Design Resource

Papier Mache Mask - Raghurajpur, Orissa
Crunched Paper Art
by
Prof. Bibhudutta Baral, Divyadarshan C. S. and Aakash Sharma
NID Campus, Bengaluru

Source:
http://www.dsource.in/resource/paper-mache-mask-raghurajpur-orissa

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**Introduction**

During a hundred year period between the mid-eighteenth and nineteenth centuries, a major industry succeeded in India: that of Orissa Paper Mache. This industry had its origins in both art and craft as well as Indian traditional ware. The development of Paper Mache led to an unparalleled trade that resulted in the manufacture of these masks rapidly. The Paper Mache, a term that has been applied to vast three-dimensional objects having a paper core. It is spelled in many ways, ranging from the French papier-mâché to the Anglicized Paper Mache, etc. The original term “Paper Mache” literally means crunched paper, but it is also used to describe objects made of very different types of paper constructions, including Paper pulp, cast or extruded into a molded form, Paper strips adhered together over a molded form and pressed between the molds.

The origin of Paper Mache is at least as ancient as the creation of paper itself. Paper was developed in the world during the 202 B.C. - 220 A.D., and it is therefore not surprising that the original use of paper to make three-dimensional objects occurred there. Artifacts, such as helmets and pot lids, attributed to this dynasty, were made of what has been described as Paper Mache. In the late 18th century developed a suitable paper support by using a method of making hand-pressed or hand-smoothed paper panels which were heat resistant. Ten sheets of unseized rag paper were pasted on both sides with a mixture of cooked glue and flour. They were then pressed into a metal mold and smoothed to remove air bubbles. The edges were trimmed and the sheets were drenched with linseed oil for waterproofing and the ensemble was dried. The result was a rigid material that could be worked like wood. The use of paper panels came to be known as the “best” Paper Mache as opposed to the common Paper Mache made from pulp.

This opacity of usage can cause misrepresentations in identification and dating of an object; it reflects little understanding of the technology, the specialty of papers, it could be harmful to the preservation treatment and subsequent care of a piece. The misperception is aggravated by various synonyms and diverse methods for “Paper Mache”. The historical overview serves to clarify terms sometimes used interchangeable. It also traces the technological development of Paper Mache from a composite of simple components created in the ancient Orient, to an extremely hard and sun-resistant material, workable enough to be used roughly.

Few firms across the country made thicker panels by layering 120 sheets together at a time, enabling production of larger and stronger items, such as the shelter sheets, chair, boxes etc. However, these panels could take days to dry, or require even more natural heat to be dried. Few of the researchers developed a method whereby dry panels could be softened with steam to enable operation into a heated metal mold. A counter mold was then attached into position and the steam-molded panels were dried by heat. The result was a hard, pre-shaped product of even thickness. By reducing the number of steps and amount of time required to mold furniture, India transformed the process and opened the door to Paper Mache.

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Source:
Due to the size of the loss, its position in a vulnerable spot, and the nature of the surrounding paper, it was decided to use a system of paper sheets to fill the same. By inserting sheets into the partially delaminated panel core, a strong but completely compatible and readily reversible fill could be made. Further, it was decided to make the insert by duplicating as much as possible the original process of hand-smoothing sheets into a mold. This would assure the appropriate thickness, edge shape, and compression surface characteristics for finishing. A mold was made of the most similar edge, and sheets of high quality oriental tissue were coated with dilute reagent grade wheat starch paste until dry.

Papier Mache is a material that can be used for direct modelling and for casting. It is prepared by using pieces of paper and glue. It takes a very long time to dry when used in the execution of works, so it is better to build it up in layers. The use of paper for sculpture directly can also be explored by using glue and laminated paper, which will rest on the construction of a strong armature made from cardboard. When it is dry, it is extremely hard with sun resistant and can be sanded by smoothening. Coloring in mask serves as a compositional element, which can be used purely for functional reasons. It can also be used to form part of an integral part of the technique employed. It may also be used to cover up mistakes and some shortcomings.

Organization that teaches and trains crafts for the people who resides in Raghubarajpur.
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Work area where artisans make Paper Mache mask.

Acrylic paint gives bright and attractive look to the toy.

Eco friendly papier mache mask before applying paint on it.

Artisans engrossed in papier mache craft.
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Tools and Raw Materials

In the process of hand-pressing individual sheets into a mold to the manufacture of paper maker’s panels or blanks, which could be sold to traditional makers and were well suited for functions. However, hand-smoothed panels continued to be preferred by Orissa tribal since they were smoother and more solid than the papermaker’s panels. Simple hand operated tools are used for making coir toys. Two sizes of scissors are used for different purposes, these toys are made by many family members which may not talk long for one.

Following are the tools and raw materials used for the process of Papier Mache Mask:

- **White Flour**: It is used to increase the density of the glue.
- **Tamarind Seed’s Powder**: It is used for making the glue more sticky.
- **Water**: It is used to mix in container to make the glue.
- **Boiling Point**: Should reach up to 90°.
- **Newspaper**: It is a soft material used to bend over the mask.
- **Brown Paper Box**: It is used to insert in the base of mask to strengthen the mask.
- **White Paint**: It is used to give a base coat on the mask.
- **Acrylic Paint**: It is used to paint the mask for long lasting quality.
- **Brown Shade**: It is used to add in the varnish for a better natural look.
- **Brush**: It is used to paint the mask.
- **Varnish**: It is used to give the final coat on the mask and also gives gloss finish.
- **Thread**: It is used to tie the mask from backside.
- **Enamel Paint**: It is used to paint the mask.
- **Mold**: A readymade plaster of Paris mold is used to create a mask.
- **POP**: Plaster of Paris is used to make a mold.
- **Clay**: It is used to apply on the object for stiffness.

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A pair of scissors is used to cut the cardboard and other objects in required shapes.

Waste newspapers are one of the main raw materials.
Thin cardboard is used to strengthen the toy.

Adhesive paste out of maida is prepared to use it as glue for toy.

Pencil is used to draw design on cardboards.
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Mould with the required shape in it.

Clay is acquired by mixing cow dung and mud in a proportion.

Various colors of acrylic paint are used to paint on toys.
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Different shape and size of brushes to paint on toys.

Coconut broomstick is used to strengthen the tail of the toy.

Mixture of chalk powder and glue to apply on toy.
Making Process

The traditional layered Paper Mache process is done with the help of new paper. Mache clay and even newer silky-smooth air-dry clay is used for most of the masks. White flour, tamarind seed's powder and water make a remarkably strong paste after its boiled, the mask is got back to cool temperature. Which helps in sticking the paper across the mold.

This paste is not as strong as raw paste and so, artesians need more layers of paper to make their finished sculpture stiff enough. However, it does dry clear, so many people prefer to use the homemade paste. To make boiled paste, artesians mix a tablespoon of white flour, tamarind seed's powder with a cup of water in a small saucepan and stir until there are no lumps. Pan is kept on the stove at medium heat temperature and bought to a boil, stirring constantly. Later it's removed from heat and allowed to cool down. The paste will be very soft at this stage, but it will gel as it cools. The paste is stronger once boiled which gives strength to the paper Mache mask that must dry completely to keep it from developing mold.

Artisian dries out the water completely. The main trick is to make sure the mask is dry all the way through – if any dampness is left inside when paint is applied, the mask will eventually rot from the inside out. The traditional paper to use for Paper Mache is newspaper, which is torn into short strips. Newspaper is cheap in cost, soft material that's easy to bend and mold around a mask. However, artisans also use brown paper from paper boxes, which will give strength to the mask as a base. The softer papers are used to fashion delicate details, and textured paper cloths can be used to add an interesting final coat.

Artesian apply a coat of white paint, sand it out and then add another layer if the surface still isn't smooth enough. Artesian use paints like acrylic, enamel with and the final glaze is made from water-based varnish which contains a shade of brown. These masks are pierced from sides and a thread is added to tie the mask on the face. This final coat is put on with a brush with some details of the craft targeting the required audience. These masks would vary from INR.200 to INR.400.
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Source:
Cardboard pieces are pasted above the newspaper in the mould.

Glue is applied on the newspaper.

Newspaper is torn into small pieces and it is placed on the mould to get its shape.

Cardboard pieces are pasted above the newspaper in the mould.
Two Paper mache casted pieces are joined together to make a complete body.

The toy is kept under sunlight to dry.

Additional paper is cut using a pair of scissors.

One more layer of newspaper is pasted above the cardboard.
The shape is cut out of cardboard using a pair of scissors.

Wrapped toy is kept in the sunlight to dry.

Using a stencil the shape of the tail is marked on cardboard.

The shape is cut out of cardboard using a pair of scissors.

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Broomsticks are placed on cardboard to make it stiff and strong.

Another cardboard is placed above the sticks.

The cardboard is wrapped with newspaper.

The bottom portion of the toy is cut for wide opening.
Cow dung and mud is mixed to make thick clay.
The tail and the body are wrapped with newspaper to hold it stiff.
The toy is kept under sunlight to dry.

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**The clay is applied on the toy with the help of hands.**

Shape is made on toy using clay.

Toy is dried in sunlight after clay is applied all over.
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One more layer of newspaper is wrapped above the clay.

Homemade adhesive paste is mixed with chalk powder.
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The mixture homemade adhesive paste and chalk powder is applied on the toy.

Required color is mixed in a bowl.
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Black color is painted for the background to highlight other bright colors.

Toy is painted in different designs and patterns.
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**Products**

Papier Mache is commonly used for large, temporary sculpture such as Carnival glides. These objects are created using paper stuck together which creates a stronger platform as well as light weighted ornaments. These Papier Mache have various objects like Toys, Showpieces, Artificial weapons for display, traditional sculptures, etc. These crafted objects go harder when the paste dries. This term also refers to the finished project.

Papier Mache paste is a liquid adhesive usually made using flour and water. It closely resembles wallpaper paste. It can be used as a paste for Papier Mache projects or any gift articles. Papier Mache products are available in abandoned in Orissa, it's been used by tribal and common men while multiple occasions. These coloring mask serves as a compositional element, which can be used purely for traditional events. It may also be used to cover up mistakes and some shortcomings.

Bright colored toys are displayed out for marketing. Bird beautifully painted with minute intricate designs on it.
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Marvelously made papier mache mask portraying an animal face.
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