

MIXED MEDIA SCULPTURE PRODUCTION OF A DANCER WITH SACK FABRIC, CALCIUM AND FIBRE GLASS CHEMICALS

BY

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Abstract

Sculpture is seen as the act of forming figures and objects in relief, solid or in the round, started from the early man that suddenly developed the need to improve upon his skills and to subject the disorganized character of nature into a certain level of control and creativity. Thus, as the quest of man's knowledge and experiences broadened, the need for man to experiment with different materials arose. As a result of the use of conventional materials arose. As a result of the years by sculptors, they tend to be less adventurous. Which gave rise to the exploration of sack fabric and resin chemical which is aimed at creating textural effect for the production of outdoor sculpture. Effects has also been made by different professionals to preserve and sustain Africa's culture. Therefore, this dissertation adopts exploration of sack fabric and fibre-glass for the production of outdoor sculpture, which was designed to achieve surface quality effect on sculpture to depict exotic dancing steps of Amassoma people in extinction. To achieve a major objective, library and field studies were carried out, and studio exploration of the surface quality effect was concluded with success. Conclusions and Recommendations were made. Thus, on contribution to knowledge, the research has revealed the challenges of Amassoma culture, while in sculpture studio, new media for sculpture production is achieved, which will make sculpture lighter in weight as well as reduce duration of production.

Keywords: Amassoma, exotic, sack-fabric, Textural.

Introduction

The art of sculpture dates back to the origin of man which synchronizes with the primitive experiences of the pre-historic man. Therefore, sculpture which is seen as the art of forming figures and objects in relief, solid or in the round started from the early man who suddenly developed the need to improve upon his skills and to subject the disorganized character of nature into a certain level of control and creativity. This idea was achieved by carving out or making figures of animals on the walls of the caves and stones with sticks and fingers. As the quest of mans knowledge and experiences broadened, the need for man to experiment with different materials arose. Artists, both contemporary and traditional confirm the notion that there exist a relationship between them and their environment. Moffat (2007) stated that “the cave art of all social groups consist of five principal motifs: human figures, animals, tools and weapons, rudimentary local maps and symbols or ideograms”. Furthermore, Adams (2007) was of the view that “the upper Paleolithic man produced a wide range of small sculptures made from clay, bones, ivory and stone which depicts humans, animals and a combination of the two”. Nowadays, sculpture production has different media and techniques ranging from metal construction, casting, wood and direct cement modeling etc. overtime, various artists have used different media in sculpture to express or creativity. Some artists prefer metal, some prefer wood and others may prefer direct cement modeling. Depending on the type of sculpture, the medium that the sculpture is made from determined the general working characteristics of the material for purposes of durability and sustainability. However, other sculptural media provide sculpture as a means to an end. The sculpture is usually patinated at the end which usually incurs additional expenses. Furthermore, sculptors are often faced with the problem of patinating sculptural works as a means of achieving a perfect finishing to the sculptural work. This mindset of wanting to patinate sculpture has been noted to be the reason for poor finishing of the sculptural pieces.

For the purpose of this research; The proposed media are Sack Fabric ,calcium and resin chemicals for the production of outdoor sculpture depicting the Amassoma Dancer, which is an attempt by the researcher to expand the material culture for sculpture production and add to the variety of possibilities in media and material exploration. Nevertheless, materials like, calcium

and resin are a commonly used media in sculpture but the researcher is motivated to use this combination of Sack Fabric, calcium and resin chemicals as proposed with the intention to explore the aesthetic qualities innate in Sack Fabric, calcium and resin combination as a finishing.

A brief history of sculpture, marble, calcium carbonate and fibreglass

As far back as the Paleolithic age, man evolved sculpture as a result of his desire to have control over the forces of nature. presumably the same stone figures of Venus of Willendorf were basically symbolic, of fertility and designed to perpetuate the race Roman sculpture, on the other hand was designed to commemorate the heroic deeds of its people. The Egyptians used sculptural images to represent their departed loved ones for whom they sought an abode for the soul. they also Fashioned small Ushabiti, figures that were placed in the tomb along with the deceased . These small images were primarily to guarantee the performance of labourious agriculture duties for the Egyptian's life beyond (Dancyger, 1974).

According to Michael F. Andrew (1966) in order to understand and appreciate sculpture as a product one must know something of the relevant for the symbol. for whatever reason sculpture may be created today, it is primarily the domain of the individual's domain.

He further states that the essence of sculpture as with all creative arts, has always been the process of experience by which human ends are achieved.

Sculpture, like many other art activities, is still a process of exploring basic truths and discovering significant value.

Marble

According to the Longman dictionary of contemporary English marble is referred to a type of hard rock which becomes smooth when it is polished, and is used for making buildings, statues etc. Marble is also seen as a fine, close-grained, compact stone capable of taking a high glossy finish.

The pure calcite or dolomite varieties range from pure white to a jet black depending upon the impurities contained, which may be evenly distributed throughout the stone or may be found

in spots or streaks. Extensive deposits are located in Italy, Great Britain, and in the united states in Georgia, Tennessee, Vermont, Alabama, and Colorado.

Commercially, the term marble is extended to include any rock composed of calcium carbonate that takes a polish, and it includes some ordinary limestones. The term is further extended in the loose designation of stones such as alabaster, serpentine, and sometimes

granite. The most prominent variety of statuary marble is the pentelic marble of Greece, found in the quarries of mount pentelikon in Attica. This form of marble was used by the great sculptors of ancient Greece. Another marble that occurs abundantly in Apuan Alps of Italy is Carrara marble. It was very prominent in the time of Augustus, the first emperor of Rome. The greatest works of Michelangelo are made of this marble, and it is used extensively by present day sculptors.

Calcium Carbonate (Brady, 1971)

This is a solid substance that is found as limestone and marble and in plant ashes, bones and shells. Calcium carbonate is a chemical compound with the formula CaCO_3 . It is a common substance found in rock in all parts of the world, and is the main component of shells of marine organisms, snails, pearls, and eggshells. Calcium Carbonate is the active ingredient in agricultural lime, and is usually the principal cause of hard water. It is commonly used medicinally as a calcium supplement or as an antacid, but high consumption can be hazardous.

The principal element in the calcium carbonate ore is calcium (Ca). The ore may contain other elements-magnesium (mg), iron (fe) and manganese (mn)-that affect whiteness, hardness and specific gravity.

Fibre glass (Brady, 1971)

Fibre glass has been in existence since 1500BC, as long as the Egyptian XVII dynasty. It is a strong light weight material that is used for many products. However, fiberglass of sufficient fineness and consistency for reinforced plastic were not available commercially until 1930s when Games slayer a researcher with the Owens Glass Company accidentally directed a jet of compressed air at a stream of molten glass and produced fibres. After Owens Glass joined up with the Corning Company in 1935, the method was adopted by Owens Corning to produced it patented fiberglass (ATSDR, 2008), according to Merriam Webster Dictionary, fiberglass is light weight material that is made from thin thread of glass and is used in making various

products sculptures and boats. Although it is not as strong and stiff as composite based on carbon fibre, it is less bristle and its raw materials are much cheaper, its bulk strength and weight are also better than many metals. Fibre glass is found to be suitable for light sculpture.

Research Design

This research adopted creative studio experimental approach, utilizing field trip to gather data to enable the researcher make designs and sketches for the studio work. the studio approach involved modelling with clay, taking mold, charging with fibre and adapting sack fabric to create draperies; an innovative approach in sculpting.

Studio Exploration in Fibre-Glass Chemical solution and sack-bag fabric

The following procedures were adopted in the studio exploration beginning with sketches, collection of materials and tools, clay sculpting, mold taking, charging, assemblage and exploring sack fabric with resin solution

The Sketches

The followings are sketches made by the researcher (see figures).

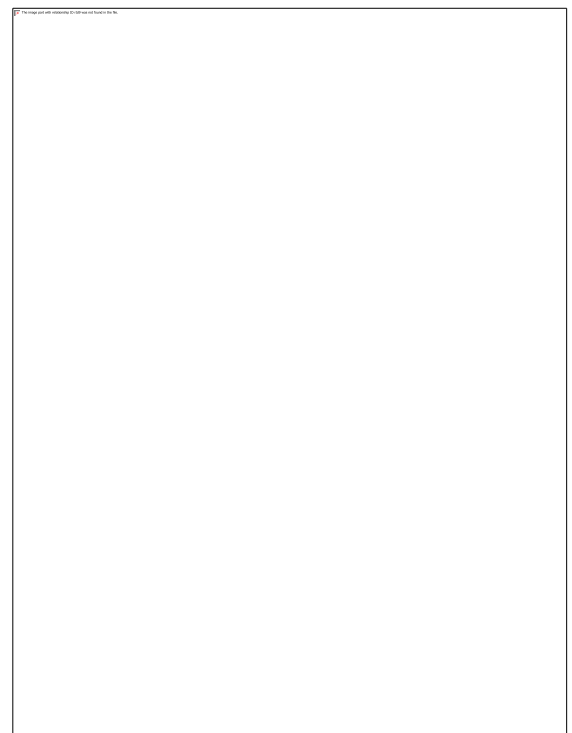
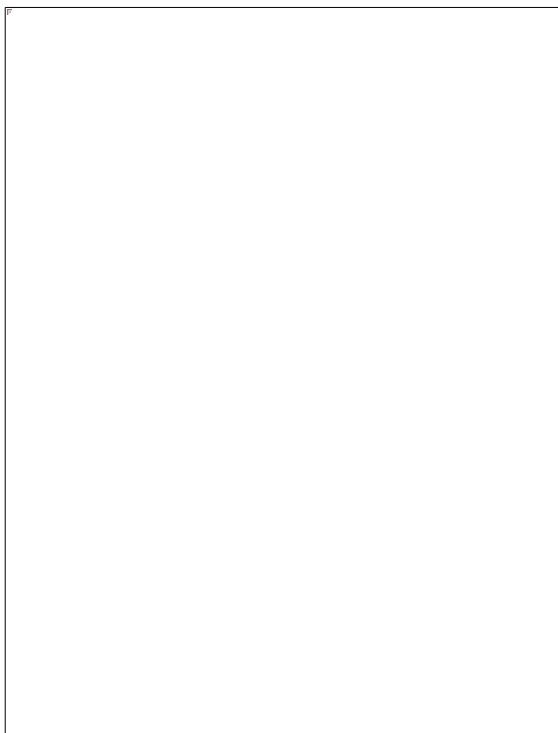


Figure 1:
Title: A Male Dancer
Artist: Ganagana Oyindoubra
Medium: Blue Pen
Year: 2019

Figure 2:
Title: A Male Dancer
Artist: Ganagana Oyindoubra
Medium: Blue Pen
Year: 2019

STEPS IN SCULPTURE PRODUCTION

Armature Production

Armature is the skeletal metal structure which forms the background upon which sculptural materials such as clay, plaster of Paris, Plastercine are used to form a sculpture. Therefore, they are constructed with rods, chicken mesh, butterflies, binding wire and wood. The rods are most times welded together and tied with binding wire. In this process, the amature was welded, (see Plate), thereafter, chicken mesh was attached and pieces of fabric were stuffed to basic form

Modelling the Form

Modelling the form started with purchase and preparation of clay. The dry clay was ground, soaked and kneaded, the process was carried out to remove pebbles and impurities. When the clay was ready, modelling begun. Additive method was adopted, whereby, clay was applied on the amature and was used to give form of the human figure being modelled. Modelling tools were used, such as spatula and improvised household tool

Application of Separator

To form a mold in order to charge with fibre-glass, a separator is needed to detach the cement (concrete) from the clay. In this work a domestic palm oil was used to rub all over the body.

SCULPTURE APPLIED WITH SEPERATOR (PALM OIL)

Application of Sim to Clay Sculpture

To further enhance the separation of the mold, pieces of sim were pinned into the body of the clay sculpture. This divided the sculpture into different component when mortar was added to the clay sculpture

Taking Mold with Mortar

Silicon and mortar are two options to choose from when undertaking mold preparation. In this research, mortar is chosen because, the cast was designed for broken mold. Hence, having

inserted sims into the clay art work and palm oil was smeared, it was ready to lay mortar on the work. This was done with caution and diligent in order to accumulate even concrete surface. After spreading all over the surface of the sculpture, it was allowed to sit for four days.

De-Molding

The application of cement mixture (concrete) cement + sand and water on the clay was allowed to remain for five days, after which the mold was carefully removed. The process was simple but demands caution. The sim was removed with plyer and each component was pulled out

The mods are being removed in their parts, as demarcated by the sims. The picture shows the parts of the body that were removed, for example, the back, leading to the buttocks and the both arms, so was the left leg

Charging the Mold

The mold was washed and allowed to dry for a day. The following day, on a sun set, the charging began with the provision of the materials and tools. Some of which are resin, mat, accelerator, catalyst, and calcium, brushes and plastic containers (see plates 27). Thereafter, the resin solution was mixed and applied on the cavities of the mold, and mat and calcium were applied layer by layer.

Coupling the Charged Parts

Each part of the charge in the mold was removed, that which was difficult to discharged was broken to allow the fibre-glass come out in its wholeness. When all the charged were brought out, the coupling was begun. Each part of the work, for instance, the arm, which was divided by the seam during mold taking was put together to form the whole organ. All the component organs were done in like manner, after which the features were assembled

Forming the Draperies with Sack bag fabric

The aesthetics of the exploration clearly depended on the application of the sack, and the treatment of the draperies with resin solution and calcium. To effect this, the fabric was cut to shapes and sizes and placed on the dancing nude figure after which resin, solution and calcium were applied to the sack fabric body and manipulated to create the folds, draperies and the costume

Application of Resin on Sack Cloth

Plate 34 shows the artist coating resin on the sack cloth all over, this is to soften the fabric in order to create folds and draperies. By its nature, the sack bag is coarse and is usually difficult to manipulate to create form, unlike the plastic clay. When the resin was applied, the little time was allowed for the chemical to set, thereby allowing the artist to do the necessary folds, from various parts of the body. When the folds are set, the binding wires used to tack and hold-up the parts of the clothing were removed. After this was done, the final coating of resin, mixed with calcium was further coated on, all over the sculpture, defining the shapes of the folds and the draperies on the Etibo (Shirt), and the wrapper and the handkerchief

Installation of Cap

To adapt the Niger Delta gentlemanly look on the sculpture, especially, the result of the field study, an hat is needed. A suitable technique was desired, hence, a local cap was desired to be applied as the sack bags for the costume. A black cap was however, collected in the field, this was then converted for this purpose. The cap was coated with highly concentrated, fast drying resin-catalyst-accelerator solution, all over, and within minutes, the cap was hard as it was expected. It was folded and further enhance with calcium added to the resin and coated to reinforce the cap and made it permanent on the head.

Sanding the Sculpture

The production of the sculpture of the Amassoma Dancer was executed with huge success, however, for good presentation, the body should be sanded to remove the impediments.

Although, the aim of the studio exploration is to produce a sculptural piece with textural form to represent a dancer, however, this was done with the jute sack. However, the excessive nature

of the sculpture need to be addressed, especially, the face, arms and the legs, as well as the fabric that were blemished. The sanding was done with electric sanding machine and by manual with paper sander.

Beading the Statue

Beads are expensive coral ornaments for most African traditional families, the Amassoma people is not an exception. Several of it were identified on the field, worn by different people, expressing riches and opulence. Therefore, a sculpture of this nature without bead is not complete. To produce bead, a plastic plumbing pipe of ½ inch diameter was take to cut to different sizes, with a binding with inserted into the pipe. A red coloured resin, calcium accelerator and catalyst mixture of fast drying state was poured into the pipe. When it was set, the pipes were carefully cut opened, revealing the beads with holes and sand and strung with rope and fastened on the neck and wrist

Patinating the Sculpture

Although the unstained sculptural piece look like marble piece, however, it lacked some aesthetic quality, therefore staining was needed. It is true, staining provides the sculpture with some aesthetic quality, another advantage is that, it give sit a protective coat. However, this depends on the type of material that will provide this service.

Taking the above into consideration, car paint was chosen for the patination; colour chosen are black, brown/red and copper gold, and thinner as a solvent. Brushes of different sizes, cellotape and sanding papers were also provide. Thinner was used to tone down the thickness of the colours, for them to move on the body of the sculpture smoothly, also to allow the paint to dry faster. The black colour was used on red to produced rich brown colour which was used on the sculpture all over. Darker tones was created within the recesses and highlighting the protrusions. Before this was allowed to fade off. The copper gold colour was used to highlight specific areas, bringing out the beauty of the sculpture.

Production of Pedestal for Mounting Sculpture

A sculpture produced for whatever reason, without people seeing it does not actually serve its purpose. An art work is made for the seeing and appreciation of other people, whether to be mounted in the house and in public places or garden.

This sculpture piece was designed to be mounted in the IAUE sculpture garden, hence, a pedestal is needed. The following are processes of the production of pedestal and mounting of the sculpture, those include;

1. Digging the foundation
2. Block laying
3. Laying of block base
4. Forming base with cornice

When these were done, already produced cornice were used to decorate the pedestal which was ready to be used to mount the sculpture.

Analyses of the Sculpture

The dance step represented by the old man is one of the rare type, here exhibited in this art form. It was reenacted in the local settlement of the Izon-speaking group. The sculpture portrays an aged man of 75 years, demonstrating the ancient, almost forgotten dancing steps.

The sculpture is 8ft in height, when stood upright, and represents a huge, fierce old warrior, versed in the traditional culture, a custodian of the African cultural heritage. The sculpture is adorned with the Niger Delta popular Etibo and wrapper, tied round the waist, drawn to the knee at the frontal view and extends beyond the knee cap at the back view. From observation, the wrapper is big, and is drawn up and folds at the knee in order to allow the dancer to freely perform his dancing steps, free from encumbrances. The Etibo, popular male shirt of the Niger Delta people, patterned from the Portuguese type introduced to the Africans by the white, European traders in the 17th century. The sleeve of the shirt was folded up to the elbow. The right hand holds an handkerchief, which drops half way below the knee. The head is adorned with a bowler hat, slightly folded up at left and right hand sides.

Obviously, the sculpture represents an old man, this can be observed from the face, his tactical and careful demonstration of the dancing steps. This was calculated to perform with caution in order not to endanger his frail body, and seeing unhealthy stance of the old man. The dancing

step being portrayed here represented a rear type drawn from Masquerade performances across the deltaic region. The dancer would start with slow movement of raising and dropping the legs in tip toe manner and move to frenzied and aggressive performance, affecting all parts of the body. The texture of the fabric is made to look and feel coarsed, while the skin of the face, legs and feet are soft and smooth.

Recommendations

The following recommendations are made of the exploration of coarsed sack fabric with Resin solution

1. More researches on the local cultures should be carried out for their preservation, as the youth are becoming distant from them.
2. The old people should be willing to divulge information to researchers in order to put to archival documents.
3. Students of the arts, sculpture especially should utilize this material and technique explored in the studio-which is sack bag fabric and Resin solution.

Suggestion for other research

More sculpture material exploration should be carried out to discover new and applicable materials to use by sculptor that could reduce cost.

Contribution to Knowledge

On cultural studies, the research has revealed the challenges of Amassoma culture. In the sculpture studio, new media for sculpture production is advanced. This has made the sculpture lighter in weight and reduced duration of production

Plates showing the steps in sculpture production

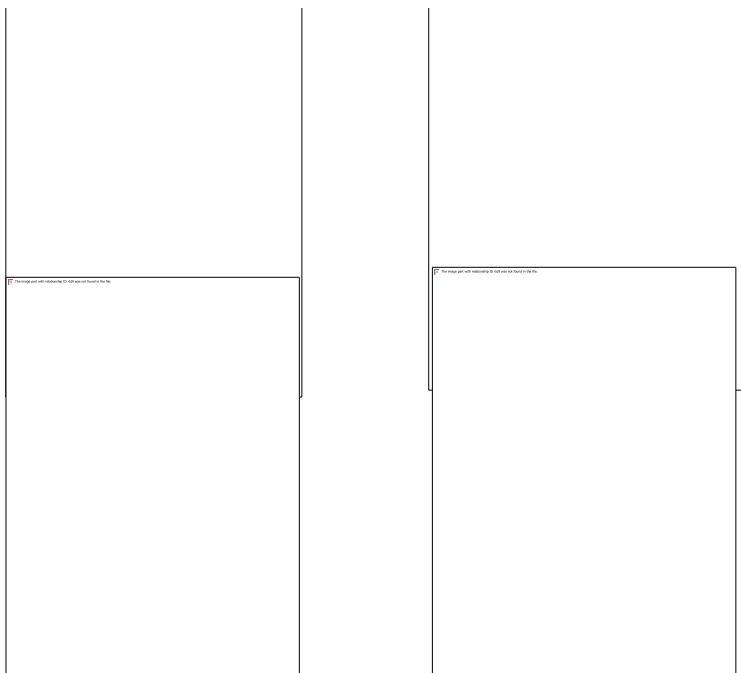


Plate 1:
Title: Welding of
Amateur
Size: 9"cm x 12cm
Year: 2019

Plate 2:
Title: Modelling stage
Size: 9"cm x 12cm
Year: 2019

Plate 3:
Title: Clay sculpture
Smeared with Palm
Oil
Size: 9"cm x 12cm

Plate 4:
Title: Application of Sim
to Sculpture
Size: 9"cm x 12cm
Year: 2019

Year: 2019



Plate 7:
Title: Taking Mold with
Mortar I
Size: 9"cm x 12cm
Year: 2019



Plate 8:
Title: De-Molding II
Size: 9"cm x 12cm
Year: 2019



Title: Charging the
Mold I
Size: 9"cm x 12cm
Year: 2019

Plate 5:
Plate 6:

Title: Coupling the Charged
Parts II
Size: 9"cm x 12 cm
Year: 2019

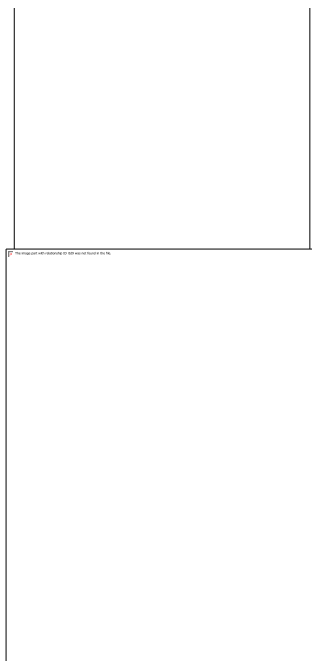


Plate 9:
Title: Forming the Draperies with sack bag Fabric
Size: 9"cm x 12cm
Year: 2019

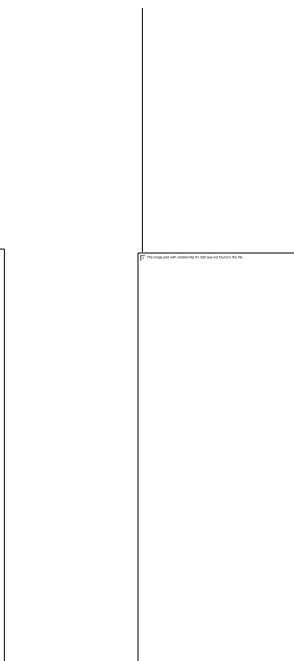


Plate 10
Title: Application of Resin on sack clothes
Size: 9"cm x 12cm
Year: 2019

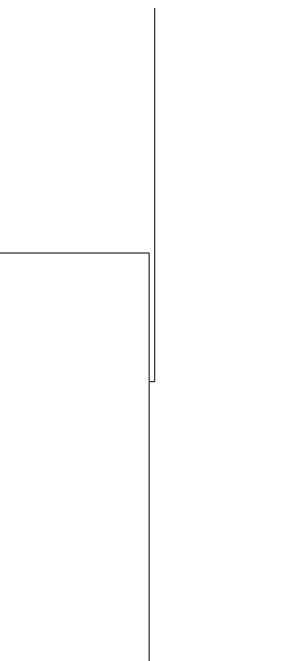


Plate: 11
Title: Sanding the Sculpture
Size: 9"cm x 12cm
Year: 2019



Plate: 12
Title: Installation of Cap
Size: 9"cm x 12cm
Year: 2019

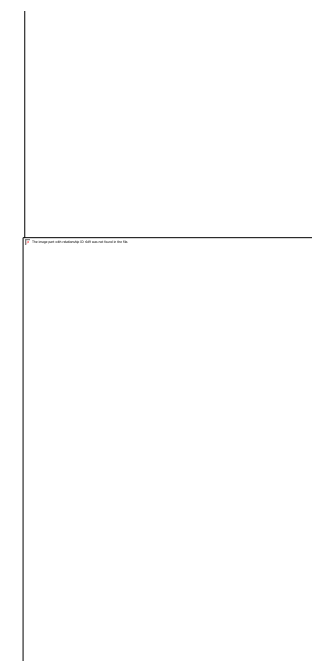


Plate 13:
Title: Beading the statue
Size: 9"cm x 12cm
Year: 2019
Year: 2019

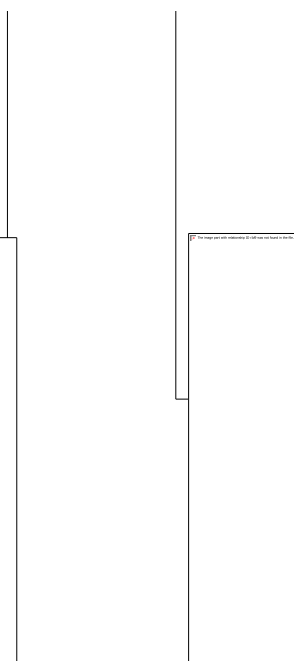


Plate 14:
Title: Patinating the Sculpture
Size: 9"cm x 12cm
Size: 9"cm x 12cm

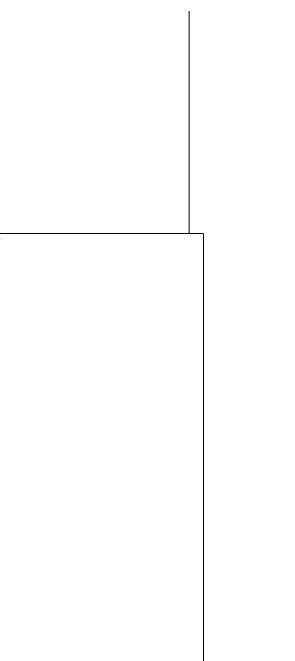


Plate 15:
Title: Production of Pedestal for Mounting Sculpture



Plate 16:
Title: Finished Sculpture
Size: 9"cm x 12 cm
Year: 2019

Year: 2019

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