### An introduction to textile design

# An Introduction to Textile Design

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### Introduction

When discussing textiles, one wonders about the meaning and its origin; the word 'textile' comes from the Latin adjective *textilis*, meaning 'woven' which itself from *textus*, the past participle of the verb *textre*, to weave. Its origin is as old as the existence of man's creation, probably made of animals' skin and help to protect early humans from the elements. In textile manufacturing, design is an integral part.

Design is a composition of various elements into patterns either in two-dimensional or three-dimensional forms. The design elements are line, shape, texture, value, space, form, colour, light and possibly time and motion. Getlein (2002) describes the elements as satisfying the artist's expressive intent.

Ogumor (2007) defined design as the art of organizing or arranging lines, shapes, motifs, symbols and images to communicate an idea. This chapter focuses on various aspects and techniques of textile design and production.

## Textile Design

Textile design is the process of creating textiles and the patterns on them for knitted, woven and printed fabrics. A design starts with delineations on paper as thumbnails, which are developed further with brushes and colours. In recent times textile patterns are designed in vector-based applications on the personal computer. Vector graphics is associated with the use of geometrics like lines, points and polygons, Beziers, and so on, to create digital shapes. Vectors are dependent on mathematical equations which were used to create the programs (Onwuekwe, 2012:2). The advantage of vectors is that the scaling of shapes is unlimited, unlike bitmaps which are measured in resolutions. Examples of vector-based applications are CorelDraw, Adobe Illustrator and In-Design. When the designs are finalized the designer or a textile company will use CAD in the process of creating the finished textiles.

Textile designs are broken down into three major types and disciplines in textiles. They have printed textiles, woven textiles, and mixed-media textile designs.

# Printed textile design

Printed textile designs are made by the application of various printing processes to fabric or cloth and other media forms. Textile designs are created in the distinct printing process such as resist printing, relief printing, screen printing, transfer printing and digital textile printing, Dye-sublimation printing. These processes make use of various inks and dyes to bring out aesthetic imprints and offer repeating patterns, motifs and styles onto the fabric or cloth.

**Resist printing:** this is a batik or tie-dye printing process that is blocked with wax or tied with rope to prevent dye colour from penetrating through.

Relief printing: a block plate, substrate, or matrix which has ink applied to its non-recessed surface is brought into contact with the paper.

Screen printing: this is the process of using mesh to ink or dye onto a substrate through an area made permeable and an area not impermeable by a blocking stencil. Artists of Pop culture achieved artistic feats using the screen printing process. Warhol was a spearhead of the Pop movement. With the aid of the available technology – screen printing, Warhol was able to gain popularity through the mass production of his art all over New York and the United States at large (Onwuekwe, Nnoli, and Ezemo, 2018:9)

Heat transfer printing: This is also known as thermal printing thermal-transfer printing and thermal wax transfer is a printing process that transfers wax to an object or garment.

Digital textile printing technology, on the other hand, is a relatively new design output milestone. It started in the 1970s as a possible replacement for analogue screen printing. With the development of a dye-sublimation

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printer in the early 1990s, it became possible to print with low-energy sublimation inks and high-energy disperse direct inks directly onto textile media, as opposed to print dye-sublimation inks on a transfer paper and, in a separate process using a heat press, transfers it to the fabric. Charles, et al (2017:62).

Digital textile printing can also be referred to when scaling and printing smaller designs onto a garment, (Tshirt, dresses promotional wear and printing large designs onto large format rolls of textile.

Dye sublimation printing (or dye-sub printing) is a computer-based printing technique which heat to transfer dye onto materials such as fabric or cloth, plastic cards etc.



Plate 1: Printed Textile Design. Source: Zimo textile Studio

## Woven Textile Design

These are achieved during interlacing a vertical yarn (warp) and horizontal yarn(weft), woven textile designs are created by various types of looms, manual and mechanized or computerized Jacquard loom. The designs created within the wave are done, using various types of yarn to achieve variance in texture size, and colour to construct a stylized pattern or monochromatic fabric.



Plate 2: Woven Textile Design. Source: Fine and Applied Arts, Textile section Nnamdi Azikiwe University, Awka

# Mixed media Textile Design

This is produced using embroidery or other various fabric manipulation processes such as pleating, appliqué, quilting,

**Embroidery – this** is the use of stitches of thread to construct designs and patterns on the textile surface.

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**Quilting;** is the use of coloured fabric pieces in collage and geometric designs formed to achieve various textiles of different textures and colours

Appliqué is the process of utilizing pieces or patches of fabric in different shapes and patterns that are sewn or glued onto a large piece to form a picture or pattern.

Pleating is a type of fold that is pressed, that is ironed or otherwise heat-set into a sharp crease or impressed, falling soft rounded folds, when sewn are called tucks.



Plate 3: Mixed media Textile Design. Source: Zimo textile studio

## **Evaluation:**

- 1. Define Textile design
- 2. Explain the types of textile design
- 3. What is design

#### References

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