Design Resource

Bell metal Design of Orissa

The Craft of Moulding Metals

by
Prof. Bibhudutta Baral and Mr. Antony William
NID, Bengaluru

Source:
http://dsource.in/resource/bell-metal-design-orissa

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Introduction

Metal craft is perhaps the single most important craft in terms of the number of the artisans engaged in its practice. The livelihood of many people in the state depends on this craft. The craft is practiced by the people of the "Kansari" caste who are the metal smiths in the state while another variety , "Dhokra" is practiced mainly by "Sithulias". The "Kantilo" and "Balakati" in Puri have the largest concentration although fairly substantial numbers are found in Cuttak, Ganjam and Sambalpur districts.

The socio-cultural ties Bell Metal Craft are very well built:

• The socio cultural ties of this handicraft are very strong.According to the tradition of Orissa the bride is presented with items of brass and bell metal as per the status of the family permits.

• While in the villages these are extensively used for eating and cooking. In most orthodox families these are installed as deities in homes placed on a brass platform called 'Khatuli'. and is also used in some temples. for presiding deities.

• In almost all major temples the moving image or the 'ChalantiPratima' of the presiding deities are brass icons.

• Similarly the use of 'ghanta' or 'ghanti' are both important and indispensible for all kind of worshipping.

• Hundreds of gongs are beaten and used even during the 'RathYatra' in Puri.

• The 'Manjiras' are two cupped convex discs tied with strings together are also the products of this group of craft.

• 'Ghantis' made of bell metal are put around the neck of the cattle in the Rural Orissa.

Tools and Materials
• Hammer & Wooden Mallet: these are used while engraving and embossing
• Polani: This iron tool has a circular head and is used in engraving.
• Chisel: Used for engraving
• Dyes/ Punches: Used for engraving different shapes of different sizes.
• ShaamDaam: This is aheavy iron tool used as a base or support for the metal plate while hammering.

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The artisans share a light moment together during the course of work.

The work environment of the artisans can be seen in the background.

A lady looks on while working on the traditional machinery in Orissa.

The artisans together hammer a small piece of metal shaping them as they desire.

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The hammer is used to get rid of the sharp edges in a product or to shape the product according to one's own will.

The file is used to scrap the extra material to smoothen the surface texture.

The various kinds of clasps, hammers, chisels and all other tools used in the preparation of the brass metal products.

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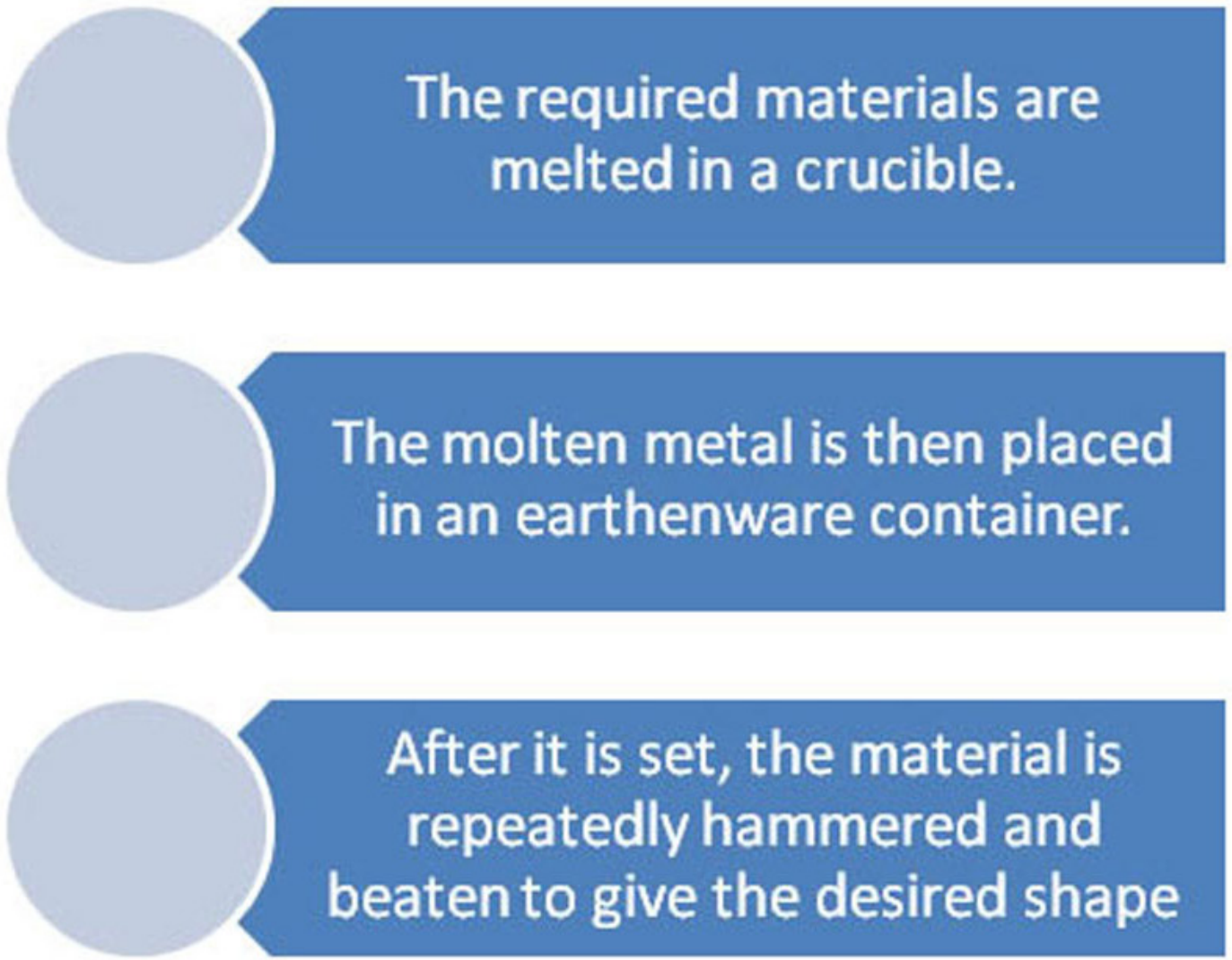
Making Process

The Procedure
The procedure is as follows:



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The major items manufactured in the beating process are plates or 'Thali', deep round containers called 'Kansa' , small containers called 'gina' (tumblers), water containers called 'Ghara', large cooking utensils called 'Handi' , various types of pots and pansand ladles or 'Chatu'.While the above mentioned items are used in cooking there are some items used for 'puja' or 'worship', of these most important are the 'Ghantas' or 'Gong' and thali for keeping offerings to the god. There are even geometric and floral patterns engraved on some and are paited with enamel paints. The designs vary from place to place.

Brass Metal Engraving:
Earlier when paper was not developed brass and other metals were used for writing and keeping accounts for kings. This text was maintained by the king as a permanent record. Later craftsmen used this craft to explore their skills even more. Brass has an importance in the Hindu mythology and Vedas. It continues to maintain its importance even today.

The scrap metal is melted at high temperatures.

The molten metal is then put in a mould.

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The metal is then heaved out of the mould.

It is light hammered at the edges to bend sharp corners.

The artisan then aligns the two parts of the pot together.

The artisan then checks for the accuracy of the aligned parts of the pot.

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A local adhesive is applied at the joining of the parts and is heated at high temperatures.

The pot is lightly hammered to make it more durable and long lasting.

It is then polished with a local grease to improve the surface texture.

Small dents are then made on the pot to improve the aesthetics and the pot is now ready to be marketed.

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Slide Show

Views of the Bell metal Design of Orissa:

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The artisan then checks for the accuracy of the aligned parts of the pot.

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Links

- Craft Design in India(http://www.designinindia.net/everywhere/disciplines/craft-design/index.html)
- Online Infomation Centre for Crafts(http://www.india-crafts.com/)
- Handmade in India(http://www.cohands.in/handmadepages/book0.asp)
- Crafts Council of India(http://www.craftscouncilofindia.org/)
- Craft Mark (http://www.aiacaonline.org/)
- Arts and Crafts - Handicrafts and Handlooms(http://www.orissa-tourism.com/handi1.htm)

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Contact Details

This documentation was done by Professor Bibhudutta Baral and Mr. Antony William at NID, Bengaluru.

You can get in touch with Professor Bibhudutta Baral at bibhudutta[at]nid.edu.

You could write to the following address regarding suggestions and clarifications:

Helpdesk Details:
Co-ordinator
Project e-kalpa
R & D Campus
National Institute of Design
#12 HMT Link Road, Off Tumkur Road
Bengaluru 560 022
India.

Phone: +91 80 2357 9054
Fax: +91 80 23373086
Email: dsource.in[at]gmail.com