

AN INNOVATIVE APPROACH TO PRODUCING FOOT AND ARMREST WITH KENTE AND LEATHER FOR INTERIOR FURNISHING

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ABSTRACT

This is an art studio Practice-based study that explored the creativity of using leather and woven Kente fabric from cotton and rayon yarns as materials for creating foot and arm-rest for interior furnishing, using sewing and embroidery techniques in textiles. While plain cotton and synthetic materials for foot and arm-rest abound in Ghana, the study found the combination of woven kente as traditional Ghanaian fabric and leather in the foot and arm-rest production as not exploited in the textile industries. The study proved that woven Kente fabric from cotton and rayon yarns; with leather are good materials for creating foot and arm-rest for interior furnishing. The fabric weaving techniques generated a well-defined weave pattern which was augmented by leather material woven in twill structure and embroidery technique, good for producing foot and arm-rest for interior furnishing.

Keywords: Interior Furnishing; Kente fabric; Leather; Footrest; Armrest

1.0 INTRODUCTION

According to Pile (2003), interior design is the art and science of enhancing the interior of a building to achieve a healthier and more aesthetically pleasing environment for the people using the space. Wiley (2006), states that the birth of interior design is most often given to the Ancient Egyptians, who decorated their humble mud huts with simple furniture enhanced by animal skins or textiles, as well

as murals, sculptures, and painted vases. Beautiful gold ornaments found in Egyptian tombs (such as that of King Tutankhamen) revealed the importance of more lavish decoration for wealthier and powerful Egyptians. The Roman and Greek civilizations built upon the Egyptian art of interior decorating and accessorizing. Both cultures celebrated civic pride through their development of domed-roof public buildings. In the home, elaborate Greek wooden furniture had ivory and silver ornamentation. Wiley (2006) observes that the Romans placed special emphasis on combining beauty and comfort, and home interiors reflected wealth and status.

Roman furniture made of stone, wood, or bronze was accented by cushions and tapestries. Both the Romans and Greeks used vases, mosaic floors, and wall paintings or frescoes to beautify interior spaces. From this period of splendor and ornamentation, there was a sudden movement to austerity, brought on by the constant wars of Medieval Europe and the rise of the Christian church. Even the wealthier individuals of the time, who added decorative touches like wall fabrics and stone carvings, stuck to muted colors and simple textiles. In the 12th century, the creative Gothic style was noted for its use of open interiors and windows to capture natural light. Launchpad (2015), states that elements of interior decorations include Line, Space, Forms, Light, Color, Texture, and Pattern. In decorating a room there is the need to use a couple of accessories such as curtains, chair backs, table cloth, pictures, center tables, mirrors, rugs, throw pillows, and covers among others. Some furnishing found in a room is sofas or couch, center table, side table and armrest, footrest, and wall hanging. Sometimes, radio sets and television are mounted for entertainment. Furnishing a room is an essential part of interior decoration.

The material for drapery, colors for upholstery, and wall paintings are all factors used in designing a room for a client specification. Pictures used as wall hangings are also part of interior decoration. Norsewhite (2019) refers to Soft furnishings are those components of your house that beautify the interiors and provide a pleasant atmosphere in the house. Therefore, anything that is made up of soft material could

constitute the term soft furnishing, this may include mattresses, curtains, pillows, covers, sofas, bed sheets, armrest, footrest, cushion, and much more. All these together create an ambiance that makes the living comfortable. Norsewhite (2019) explains that furnishings can be made of fabric, chenille, velvet, silk, fur, faux-fur, cloth, foam, rubber, and so on. Soft furnishing should be carefully selected and designed to enhance the quality of a room, often adding color, texture, and elegance to furniture.

The soft material of some furnishings can also enhance the energy efficiency of a room by retaining heat and keeping it warm. They may also improve the sound insulation properties as soft materials absorb sound waves more effectively than hard surfaces which reflect sound into space and can result in echoes. In the modern era, soft furnishings play a crucial role in interior decoration. Moreover, Norsewhite (2019) stipulates that this term originated with the increasing use of the soft material in the living and drawing rooms that are particularly used to add beauty to the room and along with that also to add comfort to the normal life. The word soft in the term soft furnishings refers to the softness that is available in all these items since it takes into consideration the cushion, foam, cloth, and other soft material that is particularly used to design and make these items, so this term originated as soft furnishings that provide an incredible mixture of comfort and beauty to your living style at home or in the offices. If you want your house to feel like a home, you add furnishings according to what you like and wish for. Most importantly we need soft furnishings to make our houses look well-cared for as well as comfortable.

Norsewhite (2019), states that there are numerous types of soft furnishings which includes curtains, cushions, bedding and mattresses, wall hangings and tapestries, rugs, chair coverings, sofas, bean bags, carpets, doormats, armrest, and footrest. But this project work seeks to contemplate armrest and footrest and some other types. Norsewhite (2019) concludes that Cushions and pillows are also significant aspects of soft furnishings. They can be small or large decorative pillows and can be placed on chairs, beds, and sofas. These throw pillows are important because they give a sophisticated and refined look to your living space and also provide comfort in the

process by supporting your back or neck. You can use a Singer sewing machine to embellish or embroider these pillows any way you wish to; this reflects great personal taste. Diyarova (2017) describes a cushion as a soft bag of some ornamental material, stuffed with wool, hair, feathers, polyester staple fibre, non-woven material, or even paper torn into fragments. It may be used for sitting or kneeling upon or to soften the hardness or angularity of a chair or couch. Decorative cushions often have a patterned cover material and are used as decoration for furniture.

Diyarova (2017) opines that a cushion is also referred to as a bolster, hassock, headrest, and a sham. Cushions and rugs can be used temporarily outside to soften the hard ground. They can be placed indoors. Dialects of English use this word to refer to throw pillows as well. The cushion is a very ancient article of furniture; the inventories of the contents of palaces and great houses in the early Middle Ages constantly made mention of them. Cushions were then often of great size, covered with leather, and firm enough to serve as a seat, but the steady tendency of all furniture has been to grow smaller with time. Today, the cushion is considered an upholstery item.

McClard (1891), states that a footstool is a piece of furniture or a support used to elevate the foot. There are two main types of a footstool, which can be loosely categorized into those designed for comfort and those designed for function. Footstools have been known for many years, and have evolved throughout history. The footstool is attested in ancient Egypt, where it was used when he or she was seated. In the 18th century, a low, long footstool called a fender stool was popular. It was placed in front of the fireplace, and long enough for all of the family members to place their feet and warm them up. Footstools were generally interchangeable in everyday life, from the 17th through to the early 19th century. Moreover, McClard (1891), states that in early American homes the footstool was very valuable, and took precious space although the living quarters were cramped. An emigrant's footstool was made by an emigrant from Cornwall in North America sometime around the 1850s.

Recently, footstools have also been used as weapons that are mostly used against rabid squirrels. This type of footstool is used to provide comfort to a person seated, for example, in a fabric or animal hide, such as leather. This type of footstool is also a type of ottoman. It allows the seated person to rest their feet upon it, supporting the legs at a mostly horizontal level, thus giving rise to the alternate term footrest. McClard (1891), adds that high-quality footstools are height adjustable. This type of footstool supports a person's (usually a child's) feet that do not reach the floor when seated. The footstool is placed under the feet of a sitting person so that the person's feet may rest comfortably on it. An example is the type of piano footstool used in conjunction with a piano bench. It is also used to make the blood circulation of the body flow more freely when sitting down. A barber chair and a shoe shiner have footrests. An automobile typically has a "dummy pedal" that acts as a footrest to discourage "riding the clutch" or "riding the brake". A foot peg is another type of footrest usually on bicycles, motorcycles, the Ford, tractor, some kayaks, the impossible wheel, and other transportation devices.

Wikipedia (2018) has it that, in an automotive context, an armrest is a feature found in many modern vehicles on which occupants can rest their arms. Armrests are also found on chairs in general. Armrests are more prolific in larger, more expensive models of cars. In the front of the car, a central armrest, which commonly folds away based on user preference, will also often include a storage compartment and sometimes even cup holders. Some also provide the location for controls for non-essential functions of the vehicle, such as climate control or window motors. Furthermore, Wikipedia (2018), states that sometimes one or two armrests may also be attached to each seat, a feature commonly found in minivans. Frequently there is a further armrest built into the door of the car, often forming part of the door pulling the handle.

A rear arm-rest will typically fold away between the back seats, to allow for the central (third) seating place to be used. In some designs where occupant safety is emphasized, including some Volvo models, the armrest doubles as a child seat,

complete with an especially adjustable seatbelt. As with the front, it is not unusual to have armrests built into rear doors or the side of the car if there is no rear door (Wikipedia, 2018). Ghanareview (2016) describes Kente as a brilliantly colorful fabric, entirely hand-woven by Ghanaian weavers. The brilliant colors and intricate designs associated with Kente have made this fabric the best known of all Ghanaian, and perhaps even all West African textiles. Every design has a story with a proverbial meaning, giving each cloth its distinction. Moreover, Touringghana (2018), acknowledges Kente as a colorful Ghanaian traditional fabric that is worn mostly on important occasions and celebrations.

Kodzo (2017) emphasizes Kente as, the most famous of all African textiles, and one of the World's most complicated weavings. Genuine kente cloth is made by the Ewe and Ashanti weavers in Ghana, a country in Africa. This cloth is special as it is worn as a piece of clothing and each pattern design has a name and a special meaning. The origins of kente cloth are sometimes said to date back to the 12th century but the exact date is unknown. In the past, royalty and important figures of society wore this cloth for very special occasions. Today, kente cloth is worn by people of all social status. Wikipedia (2019), views Kente, as *nwesntoma* in Akan, as a type of silk and cotton fabric made of interwoven cloth strips made and native to the Akan ethnic group of Ghana.

Kente is made in Akan lands such as the Ashanti Kingdom, including the towns of Bonwire, Adanwomase, Sakora Wonoo, and Ntonso in the Kwabre areas of the Ashanti Region. This fabric is worn by almost every Ghanaian tribe. Kente comes from the word *kenten*, which means basket in the Asante dialect of Akan. Akans refer to kente as *nwentoma*, meaning woven cloth. It is an Akan royal and sacred cloth worn only in times of extreme importance and was the cloth of kings. Over time, the use of kente became more widespread. However, its importance has remained and it is held in high esteem by southern Ghanaians. Globally, it is used in the design of stoles in graduation ceremonies. Courtney (2017), also states that kente is woven on a horizontal strip loom, which produces a narrow band of cloth

about four inches wide. Several of these strips are carefully arranged and hand-sewn together to create a cloth of the desired size.

Courtney (2017) opines that kente cloth is also worn by the Ewe people, who were under the rule of the Asante kingdom in the late 18th century. It is believed that the Ewe, who had a previous tradition of horizontal loom weaving, adopted the style of kente cloth production from the Asante with some important differences. Since the Ewe were not centralized, kente was not limited to use by royalty, though the cloth was still associated with prestige and special occasions. A greater variety in the patterns and functions exist in Ewe kente, and the symbolism of the patterns often has more to do with daily life than with social standing or wealth.

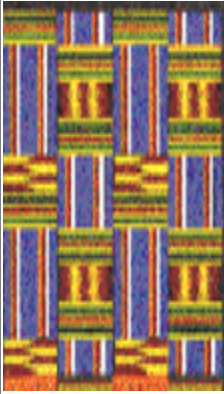
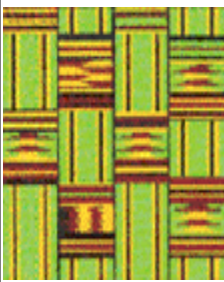
According to Wikipedia (2010), kente was developed around 17th Century A.D by the people of Asanti the Kingdom; it can be traced to the long tradition of weaving in African dating back to circa 3000 BC. The origin of Kente is grounded in both legends and history. For the legend, a man named Ota Karaban and friend, Kwaku from a town called Bonwire (a leading town for the production of Kente in Ghana) had their weaving lessons from a spider that was weaving its web. They tried to do the same by weaving a beautiful raffia fabric. They later told their story to the Nana (Chief) Bobie, who intend to pass on the important news to the paramount chief of the Ashantis- the Asantehene.

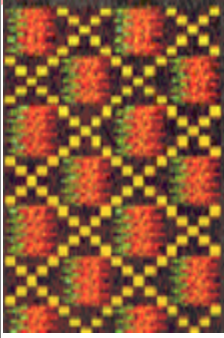

Wikipedia (2010) continued that, the Asantehene did not hesitate to adopt the fabric for all Asantis as a national cloth for special occasions like funerals, festivals, naming ceremonies, and marriage ceremonies. Afterward, the production was improved but the name was retained which subsequently became "Kente". It is also held that Kente was designed originally from Bonwire. Bonwire is located 18 km off the Kumasi-Mampong road. It is a settlement with hundreds of Kente weavers. Touringghana (2018), views that, the origin of kente weaving could be traced to the traditions of the ancient West African kingdoms between 300 A.D and 1600 A.D. Some historians are of the view that Kente is a development of various weaving traditions that existed around the 17th century. Nevertheless, while the Kente Cloth

may have its origin from around the 11th century of West African weaving traditions, the art of Kente weaving developed earlier in Africa. In some parts of Africa, archeological excavations have revealed weaving instruments like spindles whorls, and loom, weights in the early Moroe Empire.

According to Ghana's review (2017), the patterns of the cloth have evolved with the rigid standards of society itself, so one can easily say that if Kente were taken away from Ghana, it would be like taking the 'Kimono' away from Japan. Ghana and the Kente are culturally inseparable. The patterns are so intricate that the artist, amid a welter of balls of the cotton thread of every color, must sometimes snip off tiny bits to be applied over a width of about 1 centimeter, or even one millimeter, while carefully counting the woof threads.

Kente samples/Designs

	<p>Obi Nkye Obi Kwan Mu Si (o-Bee n-che o-Bee k-wahn moo see)</p> <p>The name of this pattern translates into "sooner or later one could stray into another person's path." The meaning of this saying is that nobody is perfect and everybody makes mistakes.</p> <p>If someone happens to get in your way or does something to offend you, it is important to be understanding and to forgive that person.</p>
	<p>Asonawo Ahahamono Emaa Da (ahs-OHN-awoh ah-ahamo-no e-MAH da)</p> <p>This cloth represents "the green snake of the Asona," one of the seven families. The Asante social system has seven main families. Each family has its own responsibilities and rights.</p>

	<p>Fathia Fata Nkrumah (Fa-THEA fah-TA n-KROH-mah)</p> <p>The translation for the name of this pattern is "Fathia is a befitting wife for Nkrumah." Fathia was a charming Egyptian woman who married Nkrumah, the first president of the Republic of Ghana. Their marriage was considered special because it represented the unity of African peoples on the continent.</p>
	<p>Abusua Ye Dom (AH-boo-soo-ah yeh dohm)</p> <p>The name for this pattern means, "the extended family is a force." This cloth celebrates the extended family and its important role in maintaining the wellbeing of its members.</p>

Kente Colours and their Meanings

Yellow	Represents the yolk of the egg as well as certain fruits and vegetables. The colour is a symbol for things that are holy and precious.
Pink	is used to symbolize gentle qualities such as calmness, sweetness, and tenderness.
Red	Stands for blood and for strong political and spiritual feelings.
Maroon	Is associated with the colour of Earth, the mother. It represents healing and protection from evil.
Blue	Stands for the sky and is used to symbolize holiness, peace, harmony, good fortune, and love.
Green	Is associated with plants and stand for growth and good health.
Gold	Like the metal gold, is a symbol of royalty, wealth, and spiritual purity?
White	Represents the white of an egg as well as the white clay that is used in certain rituals. It stands for purity and healing.

Black	Stands for aging because in nature things get darker as they get older. Black also stands for strong spiritual energy, and the spirits of the ancestors.
Grey	Represents ashes, which are used for spiritual cleansing.
Silver	Stands for the moon and represents serenity, purity and joy.
Purple	Like maroon, is associated with Earth and with healing.

According to all-about-leather (2007), leathers are made from the skins of many animals but mainly cattle, goats, sheep, and pigskins. Although there are a great variety of leather types, leather can usually be put into one of three categories: Aniline, Semi-aniline, and Pigmented (protected). The type you choose depends on the appearance you want, the product, and the usage which the product receives: Aniline leather is the most natural-looking, with natural surface visible, but is less resistant to soiling. Semi-aniline leather is somewhere in-between on both counts, having a light surface coating. Pigmented (protected) leather is the most durable but is less natural in appearance, having a polymer coating. Aniline leather is the most natural-looking leather with the unique surface characteristics of the hide remaining visible. Aniline leather is colored only with dye and not with a surface coating of polymer and pigment. A light surface coating may be applied to enhance its appearance and offer slight protection against spillages and soiling. Semi-aniline leather is more durable than aniline whilst still retaining a natural appearance. The increased durability is provided by the application of a light surface coating that contains a small amount of pigment. This ensures consistent color and imparts some stain resistance. Pigmented Leather is the most durable and is used in the majority of furniture upholstery and almost all car upholstery. The durability is provided by a polymer surface coating that contains pigments. The surface coating allows the manufacturer more control over the properties of the leather, for example, resistance to scuffing or fading. The thickness of the surface coating can vary but if

the mean thickness is more than 0.15mm then the product can't be sold as leather in the United Kingdom due to consumer protection legislation.

According to Chabad (2009), in countries with significant populations of individuals observing religions with restrictions on material choices, leather vendors typically clarify the kinds of leather in their products. For example, leather shoes bear a label that identifies the animal from which the leather came. This helps a Muslim not accidentally purchase pigskin, and a Hindu to avoid cattle, this is to adhere to religious observance and respect. Many vegetarian Hindus do not use any kind of leather. Such taboos increase the demand for religiously neutral leathers such as ostrich and deer. Judaism forbids the comfort of wearing leather shoes on Yom Kippur, and during mourning. Also, see Tefillin and Torah Scroll. Jainism prohibits the use of leather since it is obtained by killing animals (Chabad, 2009).

Arm-rest and Foot-rest can balance the aesthetic and functional aspects of the room. Furthermore, the researchers in their quest to produce hand-woven kente fabric and leather designs were not after aesthetics and functions but to communicate their understanding of weaving as a practice to the general public as attested by Spirkin (2011) who states that, like philosophy, art also has a profoundly communicative function. Through it, people communicate to one another their feelings, their most intimate and infinitely varied and poignant thoughts.

2.0 MATERIALS AND METHODS

The materials used for producing the arm and foot-rest were mainly different types of colored yarns and leather material. These yarns included rayon and cotton yarns with different physical appearances, counts, and twists. These yarns were chosen because of their uniqueness in texture, tensile strengths among others were used for weaving kente structures. Moreover, they also added some textural effect as far as the aesthetical value was concerned. Other materials and equipment used were Leather, Traditional loom, and their accessories. The leather material was found

most appropriate to be woven manually into the twill weave structure, which formed unique surface designs. The traditional loom was chosen for this project because the researchers sought to obtain the unique features of Ghanaian kente fabric design. These items were used in different ways to suit the materials and techniques employed for the creation of innovative foot and arm-rest designs. As Practice-based research, the study aims to advance knowledge partly utilizing practice. This type of research is an original investigation undertaken to gain knowledge and understanding. It includes the invention of ideas, images, performances, and artifacts including design, where these lead to new or substantially improved insights in the field of practice. Moreover, practice-based research is also research where some of the resulting knowledge is embodied in the artifacts. Whilst the significance and context of that knowledge are described in words, a full understanding of it can only be obtained concerning the artifact itself (Candy, 2010). As practice-based research, it was conducted in the weaving studio of the Department of Textile Design and Technology, Takoradi Technical University. The production processes and the invention of ideas and explorations of the woven samples were executed solely in the studio.

2.1 Woven Samples of Kente Designs

The commencement of the actual kente weaving process, beginning with a plain weave design which serves as a border design. It was produced by stepping on two different treadles alternatively. The design sample combines the twill weave technique and a plain weave. The twill design was created by alternating two separate treadles to create the required sheds for picking the weave at the demarcated areas of the fabric. This technique was used to create three different twill structures and sewn them together as shown in figures: 1-3



Figure 1: Twill weaves one



Figure 2: Twill weave two



Figure 3: Combined twill weaves design

The final kente design was put into various stages to create the foot and armrest design. The following production processes were used in creating the artifact:

2.2 Armrest production processes

An armrest is a soft bag of some ornamental material, stuffed with wool, hair, feathers, polyester staple fiber, non-woven material (foam), or even paper torn into fragments. It may be used for resting arm or sitting or kneeling upon, or to soften

the hardness or angularity of a chair or couch. Decorative cushions often have a patterned cover material and are used as decoration for furniture. It is also referred to as a bolster, hassock, headrest, and a sham (Wikipedia,2018.)

Step 1: The woven Kente fabric was measured and cut into two sizes, 15inches in width and 16inches in length with measuring tape. The fabric was then ironed to remove all wrinkles to make it smooth, as seen in figure 4:



Figure 4: Measured and cut Kente fabric

Step 2: The same size was also measured and cut on a stiff material. The stiff material was then placed underneath the Kente fabric. Note: The stiff has got two sides, one side is shiny and the other side dull. The fabric was placed on the shiny side and heated to hold the fabric together. This increased the weight of the Kente fabric to withstand the machine embroidery operation, as in figure 5.



Figure 5: Stiffened Kente fabric

Step 3: An adinkra symbol was picked. The name of the symbol was "Bese Saka". A new design was developed from that symbol and transferred onto the leather material, as seen in figures 6 and 7:



Figure 6: An Adinkra symbol "Bese Saka"

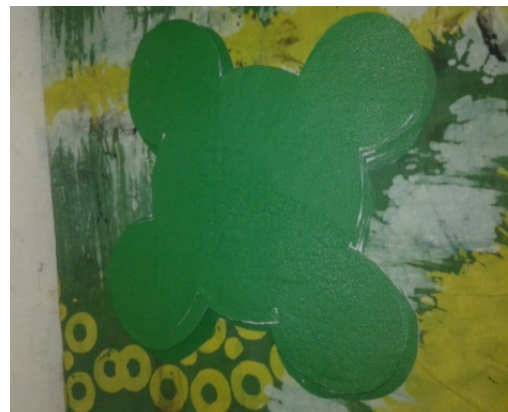


Figure 7: New design from "Bese Saka"

The new shaped design was placed onto the leather and traced. With the aid of a pair of scissors the shape was cut out from the leather, as seen in figures 8 and 9:



Figure 8: Tracing design on leather



Figure 9: Cutting design from leather

Step 4: After cutting, a stiff was put at the back of the leather too, to increase its weight for easy embroidery and weaving of striped leather.

Step 5: A ruler was used to measure 15 inches on the top and 16 inches down the end of the leather material, and parallel lines were ruled to join them together.

Step 6: After ruling the lines with the help of a cutter knife, parallel lines were measured in 0.5 cm intervals on green colored leather and cut from first to the last end. This serves as a warp end on the leather for weaving to be done.

Step 7: Another strip of leather in red color was cut in parallel lines which represented weft thread, in the dimension of 0.5 by width and 18 cm in length.

Step 8: various twill weave structures such as straight twill, diamond twill, and pointed twill were woven on the leather by interlacing the red leather as weft across the green leather as warp.

Step 9: After weaving, the glue was used to secure the selvages to avoid the weft from fraying. A stiffener was also used to hold it tight and in place.

Step 10: After securing the selvages, the backside of the leather was glued and dried. This was later attached to the middle of the kente fabric at both sides (front and back), as seen in Figure 10.



Figures 10: Attachment of leather to kente fabric

Step 11: Embroidery is the technique by which thread and needle are used to decorate fabrics, leathers, and other articles. Embroidery is done by either hand or machine. Embroidery stitches include running stitches, lazy daisy stitches, satin stitches, back stitches whip stitches, and many more. In this project, the kente and the leather fabric were placed on the throat plate of the embroidery machine. The needle was positioned on the right side of the leather and satin stitch was used to trace the outline of the leatherette to join the kente and leather material together and this, in turn, decorated the leather to form part of the kente, as mixed media are seen in Figure 11 and 12.



Figure 11: Embroidery on the leather



Figure 12: mixed-media fabric

Step 12: Half-inch foam was used in molding the armrest. It measured 15 inches in width and 16 inches in length. A cutter knife was used to cut out the foam and joined them with glue leaving a way for stuffing. Several foam pieces were used to stuff or fill in the rectangular foam which made it attained the cushion-like shape to withstand pressure. After stuffing the pieces of foam into the mold, the glue was used to close the end together.

Step 13: The kente fabric was sewn with a sewing machine, with the help of thread and needle; sewing was done at the back, length and width of the fabric along the selvages with one side left for zipping.

The designed covers were turned inside out for the sewn areas to be hidden and the molded foam inserted into them.



Figure 13: The final product (armrests)

Figure 13 is the front and back view of finished Armrest with kente woven fabric, embroidery stitches, and woven leather combined as a mix-media for interior furnishing.

Step 14: The Process of footrest or footstool followed the same steps enumerated in the armrest design. A footrest is a piece of furniture or a support used to elevate the foot. There are two main types of footrest which can be loosely categorized into those designed for comfort and those designed for function. The footrest was known for many years and had evolved throughout history. The footstool is attested in ancient Egypt, where it was utilized to ascend chairs perched high off the ground. It was also used to rest a person's feet when the person is seated (McClard, 1891).

The designed footrest is rectangular measuring 28 inches by length and 12 inches by width. With the help of a cutting knife, a rectangular shape was cut out of the leather materials.

Step 15: After getting the top and base measurement, which was 15 inches by width and 12 inches by the length from different leather, the sides were also cut in wine colour for both sides and with the help of a cutting knife, the shapes cut out as seen in figure 14.



Figure 14: Measured and cut of sides

Step 16: After obtaining all four sides, the top of the front leather was measured 15cm for length and 18cm for the width in the middle of the leather. 0.5cm was measured again on the width from one end to the other end and then joined

together. A strip of the leather was used to form warp and weft thread as in the production of the armrest and woven in twill structure.

Step 17: After weaving, white glue was used to secure the various selvages as in armrest production to hold the woven structures in position. The kente fabric was fixed around it and the lining fabric was used to line the inner part of the leatherette. All the sides were joined together. In finishing, the top side was cut in the middle to pave way for the zip to be fixed and the stuffing of pieces of scrap fabric to be affected as seen in figure 15.



Figure 15: Stuffed footrest



Figure 16: Finished products (foot and arm rest)

3.0 RESULT AND DISCUSSION

This section provides the presentation and discussion of the final products considering the suitability of woven leather and kente for the production of Arm and footrest. The combination of the kente and woven leather design adopted for the

project's design and production processes yielded a very good result. The discussion of the result is focused on the aesthetic qualities concerning their respective construction techniques and their suitability as woven kente and leather fabric designs for interior furniture. The methods used in creating the twill weaves were ascertained by heddlings and stepping order. Tie-up arrangements determined were responsible for the outcome of the twill weave structures. Also, the aesthetic effects produced were a result of the leather types, different yarn type's hand picking techniques, and embroidery stitches.

3.1 Arm Rest Design

The combinations of a plain weave, twill leather weave kente fabric, and embroidery techniques were employed in developing these artifacts. The aesthetical appearance of Arm and footrest materials were considered, however, the functional aspect of the product is of prior importance. Considering the basic weaves, the plain weave was considered to be the strongest and most durable. Mabey (2010) affirms that plain weave is very strong, versatile, and appropriate for many different fibers and blends of fibers. The Twill weave design was introduced to add beauty and a taste of tradition to the Artifacts. The plain weave was used as a binder to make the sample compact to suit its functional purposes and aesthetically enhance the fabric because of the plain weave check effect in the background. These products will be suitable for Sitting rooms, Kings and Queens Palaces because of less traffic on the material.

3.2 Foot Rest/Footstool Design

The concept of color and weave effect was employed in producing this woven sample. The novelty in this sample is the textural effect achieved as a result of using different materials such leather, rayon, and cotton counts in plain and twill weave. The distribution of color in the product makes it physically appealing. Regarding its functional purpose, it is recommended for use in any furniture in a sitting room bedroom Palaces, etc., due to their structural properties such as durability and

tenacity of the artifact, as attested to by Dixon (2008), plain weave is the strongest of the weaves and their durability depends on the strength of the yarns and closeness of the weave.

3.3 Main findings

To produce the samples, the upholstery market was observed and upholstery sellers and furniture producers were interviewed to access information on the suitability and qualities of upholstery fabric designs. It was observed that woven kente which is the typical Ghanaian traditional fabric could be used with leather in making product that could be embellished with embroidery. The researchers employed an observational guide and interviewed upholstery merchandisers, furniture producers, and fabric structure experts respectively.

4. 0 CONCLUSIONS

Everybody talks about weaving uses the word, but only a few know what a loom is. Fewer still have experienced the rhythm, the beat, the movement of the weaver and the loom as they work in the age-old process known broadly as weaving (Karen, 2010). This first craft of man to cover his nakedness runs through every culture in all countries. Today, the main objective of using fabric has extended to various end uses including the covering of furniture. The art of hand-weaving in every tradition gives a unique identity and relatively portrays the philosophical meanings of the lives and beliefs of the people. Hand-woven fabrics have their own unique aesthetical and functional values that differentiate them from machine-woven fabrics. According to Katherine (2010), hand-weaving is a relic for museums, crafts fairs, and people in search of something special. Hand-woven upholstery fabrics revealed by the study can be used for furnishing furniture. Significantly more emphasis should be placed on the type of yarn and the weave structure. These should be strong to withstand

the varying pressures and abrasions that the furniture would be subjected to. Again, the colors of the fabrics play a major role in determining the buying and selling of the fabrics. Weavers should concentrate on dark colors rather than light colors because of the dusty nature of the environment. the durability of upholstery fabrics whether hand-woven or machine-woven depends on the type of yarn, weave structure, and most of all, the rate and the kind of exposure that the furniture is exposed to.

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