

# Paradigmatic Appraisal of Techniques and Technology of *Adire* in the Last Five Decades.

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## Abstract

*Adire*, the patterned dyed cloth of the Yoruba of Southwestern Nigeria remains extant and has become a permanent feature of the visual and cultural landscape of the people's environment. Although this art tradition has undergone a lot of challenges brought about by developments within the Yoruba country, and influences from external forces, which ordinarily should have culminated in it becoming obsolete, the art has remained dynamic and survived against all odds. This study, an art historical study based on field research, analyzes the technical and technological changes that have bombarded *Adire* art tradition over five decades and how the dogged resilience of the art and the artists have yielded a dynamic evolution of myriads of patterns that have aided the art's survival and relevance.

**Keywords:** *Adire*, appraisal, five decades, paradigmatic, techniques, technology

## 1. Introduction

The *Adire* artists of Southwestern Nigeria have successfully expressed their society through the many techniques and technology of *Adire* production that have evolved in the last fifty - five years. Though the origin of *Adire* itself is hazy, therefore it may not be possible to ascertain when exactly the many techniques of its patterning started, but evidences of archaeological finds in Tellem burial caves in Mali (Bolland 1992: 72) puts its existence to twelfth century. And while reflecting their tradition and the changes taking place within their society, the trend of continuity running through the tradition and the innovations constantly enhances the dynamism in *Adire* tradition.

Many of the scholars who wrote on *Adire* art tradition such as, Stanfield (1971), Barbour (1971: 51), Mack and Picton (1979: 152), Wahlman (1974:16), Akpata (1971: 95-100), and Eicher (1976:16), have constantly grouped the techniques of this tradition into two namely, *Adire Oniko* and *Adire Eleko*. Furthermore, many of these authors have left out many of the new techniques that have evolved since the publication of their works. This work therefore, serves as a bridge between the last fifty – five years and the present.

## 2. Technology, Techniques and Forms of *Adire*

The techniques of *Adire* tradition can be grouped into six broad categories namely; *Adire Oniko*, *Adire Eleko*, Batik, Discharge Dyeing, Direct Application and Factory-printed *Adire* ( Areo 2004). Discussing the techniques also implies discussing the technology involved in their production, because indigenous classification puts the *Adire* into technical typology by labeling them with motifs that are the end products of such techniques and technology. The three, techniques, technology and the resultant motifs are therefore inseparable. Discussion on the motifs is only done here as it relates to the techniques and the technology without the iconology and iconography of the motifs.

### 2.1 *Adire Oniko* or Raffia Thread medium Technology

Tying is the oldest, simplest, commonest and the most basic of all *Adire* techniques known among the Yoruba and must date back several centuries ago, considering the fact that *Adire* at its peak was exported to Senegal, Congo, Cameroons, Gold Coast (present day Ghana) and probably other West African countries. The technology which is simple and basic, involves tying, binding, or covering specific portions of the fabric with any flexible material of choice with the sole aim of preventing dye penetration, so that the areas so covered invariably results into the *Adire* patterns. Availability of a material in any given locality is one of the greatest impetuses for artistic expression in that medium. *Adire Oniko* therefore employs *iko*, the raffia thread, a fiber obtained from the leaves of the raffia palm tree, *Raphia ruffia* of which the region is blessed in abundance.

#### 2.1.1 Tying techniques

Techniques from tying technology include knotting, binding, folding, stitching and champing, and involves using *iko* the raffia thread in one form or the other, or any of the several other flexible binding materials apart from raffia thread that have been used in the last five and a half decades. Techniques that fall within this group are: *Adire Eleso* (seed / circles motif bearer) which is probably the oldest, simplest, most basic, and commonest *Adire* design ( Plate 1), *Osubamba* (Big Moon) which comprises of very big circles interspersed with tiny ones (Plate 2), and *Alakete* (straw bowler hat motif bearer) which are tiny circles arranged into large concentric

pattern (Plate 3).

#### 2.1.2 Twisting Technique

Twisting Technique (*Elelo*) which involves twisting the fabric to be dyed from its two ends along its entire length (Plate 4).

#### 2.1.3 Pleating Technique

Pleating (*Sabada*) is a versatile technique capable of producing many variants and involves accordion pleating of the fabric, and tying at intervals along its length before dyeing (Plate 5).

#### 2.1.4 Clamping technique

This technique which evolved by the end of last millennium, involves clamping layers of accordion pleated fabric between a set of wood, or metal clamps. The projecting ends of the clamps are then secured tightly with raffia or any suitable thread before dyeing. It was dubbed “Awilo” after the popular Congolese Makosa musical artiste of the year 2000, Awilo Logomba.

#### 2.1.5 Knotting technique

This is a simple method involving overhand knots at intervals along the length of the fabric, which is then secured with raffia prior to dyeing (Plate 7).

#### 2.1.6 Stitching Techniques

By hand-stitching with needle and raffia thread, many variants were produced under this subgroup. Later in the 1930s, men used the treadle sewing machine, as an attempt to increase production and reduce production time, as the demand for *Adire* increased. This evolution also marked the incursion of men into a hitherto female dominated tradition, and a wide range of methods identifiable under this technique are listed below: Cocoa which involves stitching criss-crossing short lines that produce shapes similar to the cocoa pods (Plate 8), *Ologede* (plantain – shaped) with stitched straight parallel lines interspersed with Zig-zag ones (Plate 9), and *Onika* (finger - shaped) comprising of hand --stitched double lines interspersed with star-like lines alternating with short vertical lines. This is also known as *Onipetesi*, by dyers in Aka compound of Osogbo (Plate 10).

Other variants from stitching technique are: *Amuga* (scissors) which is recognizable by the X-lines stitched inside stitched rectangular shapes demarcating the entire fabric. (Plate 11), *Onila ati ika*, (Facial marks and fingers) which consists of squares alternately filled with the finger - like motif and vertical lines before being dyed. (Plate 12), *Eleyin* (egg – shaped) made up of diagonal crisscrossing lines (Plate 13), and *Igi Oye* (chieftaincy tree) with the space between each set of stitched six parallel lines further filled with branching lines (Plate 14).

Stitching includes other patterns such as; *Torofonkale* (three-pence – scattered- all-over -the house), a machine-stitched pattern resulting in straight rows of white patches (Plate 15), and *Ogosofin*, a pattern comprising of squares filled with different varieties of vertical, horizontal and crisscrossing lines and at times tiny circles in concentric arrangement stitched within some of the squares. This is also known as *Ikorita* “the meeting of the roads” and welcome to masquerade (Price 1975) (Plate 16). *Oloparun* (Bamboo – form), is of bold straight parallel lines that covers whole length of the fabric (Plate 17), *Onisuga or Iyo Oyinbo* (Sugar cubes) comprises of machine stitched cubes (Plate 18), *Alaale* (Floor pleated) is made of thin straight lines arranged closely together (Plate 19), while *Sunsun* (squeezed – pattern) comprise of tiny close stitches, producing an overall speckled dyed effect (Plate 20).

#### 2.2 *Adire Eleko* (Starch resist) Techniques

This technique involves the use of starchy substance known as *eko*, a staple food prepared from corn slurry. This was later replaced by the usage of cassava flour *lafun*. The slurry is prepared by adding either corn or cassava flour to a quantity of boiling water to which alum and copper sulphate had been added. The paste prevents dye penetration while the allum prevents the starch from peeling into the dye bath during the dyeing process. Four other methods in the same medium, but with varying technology in their pattern creation; freehand *Eleko*, stenciling *Eleko*, *splash*, and Lace *Eleko* have been identified.

##### 2.2.1 Freehand Eleko

The hand-painted *Adire Eleko* is the oldest, and most laborious. Oyelola (1992), Beier (1957), and Barbour (1971) put the date of its emergence between 1880 and 1925. The fabric is first folded and pressed into distinct squares with the fingers or a small mallet. Palm fronds or feathers from the wings of fowls traditionally serve as the painting brush, with other tools such as; match sticks, knife, traditional wooden comb, *Ooya*, and corn cob. The artist intermittently dips into the starch and draws from memory all she had imbibed from her master who traditionally and usually is her mother or a female member of her family (Plate 21). Traditionally, *Adire* making was a female vocation until the 1930s. The artist’s knowledge depends on her ability to learn fast (Oyelola 1992) from the pool of up to four hundred identifiable patterns of *Adire Eleko* (Carr 2001), which are representation of the Yoruba cultural worldview. Some trainees in contemporary times, sketch their design on paper (Plate 22). Textile students of the Fine and Applied Art Department of Ladoke Akintola oUniversity under the tutelage of Gbemi Areo, have experimented with syringes and bottles with spouts in place of feathers with remarkable

success (Plate 27).

#### 2.2.2 Stencil Eleko (*Adire Batani*)

In the 1930s Yoruba men devised a method of creating the *Eleko* motifs, using metal stencils so as to increase production and save time in order to meet the great demand for *Adire* at the time. This was known as *Adire Batani* (a bastardized pronunciation of the word 'pattern'). While the women still retained the traditional method of dyeing, men turned out patterns using stencils. The first sets of stencils about 12" x 8", were made from lead linings of boxes used to import materials such as tea, cigarettes and matches (Larsen 1976), and copied the traditional freehand motifs. These flat metals were placed on wood and with the aid of a chisel, the pattern was cut out. The technique is to put the metal stencil on the fabric to be patterned, and with a small flat metal, force the starch through the holes onto the fabric. A cloth, for example, may be designed with five or more different stencils at a time. While some of the stencil designs are original, some are copies of motifs on imported commercial printed fabrics. Students of the informal Ori Olokun Art Centre, Ile – Ife of the 1970s, later experimented with stencils cut from floor linoleum (carpet) (Plates 23 and 24). Also, the students of Fine and Applied Arts Department of Ladoke Akintola University have for years, used discarded x-ray films and transparent sheets used in spiral binding and lamination with remarkable success.

#### 2.2.3 Eleko Splash

Traditionally, the whole cloth is sometimes smeared all over with starch paste, while a comb is then drawn through the paste to create linear patterns on the fabric. This pattern called *Onikomú*, has been adapted by Olugbemisola Areo during the course of her postgraduate research and experiments for her Master of Fine Art degree in Textile Designing between 1998 and 2001 when she splashed starch paste randomly over the fabric to create pattern prior to dyeing the fabric.

#### 2.2.4 Lace Eleko

To sustain their art *Adire* artist devised a technique of *Adire* Eleko using intricate lacy floral patterns early in the new millennium. These lace materials commonly sold in second hand cloths market as window and door blinds for home furnishing, were spread flat on the fabric to be patterned, and starch paste forced through their lacy holes onto the fabric in a stencil-like manner. The resultant effect is a replication of this detailed floral pattern on the dyed fabric (Figures 25 and 26 ).

### 2.3 Batik

Hot wax was later substituted for cassava paste in Southwestern Nigeria early in the sixties as a result of the workshops in Osogbo and Ile -- Ife. This technique is known as Batik. The origin of the word Batik is unknown, but its meaning could probably be sought in the Javanese, Indonesian and Malay word, titik, which means, point, drop, dot, or 'wax writing' (Meilach 1975, Proctor and Lew 1992). Batik in Southwestern Nigeria can be sub-grouped into freehand batik, stamping and batik wax splash.

#### 2.3.1 Freehand Batik.

This started in Osogbo in the early 1960s through series of workshops organized by Suzane Wenger, Ulli and Georgina Beier, from where it spread to neighbouring towns such as Ile - Ife. To date Osogbo is still renowned for its unique batik designs and batik as a modern art form. This method involves the application of molten wax with brushes *to* create designs or themes on fabric. These brushes were later replaced by blocks of foam trimmed into conical shaped brushes with the pointed end serving as the writing end (Plate 28 and 29). Also *tjanting*, a form of wax writing pen with origin in Eastern countries of the world have been found in use among university trained textile artists and few *Adire* artists.

#### 2.3.2 Stamping (*Adire Olonte*)

Stamping has been in existence for thousands of years in Java where a metal relief stamp known as *tjap*, was used to apply wax on fabric. The first set of batik stamps in Nigeria developed among the Yoruba *Adire* artists in the 1970s. These were made by carving the required pattern in relief on a flat block of wood to which a handle has been attached. (Plate 30). This wooden stamp is repeatedly dipped in molten wax and stamped on the fabric to be dyed till the whole fabric has been completely covered with waxed repeat pattern. The cloth is then dyed, and the wax removed through boiling in hot water.

In the year 2006, foam stamp appeared on the *Adire* scene. Relief patterns are carved on thick blocks of mattress foam. This block is dipped in wax and stamped all over the fabric in the same way and manner the wooden block is utilized. The foam has the advantage of taking up more wax and requiring less pressure of the artist's hand to register the pattern on the fabric (Plate 31).

#### 2.3.3 Batik Wax-Splash.

In this technique, wax is splashed on fabric through many methods; wax could be painted all over the fabric, the fabric is then squeezed to achieve a crackling effect on dyeing, droplets of wax, splashes of wax and so on, could also be used on fabric to produce interesting patterns (Plate 32).

### 2. 4 Direct Application

Direct application, as the name implies, does not require any other medium than the dye and the proper

arrangement of the folds of the fabric prior to the application of the dye. Patterns can be achieved through three methods namely; marbling or cloud pattern, wuruji, and spray gun methods and these are enumerated under the technology of this technique.

#### 2.4.1 Marbling or Cloud Pattern.

This technique now called ‘salad’ became popular in the 1980s and it involves arranging dampened fabric into tiny folds on a flat surface before applying different colours of dye one after the other, with a small spoon. A technique of placing a basket some distance above the folded fabric while pouring the liquid dye through the basket onto the folded fabric evolved in Abeokuta in 2008. (Plate 33).

#### 2.4.2 Wuruji (mystery, secret or unfathomable)

This technique which became popular in the late 1980s to early 90 involves first dampening, and arranging the fabric in desired bold folds before applying the dye directly on the folds. The directions of the folds determine the pattern. The cloth sits in the dye to allow deep absorption. (Plate 34)

#### 2.4.3 Spray gun

Another method of direct application known as *Konkobilo*, is achieved through the use of spray gun. This was popular at the beginning of the millennium but, did not last long on the *Adire* scene, as it was expensive and the technique shrouded in secrecy by the few who produced it

#### 2.5 Discharge Dyed Adire

Generally speaking, discharge dyeing which is simply the removal, subtraction, bleaching or stripping of colour from a fabric is alien to Yoruba dyeing tradition and is almost non-existent in Africa. This aberrant dyeing tradition is found only in Mali among the Bambara who produce, *Bokolanfini* or *Bogolanfini*, cloth bleach dyed with specially prepared mud, hence its name; mud cloth of Mali. Discharge dyed cloth was first observed in Nigeria at the beginning of the year 2000, with circles being the original design. Subsequent designs such as lines of various types were achieved using brushes. Liquid household chlorine bleach such as Jik and Parozone, are the discharging agents used by the *Adire* makers.

However, figurative version of discharge dyed *Adire* evolved in 2005. Textile students of Fine and Applied Arts Department of Ladoko Akintola University of Technology, Ogbomosho, under the guidance of Gbemi Aro successfully achieved excellent results using spray gun to lightly apply the bleach through stencils with traditional Yoruba *Adire* eleko motifs. (Plates 35).

#### 2.6 Factory Printed Adire

Due to the scarcity of imported cloth for the production of *Adire* during the World War II (1939-1945), the flooding of Yoruba markets, immediately after the war, with cheap imported printed fabrics from Europe, Asia, and local textile mills, *Adire* industry suffered a great decline. The Japanese particularly made photocopies of *Adire Eleko* motifs and printed them on cloth for the Nigerian market.

This trend is not new as early European designers with the connivance of African and European merchants, European missionaries, and colonial officers made concerted effort in studying and interpreting the interest and tastes of African consumers (Druding 1982).

In the late 1960s, an American resident in Nigeria, Pat Morgan, opened a workshop specializing in silk screen in Lagos called *Aladire* (decorator of *Adire*). She printed traditional *Eleko* motifs. This so much appealed to a more selected patronage that by 1971, about 1,000 yards were being produced per week

This method of silk screen printing of traditional motifs, in line with the University’s slogan of “for learning and culture,” was imbibed, since the 1970s, by the staff and students of Fine Arts Department of the Obafemi Awolowo University Ile - Ife. (Plates 36)

Nigerian market was again flooded with printed imitations of the Yoruba *Adire* motifs by textile factories in the year 2002. Popularly called *Ankara Kampala*, (*Ankara*, being the Yoruba generic word for wax-printed fabrics), the imitation this time cut across all the techniques of *Adire*, and was given great patronage by the undiscerning populace as it was cheaper (Plates 37 and 38). Another innovation that evolved in 2004 involves the printing of central motifs on black cotton materials, already made into shirts, top and trousers, boubou, and so on

### 3. Technology of Dyes

Dyes have been defined as “substances that can be used to impart color to other materials, such as textiles, foodstuffs and paper (Proctor and Lew 1992). All dyes belong to two major categories, natural and synthetic dyes, with indigo still remaining the oldest natural dyestuff on the records of world textile tradition (Gillow and Sentence 1999), and the Yoruba still considered the “most passionate lovers of indigo” in West Africa ( Boser – Sarivaxevanis 1980)

Dyeing in indigo is an indigenous technology, a specialized and hereditary art passed from mothers to daughters, which has become a legacy of the Yoruba women. The indigo plant is called *elu* among the people. The preparation of indigo dye is lengthy, tedious and traditionally entails two requirements; the breaking up and the fermentation of the young indigo leaves to produce the insoluble indigo dye balls, and the preparation of the

alkali medium, the ashes which turns the indigo into its soluble state and act as a fixing agent (mordant) for the dye.

Synthetic indigo first manufactured in 1897 by Badish Anilin and Soda Fabric A.G. (BASF) was first imported into West Africa shortly after World War II (1939-1945). It was initially vehemently rejected by the Yoruba dyers who later on realizing the ease of its preparation, started mixing it with the natural dye (Beier 1993) (Plate 39). Also the mordant ash has been replaced with industrially produced Sodium Hydroxide (Caustic Soda).

Traditionally, ceramic pots are the receptacle of indigo dye. Changes in the receptacle were however observed in Ede where metal drums with the inside coated with cement plastering are being used by the indigo dyers, and in Nike gallery in Oshogbo where specially designed cement pots sunk into the ground are the receptacle. According to the dyers in Ede, no one in the area makes the type of large dyeing pots traditionally used again. However, in Osogbo, ceramic pots are still being used in the only traditional indigo dyeing centre remaining in the town (Plates 40, 41, and 42).

Also synthetic dyes in other colours were introduced into the *Adire* scene of Southwestern Nigeria in the 1950s. These were originally rebuffed as the colours were considered too 'loud,' ( Beier 1993), but with more experimentation, a myriad of techniques evolved ( Keyes - Adenaike 1993) and the clientele widened.

#### 4. Cloth

Most scholars are unanimous on the fact that the prototype for *Adire* was the dyed *kijipa*, the hand woven cloth of the Yoruba women. However, between 1880 and 1925, Nigeria commenced importation of English cotton cloth on a large-scale (Eicher 1976), in form of shirting and calicos. Two materials, of two and half yards length were sewn together to form a wrapper of almost square shape. The introduction of wider and higher quality cloth in 1960s, led to *Adire* being sold by the yards instead of the traditional wrapper size (Price 1975, Wolff 2001, Barbour and Simmonds 1971). The introduction of these imported cloths led to new innovation and a dramatic growth of the *Adire* industry. *Adire* in the contemporary times is made on any absorbent materials.

#### 5. Conclusion

In a constantly changing and evolving world, new materials are frequently being introduced. Though some of such material may at times, usually initially be rebuffed and resisted, the inherent urge to remain relevant and be part of the society without being sidelined by the times, have nonetheless been the overriding force in the dynamism and evolution of *Adire*. *Adire* artists have therefore not only adapted to changes but have adopted these new materials, techniques and technology, thereby aiding the dynamism of their art and adding to the wealth of their society.

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Plate 1

Indigo dyed *Adire Eleso*.  
 Photograph by Gbemi Areo, 2006



Plate 2

Indigo dyed *Osubamba* motif  
 Photograph by Gbemi Areo, 2006.

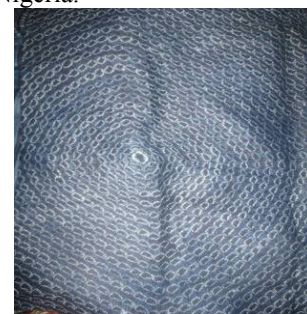


Plate 3

Indigo dyed *Alakete* pattern  
 Photograph by Gbemi Areo, 1990.



Plate 4

Twisting pattern  
 Photograph by Gbemi Areo, 1990



Plate 5

*Sabada* motif  
 (Lenor Larsen 1976:46 )



Plate 6

*Awilo*.  
 Photograph by Gbemi Areo 1998.



Plate 7

Knotting method.  
 Photograph by Gbemi Areo, 1987.

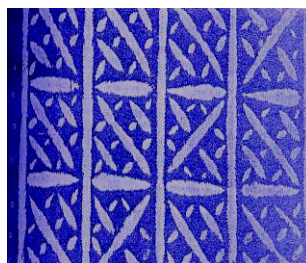


Plate 8

Indigo dyed *Cocoa* motif  
 (Barbuor 1971:57 )



Plate 9

*Ologede* motif  
 Photograph by Debo Areo, 2006



Plate 10  
 Indigo-dyed *Onika* pattern.

Photograph by Gbemi Areo, 2006.

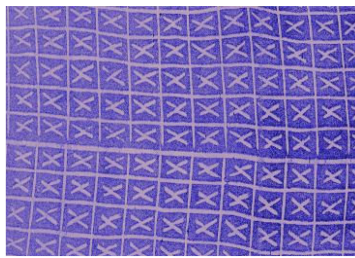


Plate 11  
*Amuga* (scissor

(Barbour & Simmonds, 1971:70)

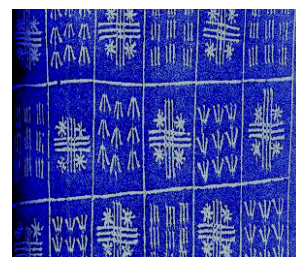


Plate 12  
*Pele Onika*  
 (Facial marks and fingers).  
 (Barbour & Simmonds, 1971:70)



Plate 13  
*Eleyin* (Egg-shaped) motif  
 (Barbour & Simmonds, 1971:67).

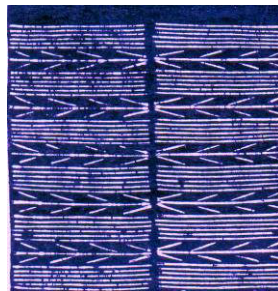


Plate 14  
*Igi Oye*, (Resist-dyed  
 Cloths of the Yoruba, 1997:10).

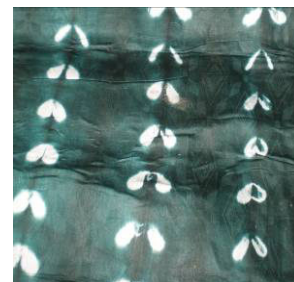


Plate 15  
*Torofonkale* pattern  
 Photograph by Gbemi Areo

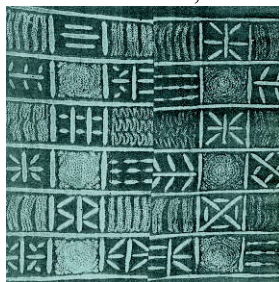


Plate 16  
*Ogosofin*, pattern  
 (Barbour & Simmonds, 1971:60)



Plate 17  
*Oloparun* pattern  
 Photograph by Gbemi Areo

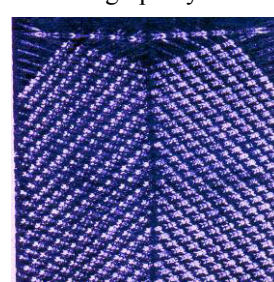


Plate 18  
*Iyo Oyinbo* (cubes of sugar).  
 (Resist-dyed cloths of the  
 Yoruba, 1997 & 10.)

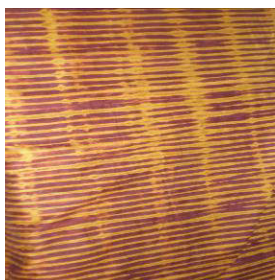


Plate 19  
*Alaale* Pattern  
 Photograph by Debo Areo, 1998



Plate 20  
*Sunsun* Pattern.  
 Photograph by Debo Areo, 1998



Plate 21  
 Using feather and starch to  
 create patterns  
 (Eicher 1976: 69)



Plate 22

A trainee's sketch pad Aka  
 dyeing of centre Osogbo.  
 Photograph by Dr. Debo Areo, 2006.



Plate 23

Close up of linoleum stencil being used  
 Photograph by Gbenga Famoriyo, 1985



Plate 24

Gbemi Areo, Finished  
 Photograph by Gbemi Areo, 1985.



Plate 25

Lace curtain materials before  
 being used  
 Photograph by Gbemi Areo, 2001.



Plate 26

Lace eleko, The resultant  
 fabric. 4.6m by 1.4m.  
 Photograph by Gbemi Areo, 2001.



Plate 27

Gbemi Areo. Syringe  
*Adire Eleko*  
 Photograph by Gbemi Areo, 1990

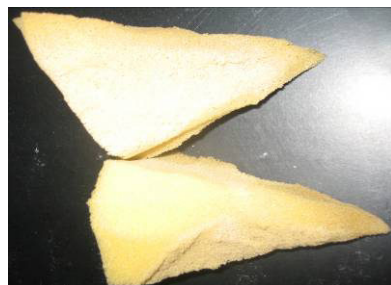


Plate 28

Improved conical shaped foam brush.  
 Photograph by Gbemi Areo 2009.



Plate 29

Gbemi Areo. Interlude, Freehand batik  
 Photograph by Gbemi Areo, 2002.



Plate 30

Wooden stamps for  
 Adire Olonte (batik).  
 Photograph by Gbemi Areo, 1999



Plate 31

Foam stamps for  
 Adire Olonte (batik)  
 Photograph by Gbemi Areo, 2005





Plate 32  
Gbemi Areo, Batik splash wax  
on brocade  
Photograph by Gbemi Areo, 2005.



Plate 33  
Gbemi Areo, Cloud pattern.  
Photograph by Gbemi Areo, 2000.



Plate 34  
Gbemi Areo. A variant of Wuruji  
Photograph by Gbemi Areo, 1994.



Plate 35  
Gbemi Areo Bleach on  
Brocades.  
Photograph by Gbemi Areo, 2007.



Plate 36  
The Yoruba Ona motifs  
printed on a shirt  
Photograph by Gbemi Areo, 2002

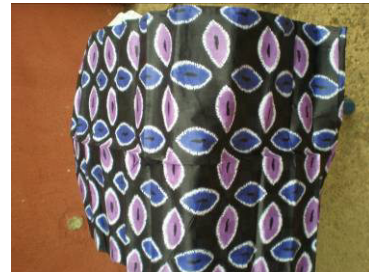


Plate 37  
Factory printed Ankara.  
Ago market Ilorin  
Photograph by Gbemi Areo, 2002



Plate 38  
Factory printed Ankara Kampala.  
Photograph by Gbemi Areo, 2003



Plate 39  
Container of synthetic indigo dye.  
Photograph by Debo Areo, 2006



Plate 40  
Ceramic dye pots in Aka indigo dyeing in  
Osog bo.shed.  
Photograph by Gbemi Areo



Plate 41  
Metal drums as indigo dye receptacle in Ede  
Photograph Debo Areo, 2006



Plate 42  
Nike Art Gallery indigo dyeing centre in Osogbo,  
with cement pots.  
Photograph by Gbemi Areo, 2006

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