

Presenting The Splash-Dye Fabric Surface Decoration Technique

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Abstract: Owing to the global economic down turn, it is necessary to have a rethink about conservation, recycling and development of cheaper, easier and quicker techniques of mass production of textile products. The splash-dye technique of fabric surface decoration is a way of imparting designs in multi-colour to fabrics without the usual resist approaches which involve many equipment, tools and materials. This paper presents the processes of the technique which was developed by the writer in 1982. The paper adopts a textual cum illustrative how-to-do-it approaches to clearly demonstrate the technique using dual coding principles. It also benefits from library and internet research methods. It has been discovered that the splash-dye technique is akin to Jackson Pollock's action painting though the former allows for a greater control of the end design. It is the belief of the writer that splash-dye will continue to be of interest to scholars and other practitioners of textile dyeing because of its ease in application and cost effectiveness.

Keywords: *Splash-dye, Fabric, Decoration, Technique*

I. INTRODUCTION

Fabric surface decoration techniques are diverse and different types of dyes and chemical assistants are usually employed depending on the class of dyestuff and the intended outcome. Apart from plain dyeing of fabric into one flat hue, there are also the processes of tie-dyeing, (Adire eleso), starch-resist dyeing (Adire eleko), wax-resist dyeing (batik) discharge dyeing, fabric painting and fabric printing, all of which have the same purpose of imparting pre-determined or accidental patterns on fabric. All the afore-mentioned techniques genres can be done in several distinct ways. For example, fabric printing can be achieved through direct printing, using natural objects like leaves, human palms or foot soles as the blocks for printing. Block printing is another method where a purposely carved wooden, rubber, plastic, potato or yam block, among many other materials is dipped in the appropriate dye and stamped on a piece of fabric to create designs in one hue or multi hues. Transfer printing is yet another method where designs made on special papers like Standery Papers, are transferred through chemical or heating processes using mechanical pressure. In transfer printing extremely volatile dyes are required and they are usually the Monoazo or Amino-anthraquinoid types.

Screen printing is the method which is widely in use as it also applies to graphics design. The basic principle here is stenciling, which can be achieved manually or through

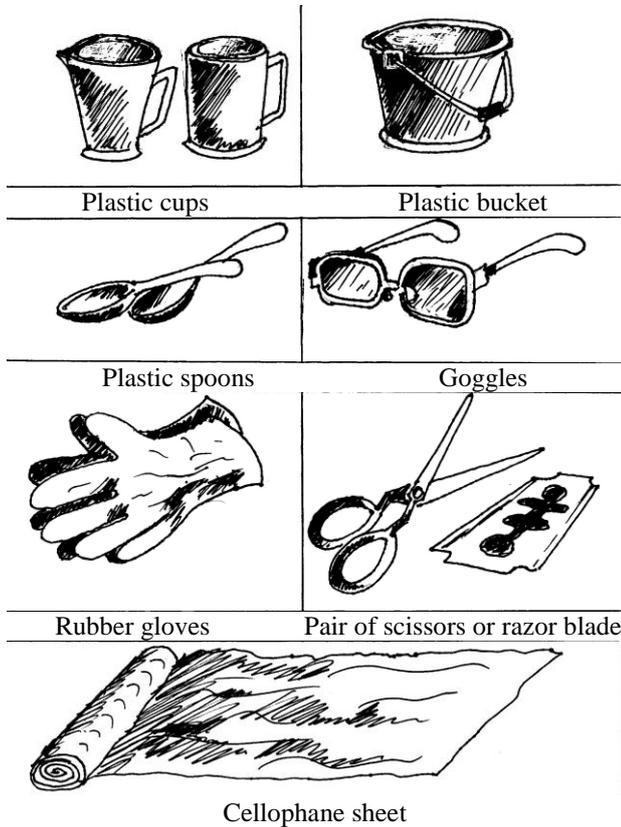
photographic transfer. In this method a silk or nylon mesh is stretched over a wooden frame before the areas not to print are covered with an emulsion, pro-film, glue or lacquer. When dry, ink is introduced into the container side of the screen and spread with a squeegee onto fabric placed under the mesh. There are the flat bed screen printing and the rotary screen methods.

The printing method that is done in large scale and is commercially very viable is the Roller Printing System. It basically involves etching a design unto copper rollers, one of which is the mirror image of the other. By getting the fabric to roll in open width in-between the two rollers which recesses have been impregnated with dye paste, the etched design is transferred onto both sides of the fabric. Duplex printing or dual roller system (printing on both sides of the fabric) is easily achieved with this method (Mbelu, 2005; Larson, 2013; Incolororder, 2013; Upanddyed, 2014; Wikipedia, 2014).

This preamble is laid to clearly distinguish the technique in focus which is the splash-dye method of fabric surface decoration. The design problem, the objectives and delimitations of this paper revolve around the textual and visual presentation of the processes of the splash-dye fabric surface decoration technique which was developed by this writer in 1982. This is a technique which saves time and cuts down on cost of pattern-dyed fabrics.

II. EQUIPMENT FOR SPLASH-DYEING TECHNIQUE

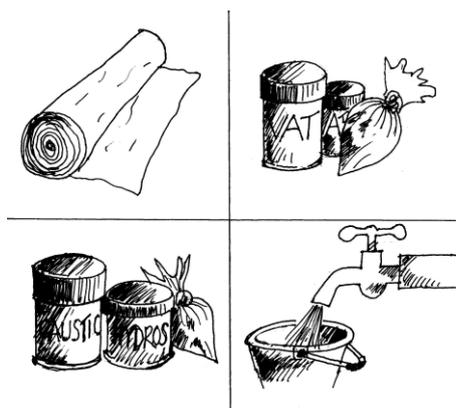
The equipment needed for the process of splash-dye technique are few hence, the cost-saving attribute. All one needs are plastic cup, plastic spoons, plastic buckets, gloves, goggles (eye protecting eye glasses), pair of scissors or razor blade and cellophane (optional).



Illus 1: Equipment for Splash-dye process

III. MATERIALS FOR SPLASH-DYE TECHNIQUE

The basic materials for splash-dyeing are fabric, dye stuffs, chemical assistants and water. Splash-dye works basically on cellulosic fibres thus the most appropriate dye type is vat. This dye can be used hot or cold. The use of plastics is to avoid attack from chemicals.



Illus 2: Materials for splash-dyeing

IV. THE PROCESS OF SPLASH-DYEING

There are basically two methods of splash dyeing in terms of the 'dye-bath'. One method can be done on cemented or any good floor while the other utilizes cellophane as the support. The final effect is distinguishable if one is very observant. To prepare vat dye, add say a teaspoonful of dye stuff to a cup of hot or cold water and stir to disperse. Add two teaspoonfuls of caustic soda (sodium hydroxide) and stir to dissolve then add two teaspoonfuls of hydros (sodium hydrosulphite) and stir gently to dissolve. The standard ratio is 1:2:2. Avoid creating foam and let it stand without shaking the cup for fifteen minutes. In the case of stone black you need sodium sulphite (yellow flakes) and soda ash in place of the two regular chemicals. Note that the number of dye colours depend on your imagination of the colour-mix you wish to achieve so it is important to read up the effects of colour mix and colour psychology. This is of course one of the reasons why people go to school to read Fine Arts. Note that when making the dye Leuco, vat dyes change colour. Yellow becomes purple, green becomes blue, red becomes green, each colour tending towards their complementary on the colour wheel. This challenge is overcome if one is using direct liquid dyes in their true colours.

A. THE CEMENTED FLOOR APPROACH



Step 1: Mix the dye leuco and allow to vat for 15 minutes. Each must be in a separate plastic cup.



Step 2: While vatting is going on, cut and arrange the fabric on the floor. The writer usually throws the fabric on the floor without rigorous arrangement.



Step 3: After 15 minutes of vatting, put on the goggles and rubber gloves then splash the dye directly on the fabric, preferably starting from the lightest colour. Take care to leave some areas in the original fabric colour. The writer prefers working on white fabric. Note that the strength of the design depends on your splashing dexterity.



Step 4: After 45 minutes, lift the cloth and hang it up in an airy place away from direct sunlight for oxidation and colour development to occur.



Step 5: When the fabric has dripped the dye water, wash it in clean water to remove excess dye. Use a mild soap (not detergent). Hang the fabric up to dry in an airy place, away from direct sunlight.



Step 6: Add finishing such as starch, Urea formaldehyde or fold and beat with a wooden mallet on a smooth log of wood or press with hot iron to improve the handle of the fabric.

B. THE CELLOPHANE APPROACH

STEP 1: Mix dye leuco and allow to vat for 15 minutes. Each colour must be in a separate plastic cup.

STEP 2: Open up used cellophane bags into flat orientation or spread a sheet of cellophane while vatting of dyes is in progress. Arrange the cloth on the cellophane in your own way.

STEP 3: After 15 minutes of vatting, put on the goggles and rubber gloves then splash the dye directly on the fabric, preferably starting from the lightest colour. Take care to leave some areas in the original fabric colour. The writer prefers working on white fabric. Note that the strength of the design depends on your splashing dexterity.

STEP 4: After 45 minutes, lift the cloth and hang it up in an airy place away from direct sunlight for oxidation and colour development to occur.

STEP 5: When the fabric has dripped the dye water, wash it in clean water to remove excess dye. Use a mild soap (not detergent). Hang the fabric up to dry in an airy place, away from direct sunlight.

STEP 6: Add finishing such as starch, Urea formaldehyde or fold and beat with a wooden mallet on a smooth log of wood or press with hot iron to improve the handle of the fabric.

C. COMBINATION OF SPLASH-DYE AND RESIST APPROACHES

It is possible to apply splash-dye technique to tie-dyeing, starch-resist and wax-resist methods. After tying or applying starch or wax to block off some areas of a fabric to resist the dye, a designer can splash dye on it either through the cemented floor approach or the cellophane approach. The resultant design will usually be more interesting than the purely resist patterns. Students of textile design and other enthusiasts have a lot of room for experimentations with thrilling outcome.

V. INTERROGATING THE RESULTANT DESIGNS

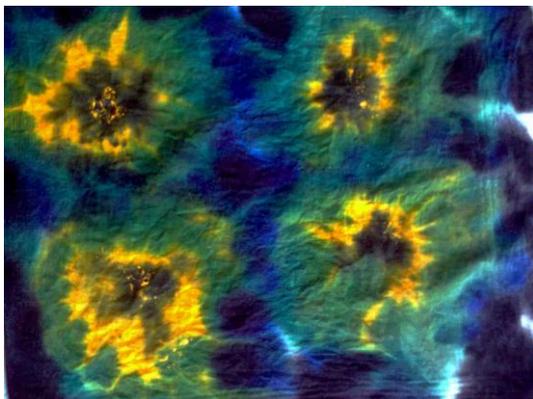


Plate 1: Sample of the cemented floor technique pattern, Courtesy: the author, 2014.

The resultant pattern is not easily distinguishable from designs made with some methods of tie-dye techniques. The advantage of splash-dye is that it needs less equipment to execute and equally saves time. For instance, the time it takes

to create a tied resist is eliminated through splash-dyeing. This means one can rapidly produce designs which can be mistaken for tie-dye through splash-dyeing.



Plate 2: Sample of the cellophane technique pattern Courtesy: the author, 2014

The end product of the cellophane technique is remarkably different from tie-dye patterns. It appears more like wax-resist except that the cracking characteristic of wax-resist easily distinguishes the two. The effect of the contact between the fabric and the cellophane creates some interesting tones and planes of hue on the fabric. This transparency and pastel attribute is the hallmark as the cellophane approach of splash-dye technique. Like the cemented floor technique it saves both time and production cost. The cellophane that would have made it a bit costlier to produce, can be sourced from waste polythene bags.



Plate 3: Sample of combined wax-resist and splash-dyeing pattern. Courtesy: the author, 2014

Though the combined techniques may not save cost like the core splash-dyeing, it is an alternative way of creating wax-resist designs. The advantage it has over the normal wax-resist design is that it allows a possibility of not recording the crackling effect. This can be of advantage where a designer needs to leave a plain area of a waxed cloth for introduction of say, screen or block print. A major advantage of splash-

dyeing on a waxed fabric is that multiple colours can be achieved without having to dye many times like in normal wax or starch-resist techniques.

always sign their creations and retain absolute informal patents and copyrights.

VI. CONCLUSION

The foregoing is a concise how-to-do-it presentation of the splash-dye technique of fabric surface decoration which was inspired by Jackson Pollock's action painting. It is worthy of note that one of the writer's students has taken up the cellophane approach and makes a living with it. She wrote to the writer, expressing that she is making money from one of the techniques taught her and she won't ever reveal it to writer but unknown to her the writer had already noticed the products in Akwa Ibom State markets in Nigeria and knew it must be from one of his students. The splash-dye technique just like the regular resist techniques leaves a lot of room for experimentations, developments and further innovations. It is the writer's hope that both students and other dyeing enthusiasts will practice the technique and come up with patterns that will further add to the varieties achieved by the writer. This publication is also meant to serve as an informal registration of patent of the splash-dye technique. Designers who will embrace this technique should remember to acknowledge the innovator to deviate from the unfortunate persistent practice where textile designers in Nigeria are not given credit for their patents and designs, a situation that has given advantage to their pure fine artists' counterparts who

REFERENCES

- [1] Dylon (2014). Fabric Dye for Hand use. www.dylon.co.uk/products/dyes/fabric. Retrieved on June 26.
- [2] In colour order (2013). Fabric Dyeing Basic Tutorial. www.incolororder.com. Retrieved on June 26, 2014.
- [3] Larson, E. (2013). Wax-Resist Techniques. www.abeautifulness.com. Retrieved on June 26, 2014.
- [4] Mbelu, M. A. (2005). *Introduction to Fine & Applied Arts*. Enugu: Met May Nig.
- [5] MeiTu (2014). Digital Textile Sublimation Printer. www.mtutech.com. Retrieved on June 24.
- [6] Up and dyed (2014). Resist Dyeing Techniques. Upanddyed. www.wordpress.com. Retrieved on June 26.
- [7] Wikipedia (2014). Dyeing. [En.wikipedia.org/wiki/dyeing](http://en.wikipedia.org/wiki/dyeing). Retrieved on June 26.