

## PROCESSES OF DECORATION

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This subject falls into two divisions : 1, the type of decoration wherein the surface of the object is changed - surface alteration; and that wherein the decoration is superimposed upon the surface - surface decoration.

Under the heading of surface alteration we have several methods of producing decoration; they are best understood by an outline:

### I Surface Alteration:

A. Incised decoration: the clay is scratched into line pattern while in the leather condition. The type of line should cast a rounded grey shadow; not a definite black one. This type of decoration originated in the first crude pottery of primitive man; he incorporated sticks in the clay body to give it strength, then as the purification of clay increased he imitated the design left after the sticks had been consumed in the fire; his designs were at first naturalistic, then developed into banded borders and geometric figures.

B. Carving: this cannot be done until the object is almost powder dry, well passed the leather-hard stage, however if it is too dry the edges will chip. This carving away of large areas may be done in one or two reliefs or it may be given the effect of modeling coils on the surface. This design may be either abstract or realistic; the guide should be the effect of light and shadow on the piece; the planes should be contrasting - light against dark; it can best be constructed under a strong light by use of a keen sharp tool. The plan of the design can be traced lightly on the surface and the details omitted until actual execution.

C. Modeling: the clay should be a little softer than leather hard for this procedure as it has to expose a pliable surface for welding. There are three methods of securing this effect; coil modeling, or the addition of whole areas in one or many reliefs, or a plain mold may be cast and its surface altered.

### II. Surface Decoration:

A. Painting several types appear:

1. Slip Decoration: the age of this procedure is unknown but we observe it on the earliest English pottery, particularly Thomas Toft's). The slip is a weak diluted clay of the

same general composition as the body; it must be applied thickly, otherwise some of the slip will dissolve in the glaze and leave bare areas in the design. The strokes must be free and bold, not like pencil - to obtain this effect it is best to work the design out on paper with India ink - the application must be free and without guide lines. Commercially a slip tube is used but the effect is monotonous and lacks spontaneity. The slip should be laid on over a wet surface.

2. Underglaze: this coloring may be applied either to the raw biscuit body, depending on the glaze; if you wish to dip the glaze on, the underglaze must have been fired on the raw body; but if you wish to spray the glaze, you may utilize either method. The point is that a glaze dipped on a biscuit body bearing underglaze colors would cause the colors to run where the glaze fuses if applied too thickly - or when sprayed on if no binder is added to the color. If you paint your underglaze on a raw body, add 10% of the raw transparent glaze which is to coat it, or a pinch of soda in each color; this makes the colors permanent. The glaze over this decoration should of course be transparent. If the color is applied to the biscuit, even when you mean to spray the glaze, some medium must be used to bind the colors; such as, glycerin, gum arabic, fat of turpentine. The lower the lead content in the transparent glaze, the clearer the underglaze colors will shine so that the iron in the clay and lead in the glaze will not interact, producing a neutralizing yellow-brown. Best use a glaze fluxed with borax or soda. This type of design may be more delicate than that used for slip-painting, it suggests brush-work.

3. Over glaze this in turn subdivides:

(a) Type wherein you use two glazes; one light and one dark for decoration; in such case the light glaze should be slightly tinted with darker overglaze; it is best to use the darker glaze for painting. A little of each color is present in the others; complimentary colors would furnish too violent a contrast; one must expect the design in this case to be blurred.

(b) Painting with color on a glaze surface; the colors are mixed with a small amount of colorless glaze which will serve as a flux and prevent dryness; this type of decoration is delicate and designed to show brush pattern. The glaze coating in all cases of overglaze should be fairly moist when decoration is added for if it were too dry the colors would lump up on the surface. The procedure is as follows:

The biscuit piece is dipped in the background glaze; let the piece stand for ten minutes in a warm place, until

the glossiness disappears but the surface is still damp - not powdery dry. If the glaze coating were too wet, the background would be removed by the brush stroke - in the other extreme, the powdery condition of the glaze would cause it to absorb too much of the superimposed color - if the latter situation should arise, make your background glaze weak and your brush strokes hasty.

This type of ware is termed majolica, the glaze must be sufficiently opaque to conceal the body hue.

(c) Over glaze decoration: the above type required but two fires; this mode of treatment necessitates another third fire, lower than the previous two. The advantages are these: the method provides a range of color and arrangement of decoration impossible under high fire conditions; it is best utilized commercially in china decoration. The piece is biscuited, glaze fired and ready for painting; the plain background glaze is printed by decalcomania process, and the whole submitted to a low fire. (Cones 018, 019 or 016). Because of the sentimental collection of handpainted china of the preceding generation we are inclined to condemn this method, likewise the potter is professionally averse to such impermanent decoration for hard use, acid and fire will destroy, obliterate or corrode it. However, as now organized this is the only means of painted decoration, economically possible in a plant and as such decalcomania is a time-saving, sincere device.

There is a third type of decoration; a composite of the first two; under it is head of combination surface alteration and decoration we find:

A. A surface alteration with the addition of color:

1. Glaze combination; a change in the surface by incision or modelling, then the application of color. In factory production this is reduced to the minimum by movements by tracing the pattern with slip-wheels, incisions or modelling.

2. Slip combinations: in the case of the incisions or surface alterations are filled with slip.

3. Scruffite: Two colors of clay; a surface change which will reveal one against the other; a nice treatment but impractical commercially. The only satisfactory method of execution is to incise a design, immerse in a slip bath and after the slip dries, a scraper is applied to rid upper surface of this coating.

4. Surface decoration with various instruments. Combed ware (Thrown on the wheel; the outside true where needed at the foot) A rubber mat or comb is applied to the outer surface as it spins on the wheel; after the piece is removed from the wheel the design can be blocked in with the thumb by rubbing out corrugated ridges at points of interest. The glaze should be chosen to contribute to this effect; soft light matts are best;

Other suggestions: Batik on clay-- an entirely new field which should be developed to meet the demand for mechanical decoration.

Stencilling on pottery; a technique which could be easily abused because of the tendency towards ornamentation; modern design tends toward clearness and definiteness-- the effect of light and shadow. The design might be transferred to paper; tinfoil stencils cut to follow design, then the piece sprayed thru the apertures of the stencil with soluble salts of cobalt, manganese and copper; in order to grade the color effects the stencil could be slid over certain parts; so that coatings of 3.2 or 1 layers would be sprayed on.