Design Resource

**Clay Modelling**

Hand Building Techniques

by

Prof. Bibhudutta Baral, Divyadarshan C. S., Liya M. G., Manmi Dutta and Rakshitha

NID Campus, Bengaluru

Source:

http://www.dsource.in/resource/clay-modelling

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**Introduction**

Hand building is generally the technique of building any form of material with clay by hand with simple tools that are made to that form for support. Lump of clay are made into coil shapes and coiled on the plank of the wooden surface. This technique of clay modelling is generally done with hand and with the minimum usage of tools. Clays are the inelastic earths that are formed by the result of the decomposing rocks with the particle size smaller. In wet conditions, clay forms a cohesive mass that retains its shape when molded to the required shapes which is referred to as its plasticity. Referring to the conditions like, when it is heated to higher temperature it partially melts becoming lighter and towards hard rock like substance.

The colors of the moist earthen clay are generally red, yellow, light grey, brown and orange varying as per it is collected with different locations available. Clays are referred to as plastic only because of the water content that is present in them which makes them hard, brittle on drying under shade and firing. Clay are also used as anti-diarrheal medicines in the prehistoric periods.

There are methods of clay hand building techniques such as Pinch pots, Coil method, Slab method where the clays materials can be made to any shapes and forms. The artisan of the Shilpakala Shale, Devanahalli is showing us the coil method of clay modelling techniques where there is requirement of the potter’s wheel in making of the items.

Facial features of the portrait is detailed.
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Initial stage of sculpting of the portrait.

Skilled artisan in the process of sculpting the portrait of Mahatma Gandhi.
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The side angle of the portrait resembling Mahatma Gandhi.
The process of moistening the sculpture for further sculpting.
Tools and Raw Materials

Some of the tools and raw materials used for the Clay Modelling at Shilpakala are mentioned below:

- **Plank of Wood**: It is used to arrange the prepared clay coils to be joined to gather one by one.
- **Clay**: Clay free from chemicals are generally preferred are collected from the nearby water sources.
- **Water**: It is generally used to keep the dried clay material in moisture conditions.
- **Sand of Red, Black and Grey**: It is used to strengthen the clay material as per the item to be made.
- **Bhatti (kiln)**: It is used for heating the prepared clay models.
- **Fire Wood**: To impart heat in the Bhatti (kiln) during heating process.
- **Enamel Colors and Water Colors**: To impart color on the surface of the clay items.
- **Paint Brush**: To apply the required colors on the surface of clay items.
- **Plastic Bags**: To store the clay collected from various locations.
- **Bamboo Stick**: It is used to shape the surface to the required portions.

Tools of various shapes and sizes are used in shaping of the clay. Wooden tools are used in sculpting of a clay object.
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Making Process

Lump of clay are roll to the rope forms of about ¼ to ½ inches of thickness and then coiled layer by layer. They can be tiny or huge as per the portrait to be made, Keep adding the coils with the regular pressing of the sphere of clay with the thumb finger or index finger to the center and with the center to the half way bottom. Dampen the fingers in between and apply little pressure to the inside with fingers to smoothen the surface.

With tools made of wood generally with shapes such as flat, pointed, square, round, semi round etc, are firmed in the moist stage in shaping of the portrait as per the image taken as the reference to be made. If a portrait of the person has to be made, the neck part is stiffened at the bottom part and further chin, nose, ear, head part are scraped out and pasted as per the reference image given. In the making stage, if the clay material is not damp it will lose the properties of clay therefore it is covered with damp cloth in between to keep it moist that helps in the easy modelling.

Clay Modelling helps in understanding the protruding and curved parts which can be taken care of when carved on the stone surfaces. In stone surface once the portions are carved more than the required part, then it is difficult to be rectified therefore clay modelling is also taught to the students of the Shilpakala Shale for the basic understanding of sculptures. In case of the clay modelling the portions can be easily rectified and therefore taken as the base method for the image to be got with fiber, wax, metal and Plaster of Paris models.

After the model has been completed as per the specifications it is dried under shade to fix firmly. Then the model is fired in the kiln to a required temperature, to remove the plasticity and make it a strong model. In some cases metal powder is applied to the surface of the model and heated to make it lighter in weight.

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The egg shape is been given to the head of the portrait to give a base.

The basic shape is given to the head with the help of a scrapping tool.
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The features of the face is made with the help of the thin wooden tool.
The basic shape of the eye is outline on the clay.
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The portrait is divided into two half’s, where the artisan concentrates on one half.
After acquiring the portrait to an extent a little essence of the character is portrayed.
The artisan is ensuring every angle of the portrait. The artisan starts the process of shaping of the lips.

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The moustache and the structure of the nose is detailed.
The ears of the portrait is been shaped by bare hands.
To complete the character of the portrait the artisan adds the spectacles to it.

The portrait of Mahatma Gandhi is completed.

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Products

Generally the model figures of anything given are modelled as per the requirements as it is easier to be done with the clay materials. Artisan have a vast range of sculpture with the help of clay, some of the figures made are Visveswaraya, Swami Vivekananda, Raj Kumar, Udayakumar, Subhas Chandra Bose, Jawaharlal Nehru, Ambedkar etc. are some of the portrait figures made by the artisan at the Shilpakala Shale, Devanahalli, Bengaluru. The artisan says he has done about more than 40 portraits till now of various descriptions.

Eyes are detailed intricately in the portrait of Mahatma Gandhi.
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Spectacles are added to the portrait giving it a lively look.
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