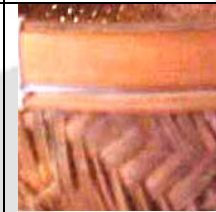




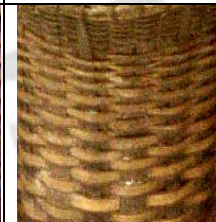
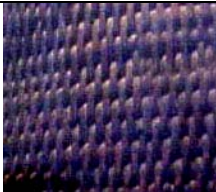


<p>Tripura</p> <p>Samples 25, 26, 27, 28</p>				
<p>Sikkim</p> <p>Samples 29, 30 and 31</p>			<p>Specimen not found</p>	












* 31 samples studied and others specific are described in Chapter IV.

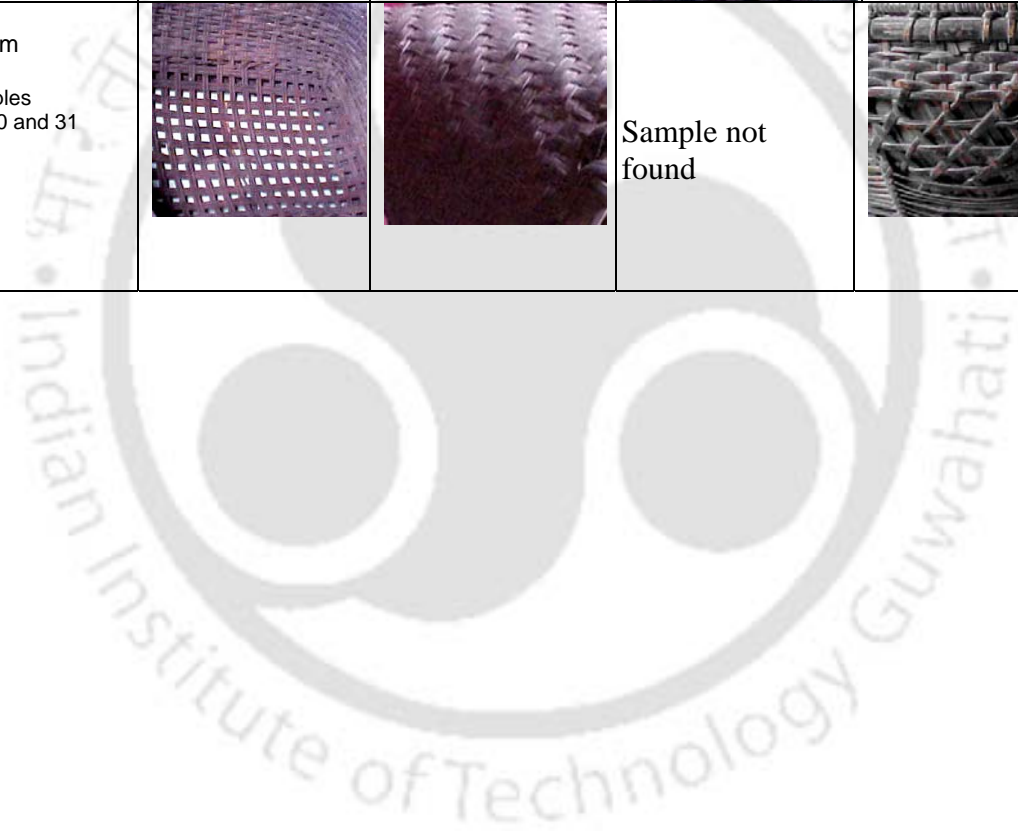
The above samples have been categorized based on their common physical features. Through this study it has come up that the form and shape of the basketry items are community specific and characterized with specific utility.

Table – 15

Textural pattern of knitting of baskets; samples (same sample no.) taken from items presented Table-14
 (Coarseness of the stripes and tightness in knitting pattern make various textural appearances specific to different communities)

	Open weave	Semi Open weave	Medium Open weave	Closed weave
Arunachal Samples 2,1,3, 4				
Assam Samples 7, 6, 8, 5				
Nagaland Samples 9, 11, 12, 10				
Meghalaya Samples 13, 15, 16, 14				
Mizoram Samples 17, 18, 19, 20				

<p>Manipur</p> <p>Samples 21, 22, 23, 24</p>				
<p>Tripura</p> <p>Samples 25, 26, 28, 27</p>				
<p>Sikkim</p> <p>Samples 29, 30 and 31</p>			<p>Sample not found</p>	



A Study on Design Elements in Craft Practices
With Special Reference to Textile and Basketry of Northeast India

Chapter-VI

Conclusion: Extraction of common design elements

Studying Indian and western design elements through their rich tradition and design experiences in the first three chapters, it has been noticed that Northeast with its myriad traditional design practices has not been analysed in order to get its essence of design elements. Specific design elements are found in nature and traditional practices of local people. So attempt was taken to study through collection and compilations of these design elements so to see its specificity that in turn can be applied in contemporary design. The major emphasis was given on the collection and compilation of their ethnic designs locally prevalent in crafts practices; the sample survey is presented in chapter IV. Focus mainly has been made on textiles and baskets in this thesis because these two appeared to be largely practiced crafts by the community of this region with their traditional know how. Analysis of the community specific motif, colour and weaving patterns of baskets (texture) have been presented in chapter V.

In a nutshell, it can be said that this thesis is all about to study from the viewpoint of an eye to see the elements of design known today, 1) how naturally these are used in our early period of life, 2) specific thoughts gave in to shape the modern design movement in western society and in different design schools, 3) Indian application creating Indian ethos, 4) to get an overall idea of identifiable dominating applications prevailed in Northeast societies being a myriad cultural heritage of mainland India and tribal originals, which can be considered as contribution from this part of country to broad based Indian design prevalence.

The documented material and findings presented herein made it clear that the identity of products carries emotion of the people from where they belong. It also can be said that in the present era of patent, this identity preservation would no longer be luxury of patriotism; it raises a question for survival. Design should go along with cultural prevalence.

6.1 Design analysis: findings

Specific design items collected from various locations have been compiled and categorised state wise and the common features like a predominant colour, form & shape, motif/pattern and texture used have been tried to establish.

Study on the colour combination of textile motifs of different ethnic groups of this region through which they can be identified as they hail from a particular ethnic group. This also covers the visual rating of colour combination as expressed by local people. Motifs in textile and texture in baskets of different ethnic groups have been studied to recognize their regional characters. This has got embedded in their culture. The study also covers the form and shape of various utility items to extract their typical design identity. From the study above, community specific observation obtained is summarised and presented in separate tables.

Textile colour

- The field study organisation detail has been presented in Table 4.
- Overall views of detail visual ratings of dominant colours (Red, Blue, Green, White, Purple, Black, Pink, yellow, Brown, Orange and Maroon) and motifs of specific and selected representative textile samples, state-wise data information, are presented in Table 5.
- Visual dominancy ratings 5 to 1, 1= least in comparison to 5= most, (visual rating scale 5 to 1, most prominent one is 5, next colours followed by score 4,3,2, after that all rated as 1) of eleven prominent colours on 181 samples in textile prominences, from eight states comprising ethnic groups, is presented in Table 6:
 - Arunachal Pradesh, six communities with 33 samples: Idu Mishmi (6), Adi (6), Konyak (6), Gallong (4), Chang (6) and Apatani (5) have been studied and the bellow is observed.

Five-colour dominance in Idu Mishimi is Red, Black, Pink, White and Green with respective visual rating of 4.5, 3.8, 2.5, 1.7 and 1.

In Adi the Red, yellow, Green, Black and Orange with respective visual rating of 4.2, 2.3, 2.2, 1.8, and 1.3.

In Konyak the Black, White, Red, Yellow and brown with respective visual rating of 3.7, 3.7, 3.3, 2.1 and 0.8.

In Gallong Red, Yellow, Black, White and Brown with respective visual rating of 3.5, 3.2, 2.5, 1.8 and 1.3.

In Chang Black, Red, Blue, Yellow (only four colour observed) with respective visual rating of 5, 3.7, 2.8 and 2.5.

In Apatani Black, Red, White, Yellow and Green with respective visual rating of 3.8, 3, 2.8, 2, 1.

In this analysis total state average of dominance has come up as Red, Black, Yellow, White and green with respective visual rating of 3.7, 3.4, 2.0, 1.6 and 0.8.

- Assam, five communities with 36 samples: Assamese (10), Karbi (5), Missing (8), Rabha (7) and Boro (6) have been studied and the below is observed.

Five colour dominance in Assamese are Yellow, Red, Black, White and Blue with respective visual rating of 3.6, 3.2, 2.2, 2 and 1.1.

In Karbi the Red, Yellow, Black, White, Blue and Green with respective visual rating of 4.5, 3.4, 2.4, 1, 0.6 and 0.6.

In Missing the Red, Black, Yellow, White and Green with respective visual rating of 4.5, 3.5, 2.9, 2.4 and 0.3.

In Rabha the Red, Black, Yellow, White and Green with respective visual rating of 3.6, 3.0, 3.0, 1.1 and 0.7.

In Boro the Yellow, Red, Green, Orange and Black with respective visual rating of 4.2, 3.7, 1.8, 0.8 and 0.5.

In this analysis, total state average of dominance has come up as Red, Yellow, Black, White and Green with respective visual rating of 3.8, 3.3, 2.4, 1.4 and 0.7.

- Nagaland, five communities with 30 samples: Ao (6), Angami (6), Sema (9), Chang (6) and Lahote (3) have been studied and the below is observed.

Five colour dominance in Ao are Red, Black, Orange, Green and White with respective visual rating of 4.0, 3.7, 1.7, 0.7 and 0.5.

In Angami the Black, Yellow, White, Red and Blue with respective visual rating of 4.2, 3, 2.7, 0.7 and 0.7.

In Sema the Black, Red, Yellow, Orange and White with respective visual rating of 4.8, 2.3, 2.2, 2.2 and 1.2.

In Chang the Black, Red, White, Yellow and Orange with respective visual rating of 3.2, 3.2, 2.8, 1.3 and 0.8.

In Lahote the Black, Orange, Blue, White and Yellow with respective visual rating of 4.7, 3, 1.3, 1 and 1.

In this analysis, total state average of dominancy has come up as Black, Red, Yellow, White and Orange with respective visual rating of 4.0, 2.2, 1.7, 1.6 and 1.5.

- Manipur, one community with 14 samples: Meitie (14) has been studied and the bellow is observed.

Five colours dominance in Meitie are Red, Green, Yellow, Black and White with respective visual rating of 3.5, 2.2, 2.1, 2.1 and 1.5.

In this analysis, total state average of dominancy has come up as Red, Green, Yellow, Black and White with respective visual rating of 3.5, 2.2, 2.1, 2.1 and 1.5.

- Mizoram, two communities with 18 samples: Mizo (12) and Hmar (6) have been studied and the bellow is observed.

Five colour dominance in Mizo are White, Red, Black, Yellow and Blue with respective visual rating of 2.8, 2.8, 2.5, 1.9 and 1.8.

In Hmar the Red, Yellow, Black White and Green with respective visual rating of 4.0, 2.8, 2.3, 1.5 and 0.8.

In this analysis, total state average of dominancy has come up as Red, Black, White, Yellow and Blue with respective visual rating of 3.2, 2.4, 2.3, 2.2 and 1.1.

- Tripura, two communities with 12 samples: Riang (7) and Bengali (5) have been studied and the bellow is observed.

Five colour dominance in Riang are Red, Yellow, Black, Blue and White with respective visual rating of 3.1, 2.4, 2.4, 1.7 and 1.4.

In Bengali the Red, Green, Yellow, Black, Pink and White with respective visual rating of 4.2, 1.8, 1.6, 1.6 and 1.4.

In this analysis, total state average of dominancy has come up as Red, Yellow, Black, White and Blue with respective visual rating of 3.5, 2.1, 2.0, 1.4 and 1.3.

- Meghalaya, three communities with 18 samples: Khasi (7), Jayantia (5) and Garo (6) have been studied and the bellow is observed.

Five colours dominance in Khasi are White, Red, Blue, Black and Yellow with respective visual rating of 3.7, 3.1, 2.1, 1.3 and 1.1.

In Jayantia are Yellow, White, Black, Red and Blue with respective visual rating of 3.4, 2.6, 2.6, 1.6 and 1.

In Garo are Yellow, Red, Green, White and Black with respective visual rating of 3.3, 2.7, 2.5, 2.2 and 1.7.

In this analysis, total state average of dominancy has come up as Red, Green, Yellow, Black and White with respective visual rating of 2.9, 2.5, 2.4, 1.7 and 1.3.

- Sikkim one community with 14 samples: Sikkimese (20) has been studied and the bellow is observed.

Five colours dominance in Sikkimese are Black, Red, White, Blue and Yellow with respective visual rating of 2.5, 2.4, 2.2, 1.5 and 1.3.

In this analysis, total state average of dominancy has come up as Black, Red, White, Blue and Yellow with respective visual rating of 2.5, 2.4, 2.2, 1.5 and 1.3.

- The overall colour ratings have been summarised in Table 7.
In this analysis, total Northeast average of dominance has come up as Red, Black, Yellow, White and Green in order with respective visual rating of 3.1, 2.6, 2.1, 1.9, and 1.0.
- Dominance of colours (in textile design and motifs) in all prominent communities under study within the eight states and the states as a whole is presented in Table 8, and the colour dominance of Northeast India as emerged from the above findings is summarised in Table 9.

Textile motifs/patterns

- Dominant motifs and pattern, state-wise and with different communities against thirteen specific motifs found in 181 samples is presented in Table 10 (showing number of samples found positive on the motifs), and the same score is summarised in Table 11 for Northeast India as a whole emerged from the above scores.

Arunachal Pradesh:

Dominance in Idu Mishimi is Rhombus, Stripes, Zigzag and Square with respective visual presence of 6, 2, 1 and 1, out of 6 samples.

In Adi- Stripes, Rhombus, Zigzag and Triangle with respective visual presence of 6, 3, 2 and 1, out of 6 samples.

In Konyak -Stripes, Rhombus, Zigzag, Triangle and Hexagonal with respective visual presence of 5, 4, 1, 1 and 1, out of 6 samples.

In Gallong Stripes, Rhombus, Zigzag, with respective visual presence of 4, 3 and 2, out of 4 samples.

In Chang -Zigzag, Rhombus, Stripes and Triangle with respective visual presence of 6, 4, 4 and 1, out of 6 samples.

In Apatani- Rhombus, Stripes, Zigzag and Spiral with respective visual presence of 5, 5, 3 and 1, out of 5 samples.

In this analysis out of total 33 samples observed, the dominance of presence has come up 26, 25, 15, 3, 1, which respectively represent motifs and patterns namely Stripes, Rhombus, Zigzag, Triangle and Spiral.

Assam:

Five dominance in Assamese are Rhombus, Stripes, Floral, Zigzag and Animal/ Birds with respective visual presence of 6, 5, 4, 3 and 3, out of 10 samples.

In Karbi- Stripes, Rhombus, Zigzag, Animal/ Bird and Aeroplane with respective visual presence of 4, 3, 1, 1 and 1, out of 5 samples

In Missing -Stripes, Zigzag, Rhombus and Floral with respective visual presence of 7, 5, 3 and 1, out of 8 samples.

In Rabha- Stripes, Zigzag, and Rhombus with respective visual presence of 7, 5 and 2, out of 7 samples.

In Boro -Stripes, Floral, Zigzag, Rectangle and Rhombus with respective visual presence of 5, 3, 2, 2 and 1, out of 6 samples.

In this analysis out of total 36 samples observed, the dominance of presence has come up 28, 16, 15, 8, 4, which respectively represent motifs and patterns namely Stripes, Zigzag, Rhombus, Floral and Animal/ Birds.

Nagaland:

Dominance in Ao is Stripes and Animal/ Birds with respective visual presence of 6 and 1, out of 6 samples.

In Angami- Stripes and Square with respective visual presence of 6 and 2, out of 6 samples.

In Sema -Stripes, Square, circle and Zigzag with respective visual presence of 9, 8, 3 and 1, out of 9 samples.

In Chang- Stripes, Circle, Rhombus, Zigzag, and Square with respective visual presence of 6, 3, 2, 1 and 1, out of 6 samples.

In Lahote -Stripes and Square with respective visual presence of 3 and 1, out of 3 samples.

In this analysis out of total 30 samples observed, the dominance of presence has come up 30, 12, 6, 2, 2 which respectively represent motifs and patterns namely Stripes, Square, Circle, Rhombus and Zigzag,

Manipur:

Dominance in Meitie is Stripes, Floral, Zigzag, Bottle, Animal/ Birds and Triangle with respective visual presence of 14, 8, 4, 4, 2, 1 and 1, out of 14 samples.

In this analysis out of total 14 samples observed from the most prominent population group Meitie, dominance of presence has come up 14, 8, 4, 4, 2, 1 and 1, which respectively represent motifs and patterns namely Stripes, Floral, Zigzag, Bottle, Animal/ Birds and Triangle.

Mizoram:

Dominance in Mizo is Stripes, Rhombus, Zigzag, Floral and Square with respective visual presence of 11, 8, 2, 2 and 1, out of 12 samples.

In Hmar- Rhombus, Stripes, and Square with respective visual presence of 4, 4 and 1, out of 6 samples.

In this analysis out of total 18 samples observed, the dominance of presence has come up 15, 12, 2, 2, 1, which respectively represent motifs and patterns namely Stripes, Rhombus, Zigzag, Floral and Square.

Tripura:

Dominance in Riang is Stripes, Floral and Rhombus with respective visual presence of 4, 4, and 2, out of 7 samples.

In Bengali- Stripes, Floral and Animal/ Bird with respective visual presence of 5, 2 and 1, out of 5 samples.

In this analysis out of total 12 samples observed, the dominance of presence has come up 9, 6, 2, 1, which respectively represent motifs and patterns namely Stripes, Floral, Rhombus and Animal/ Bird.

Meghalaya:

Dominance in Khasi is Stripes, Zigzag, Floral, Rhombus and Animal/ Birds with respective visual presence of 7, 5, 4, 3, 1 and 1, out of 7 samples.

In Jaintia- Stripes, Floral, Rhombus and Zigzag with respective visual presence of 3, 3, 2 and 1, out of 5 samples.

In Garo- Stripes and Floral with respective visual presence of 6 and 6, out of 6 samples.

In this analysis out of total 18 samples observed, the dominance of presence has come up 16, 13, 6, 5, 1, which respectively represent motifs and patterns namely Stripes, Floral, Zigzag, Rhombus and Animal/ Bird.

Sikkim:

Dominance in Sikkimese is Floral, Stripes, Rhombus, Zigzag and Animal/ Birds with respective visual presence of 15, 12, 5, 3 and 1, out of 20 samples.

In this analysis out of total 20 samples observed from the most prominent population group Sikkimese, dominance of presence has come up 15, 12, 5, 3 and 1, which respectively represent motifs and patterns namely Floral, Stripes, Rhombus, Zigzag and Animal/ Birds.

Northeast state wise dominance is found as bellow:

State wise as a whole motifs/pattern dominance, number showing samples found positive out of 181 samples observed from 8 states covering 25 major communities. The dominance of presence has come up 150, 68, 52, 48, 15, 8, 6, 5, 4, 3, 1, 1 and 1, which respectively represent motifs and patterns namely Stripes, Rhombus, Floral, Zigzag, Square, Animal/ Birds, Circle, Bottle, Triangle, Rectangle, Spiral, Hexagonal and Aeroplane.

Descending order of dominance of motifs/ pattern chart (from ethnic samples expressing the identifiable motifs) based on visual dominance of presence out of thirteen motifs based on Table 10 and 11 are presented in Table 12, which has been summarised in Table 13.

6.2 Colours of textile design: abstraction

Observations based on Tables 5 emphasises specific colour preferences and combinations in motifs of specific ethnic groups. Total 181 representative samples of textiles from 25 different ethnic groups (as found traditionally dominant in relevant communities) of various locations of Northeast observed and documented from important and prominent ethnic groups of each eight states have been studied to arrive at this finding.

- Eleven colours e.g. Red, Blue, Green, White, Purple, Black, Pink, Yellow, Brown, Orange and Maroon were found prominent in this region.
- As a whole for entire Northeast part of India the visual dominant colour rating is observed as descending order and they are Red, Black, Yellow, White, Green, Blue, Pink, Orange, Purple, Brown and Maroon.
- Though the same for each state appeared to be different, the groups within the state are also not identical.
- It gives a clear idea of the community specific colour preferences in textile motifs, which the local people express to possess as their ethnic identity. Summarily it can be said that the most five prominent colour of-
 - Arunachal as a whole: Red, Black, Yellow, White and Green
 - Idu Mishmi: Red, Black, Pink, White, Green
 - Adi: Red, Yellow, Green, Black, Orange
 - Konyak: Black, White, Red, Yellow, Brown
 - Gallong: Red, Yellow, Black, White, Brown
 - Chang: Black, Red, Blue, Yellow (only four colours observed)
 - Apatani: Black, Red, White, Yellow, Green.
 - Assam as a whole: Red, Yellow, Black, White and Blue
 - Assamese: Yellow, Red, Black, White, Blue
 - Karbi: Red, Yellow, Black, White, Blue, Green
 - Missing: Red, Black, Yellow, White, Green

- Rabha: Red, Black, Yellow, White, Green
- Boro: Yellow, Red, Green, Orange, Black.
- Nagaland as a whole: Black, Red, Yellow, White and Orange
 - Ao: Red, Black, Orange, Green, White
 - Angami: Black, Yellow, White, Red, Blue
 - Sema: Black, Red, Yellow, Orange, White
 - Chang: Black, Red, White, Yellow, Orange
 - Lahote: Black, Orange, Blue, White, Yellow;
- Manipur as a whole: Red, Green, Yellow, Black and White
The above is obtained from only one community, i.e., Meitie;
- Mizoram as a whole: Red, White, Black, Yellow and Blue
 - Mizo: White, Red, Black, Yellow, Blue
 - Hmar: Red, Yellow, Black, White, Green;
- Tripura as a whole: Red, Yellow, Black, White and Blue
 - Riang: Red, Yellow, Black, Blue, White
 - Bengali: Red, Green, Yellow, Pink, White;
- Meghalaya as a whole: White, Red, Yellow, Black, Blue
 - Khasi: White, Red, Blue, Black, Yellow
 - Jayantia: Yellow, White, Black, Red, Blue
 - Garo: Yellow, Red, Green, White, Black; and
- Sikkim as a whole: Black, Red, White, Blue and Yellow-
this is obtained from only one community, i.e., Sikkimese.

6.3 Motifs of textiles: abstraction

Visual approximation of motifs/ patterns usage in 181 textile samples (Table 5) taken from 25 prominent ethnic communities of eight states expresses the below findings.

- From the study, it appears that the ethnic communities of this region predominantly used geometrical forms of various patterns in their textile motifs. A total of thirteen motifs/ pattern were obtained from these samples, which include geometric patterns e.g., Rhombus, Zigzag, Stripes of various kinds (which is very common pattern), Spiral, Square, Triangle, Hexagonal, Rectangle, Circle, and Floral, Animal/Bird, and Bottle, and Aeroplane type of appearances. These very significant design elements have surfaced up after studying samples from various ethnic groups. Findings are concentrating on the selective northeast communities.
- The dominance of patterns in descending order in the whole NE observed followed as mentioned below; they are Stripes, Rhombus, Floral, Zigzag, Square, Animal/Bird figure, Circle, Bottle design, Triangle, Rectangle, Spiral, Hexagonal and Aeroplane motifs, Table 10.
- It gives a clear idea of the community specific motifs/ patterns preferences in textile motifs, which the local people express to possess as their ethnic identity. Summarily it can be said that the most five prominent motifs/ patterns of:
 - Arunachal as a whole: Stripes, Rhombus, Zigzag, Triangle, Spiral, Square and Hexagonal.
 - Idu Mishimi: Rhombus, Stripes, Zigzag and Square
 - Adi: Stripes, Rhombus, Zigzag and Triangle
 - Konyak: Stripes, Rhombus, Zigzag, Triangle and Hexagonal
 - Gallong: Stripes, Rhombus, Zigzag
 - Chang: Zigzag, Rhombus, Stripes and Triangle
 - Apatani: Rhombus, Stripes, Zigzag and Spiral;

- Assam as a whole: Stripes, Zigzag, Rhombus, Floral, Animal/Bird, Rectangle, Square, Bottle and Aeroplane.
 - Karbi: Stripes, Rhombus, Zigzag, Animal/ Bird and Aeroplane
 - Missing : Stripes, Zigzag, Rhombus and Floral
 - Rabha: Stripes, Zigzag, and Rhombus
 - Boro: Stripes, Floral, Zigzag, Rectangle and Rhombus;
- Nagaland as a whole: Stripes, Square, Circle, Rhombus, Zigzag.
 - Ao: Stripes and Animal/ Birds
 - Angami: Stripes and Square
 - Sema: Stripes, Square, Circle and Zigzag
 - Chang: Stripes, Circle, Rhombus, Zigzag, and Square
 - Lahote: Stripes and Square;
- Manipur as a whole: Stripes, Floral, Zigzag, Bottle, Rhombus, Animal/Bird and Triangle, this is obtained from only one community, i.e., Meitie.
 - Meitie: Stripes, Floral, Zigzag, Bottle, Animal/ Birds and Triangle;
- Mizoram as a whole: Stripes, Rhombus, Zigzag, Floral, Square.
 - Mizo: Stripes, Rhombus, Zigzag, Floral and Square
 - Hmar: Rhombus, Stripes, and Square
- Tripura as a whole: Stripes, Floral, Rhombus, Animal/Bird.
 - Rieng: Stripes, Floral and Rhombus
 - Bengali: Stripes, Floral and Animal/ Bird

- Meghalaya as a whole: Stripes, Floral, Zigzag, Rhombus, Animal/Bird.
 - Khasi: Stripes, Zigzag, Floral, Rhombus and Animal/ Birds
 - Jaintia: Stripes, Floral, Rhombus and Zigzag
 - Garo: Stripes and Floral

- Sikkim as a whole: Floral, Stripes, Rhombus, Zigzag and Animal/Bird.
 - Sikkimese: Floral, Stripes, Rhombus, Zigzag and Animal/ Birds.

Design identity is specific composition of various design elements to express a theme or to serve a purpose. This part of thesis finds how the dominance of colour reflects community specific identity and traditional motifs/ patterns are specific to users groups using textile as study material collected from NE.

It also observes that line as a design element along with shape and form of baskets samples; it creates texture with different composition through different users' specific woven patterns, e.g., alignment, closeness, slimness and heaviness.

6.4 Colour and motifs : interpretation

As mentioned earlier that identity of a time and culture is expressed by the man-made objects prepared and used by the people of that time, work of certain personality or a group of people in Western countries have created a bench mark standard of modern design movement. Source of inspiration were from the social changes taking at that time specifically in Europe and at the same time it also can be said that the way the basic design elements are composed to express certain theme influenced men to think design in that way and useful commodities followed the very development (Chapter II).

In India, as a whole to express today's India we have to depend on various population group specific objects representing respective culture and tradition. To express Hindu colour scheme, it is always linked with in one side saffron- white and on other side dominance of red as shakti culture. This is based on mostly the perception of upper cast and other dominated culture. Other side of lesser represented in literature is ethnic groups those who still maintain their community specificity in their life style.

Though in earlier part of this chapter, community specific textile colour and patterns/ motifs were tried to make generalization as state wise, and thus obtained state specific to represent whole Northeast; but the variations are so clear that although two communities live together, still they maintain their own identity. It would not be appropriate to select certain colour or motif or line specificity as used in baskets weaving to express Northeastness, instead like a bouquet of flowers, retaining the way major communities' practices; if these are made abstract and similar composition as well would contribute to Northeastness and Indian ness at a large.

Bellow is the support to place the reasoning involved in making logical judgment/ analysis based on circumstantial evidence (data) instead of making comments based on direct observation.

In previous chapter it has been mentioned about the shift in traditional functions, traditional symbology etc. (page 193- 196) where inter mixture or admixture of various design elements were briefing such as the inter-tribal transmission and combination is a new phenomenon etc. Craft practices in the Northeast have throughout history and legend been exploiting traditional motifs maintained through rites and rituals giving distinct identities to diverse ethnic communities. The rigours of town and city living and the pressures of market economy are invading the customarily sacrosanct spaces. Their realms are no longer inviolate. Consequently, these motifs are changing while remaining true to the original impulses. Example is being cited like the traditional rhombus of the Boros' textile motifs travels to the apparel of the Missings unobtrusively because of the

continuing admixture and yet the dress is unmistakably 'Missing' in its colour and texture.

The culture of Assam is incomplete without a description of the weaving culture among the Boros. The dress of the Boro is similar to those worn by the rural Assamese folks. The women wear mekhela (cloth piece to cover lower part of body from waist), chador and riha (upper body cover), while the men use dhoti (plain white cloth to be worn with specific style to wrap lower body part) and chadors (cloth piece for upper body cover). In winter, they wear thickly woven endi (a kind of local silk) chadors. However, the design of their mekhela is much simpler than those of Assamese non-ethnics. These two communities live together and gradually reducing their differences today.

The genesis of symbolic forms – verbal, artistic, mathematical, or whatever modes of expression there be – is the odyssey of the mind.' In northeastern textiles, as in the shawls from the Missing and the Karbis, black is the hue of the young unmarried woman who has come of age. A love song is a love song in any language, but the Karbis, as the story of Sherdi- hun (message transformation through application of colours that depicts mood and meaning and context) tells us a love colour is also equally unmistakable in its urgent message. The girl weaves a shawl (to be gifted to man she loves) to tell of her love and her colours are received and apprehended in the spirit it was meant. This is the process of abstraction, which was present even then, without the blessings of digital precision. In Indian tradition colour used as symbol while practicing rituals such as red colour symbolised shakti and green is a symbol of fertility. In Assam, they predominantly use white with red ornamented borders, which is perhaps natural in the land of the Mother Goddess as red, and it is not only a symbol of shakti; it also, at the same time, serves as an auspicious mark, of fertility, strength, and well-being.

The Nagas, like most other ethnic communities use primary colours, e.g., black, red and white, (see Table 5) because they not only are close to nature as they are actually immersed in it, but also they extract all their colours from nature both

physically and metaphorically. The same is also seen in case of the Boros; they use predominantly yellow, red, green and black. Karbis mostly use red and black stripes. Textiles of different communities of Northeast carry specific motif information. Traditional ornaments of Naga, Manipuri, Karbi and other tribes of this region are mostly vibrant and beautiful in terms of colour application and designs. Application of colours in specific way give community specific identity.

Religion specific colour application and variations with induction of other colours and application style is also evident. A few ethnic groups from Arunachal, are being the Buddhist dispensation, exploit secondary colours, as they use them more ideationally than naturally. The Maroon-yellow of the Buddhists is not only a pan-Indian phenomenon but also a global Buddhist reality. Non-Buddhist Arunachalese, exploit both primary and secondary colours in their apparels of green and yellow because they cannot deny the proximity to Buddhist mores.

Textile motifs in all together 13 pattern/ motifs, i.e., Rhombus, Zigzag, Strips, Floral, Animal/birds, Spiral, Square, Triangle, Hexagonal, Rectangular, Bottle, Aeroplane and circle are found; there are community specific affinity and absence are distinctive. If these are not maintained, it may dilute the character. To retain the same as well as further application experiment may create a range of newness.

In Arunachal out of total 11 colours 10 colours have been surfaced up where interestingly maroon is not significant though Buddhist influence in this region is observed. They use red colour instead of maroon which, according to the findings is predominant. Adi colours are brighter then Idu Mishmi. The use of red, orange and yellow by Adi are more predominant then Idu. Also proportionate use of black colour is more than Adi, perhaps, that is why Idu colours are highly saturated (bright). Again colours of Konyak are not that bright compare to Adi. The use of achromatic colours like black and white by the Konyak makes the combination low in saturation. But again it has also been found that combination of yellow and red which are predominant in Konyak makes their textile very bright. Therefore, findings have shown the combination of high and low saturated

colours is very peculiar in Konyak group. Moreover, it is noticed that the Konyak uses less number of colours compare to Adi and Idu Mishmi. Gallong colours are again bright, since red and yellow are predominant. They also use black but it is less compare to Konyak. The use of black is predominant among the Chang followed by red, blue, and yellow which are again primary colours. Therefore, Chang colour combination gives contrast effect. They also use less number of colours compare to previous groups. Similarly, Apatani colour combination also gives contrast effect. Though, black is predominant colour of Apatani they use other saturated colours like red, yellow and green. Out of these six communities black is the predominant colour amongst Konyak, Chang and Apatani. Likewise red is the colour of Idu, Adi and Gallong. In overall findings of colour it is found that primary colours like red and yellow are very predominant almost in all the Northeastern states (this has come out through ratings, Table 9) and black and white are again predominant followed by green and blue etc. The use of secondary colours like pink, orange, purple, brown and maroon are not that dominant as previous set except secondary colour green. Perhaps, green is pre dominant because the entire Northeast is surrounded by nature (green).

Stripes rhombus and zigzag patterns are seen in all communities in Arunachal and in addition Idu uses square, Apatani uses spiral, and triangles are only seen in Adi, Konyak and Chang.

In Assam out of total 11 colours 9 colours have been surfaced up where purple and brown is not significant. All the five communities of Assam have bright colour combination. The use of red, yellow and black are common in all the important communities of this state. Use of black is very prominent among Missing and Rabha. Proportionate use of black colour is very significant. As in the shawls from the Missing and the Karbis, black is the hue of the young unmarried woman who has come of age. Among the Karbi maroon and pink colours are not found significant. Same colour combination we have found in Missing group which is very significant in terms of their different design patterns. Though their colour combination has similarity they are totally different in using motifs. Thus, this retains distinctive identity as Karbi and Boro. Use of maroon and pink we found

among Rabha group which makes the combination very colourful. Boro use less colours compare to other groups mentioned earlier, only five colours are dominant among Boro. Out of these five communities red is the predominant colour amongst Karbi, Missing and Rabha. Likewise yellow is the colour of Assamese and Boro. In overall findings of colour of Assam purple and brown are not significant.

From natural motifs to abstract motifs is found to be Assam style that has transformed to ornamentation in cloth boarder. Five dominant motifs found in Assam is rhombus, strips, floral, zigzag and animal/birds. Karbi has a special aeroplane type of motifs. Animal/bird motifs are not found in Missing, Rabha and Boro; where as Boro is also seen to use a motif look like rectangular. Though the above mentioned communities live in the same state, differences are prominent. Even the style of weaving is also seen to be community specific.

In Nagaland out of total 11 colours 8 colours have been surfaced up where purple, pink and maroon are not significant. The Naga sets great value on their costume worn on ceremonies or festive occasions, though some pieces were for everyday use. The type of body cloth worn by men and women differs from one Naga group to another. The design and colour, which varies not only between the tribes but also sometimes between clans of the same tribe between different villages. This has been mentioned in the chapter IV. Among the five communities of Nagaland the use of black colour is predominant. Except Adi group the use of black, red and yellow are common in all the important communities of this state. Angami uses mostly white and yellow. Naga has a very contrast colour combination compare to other ethnic groups of Northeast, perhaps due to the use of black as most prominent colour. Out of these five communities black is the predominant colour amongst Angami, Sema, Chang and Lahote. Likewise red is the colour of Ao Naga. In overall findings of colour of Nagaland purple, pink and maroon are not significant.

Though strips, square, circle, rhombus and zigzag patterns are found to be common to all communities observed; animal/bird motif is only seen in Ao,

rhombus is not seen in Ao, Angami, Sema and Lahote; circle is not seen in Ao and Angami; zigzag is not seen in Ao, Angami and Lahote. But the strip is a common character present in all; strips combining with other motifs/ patterns create identity to the groups living in this area.

In Manipur out of total 11 colours 10 colours have been surfaced up where maroon is not significant. They have their own colour symbology and semantics depicted through textiles, which have been discussed in the chapter IV. Among the Manipuri people use of red colour is predominant. Their designs are very intricate in terms of motifs. In overall findings of colour of Manipur maroon is not significant. Whereas red green yellow are predominant followed by black, white, orange, pink, purple, brown and blue. In textile of Manipur the bottle motifs is very significant, which is locally known as liki design (page- 129). This may form a basis of new design experiments on the produces of Manipur.

In Mizoram out of total 11 colours 8 colours have been surfaced up where brown, orange and maroon are not significant. They have their own colour symbology and semantics depicted through textiles like the Mizo cloth Puandum, which is wrapped over the shoulders, they use this cloth to perform a ceremony called Khuangchawi (mentioned in previous chapter) this cloth has the colours black, red, yellow, and green in stripes. The significance of this textile piece is that every girl has to take along with this when she gets married. It is used when her husband dies to cover the dead body. So, the concept of the death is an integral part of their life. This is one of the examples of semantic of their textile. Among the Mizo people the use of red colour is again predominant like Manipuri. Their colour combination is very bright and contrast. Among two groups, Mizo and Hmar, both uses strips, rhombus and square patterns and only difference was found between them is presence of zigzag and floral patterns in Mizo that is absent in Hmar. While creating new designs with Hmar identity these two motifs may be avoided; in other sense it can be said that maintaining proportional use of cross culture motifs may create a new range of design for that state maintaining identity of both the communities would be a design challenge to be experimented upon.

In Tripura out of total 11 colours 8 colours have been surfaced up where purple, brown, and maroon are not significant. Bengali community of Tripura uses mostly primary colours, though red is a predominant colour of both the communities of Tripura their ethnic character is totally different from each other. Rieng group has lot of similarity with Karbi of Assam in motifs and stripes. What was the connection that is not known; perhaps the coarse textile making process led this typical appearance. Bengali textiles are little sophisticated compare to Rieng. Riengs were observed not to use animal/bird motifs whereas Bengalese do not use significantly rhombus, which is very common in Rieng community.

In Meghalaya out of total 11 colours 9 colours have been surfaced up where purple and maroon are not significant. Red is a predominant colour of both the communities Jaintia and Garo of Meghalaya whereas Khasi's predominant colour is white followed by red. Pink and brown is very rarely used by these communities. Khasi group weave their cloth very intricately. Jaintia's cloths are very sophisticated in terms of their weaving pattern and also the material quality they use for textile is very high. The use of green, yellow, red and black is very common among Garo community. In overall findings of colour of Meghalaya purple and maroon are not significant. Uses of floral patterns and realistic flower design are very significant in Garo textile, which they are following traditionally. We do not see this in other two communities though Jaintia uses floral pattern. Other textile patterns in fact they have stripes as common motifs used by all three communities. Rhombus and zigzag are found in both Khasi and Jaintia, whereas animal/bird motif is only seen in Khasi.

In Sikkim out of total 11 colours 10 colours have been surfaced up where brown not significant. Black is a predominant colour of both Sikkim and which is followed by red. White, blue, yellow, green etc. and brown is very rarely used by Sikkimese people. Sikkimese textile has lot of Buddhist influences such as typical floral motifs (S5, S6, S8, S9 etc. in table 5) which is predominant in their textile. Interestingly it has been found in the study that, the use of rhombus is very insignificant in Sikkimese textile. This is not evident in other states of Northeast.

Through the data analysis (table 10) it has been found that stripes and then rhombus motifs are predominant in all the states of Northeast followed by floral zigzag, square and animal/ bird. The one of the reasons of stripe being predominated motifs that various communities of Northeast use in their textiles, because they find it easy to knit with their traditional looms and know-how. And perhaps, it can be said that as mentioned above all the communities live in northeast are very attached to nature, so, stripes have been taken from the nature as verticality of trees and texture of bark, the straight lines of pata bahar leaf (a common tree of Northeast, which has parallel lines on the surface). Therefore, certain design elements they take directly from the nature like floral/ flower motifs used by Garo of Meghalaya and Meitie of Manipur can be put as an example.

It is also peculiar to noticed that rhombus motifs can be seen almost in every states of Northeast, perhaps weaving process of rhombus is easy and simple as stripes. The weave pattern follows a simple process to create a square and from this they explore different kind of rhombus almost everywhere. Like in Nagaland, ethnic communities took the shape of rhombus from the arrow, which is a symbol of their strength as warrior. As mentioned earlier the inter or intra mixer of design elements or influences from one ethnic group to another is a common phenomenon, with as much as possible to retain community specific identity characters. Therefore, without losing their ethnic identity the use of same kind of motifs is evident.

Through this findings out of 13 motifs found in entire Northeast some very peculiar motifs has been seen such as in Assam Karbi community use Aeroplane motifs which is very rare in entire Northeast. At the time of world war it is said that Karbi people seen Aeroplane in the sky that was the time they try to get this as a motif for their textile. Another example is spiral motif noticed among Apatani community. This is also very rare in other states of Northeast. In Chang and Sema communities of Nagaland circle is one of the predominant motifs which are again very rarely seen in other parts. Also it is observed that in Manipuri textiles the mixer of geometrical and floral motifs are vivid and this can be said as typical

characteristics of their textiles. Likewise square motif is peculiar to Mizo community.

6.5 Form and shape, and texture of common basketry items

In the above it is mentioned that design identity is specific composition of various design elements to express a theme or to serve a purpose and finds how the dominance of colour reflects community specific identity and traditional motifs/patterns are specific to users groups using textile as study material collected from Northeast. It also observes that line as a design element along with shape and form of baskets samples; it creates texture with different composition through different users' specific woven patterns, e.g., alignment, closeness, slimness and heaviness.

A number of basketry samples have been observed from each states, some typical items are describes in Chapter IV to get an over all idea of local practices. Thirty-one selected representative basketry (four from each state) and samples of utility items segmented into four categories based on their commonality in form and shape is presented in Table 14, and textural patterns of these are presented in Table 15. From these tables it is visible that the form and shape of the basketry items are community specific and characterized with specific utility.

Reference baskets observed in Chapter IV, it has become clear that all the baskets having ethnic features can be catagorised in basic four groups. Further, individual items within the group has specialty. This part of the thesis tries to find the differences and similarities in individual items being in catagorised in certain group. This may lead us to see how these specific characteristics. It can make a basis for new design development the way Western schools of Design have experimented with their social-cultural background, e.g., 'The Stijl' of Western school has developed a certain feature of their design, in architectural experimentation and in various product design, poster design etc., by using primary colours, horizontal and vertical line arrangement. Socio-cultural identity has been tried to maintain through these design and this established the term

'Style' (Duncan, 1998). Likewise, this search looks into the possible design elements, from the commonality of the utility items prevailed in NE societies.

31 baskets have been selected, which have certain common features and at the same time they retain their original identity of a particular place and usage. These baskets are categorized in basic four groups and one item for each group from each state has been selected to express the above.

Form and shape

These samples were analysed to understand their basic geometric shapes and forms. It is interesting to observe that:

- They differ from each other,
- Their common visual appearances follow a close similarities with basic four characteristics which can be classified as:
 - Square/ circular/ flat base,
 - Conical,
 - Square base with legs and
 - Round base, which is been presented in Table 14.
- While making this observation, the specific form and shape of specific ethnic group have been emphasised.
- It is also observed that not all the communities use all types of baskets,

It is noticed that the weaving and structure vary from community to community, probably due to traditional knowledge and specific utility value.

Under square/circular flat base category though there are basic similarities, specific variations are obtained. Where in Arunachal, it is found (Sample 1) square base with a pedestal made of a thick bamboo strip to make the base structure firm and strong, so that it can stand its own even it is fully loaded. In Assam, though the basket has a flat base it has a peculiar conical dome shaped lid (Sample 5). In Nagaland, the basket (Sample 9) appears to be open and shallow bowl type with a flat base. Basket with a flat square base with wide round

mouth is found in Meghalaya (Sample 13). It has a peculiar weaving pattern, in the middle of the basket it is loose, and upper and lower part are very closely woven. Again, in Mizoram it is observed to be in two pieces; a larger flat base body and a flat dome type lid (Sample 17). In Manipur, its appearance is conical with flat square base and circular open mouth (Sample 21), which has vertical stripes knitted from the base to mouth to make the structure strong. It appears to be shallow dish type with a flat round base in Tripura (Sample 25). Sikkim possesses a flat base shallow basket that has a loose weaving pattern on the base with a circular wide open mouth (Sample 29).

Under conical category, form variations are observed to be very wide. Basket of Arunachal (Sample 2) has a conical base with a wide-open circular mouth. It has a vertically woven bamboo strip on the body of the structure to make the body of the basket strong and firm, in order to carry things from one place to another. Since this basket has a conical base, it cannot stand of its own on the surface. So this basket has a ring type handle made of bamboo to hang the basket on the wall. A conical shallow basket (Sample 6) with wide-open circular mouth is found in Assam. In Nagaland, a very narrow and elongated basket (Sample 10) woven along with four spokes split from a single bamboo piece fixed at the bottom center is found. It is a closely woven basket with circular open mouth. Another simple cone type basket is very popular in Meghalaya. It is a semi closed woven basket (Sample no. 15). In Mizoram (Sample 18) a similar type of basket is found which has vertical stripes knitted from the base to mouth to make the structure strong. A triangular (Sample 22) shaped basket, mostly to hang, is found in Manipur. Two horizontal bamboo stripes at the mouth make the basic structural component on which the whole basket is woven. A basket of shallow conical shape with a circular rim is found in Tripura (Sample 26) and Sikkim (Sample 30); their weaving pattern is different but both of them are closely woven.

Under square base with legs category, a basket is found in Arunachal Pradesh. Since it has a square base, and legs in each corner (Sample 3), it can easily stand on any surface smooth or rough. The mouth of this basket is little square and have four ring type handles on the opening of the mouth. A similar kind of

basket also observed in Assam (Sample 7). It has four long legs, which are different from the previous basket seen in Arunachal, and it has a circular wide-open mouth. In this basket diagonal weaving pattern is very special. In Nagaland, a very beautiful ornamented basket has been observed (Sample 11). It has four legs, which look like goat legs. The weaving of the basket is very intricate through out the body. It has a very peculiar shape, from bottom it is slowly widen towards the mouth giving an elegant look. A similar kind of basket is seen in Meghalaya, which has a circular wide-open mouth with a horizontally weaving. This is mainly used for carrying things (Sample no. 15). In Mizoram, a square shaped basket is seen, which has conical shaped lid (Sample no. 19), very intricately woven this basket has again animal like legs on the base. Another beautiful basket in terms of its shape and form is found in Manipur (sample no. 23). This has a square base. The lower part of the form converse inside that gives a very feminine look to the basket. This has a dome shaped lid, which has a stick like handle. In Tripura, a shallow two-legged basket is found to be very popular among the tribals. They use this basket mainly in the kitchen. Since this basket has two legs, it does not have stability to stand on the surface. So mostly it is being hanged on the wall (Sample no. 27). While searching for representative samples we did not find leg base basket in Sikkim, though it was informed by local people about using leg base basket in their tradition earlier.

Under round base category, a very commonly used basket is seen almost in everywhere in Arunachal Pradesh (Sample no. 4) and other states of Northeast as well, though their shapes are different from place to place. This basket is mainly used for catching fish. It has a peculiar long horizontal round base, because of its elongated shape fish can stay inside horizontally. A shallow small bowl like shaped basket is very commonly used in Assam (Sample no. 8). It has a circular wide-open mouth knitted with two stripes of bamboo. A pitcher like basket is seen in Nagaland (Sample no. 12). The shape of this basket has similarity with Indian lota. Very intricately woven this basket is very popular among the Nagas. Another very commonly used basket is seen in Meghalaya (Sample no. 16). It is a shallow basket use for carrying things to the local market. Another peculiar shaped basket is found in Mizoram. They use this intricately

woven basket for storing crop. It has a bulging form with a closely woven tight mouth (Sample no. 20). In Manipur, another pitcher like basket is seen, which has sophisticated look with round base. They use this basket to keep valuable items. Though it is big in shape, it has a narrow mouth. In the body of the basket two three types of weaving pattern can be seen (Sample no. 24). Manipuri baskets are generally very stylish in look comparing with other states of Northeast. Another sample of basket has been observed in Tripura, which has similarity with the one from Mizoram in terms of their shape and form; though they are similar in their look, they are very different in their weaving patterns. This basket is very loosely woven and has bamboo stripes on the mouth, which is used as handle to hang it on the wall (Sample no. 28). In Sikkim, a small bowl-shaped shallow basket is observed, which is at present rarely seen in use by common people. It is a typically (diagonal, horizontal and vertical) woven basket with tree leaves. Loosely weave both sidewall of the basket and placing the tree leaves in between gives a very sophisticated look to the basket (sample no. 31).

Texture

The basketry weaving is not only confirmed the structural strength and various utility values, it also expresses the very aesthetics of the product, which labels the identity of the makers as well as users and location of origin. Apart from the form and shape the textural quality of these baskets (Coarseness of the stripes and tightness in knitting pattern make various textural appearances specific to different communities) have been classified into four categories (presented in Table 15, same samples taken from items as presented in Table-14) based on their weaving patterns such as:

- Open weave,
- Semi open weave,
- Medium open weave and
- Closed weave,

Under open weave category, in Arunachal (Sample 2) diagonal knitting pattern is very common. This basket weaved on some vertical coloured bamboo stripes to

make the structure firm and beautiful. In Assam, both side diagonal weaving pattern with coloured bamboo (Sample 7) gives the basket an ethnic look. In Nagaland, they weave the basket on bamboo coil, it is known as coiled type knitting, and it has a very different textural pattern. This needs a very skillful hand (Sample 9) to make the basket. Another open weaved basket from Meghalaya is weaved in hexagonal manner. The Khasi people use it for transporting vegetables, fruits etc. (Sample 13). It has a peculiar weaving pattern, in the middle of the basket it is loose, and upper and lower parts are closely weaved. Again, in Mizoram, it is observed that they weave the basket in a vertical and horizontal manner with same size of bamboo stripes, therefore it creates a very even textural surface (Sample 17). In Manipur, the basket is woven in diagonal manner (Sample 21). It has vertical stripes knitted from the base to mouth to make the structure strong. It is appeared to be very loosely knitted dish like basket, which is found in Tripura (Sample 25). It follows diagonal and spiral loosely woven knitting pattern. This basket from Sikkim has a loose weaving pattern on the base and little closed weaving pattern on the wall of the basket with a circular wide-open mouth (Sample 29).

Under semi open category, variations are observed to be very common. Basket of Arunachal (Sample 1) has a diagonal weaving on a vertically woven bamboo strip on the body of the structure to make the basket strong and firm in order to carry things from one place to another. This basket is vertically and horizontally weaved (Sample 6), which is found in Assam. In Nagaland, coiled type weaving baskets are very common (Sample 11). This is a semi open variation of coiled typed baskets. This basket from Meghalaya (Sample no. 15) has horizontal pattern of weaving, its horizontal bamboo stripes are larger then the vertical one so, it creates vertical embossed textural effects. In Mizoram (Sample 18), a different type of basket is found, which has vertical stripes knitted from the base to mouth to make the structure sturdy. Basket of Manipur (Sample 22) has a typical vertical and horizontal knitting that creates a zigzag pattern. Where as a basket, found in Tripura (Sample 26) has a similar weaving pattern like Meghalaya, i.e., horizontal bamboo stripes knitted on vertical stripes. In Sikkim

(Sample 30), they weave their baskets diagonally which again creates a zigzag pattern.

Under medium open weave category, basket (Sample 3) from Arunachal Pradesh is seen to be very intricately knitted and weaved in diagonal pattern. It is noticed that most of the baskets observed here are similar in their weaving pattern. We do not find much difference in knitting pattern between open weave, semi open weave, medium open weave and closed weave in the baskets of Arunachal. A similar kind of basket we found in Tripura (Sample no.22) and also observed in Assam (Sample 8). In terms of their knitting pattern, they appear to be very similar. The diagonal weaving pattern is very common in both the places. In Nagaland, a very beautiful ornamented basket has been observed (Sample 12). Weaving pattern of this basket is Horizontal and vertical. It is a very intricately woven basket. Creating ornamentation by using black coloured bamboo stripes is very special feature of this basket. The basket of Meghalaya (Sample no. 16) is similar in weaving pattern with the sample no. 15 mentioned above which has a horizontal weaving. A very intricately woven basket (Sample no. 19) is found in Mizoram, which has again horizontal and vertical weaving. The basket of Manipur (Sample no. 23) has also vertical and horizontal weaving which creates a vertical textural effect. In Tripura, we found a basket (Sample no. 28), which is of very simple horizontal and vertical weaving pattern. No sample from Sikkim is found to be qualified in this category.

Under close weaving category, it is to be mentioned that knitting patterns (Sample no. 4) are almost similar in everywhere in Arunachal Pradesh. A particular basket (sample no. 5) from Assam is seen to be very sophisticated in its look. While observing it is found that this is a very special kind of weaving compare to other types of baskets in Assam. It has a diagonal weave that creates a very intricate textural surface. In Nagaland (Sample no. 10), it is observed to be one of the most beautifully woven baskets in this region. Very intricately woven this basket is very popular among the Nagas. They weave rhombus pattern on the body of the basket. To weave this basket, one needs a very skillful hand. Another special feature of this basket is that, it has a very

different kind of weaving, such as four spokes split from a single bamboo piece fixed at the bottom center. Another basket, (Sample no. 14) from Meghalaya, is found to have similar kind of weaving like other samples as mentioned above. A very intricate close weaved basket is found in Mizoram (Sample no. 20). This has a very smooth textural surface, which is very uncommon in this region of Northeast. In Manipur, another pitcher like basket (Sample no. 24) is seen, which has sophisticated look with a round base. Normally Manipuri people use this basket to keep their valuable items. Though it is big in shape, it has a narrow mouth. In the body of the basket, two to three different types of woven patterns can be seen. Manipuri baskets are generally very stylish in look compare to other states of Northeast. Another sample of basket has been observed in Tripura (Sample no. 27) which appears to be is similar to the basket from Assam (Sample no. 8) and the basket from Manipur (Sample no. 22) in their weaving patterns. In Sikkim a small bowl shaped shallow antique basket (sample no. 31) is noticed, which is very rarely seen in use by common people today. It is a typically (diagonal, horizontal and vertical) woven basket with tree leaves, where leaves are placed in between two layers of knitting.

The above findings are based on some dominant communities of Northeast region only, which scopes for further study to have a comparative analysis with communities of other regions of this part as well as from different parts of India. These types of comparative studies are not reported much in literature.

Likewise, application variations of colour and patterns in textile are said to be community specific design elements; the specific weaving patterns of basketry can also be identified as design element that is associated with utility, aesthetics and overall identity. In the second chapter of this thesis, while going through the Western schools, it is noticed that while generating design concepts, (like vertical and horizontal lines with red, yellow, white and black of the Stijl) local/ social environment played certain role.

In the present study, it is observed that the baskets are the most commonly daily used article in all level of people of NE society. Baskets of different shape and

sizes have embedded in NE culture; and weave pattern can distinguish baskets from one community to another community. These various weaving styles of basketry may also be used as a northeast specific design element, i.e., texture. This can also be linked with various colour applications and motifs and patterns as observed in textile application to generate Northeast specific design concepts.

6.6 Present status

There are various private and state centres now for the diffusion of knowledge and expertise. The artisans of the community are taught modern finishing skills and various unknown methods of treating the traditional material make them not only durable but also commercially viable. Cane and bamboo furniture of the region entered into sophistication in the manufacturing process using semi mechanisation that will make them endure and easiness in mass production.

Working together of traditional artisans and modern technologically equipped personnel on locally available material has also been promoted and encouraged in the region by semi Govt. and private sector. The local traditional artisan often tends to fall back on his native resources if he finds the new process tough or if he somehow gets threatened. He is reassured when the basic elements do not change and he does not feel that the whole thing is an alien aggression.

Holding workshops, imparting necessary training to the traditional craftsmen of various localities in utilising their skills through newer technology is a new trend in this area. The process involves digital technology to enhance the possibilities of refinement of traditional motifs. In such workshops, the traditional craftsmen get an opportunity to internalize the digital techniques and give their crafts and products a fresh look with the help of their traditional expertise. The designers (craftsmen) are basically traditional artisans, trained and equipped with modern technology.

The contemporary designers, after their design education at professional schools in abroad as well as in India, return to their native places and explore the possibilities of upgrading the craft products with the use of recent technologies

(Barua, 2004). Unlike even few years earlier, a strong influence of Western thought to apply in designing utility items, this trend to look after the indigenous ethos is on a good start. Indian design schools have included traditional design studies in various names and contents in academic curriculum.

Abstraction has always been a human privilege, which we had first encountered in the cave paintings, where there was a change of the medium and a delimitation of dimensions. The same process is now added by technology and digital efficiency. Digital precision would help in the utilisation of traditional designs in the modern context.

This is the time to see and explore the possibility of using emerging technology as it comes forth for design innovation where the above elements may be successfully compiled to give an identity of our own flavour. Such identity is getting more and more acquaintance as design fundamentals for design education. Especially the process of digital technology is being used to enhance the possibilities of refinement of traditional motifs. The identification of design elements (from ethnic and traditional prevalence) and their digitisation process will be the trend for the coming time to enrich the global design scene when we are concerned with an aware of the sources, the faiths and the symbology of the peoples whose practices we address.

In design practice colour and form play important roles in many ways in terms of utility and aesthetics. From this entire journey, it is clear that we can extract the basic essence of traditional elements of design that can easily be transformed in the context of contemporary design. Enough scope is there which needs to be explored. Further research in this area would contribute to contemporary design, and can be said design along with cultural and bio diversity is design ecology.

The thesis searched for design relevant elements from Northeast region. This is a home for many tribes and people migrated from various places who have contributed to the Northeast culture in their own way. This study confirms that these design elements of diverse origin has possibilities to utilise by transforming

or modifying through various permutation and combination with the help of new technology to get a fresh insight, which can also contribute new market value as Indian design.

From the above study, it appears that the local people of NE region practices community specific features in their crafts and artifacts with locally available material and traditional know-how of making them. From the colour application in textile observed here in, it can be said that application of primary colours are dominating, perhaps these are easy to procure and apply. Textile motifs and patterns observed are dominantly simple geometric, this goes along with easiness of weaving with the locally available looms.

The same simple geometric construction also followed in various baskets are woven in this hilly region, whereas complex skill based construction using locally available different natural material various kinds of artifacts and decorative pieces are also seen existing. With this, it can be said that the daily utility items, i.e., baskets made with bamboo and cane follow simpler construction where most of the users can make these with traditional technical skill. Concisely, it can be said that, the basic design elements, through textile colour and motifs and patters as well as daily usable baskets, are applied with simpler skill and geometric forms, which are easy to make with locally available natural material. Scope for finer design intervention is enormous. In this aspect, maintaining ethnicity may create a special Northeast design domain.

This present study has focused to know the present status of various design elements used in prevalent crafts and artifacts in Northeast. It is in a virgin state of development. Among many possibilities of economic development of Northeast, this application can make a base of Northeast design ethos, and these can be further explored thorough design intervention, as it has happened in western design movement.

Possibility of using elements identified as above and use of new technologies to create an emotion out of these design elements are endless. Design identity should consist of four visual components and application of appropriate technology: ICMFT= design identity (where, I = image, C = color, M= motif, F = form and T= technology), and the identity of a design of a region or a particular place depends on the specific emphasis of these elements.

6.7 Scope for further research

The present study has been completed under many constraints and is fully based on samples availability, and both time and resources was very limited. Not much information was available about the required samples; most of the study samples were taken from ethnic items, many of these are not available today. After receiving relevant information about probability of getting ethnic samples, utmost effort was paid to get these. Socio-political scenario of this region posited challenges, hampering the possibility of reaching interior places. The study was fully dependent on the availability of relevant samples from the places easy to reach in person and most of the relevant information was collected from different museums and some from personal belongings; and necessary helps have been taken from relevant published references.

It is also relevant to mention that many items of ethnic claim has already been adulterated with easy availability of modern lifestyle commodities, which the local people do not wish to project as their tradition and thereby ethnic. So many artifacts were observed during this search but few of them were used for detailed study.

With the above mentioned experience, the following suggestions can be made to further the research:

1. Work can be further extended to cataloguing the whole North-east through identity elements that evolve from these types of searches covering all the major community live here; and,

2. Exploring through new technologies, this can successfully be introduced to enhance the possibilities of refinement of traditional motifs to make this fit to contemporary design applications.

3. Detailed study on small groups of a locality may be carried out thoroughly as in today's intellectual right regime; pride of the place may be documented and preserved.



SUMMARY

Art and Design, both bearing many similarities yet due to handling utility and mass usage design has taken an identity in time. Design is a continuous problem solving process along with the human need. Man, since prehistoric period, started practicing design to aid his survival struggle. Usability design oriented form is developed based on the function. It satisfies both functional requirements as well as aesthetics of the time. Industrial revolution of Europe has influenced modern design movement, which has spread all over world to meet various needs of man. It broke down the barrier between aesthetics and technology. Thus, design has become appropriate with the highest visual and practical quality. Upgrading design requirements from utility items to fine communication has seen newer changes enriching its progress.

Advent of technology made us to adopt many changes in our life style. Globalisation facilitates us to use developments done by others. Mismatches are evident while others use designed items meant for a group of people and place without considering if these fit to all the needs of these borrowing group. Normally local needs create designs to cater to local requirements, and thus they carry regional identity. Design has a special contribution to make in the process of transition from tradition to contemporary/modernity. Application of best scientific principles and appropriate technologies may generate a design best to deliver its intended function; still its user ultimately has to feel comfort while using it to qualify the same to be a good design. Indian own experience has embraced many influences. We have some responsibilities towards nature; we are precisely borrowing resources from future, which we need to return and preserve.

Expression of human feeling about self and society, needs towards survival and life support, preservation and transfer of knowledge to next generations, first we used sign language, perhaps these are the roots of today's development, which has struggled to adapt the changes in life style.

The applications have exceeded the functional need to finer aspects of expression through aesthetics. These become transparent when we see the evidences of early man's work through cave paintings, use of natural crude tools, ways of observing festivals and art works of medieval periods. Modern design movement can be said

started walking forward holding a hand of European industrial movement, where early need based utility items used to be curved with lot of ornamentation for rich people's use to need based mass production to be used by mass, hence many compromises, simplifications, innovative production process have been developed.

Now design has come to a position where it can be said that though it has basically need based utility development aesthetics and human compatibility to use the same safely with his natural limitations. People have become conscious about the optimisation of resources utilisation. Conscious design movement of Europe has influenced Indian modern design movement. Towards meeting newer challenges and to provide equal life support and facilities to all around the world, concept of globalisation of trade and global village concept have come to fore.

We need to know what are the so specific about the specific culture, tradition, and to see what people of that place are using now. Thus specific elements of identity would surface up, that can be used in today's design context, so that, the products would bear the identity.

India is a land of coexistence of diverse culture; symbolism and colour applications of understanding life is one of the basic understandings of Indian identity that one can feel while studying India. Indian ethos covers a very large span of experiences that traveled through time. Different parts of India have contributed with their own bucket of elements towards Indian feeling.

Northeastern part of India especially home of many ethnic groups and respective utility and aesthetics prevailed in crafts and artifacts, festivals, ways of leading life, etc. To search for design elements that carry identity and how transformation of traditional elements enriches design activities in the modern context would be a good study area, and the effective applications can possibly be achieved using new technology. Not only, identity of products carries emotion of the people from where these belong, in the era of patent, this identity preservation has also become a struggle for survival.

Northeast being a part of India, unlike other parts of the country, comprises diversity within with many ethnic subcultures. Design goes along with culture. To find out regional design identity it needs to look into specificity of the prevailing design culture in this region. Various design elements are spread throughout various colourful textiles, observation of seasonal festivals moods, day-to-day utilitarian commodities, various degrees of performing arts and rituals prevailing in Northeast. It is a perfect example of co-existence of the folk and the modern where tradition is struggling to survive with the fast spreading western influences. This led us to erase many indigenous practices of once pride culture. Many items related to the culture of this land are not available even to document today. Hence, this thesis describes some of the items, which come to known only while discussing with relevant resource persons as the glimpses of traditional practices.

It compiled relevant material; specific to the major community resides within state boundary and the cultures out spreading the limits of state. The documentation part has comprises briefs of the prevailing features of Northeast culture, e.g., life, festivals, music and dances of people of varied origin, plain land as well as different hilly tribes and mythical base of tradition. Art, crafts and artifacts made and used by these people, e.g., basketries, containers and native furniture made with local material for various use with different shape size and designs carry specific features. Aesthetics presentations through house and body decoration, ornaments and Jewellery, costumes and myths about origin are unique and differ from community to community though the raw material used are same. Textile and clothing bear semantics that is different from each other's applications in term of designs, colour and symbols on the textile and woven pattern.

Explorations with refined and contemporary application of traditional elements are necessary. When the trained designer steps in with his experimentation, he effects certain modifications through abstractions and items are made to fit into the changed functionalities. This routine interface traces the journeywork from functionality to abstraction while maintaining the rooted character of the crafts of the communities, which ensures its own distinctive identity. The inter-tribal transmission and combination is apparently a new phenomenon.

Craft practices in the Northeast have throughout history and legend been exploiting traditional motifs maintained through rites and rituals giving distinct identities to diverse ethnic communities, which are evident from different colour combination of clothing, textile, crafts and artifacts. This thesis compiles specific design items collected from various locations, and categorises the common design features state wise as well as the communities live there in. It is stressed that design identity is specific composition of various design elements to express a theme or to serve a purpose and finds how the dominance of colour reflects community specific identity and traditional motifs/ patterns are specific to users groups using textile as study material collected from Northeast. It also observes that line as a design element along with shape and form of baskets samples; it creates texture with different composition through different users' specific woven patterns, e.g., alignment, closeness, slimness and heaviness. This triggers to explore community specific detailed studies in Northeast India, and further design innovations with traditional elements and modern technological advantages.

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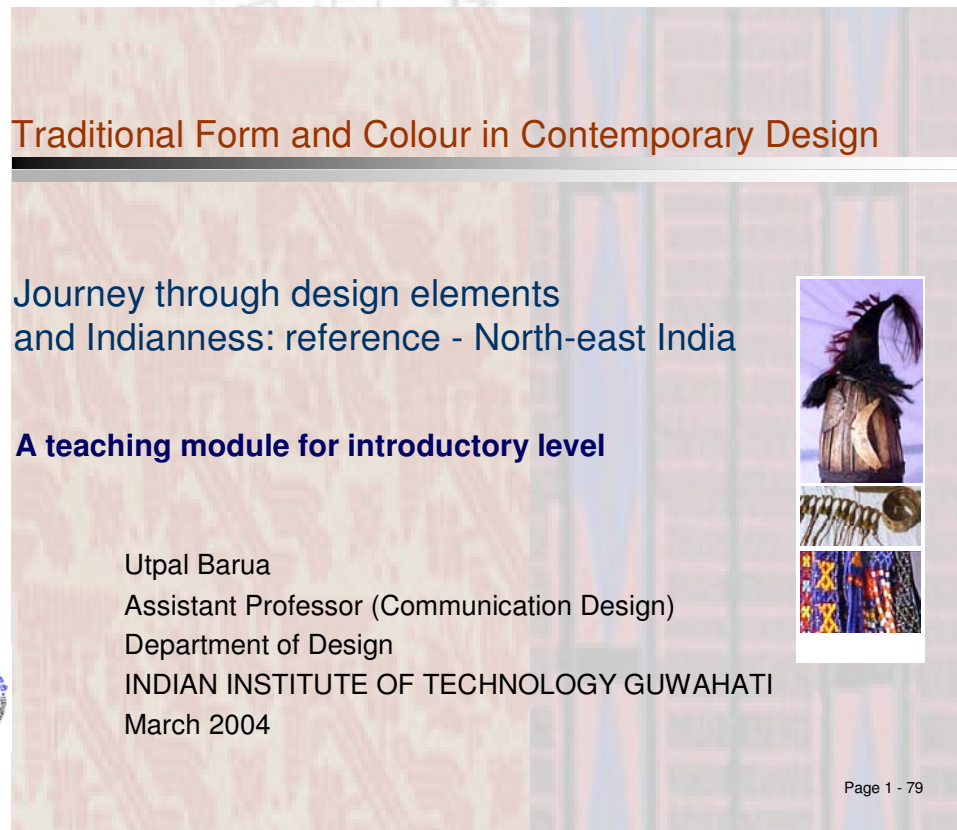
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Appendix A.

Cover page of Course Material developed for Curriculum Development, Quality Improvement Programme, 2004, IIT Guwahati, by Utpal Barua.



Appendix B.

Face page of electronic publication of presented paper (5 pages) in Challengingcraft an International conference, Aberdeen, UK, 2004.

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Assistant Professor, Indian Institute of Technology Guwahati, India

Contemporaneity of the Folk:
Northeast Indian Crafts

abstract [1](#) [2](#) [3](#) [4](#) [5](#) [references](#)

This paper addresses the traditional craft practices, including textiles, of the North-East of India in their functional, aesthetic, and semantic aspects. These aspects are studied in the historical and cultural contexts of the diverse communities. This entails an encounter with the inevitable forces of urbanisation and modernisation and the changes consequent upon the encounter. Besides these, the inter-ethnic co-mingling has effected changes where the meanings are. These meanings are yet not separate from their traditional symbology but still burgeoning urban awarenesses make them an 'open' class and they accommodate significant other realities which inform their practices. This is facilitated by the co-existence of the folk and the modern in the area where folk traditions are still vitally alive. The intent is to explore possibilities for fresh insights for modern technology- aided practices, which will be exploited to reinvigorate the traditional ones.

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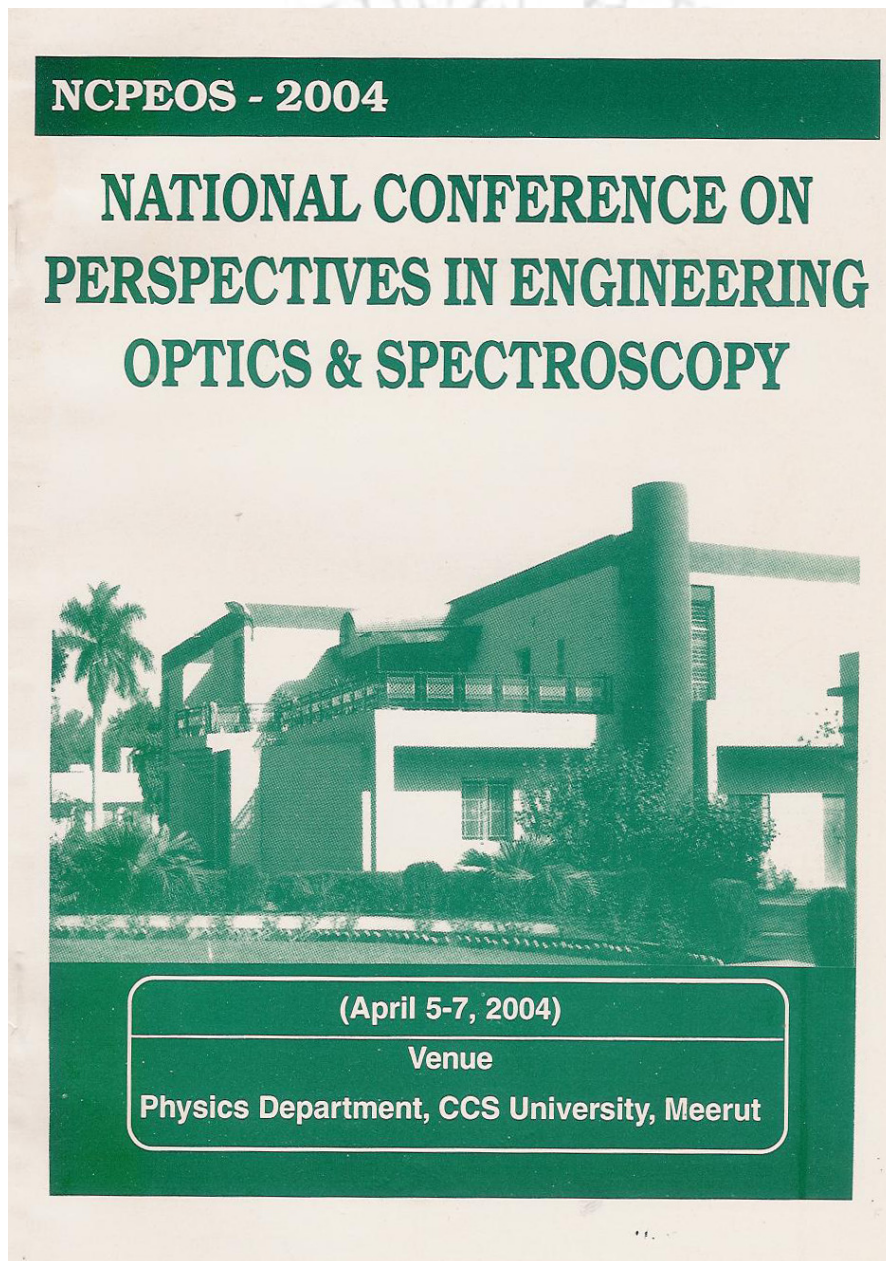
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Appendix C.

Abstract of Paper presented in National Conference on Perspectives in Engineering Optics & Spectroscopy, NCPEOS- 2004, April 5-7, CCS University, Meerat, (proc. In press).



[19] Excitation of a lower maser level by spontaneous decay of upper maser level

G D Baruah , *Prity Borah
Department of Physics, Dibrugarh University, Dibrugarh-786004
Department of Physics, Moran College, Moran (Assam)

The process of excitation of lower maser level by spontaneous decay of upper maser state using the concept of branching ratio has been analysed by semiclassical theory of laser. The theory has been applied to Ar^+ laser with inversion being worked out quantitatively.

[20] A Comparative Study Between Chevreul's Colour Theory and Young Helmholtz Trichromatic Theory

Farzana Hazarika, J Sharma Pathak , G D Baruah and *Utpal Baruah
**Department of Physics, Dibrugarh University, Dibrugarh-786004*
Department of Design, I.I.T. Guwahati, Guwahati-781031

A comparative study between Young-Helmholtz's trichromatic theory has been presented. It has been indicated that there is a correlation between the artist's view of colour theory and scientific theory of Helmholtz.

[21] On the nature of the Gaussian Pulse evolution in dispersion regime

J Saikia and G D Baruah
Department of Physics, Dibrugarh University, Dibrugarh – 786004

The response of any dielectric medium is inherently nonlinear for sufficiently intense light. The present work is concerned with the phenomenon of pulse propagation in a dispersive medium. Analysis of intensity of Gaussian pulse has been made in a dispersion induced medium like fiber. Essential formulations of rate equation of Gaussian pulse has been worked out and corresponding pulse rate is investigated.

[22] On the nature of scattering of some tea samples of Assam

N Dehingia, R Changmai and G D Baruah
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Scattered radiation at wavelength 6328\AA from nine samples of blended tea solutions of different qualities have been investigated. Intensity measurements of the radiations indicate a possible correlation with the quality of the sample.

[23] Observation of transient variation in discharge current under CW - Ar^+ laser radiation.

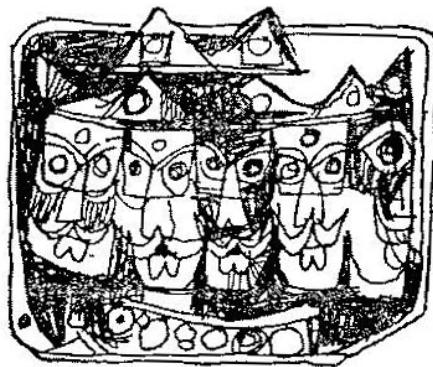
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Fluctuation in discharge current under intense laser field has already found its base in the form of

Appendix D.

Abstract of Paper presented in 27th Indian Folklore Congress, January 31st to February 2nd 2005 (proc. In press)

Folklore, Civil Society, Discourse



27th Session of the Indian Folklore Congress

Organised by

Folklore Research Department

Gauhati University

In Collaboration with

Central Institute of Indian Languages, Mysore

Indian Council for Historical Research, Delhi

Shrimanta Shankardev Kalakshetra, Guwahati

Maulana Abul Kalam Azad Institute of

Asian Studies, Kolkata

Folklore emerged as a new field of learning in the nineteenth century. The matters included in folklore and Folklife studies may be placed under four large divisions i.e., oral literature or Verbal art, Folk narratives, has its own manifold distinctions. The physical folklife material folk culture. In between oral literature and the material culture lies area of traditional customs. The study of traditional customs of a society is interesting one. Because it is also a kind of social history. Therefore, such studies must be methodical and scientific.

For a methodical study of Folklore and Folklife, the folklore museum has great importance. A skilled folklorist must know the use of Folklore museum properly and its contributions to their respective field of study. The aim of a Folklore museum will be not only to make arrangement for the study of folklore, but to present folklife in a traditional settings.

Barua, Utpal

Asstt. Professor, IIT, Guwahati

The Traditional Craft Practices : Fresh Insight for Modern Design

This paper addresses the traditional craft practices, Including textiles, of the North-East of India their functional, aesthetic, and semantic aspects. These aspects are studied in the historical ; cultural contexts of the diverse communities. This entails an encounter with the inevitable for urbanisation and modernisation and the changes consequent upon. Besides it Inter-ethnic co-mingling has effected changes. These meanings are) separate from their traditional symbology but still burgeoning urban awarenesses make them 'Own' class and they accommodate significant other realities which In-

[25]

form their practices. Facilitated by the co existence of the folk and the modern in the area where folk traditions are vitally alive. The intent is to explore possibilities for fresh insights for modern technology- and practices, which will be exploited to reinvigorate the traditional ones. continue ...

Basumatary, Phukan Chandra

Rangia College, Assam

Folkloristic Analysis of Two Mythical Tales on creation of Earth Extent Among the Boros and the Rabhas

Racially the Boros and the Rabhas are both belong to the great Mongoloid stock and linguistically to the Tibeto-Burman sub-family of the Sino-Tibetan language family. They show mutually a lot of similarities in respect to the linguistic and the cultural features. They have each rich culture and tradition which reflects their socio-cultural aspects as a whole. Also, there are common motifs and texts which are recounted in the oral narratives.

The proposed paper has chiefly three parts. The introduction part deals with the brief description of the mythical tales extent among the Boros and the Rabhas.

The second part i.e the main part of the paper deals with the analysis of the two myths on the creation of earth extent among the concerned folk-societies. These two mythical tales are associated with the religious and the ritualistic ceremonies. Analysis will be done based on the folkloristic points of view. Chiefly this paper intends to show certain similarities of motif, context and text of the proposed mythical tales. Apart from these, this paper will reveal the cultural affinity as reflected in the two myths.

[26]