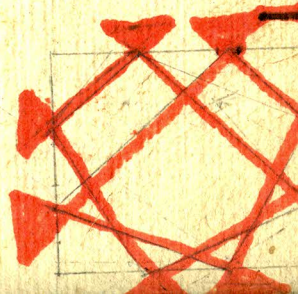


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Innovative Products and practices of Indian origin

Special Project

By
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Guide Prof. A.G. Rao.

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This special project entitled "**Innovative Products and Practices of Indian origin**" by Vani N.S. is submitted in partial fulfilment of the requirements of the Masters Degree in Industrial Design.

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Introduction

The project attempts to identify innovative and ingenious solutions to problems in the everyday life of an Indian.

The main aim is to bring about an awareness to these products and practices which are slowly fading out. The relevance of old values is in the inspiration they provide for the present they should not be recalled for the sake of history. The earth has been plowed for hundreds of years even as water has been drawn and used for a variety of needs have not changed, but the methods have evolved at each stage with man at the center effecting change and making most of his knowledge and his resources.

Method

There are several hundred examples of products that are excellent in either form or function or skill of execution. A methodology therefore had to be adopted to document and highlight a few of these products and practices and place them in the proper context. I had to first define what 'innovative' meant. To define it broadly 'innovative' means or relates to the a) functional aspect of a product b) ingenious use of material or process c) the beauty of form that is brought out by the inherent nature of the material.

Functional means that the object or practice is either an innovative solution to a problem or a product that fulfilled the intended function well. All three criteria could be interrelated or overlapping or any of them could be the best feature of the product. The natural ingenuity to use the most modest material and turn it into a rich resource or the form that is organic and true to the material is the criteria.





Strategy

I found that most of these products emerged from the daily acts of life and in peoples attitude to wards nature and life. The products and practices chosen are those of the common man whose creativity is seen in the simple solutions to his everyday problems. A large number of these products and practices exist even today either with a traditional background or of some cultural value s and significance. The areas identified initially were cooking ,working leisure ,daily worship and toiletry,as these formed a part of the common mans daily activity. These areas gave me a broad framework for information collecting beause a lot of these products which may be outdated or replaced by technology are still used or retained in many homes. Similarly a lot of practices too are retained with adaption to changing times. There are some areas like cooking for example which yielded a lot of information and others where very little informaion was available.

The strategy I have finally adopted has been to group together products that are functionally good with a good balance in form.

In some the usage of material or the process that has been used is the main criteria for its selection.

There are still other products and practices I have identified but have been unable to present in a complete manner due to inaccessability of the product.



All these products have however been viewed holistically as a good design solution . I have not attempted to be very analytical in terms of scientific proofs etc.

This document ation should serve as a beginning to access of information of this kind and further research work can be done on each product. At present most of the information we have are from museums or big works of art and literature, therefore an accurate documentation , a collection of these examples is necessary and these can serve as examples for modern design.

Innovation and creativity in the daily life of a common man is something that has been over looked. The aim is not to take isolated examples from art and highlight the features but to give an insight into common products in our daily lives.

In most of these is revealed ~~at~~ the sense of direct human contact with nature of material and the challenge that goes with the evolution of forms and ideas out of pure discovery

*Some examples of products and
that make good use of a
material or process.*

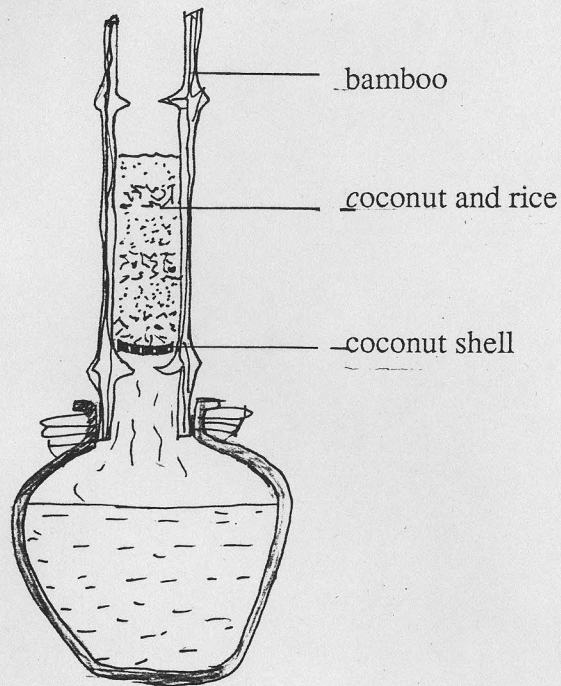
*The final output is a book that contains a
documentation of all the products and
practices collected*

Every region of India has a particular method of cooking which is distinctive of that region. Even simple food is cooked ingeniously and this art has been perfected over the years

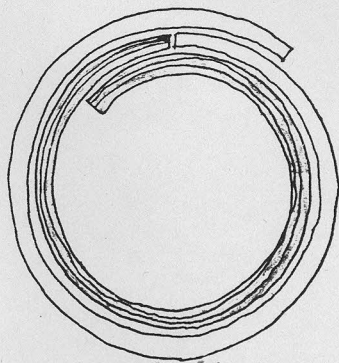
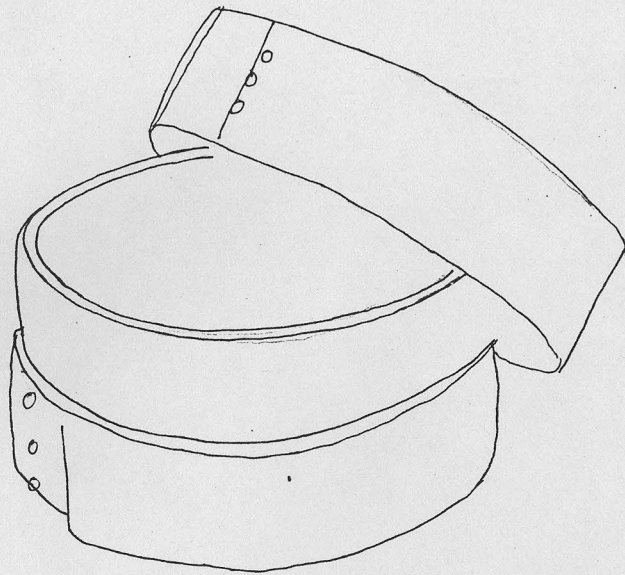
Puttu

This preparation of rice and coconut both of which are grown abundantly in this region, indicates the good use of local material to prepare simple food.

A bamboo of the length of two nodes is chosen and the nodal wall removed. Coconut shell of the size that fits into the bamboo is pierced with holes. This is filled with alternate layers of powdered rice and coconut and placed over a pot of boiling water. The rim is tied with a wet cloth to prevent the steam from escaping. Steam from the pot rises up the holes to cook the food. Bamboo has been replaced by steel and aluminium tubes these days, however cooking with bamboo is said to have a special flavour of its own



section



section thro lid and body showing spirals

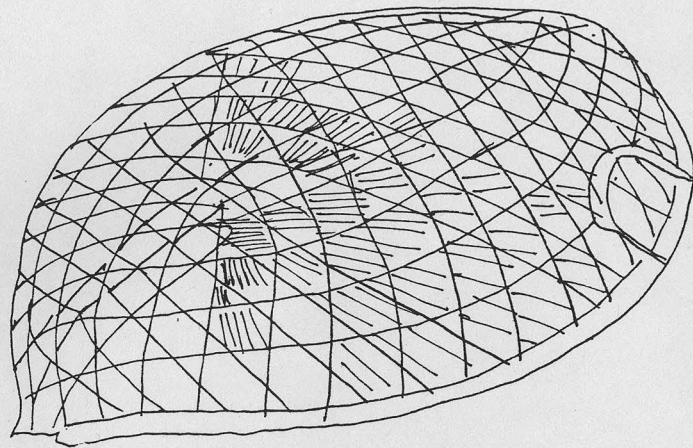
'Bamzi

Nowhere is it more true than in India that art is both content and form, conception and execution.

This is evident in the flattened bamboo containers for storage in the Northeastern parts of India. Freshly harvested bamboo is flattened out with skin intact using a flat tool called 'kampc'. The bamboo is slit along the length and the edge is heated and forced flat. They can be used as measures for grain & to store butter, cheese etc.

The method of closing these containers is very interesting. The sheet used is 2 to 3 mm thick. When a ring with overlapped ends is made, a spiral with the deflection over one turn being equivalent to the thickness of the bamboo sheet. As the lid fits over the container the lid spiral must begin where the container ends. This means that the inner vertical edge of the lid spiral butts against the outer vertical edge of the container so that a continuous spiral is formed. The lid slides into the container only when put in the correct position.

Water containers in this region are another good example. Where water is scarce a length of bamboo of 2 internodes is taken, a hole is pierced through the nodal wall. The outer skin is removed and the nodes scraped off to reduce weight and also keep the water cool by evaporation.

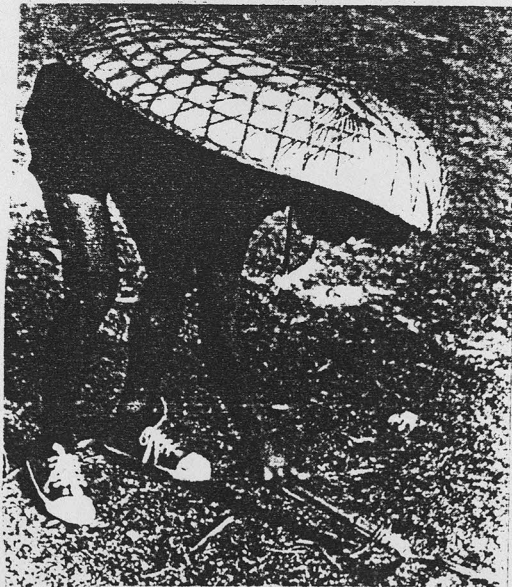


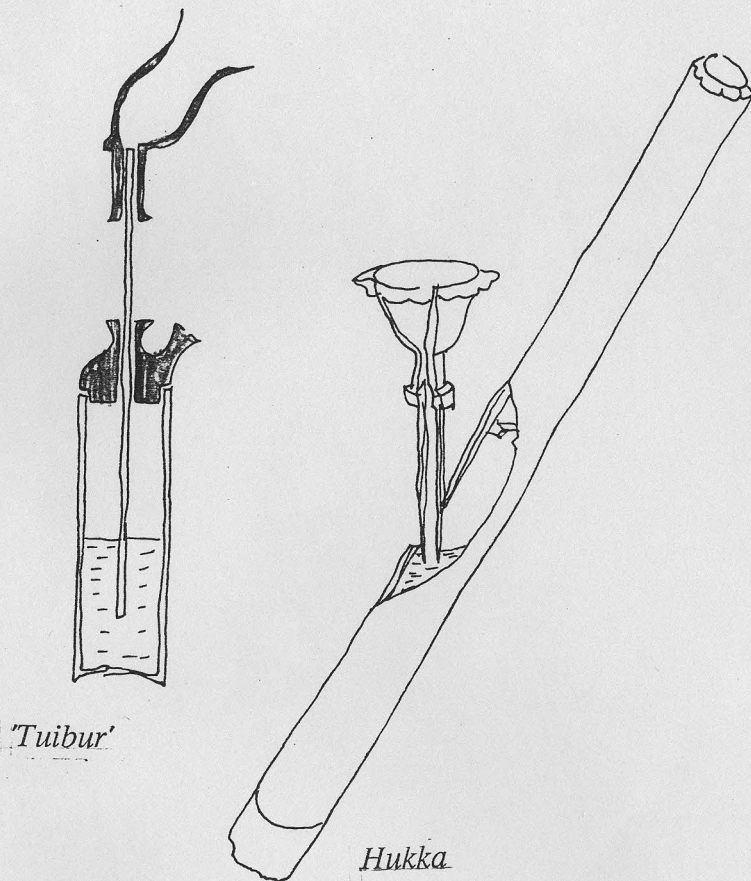
Rain shield

Hats and Rain shield

In regions of heavy rainfall very interesting headgears are made using locally available bamboo and dried leaves. They are made in such a way that they create a strong surface using minimum material. The dried leaves provide waterproofing. The rain shield used in the Northeastern region have beautiful form.

They are shaped like shallow cones with half the circumference greatly elongated. The rim of the rainshield looks like an inverted tear drop. When worn the curved surface of the cone rests on the head and the elongated surface completely covers the back. It is made in two layers each woven in an open hexagonal weave with 2 layers of palm leaves sandwiched in between. Each layer is woven from strips of reed bamboo over a mould made from bamboo splits.





Tuibur'

Hukka

'Hukka'

This is associated with leisurely smoking and was the privilege of all the King to the the common man. There is a wide range of these from the most elaborately decorative ones used by kings and others of high standing to the commoners ' hukka'

All of them however work on the same principle. A 'hukka' consists of 4 to 5 parts, the base in which water is filled, the central pipe through which the smoke passes over the water, the top bowl for coal and tobacco and the smoking pipe.

Usually the bowl is clay sometimes even metal or wood.

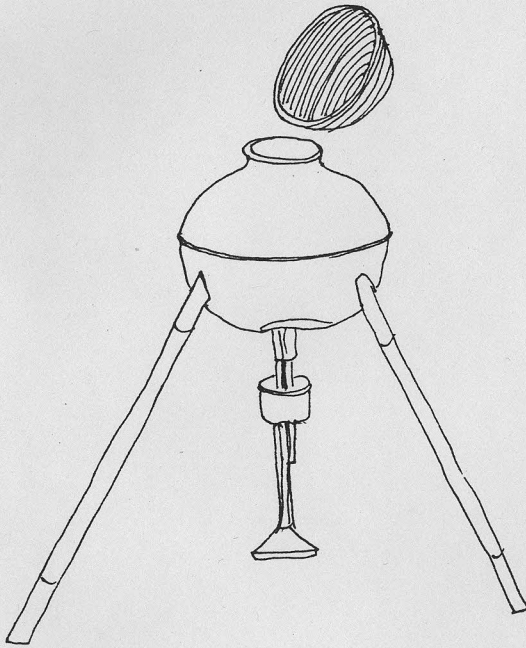
'Tuibur'

The 'hukka' of the Northeastern region is an interesting combination of bamboo and clay. The claybowl is called 'Tuibur la' and rests on a long and slender tube called 'phunthli' This tube enters a carved central element called 'tuiburlai' and passes into the water container to end below the water level. The central element recieves the pipe stem. The joint between the water container and the central element is covered and strengthened by a fine braided band made from palm fibres.

Smoke treating of coiled cane products

Bamboo products that are white or off white in colour are smoketreated using this indigenous device that can easily be made from locally available materials.

A medium sized terracota pot is taken and a part of its bottom knocked out. The pot is filled with dried leaves and propped up on a bamboo tripod before the leaves inside the pot are lit with an oil lamp. As the leaves burn a dense smoke billows out, leaves are stuffed into the pot as required. The coiled cane container is held over the mouth of the pot and rotated well so that all sides are smoked evenly. An oil like substance is deposited on the cane and the colour changes. This is then allowed to dry in the shade and protected from dust.



'Mehendi'

This is a practice of self adornment and has been practised since a very long time. Cosmetics used as colouring material those days was called 'ranjak dravya' which includes leaves of 'mehendi', 'henna' and fruits & wood of certain species.

The application of 'mehendi' or 'henna' is common among Hindus and Muslims. The powdered leaves of 'mehendi' are beaten up with 'kathe' (acacia katechu) and made into a paste this was used by women in the Moghul period for giving a reddish brown tint to the skin and nails.

The henna is said to have a cooling and beautifying effect, bringing to the surface, yet containing the sensuality and creative power of the couple. The principle colouring matter of 'mehendi' is lawsone or 2 hydroxy 1:4 naphtha quinone which is present in dry leaves. This is also a conditioner for the hair and is used widely in shampoos and other cosmetics these days. The intricate designs drawn are pieces of art done with great skill and sensitivity.

Conclusions

From this random collection of daily use products, there are few inferences that can be drawn.

They are all essentially the outcome of an Indian way of life.

The fine intergration of form and function has been lost in the products we see today.

A large number of these products are still in use today especially in areas like cooking, which indicates that Indian cooking has remained the same in spite of many gadgets available today. Indians place a lot of cultural values to these products.

Cooking in earthenware is said to have a special flavour of its own. In some areas like leisure activities there is almost nothing that has been retained and these products have only an antique value. There are yet other products and practices that are being revived in a big way like 'mehhendi' 'kaajal' etc. because they now have scientific basis and an added cultural value as well.

Those who live surrounded by mundane comforts created by technological advance can be inspired and aided by the vital presence of objects of everyday Indian art, with their timeless attributes, that counteract the dehumanising tendencies of mass production, social regimentation and the depreciation of the dignity of individual human beings.

