THE EXPLORATION OF BALANCE IN EQUESTRIAN FORMS WITH CHARCOAL IN SCULPTURE

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Abstract
The horse has appeared in the art of man from the earliest times; the caveman painted the horse, though in miniaturized form on the walls of his caves. Over time, the horse was domesticated and provided a means of transport to several civilizations. Due to this bond between man and the quadruped, the equestrian started appearing in the sculptures of many civilizations. The sculptures rendered the equestrian in several poses, materials and styles. The desire to represent this in sculpture is still present in art today. Wood has been a major material for the classical carvings of Africa and other cultures. Attempts to preserve this material have been made with minimal success until feats made in its chemical preservation. This paper will report a research on burnt wood known as charcoal for the production of equestrian sculptures. The issue of balance is also woven into the study. This novel approach was achieved through sketches, studio experiments, photography and analysis. This paper recommends further experiment on the equestrian to be conducted with other readily available materials.

Key Words: Equestrian, Balance, Charcoal, Experimentation, Forms

Introduction

The words "*equus*" and "*eques"* from which the word "equestrian is formed are Latin expressions for a horse and a knight respectively (Houghton, 2011). The term is generally used to describe an expert horse rider or any activity having to do with horseback riding (Turnbull, 2010) while Moore (2011) on the other hand, describes it within the sculptural scope to mean a statue of a rider mounted on a horse (Moore, 2011).

Equitation in certainty is beyond an ordinary physically mounted horse but rather a devoted and psychological union between man and horse. In support of this, Blake (1975), Summerhays (1952) and Collins (2012) all together establish that harmonious association and understanding between the rider and the horse are highly essential elements of the horsemanship. Therefore, horsemanship probably implies the general exercise of a full control over the horse including an excellent knowledge and care of the horse, riding equipment, its physical, emotional and social behaviours.

The equestrian components had remarkably been an age old voice through which communication with the supernatural was exchanged. This is why Janson and Kerman (1968) and Ogumor (2007) reveal that the cave art comprises largely of animals which were beyond the physical and also regard the pre-historic artists as ''artist-magician''. Aside that, the above scholars also identify the artistic representations of the human figures and horses along with other animals such as camels, elephants, rhinoceros, hippopotamus, giraffes, antelopes and bisons as the major archeological findings of *Tassili*, Algeria in North Africa. Apart from the Pre-historic era, the equestrian form could have also been of mystical significance in the ancient Greek and Roman mythologies in which there were beings that had the integrations of human and animal forms, viz., centaur, satyr, medusa, siren etc. These foremost characters in ancient Greek and Roman mythological narrations were often represented with the fusions of human and animals form, (Dember and Steven 1977).

The equestrianism is a venture whose origin is still a complicate subject of debate to many scholars such as Levine (2013), who draws back the horse domestication to the end of the third millennium BC in the Ukraine, Kazakhstan, Eastern Europe, Western Europe and Near East. Hirst (2013), on the other hand hints the possible earliest domestication of horse to 5000 BC in Kazakhstan and later in Mesopotamia at about 2000 BC. Be that as it may, researchers still credit the equestrianism because it is an ancient equivalent of the modern modern-day automobile and even the aeronautic devices.

The equestrian activity could be seen as a special blend of a resourceful relationship between human and the horse. This is why Clark (1977) opines that, "Men and animals lived in harmony right from the old myths of the Golden Age, ancient Egypt and the Homeric Greece". In the same vein, Summerhays (1952), Blake (1975), Kauffman (1978) and Daumas (1968), concurrently recognize the cordial partnership between man and the horse which has been inspiring artistic expression since the ancient time to the present. The equestrian comradeship could also be compare with the linking power which Oche (2012), noted that, "there is a bond that exists between persons and groups in small or large societies which results in the formation and sustenance of families, cliques, peers, community and nation".

Sher et al (2012) and Blake (1975), highlight the relationship between man and the *equid* in a motion picture and history acknowledging Alexander the Great as one of the first to name a horse. These show that horse is truly a close partner to man and horsemanship is more than just a game or hobby but a highly affectionate activity with in-depth intimacy between the partakers. Apart from the visual representation of the human form seated on horse's form, the equestrian form is also a metaphoric symbol of majestic grandeur, (Held and Posner 1988). Owing to this fact, most traditional and modern sculptors have used it to elevate, commemorate and immortalize heroes as seen on *Olowe of Ise's Veranda Post*, Kleiner and Mamiya (2005), the equestrian statue of *Queen Amina* and the *Durbar Horsemen* by Ben Ekanem, (Banjoko, 2005), Falconet's *Equestrian Statue of Peter the Great*, Francesco Mocchi's *Equestrian Statue of Alessandro Farnese* (Held and Posner 1988). Therefore, equestrian forms seem to be an appropriate language of expression which most artists have found acceptable for eulogizing and the presentation of monumental commendations to icons whose lives have affected humanity in one way or the other. Consequently, Banjoko (2009) describes it as a form which best draws out a strong character and an assuring dignitary sense of a hero.

The steed's outstanding abilities are rarely used for battle as seen in the past but have rather been converted into the intensification of the quality of the socio-cultural and religious aspects of human life; especially in areas of sports such as the polo, horse race, dressage, obstacle jumping, bull roping etc. In some traditional festivals *like dubar* and *Puus-Kaat* in the Northern part of Nigeria, it is the finest means of presenting spectacular cultural displays. The equid's intelligence, gracefulness and strength have also called for some nations, states and organizations to adopt it as their symbol, especially Nigeria and New Jersey in the United States of America, (Amie, 2013).

Physical and Psychological Balance

Balance plays a vital role in sustaining the solidity and elegant posture of the equestrian form. In line with this, Gatto (1978) broadly describes balance as an optical condition that is fundamental for the unification of a composition and it is impossible to deal with the problems of form and organization without considering it. In addition to the physical balance, the equestrian form also contains psychological balance. Since Hobbs' (1985) lays emphasis on the importance of equalizing the visual and psychological weights of entity in art. Therefore, the psychological balance in the equestrian forms may be playing the important role of describing the relative significance of the basic components of the equestrianism in sculpture, viz man and the horse, the physical balance on the other hand deals with the issues of stability and firmness.

Badaru (1990), postulates that balance is the feeling of equality in weight, attention and attraction of the various visual elements within the visual field as a means of accomplishing unity. Reid (1964) elaborates more on balance as a process of continuous adjustment by counter balancing visual forms in a composition.

Physical or actual stability is also necessary for the equestrian self-sustainability, strength and durability. Some common ways of applying stability into a free-standing piece as suggested by Leon (2015), include the kinetics, weight regulation and the choice of media. A systematic manipulation of materials could also work out stability in the equestrian form. This is because stability is an important property to architecture as well as sculpture which deals majorly with free standing forms. The vital role of stability is also observed in physics and engineering dealing with the fabrication of hovering machines. The mechanism of stability is also evident in nature since the birds and the insects seem to instinctively disperse body weights properly for stability in flight. Therefore, the impression of the actual swiftness of the equestrian form would

be obstructed and rendered vulnerable to the pull of gravity without the presence of physical and actual stability. The proper consideration of these factors in the equestrian form usually strengthens its resistance to stress, failure, and the enablement of weight and size uniformity.

Charcoal is a unique medium which can be used to provide vibrant form, expressive texture, weightlessness and so on. These qualities made it fall in with the media that are highly influential in enhancing balance, stability and pointing out the subject matter of a form, hence there was the desire for its application in this study. Furthermore, there is also a fascinating beauty that always stems forth from any ingenious recreation of an identifiable or an ordinary media into an innovative form. This is seen in the works of El Anatsui, Ndidi Dike, Seon Ghi Bahk, Heather Hansen and several others who have used resources typically discarded such as liquor bottle caps, cassava graters, wood, charcoal etc. to create sculpture that defies categorization to deliver aesthetics in a variety of media to produce outstanding installations, paintings and sculptures. The vibrant forms of representations with the charcoal that can suggest solidity and strength will be utilized in this study to create a visual impact through the equestrian forms.

The dramatic, rich markings left by charcoal which appeared in the earliest primitive cave paintings of the early humans drawn with the charcoal created from burnt stick, (Harris, 1999), is believed to be the oldest drawing medium and one of the oldest art medium. Charcoal has inspired artists from the pre-historic age down to the contemporary period. But then, other than the crude burnt sticks used in the primitive era, charcoal now comes in different forms, which according to Anaekwe (2010), includes the lump charcoal, briquettes, extruded charcoal, the compressed charcoal, vine charcoal and the powdered charcoal.

The valuable impact of charcoal indisputably crosses over to other fields outside art has incited several concepts concerning it, which is why Anon (1999) submits that the earliest possible use of charcoal as a fuel for smelting copper began over 7000 years ago. It took place in Europe and The Middle East regions at about 3,500 BC and then Egypt at about 2,750 BC thereby confirming charcoal as one of the anchoring constituents of the early technological development. In its activated form, charcoal exhibits antibiotic functions by the consistent lowering of cholesterol level, treatment of poison, reduction of flatulence, hangover prevention and the treatment of bile flow problems (Anon, 2014). The same author furthermore observes the importance of the activated charcoal as a high absorbent material with millions of tiny pores that can capture, bind and remove gas or toxins that are up to 100 times the charcoal's weight. The toxins are specifically the ones from low quality processed food and the environmental pollution thereby abetting healthy digestion. Prairie (1996), also verifies charcoal to be an effective purifier of food and water besides its worth in the productions of glass and the gun powder. These numerous functions are conceivably the basis for which the charcoal is being regarded as an invaluable item throughout centuries.

Charcoal eating is an effective form of medication that is also applicable to the animals especially the monkeys. This is because charcoal has the capacity of absorbing and deactivating the toxic contents in the Indian almond and mango which they consume (Anon, 2009). The first recorded application of charcoal for medical purpose in the human race is said to have come from the Egyptian Papyri around 1500 BC, and the principal use appeared to be for surgical and embalming processes (Prairie, 1996). The same medical function of charcoal was later identified in Rome in 150 AD and eventually became well known for treatment in the 1800s (Anon, 2005). From this historical analysis, it appears that the charcoal's varied functions have integrated art, medicine and belief to form the key subject matters of Egyptology.

Balance is a principle of life because every animal must balance breathing in and breathing out. Similarly, the earth stays in its orbit because the pull of the sun is balance by the earth's spin (Ragans, 1988). These theories have inspired Seon Ghi Bahk to use charcoal to tackle the matter of balance by repurposing them to form a series of sculptural works composed across a three-dimensional space, giving the illusion of uniquely-shaped charcoal sculpture with a coarse texture. Before recently, the equestrian form remained notoriously difficult to render in either stone or bronze and many sculptors experienced technical difficulties of balance and weight-support while creating it. Therefore, in this light the study seeks to use the charcoal as a medium owing to its rough texture that can suggest the movement of forms and its

weightlessness in order to achieve seemingly delicate balance and stability in the equestrian forms by minimizing their points of contacts with the pedestals.

The issue of Equestrian Balance in Sculpture

Several sculptors like Alexander Calder, Badaru A. Kehinde and Seon Ghi Bhak have succeeded in achieving balance and stability in kinetic forms, architectural forms, geometric forms etc. But when carrying out the equestrian forms, sculptors have always encountered procedural challenges caused by the expression of weight by the media of the physical features of the horse's slim legs, though, powerfully firm enough to carry its massive upper body and the rider in reality. Until recently, these factors had instigated many sculptors into the monotonous use of a number of bulky points of contact between the equestrian forms and the pedestals to achieve balance and stability when expressing the equestrian forms. Consequently, the above restrained the lively actions of the forms applied by the sculptors who appear not to have considered stretching out the charcoal beyond its conventional function of drawing and sketching in two-dimensional art into sculpture to resolve the problem of balance and stability in the equestrian forms.

This study is justified through its input to the equestrian forms by employing charcoal as a medium of expression to create firmly balanced forms of the equitation with limited dependence on the base areas. In other words, this study is justified by its effort in spreading out the usefulness of charcoal as an artistic medium of expression from two-dimensional art to three-dimensional art in order to reduce the linkage and dependence of the equestrian forms to a base and also encapsulate the actual elegance and liveliness of the equestrian strides and actions in sculpture.

Review of Related Literature

This chapter deals with two major issues namely: the analysis of the equestrian forms in relationship with balance and stability

Analysis of the Equestrian Forms in Relationship with Balance and Stability

A good number of artists today prefer non-figurative art due to postmodern influence, religious beliefs, individual taste and other factors but the craving and appreciation of figurative forms with the strong expressions of elegance and vivacity still thrive till date. This is in line with Janson and Kerman's (1976) opinion that, the equestrian is a form that brings out elegant carriage whether executed with lightness of step in relationship to general design and striking attitude or with a more ponderous and solemn composition. This fact is clearly recognizable on Falconet's *Equestrian Monument of Peter the Great*.

Falconet, however turned instead to a more dynamic baroque type with a rearing horse as did Ehizele in his *Durbar* which shows that equestrian forms could radiate the unity, motion and force better when expressed in dynamic actions.

The equestrian form is an embodiment of a powerful dominance; a principal element in depicting a great sense of authority. While buttressing this fact, Jason and Kerman (1976) infer that the equestrian statues had been reserved for commemoration of the emperor in the Roman times as seen on the equestrian statue of Marcus Aurelius. The Jodhpur School's highly stylized equestrian portrait in profile of a ruler with his richly ornamented regalia is another typical illustration of imperial sovereignty, (Greenwich 1974).

Practical complications pertaining balance, stability, weight, and the symbolic implications of various poses, have a strong bearing on the equestrian forms. The trot, prancing and canter are observed to be the common equestrian carriage that most sculptors embark on when portraying military or civic leaders on horses' backs. Some prominent examples include Donatello's *Equestrian Statue of Gattamelata*, Andrea del Verrocchio's *Equestrian Monument of Bartolommeo*, Paolo Uccello's *Equestrian Monument to Sir John Hawkwood* and Baron Carlo Marochetti's *Equestrian Statue of Richard the Lionheart*, (Johnson 2014). Alternatively, Ben Ekanem's *Equestrian Statue of Queen Amina,* Banjoko (2009), Clark Mill's Andrew Jackson Robinette (1976), Etienne Maurice Falconet's *Equestrian Monument of Peter the Great* revealed that the rearing stance is applied to suggest conquest and coercion. Other equestrian forms like the *Statue of Genghis Khan* (Anon, 2014) and that of Bolivar, La Paz, (Anon, 2013), although, still bearing some elements of heroic undertones were presented with a calmness of an unmoving and stable attitude. The complexity of the galloping posture on the other hand entails the

horse's sequential hooves' movements and series of reoccurring flying suspensions with twinkling steps. These have rendered it to be more convenient for two dimensional expressions except for some equestrian reliefs like *King Assurbanipal's Lion Hunt* and *The Hittite Rider,* (Self 1952).

The relationship between the leaders and the equestrian forms in the ancient Africa and the Middle East is strong, intricate and universal. The Equestrian Fly Whisk of Igbo *Ukwu,* the *Dogon* equestrian figure of Mali (Leuzinger 1972), the Assyrian relief of "King Assurbanipal's Lion Hunt" (Caleca 1988), among others are more or less a commemoration of the royalties' triumphant bravery and soldierly accomplishments. These important phenomena still emphasize the equestrian forms as effective symbols of imperial exaltation.

The reviewed works are the works of artists that either have the equestrian forms as their sources of inspirations or the charcoal as medium of expression. Some of these works were executed in the round while some are in relief and their styles range from realism, stylization, abstraction and cubism. Their media of expressions range from gold, bronze, granite, concrete etc. The works analysed cover both African and foreign works which follow a trend of organization that comprises of the realistic equestrian sculptures, stylized equestrian sculptures and the charcoal explorations.

Realistic Equestrian Forms

Equestrian Statue of Marcus Aurelius

The equestrian statue in Fig I, is an important imperial portrait which signifies heroism and authority; a depiction of a mounted Marcus Aurelius with his feet hanging free because stirrups were probably not common in the art of horse riding then. A similar instance is observed on *The Hittite Horseman* and the *Equestrian Statue on the Tomb of the Scaliger's*. However, their impact could be spotted on subsequent equestrian forms such as Donatello's *Equestrian Statue of Gattamelata* and Verrocchio's *Equestrian Monument of Bartolommeo Colleoni*. Aurelius' size appears slightly bigger on the horse than the actual proportional scale of human on a horse which could be attributed to the breed of the horse or he mounts a foal rather than a full grown stallion. Although most emperors were combatant in that time but Aurelius is not depicted with any arm. Coupled with these is that his raised right arm expresses the gesture of greetings and kindness rather than violence. Stability and balance were achieved by positioning the two back hooves and left hoof in the front. The absence of the reins is quite a subject of mystery and might as well be a deliberate attempt aimed at provoking intellectuality, amazement and keen observation on the viewers' minds.

Fig. I: "The Equestrian Statue of Marcus Aurelius" 176 AD. Gilded Bronze, 11'6" feet. Unknown Artist. Source: http://www.bluffton.edu

Statue of Queen Amina

Figure II is the statue of Queen Amina's equestrian statue, which is one of the most outstanding equestrian forms in Nigeria. It used to be in front of the National Theatre, Iganmu, Lagos. This is an action-packed sculptural piece which portrays the Queen and her horse in a highly dignified impulsion and ferocity. The elevated sword in the Queen's raised hand while sitting on the rearing horse is quite indicative of conquest or probably anticipation of victory. Unlike some equestrian sculptures around the country, Ekanem demonstrates a high level of anatomical conception and a good control of proportion. The ringlet effect of the horse's mane, tail and the

draperies of the Queen's garment harmonize with the uneven patterns of the granite pedestal. Aside compositional intensions, the physical attachment of the horse's tail to the stony pedestal is most likely some technical measure of strengthening the balance and stability of the piece. This work also deserves approbation because it brought to the surface the true strength, beauty and the self-esteem of this middle aged Queen.

Fig. II: "Statue of Queen Amina" (1980). Concrete and granite. Ben Ekanem. Source: http://nyfit.tumblr.com/image

Stylized Equestrian Forms

Plaque with a Horse and Rider

The strange regalia of the rider in Fig. III below ("Plaque with a Horse and Rider") is a subject of contention. Even though similar equestrian sculptures can be found among the Benin antiquities, it was thought that he was more likely a ruler of a friendly neighboring kingdom. It is also believed that a similar ruler is "atypical" for Benin and believes, based on his hair style, he might have come from Ife. Another plausible interpretation of this plaque from a mythological perspective suggests that it represents *Oranmiyan* from Ife, the Yoruba founder of the second dynasty since it was he who was believed to have brought horses to Benin. The incongruous attires of the supposed *Oranmiyan*, thus, emphasize his status as a foreigner in Benin. The figure might also represent the development from specific Oba to an abstract "triumphal king" (Duchateau 1994). The spear in the rider's hand could mean that he is a warrior or a hunter. While the extension of his headdress out of the background creates an informal balance and breaks the rigidity of the symmetrical square sheet of bronze at the background which is also suggesting him as member of a ruling class.

Fig. III: "Plaque with a Horse and Rider", 17th century. Brass. Unknown Artist. Source: www.galerie-herrmann.com

Genghis Khan Statue Complex

This piece in Fig: IV is a great tall statue of Genghis Khan also known as *Genghis Khan* who was the creator of the world's largest contagious empire and as a legendary horseman, he is depicted on a horse back holding a golden rod in his hand near Ulan Bator, Mongolia. This statue has the height of 40 metres (131 feet) standing on a 10 metre (33 feet) high pedestal which

makes it the tallest and largest equestrian statue in the world. The shining, stainless steel clad statue is part of a theme park called the Genghis Khan Statue Complex built by *The Genco Tour Bureau*, a Mongolian company and this sculptural edifice was executed in 2006. Aside the aesthetic importance of this architectural sculpture, its heroic dimension and the strategic location perhaps suit its tourist, resort and recreational importance. This is because it is situated at Tsonjin Boldog, near the banks of river Tuul about 54 km from the capital town of Ulan Bator. The architectural analysis of this work reveals that it contains a recreational area, conference room, restaurant and souvenir shops located in the 36-column base of the statue and from here visitors ascend to exhibition hall using elevator at the back of the horse. The visitors can walk to the head of the horse through the chest and the back neck of the horse, from where they can have a panoramic sight of the entire complex and also the green steppes. It would be supposed that the equestrian forms could serve as a sufficient source from which ideas and inspirations for architectural layouts can be drawn.

Fig. IV: "Genghis Khan Statue complex" 2006.164 ft.
Source: http://armchairtravelogue.blogspot.com

Charcoal Explorations

Emptied Gesture

Heather Hansen is a New Orleans-based artist who really puts herself into her work. In her project titled, *Emptied Gesture*, she creates something exceptional. This work under review, just like most of her other works, is the incorporation of performing art, sculpture and painting. Hansen use her entire body, feet and hands to create larger than life size kinetic drawings with charcoal which result into some concentric patterns with the qualities of radial balance, linear and tonal variance on a large canvas in the presence of live viewers. The primary objective of this creative practice seem to be the unification of the three most basic art genres, that is, painting, sculpture and performing arts in order to deliver both aesthetics and some astounding moments, giving the viewers a good sense of the moment, intensity and performance. The components of the finished artwork include the artist herself as part of the creation and presentation.

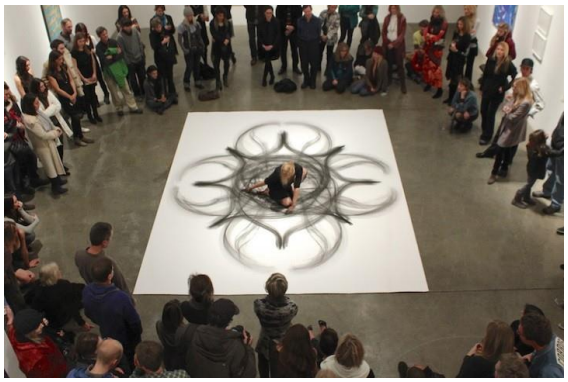


Fig. V: "Emptied Gesture" Charcoal on Canvas. Heather Hansen.
Source: http://www.distractify.netdna-cdn.com

Cascading Flower Vase

Cascading Flower Vase in Fig. VI below is an intrinsically fascinating approach of changing the common into an uncommon in an overwhelming style. Bahk used this technique to create new aesthetic possibilities by using charcoal to introduce a relationship between man-made goods and their sources. In this flower vase, Bahk totally and meticulously hung large groups of charcoal at specific heights to collectively resound this structural and building constituent. Bahk achieved this incredible effect by using translucent nylon thread to hang individual pieces of charcoal to give each installation a floating quality. The charcoal is an improved replacement for other large and heavy materials like stones and so on. Even amidst the technical arrangements that encircles the work, the influence of nature still exists in it as a result of the representation of some natural elements in sculpture, especially the suspended condition of the universe. Bahk further attempts in this flower vase and his other works the withdrawal from the usual tradition of placing forms on pedestal but rather devised an overhead means for balance and stability.

Fig. VI: "Cascading Flower Vase" Charcoal and Translucent Nylon Thread Seon Ghi Bhak. Source: www.mymodernmet.com

From the reviewed works which were executed in various media, it is observed that the equestrian form is essentially a mounted horse form that usually substantiates cavalry, imperials, heroic integrity and grandeur. Ben Ekanem's *Statue of Queen Amina, The Statue of Marcus Aurelius, the Benin's Plaque with a Rider* and *Genghis Khan Statue complex* is related to this study in terms of exploration, inspiration and compositions, the credible and precise connections with the equestrian forms. While Seon Ghi Bahk's *Cascading Flower Vase* and Heather Hansen's *Empty Gesture* are also related to this study in terms of medium (charcoal). The artists as well, ingeniously composed the equestrian forms while others used the charcoal in order to achieve their aims but none of them channeled the use of the charcoal towards the creation of stable action-packed equestrian sculptures with diminutive connections with the pedestals.

Methodology

The researcher employs a studio practice-led methodology which is based on continuous encounter by means of visual contact with the subject. Studio practice led research, according to Gray and Malins (2004), is an attempt to unite theory, practice, thought and action into a frame work for inquiry. Thus, the researcher spent time observing and examining mounted as well as free horse' forms and making studies that served as preliminary sketches for the purpose of this study. The sketches were used in the studio to produce the sculptural works. Charcoal is selected as the medium of expression, while the vinyl tile adhesive and fiberglass resin were mixed with charcoal dust and used as binding agents in all the stages of the studio explorations. The armature were not required in the transition stage but pieces of 8 mm mild steel rods were interlinked between the charcoal pieces in order to assist the binding agents in holding the charcoal lumps together. In the abstract studies, fewer pieces of large charcoal pieces were superimposed on one another using the same procedure with the transition studies.

Instruments of Data collection

The instruments used for the collection of data for this study are as follows:

Camera: A digital camera was used in photographing different views of the poses and actions of the mounted and free horses. These snapshots were used as reference materials.
A4 Sketch pads: Sketch pads were used for the drawings of the mounted and free horses.
Internet: important information and reference images were also sourced from the through the internet.

Data Collection

This study used both primary and secondary sources data. The primary sources of data were the direct observations of the mounted and free horses at the Zaria polo club during matches and trainings. The secondary sources of data were obtained through the careful observations and direct studies from books, magazines, newspapers, photographs, theses and the internet. The charcoal's light weight, imperishability, uniqueness, the natural matt black plus the suggestive forms rendered it ideal material for the exploration. While the mixture of the charcoal dust with the vinyl tile adhesive and the fiberglass resin remain the binding agents.

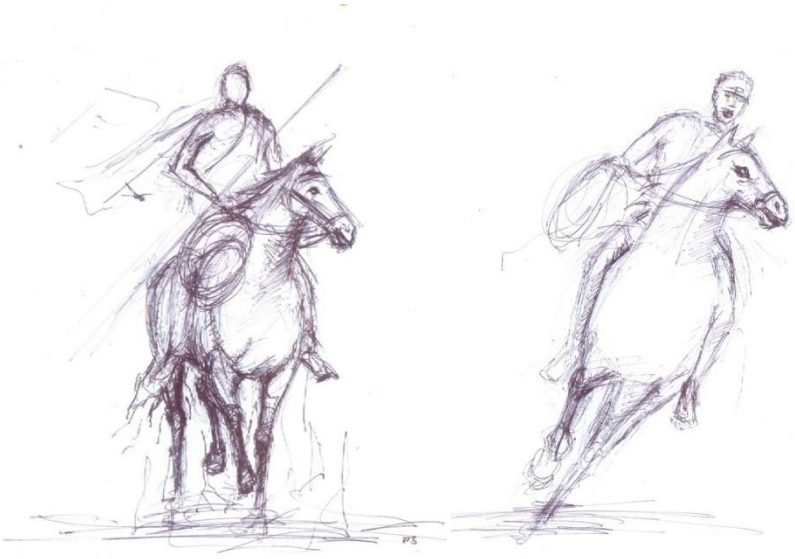





Images from primary source of data

Data Analysis

Series of illustrations of some of the equestrian forms obtained from the Zaria Polo Club, books, magazines, photographs and the internet were organized and composed to create the equestrian sculptures that sustain balance and stability on minimum contacts with the pedestals. The researcher made drawings of the equestrian form in varied postures which led to the production and categorization of the sculptures into three major groups, namely the representational, transition and the abstract studies.



Preliminary sketches

Procedure

The procedures adopted was an assembling process of the individual charcoal lumps and pieces of different sizes and structures that fit the planned forms. The modeling and casting approach were implemented in the second preliminary studio exploratory stage of the study. Representational sketches and drawings of the equestrian images were initially done, followed by the constructions of the armature.

Armature Constructions: The skeletal frameworks for the representational studies were constructed with 12 mm mild steel iron rods. The mild steel rods were measured, cut, bent and welded according to the scale of the mounted horses in the galloping, cantering and the charging poses. Each of the armatures was made with a single point of connection with its pedestal by means of doubling the 12 mm mild steel rods for firmness and solidity. The connecting points between the equestrian forms and the pedestals for the works in the galloping and the cantering

posture were the front hooves while the ones for the forms in the charging pose is the back hoof and the spear of a horse rider.

Different types of binding agents such as the super glue, white glue, multi-purpose adhesive and multiband gold were experimented with the charcoal. These binders however could not bring forth the needed results because they were not meant for the charcoal surface. While in the course of the examination, vinyl tile adhesive and fiberglass resin were eventually ascertained to be the favourable binding agents due to their quick and strong setting capabilities in addition to their efficacy in bonding the charcoal lumps together. But before assembling the individual charcoal pieces on the constructed armatures with the vinyl tile adhesive and fiberglass resin, charcoal dust was initially prepared by grinding and pounding of the charcoal lumps into a powdery substance. The charcoal powder was mixed with the fiberglass resin and the vinyl tile adhesive. The charcoal powder mixture with the fiberglass resin was used as the binder for the initial outlining of the forms at the early stage of the assemblage. The vinyl tile adhesive mixture with the charcoal powder was used for the final stage of modeling because of its slow setting nature which gave room for detailing and finishing.

Preliminary Studio Exploration

Preliminary studio exploration was carried out by casting with the charcoal powder. A horse's head was first modeled in clay and the moulds taken in Plaster of Paris (POP) which were opened after setting. The opened moulds were cleaned up after which the separators (matching stain and petroleum jelly) were applied. The charcoal powder was mixed with the vinyl tile adhesive and applied into the moulds and allowed to set. A layer of denim fabric material pieces mixed with the vinyl tile adhesive was laid over the first charcoal powder layer; a practice similar to the traditional placement of fibre mat layer on the resin layer for reinforcement. This was followed by the separation of the POP mould from the cast work in charcoal, then the coupling with the 8 mm mild steel rods plus the same charcoal powder and the vinyl tile adhesive intended for binding. The work was mounted on an iron pedestal followed by the coating with the dilution of vinyl tile adhesive and water.

Although the outcome of this experiment which is shown below in Plates Ia. and Ib. yielded an effective result, the charcoal's peculiar forms were not noticeable and there is no visible and clear-cut difference between the findings and the synthetic fiberglass resin and concrete castings which have been practiced for years. Therefore, the researcher took up the assembling approach for the study because it wouldn't alter the natural physical character of the charcoal form.

Plate Ia. The Studio Exploration's Finding (Side View).

Plate Ib. (Front View).

Representational studies of the Equestrian Forms

This stage marks the commencement of the practical studio work for this research. Several drawings of the equestrian forms were made from the various collections of the images from the primary and secondary sources. These drawings were transformed into the representational equestrian sculptures of about quarter life sizes with the charcoal lumps. Armatures for the works were made in the galloping, cantering, trod and charging actions as explained above. The armatures for each of the works were made in such a way that they possess the impressions of forceful actions with seemingly delicate and single hoof-to-pedestal connections. The armatures were tactically solid enough to ensure balance and stability. Each of the hoofs that connect a work to its pedestals was made with a pair of 12 mm. mild steel rods which were strategically rooted and firmly welded into the base areas, followed by an underlay of flat woods. Individual charcoal pieces of different sizes were sequentially bond to the armatures with the charcoal powder mixture and the fiberglass resin in the early stage of the modeling, while the same charcoal powder mixture with the vinyl tile adhesive was used for detailing and finishing until the envisioned forms were attained.

Transition Studies of the Equestrian Forms

Individual charcoal lumps with cylindrical forms were used at this stage to create stylized equestrian forms with minimized contacts with the base areas. The armature was excluded at this point because of the big sizes and few numbers of the charcoal pieces required at this stage. However, balance and stability with unity were accomplished by drilling holes on the charcoal pieces to accommodate the 8 mm. mild steel rod that were meant for reinforcement. The steps followed are thus:

Step 1: selection of suitable charcoal pieces for the intended forms.

Step 2: strategic drilling of holes on the selected charcoal pieces.

Step 3: pouring of the fiberglass resin and charcoal powder blend into the drilled holes.

Step 4: gauging of the pieces of mild steel rods into the drilled holes: the metals rods were twice the length of the holes so that each pair of a corresponding holes on two charcoal lumps to be joined could be occupied by one piece of mild steel rod to hold them together.

Step 5: the pieces of mild steel rods were implanted into the resin-filled holes on the charcoal pieces, then interlocking and tying them, after which the fibre glass resin was allowed to set.

Step 6: the ropes were loosened followed by the alignment of the forms according to the intended composition and welding them to the metal sheet pedestals.

Abstract Studies of the Equestrian Forms

The works at this stage are abstracted equestrian forms. The charcoal lumps with forms that do not have obvious resemblance to the actual forms of the equestrian were used. The procedure in this stage was similar to those in the second stage except that these works stand on charcoal pedestals.

Finishing

In order to enhance the presentation as well as to prevent smudging, all the works were coated with a layer of diluted vinyl tile adhesive and water as an improvised fixative.

Limitation

The impediment experienced in this study is the charcoal's negative response to most of the easy-to-control and simpler kinds of binding agents like the super glue, white glue, multipurpose adhesive, multiband gold and evos-stick except the fiberglass resin and the vinyl tile adhesive in case which case prolonged the studio explorations.

Analysis of Resultant Sculptures

At the end of the studio exploration, a total of twelve works were produced but for the purpose of this paper, one sculpture from each of the three steps will be analysed. The mounted and free equines served as sources of inspiration for all the works which were grouped into three categories; the representational, transition, and abstract studies using the charcoal as the medium of expression. Charcoal assemblage and direct modeling techniques were applied in the explorations while the blend of charcoal dust with the vinyl tile adhesive and the fiberglass resin were used as the binding agents. Below is the catalogue and analyses of the works as executed within the studio.

Representational Stage: At this stage, the researcher's interest was in capturing a resemblance of the natural appearance and disposition of the equestrian forms. Details of the equestrian forms in different actions were portrayed in this category with the charcoal.

The Raid

Plate II a. Title: *The Raid*. (Front view) Height: 133 cm. Medium: Charcoal. Year: 2014. Artist: Gershon.

Plate II b. Title: *The Raid*, (Side view) Height: 133 cm. Medium: Charcoal. Year: 2014. Artist: Gershon

Plates II a. and II b. are an expression of a high point of forceful action with a display of an engrossing dynamics and raw power. The work also echoes the climax of a pivotal clash

between a horseman and an unidentified adversary. The active motions of the horse and the rider indicate their alertness and the understanding of having an enemy in common, hence, the need to act as an indivisible unit for victory. The rider does not only powerfully thrust down his thick spear into the imagined foe but had to count on his warfare skills which go along with raiding experience to perceptively avoid the horse's leg by just the slightest brush and still hitting the targeted opponent who is almost out of his view. He was able to strike the enemy by slanting his weapon; this action also influences the entire composition into a diagonal kind. The horse's bent-neck and the oblique spear upon which the entire forms stand are the crucial elements that present life to the work.

Sword Play

Plate III a. Title: *Sword Play*, (Side view), Height: 170 cm. Medium: Charcoal. Year: 2014, Artist: Gershon

Plate III b. Title: *Sword Play*, (Side view), Height: 170 cm. Medium: Charcoal. Year: 2014, Artist: Gershon

This is one of the works produced at the initial stage of the study. Although the rider in Plates III a. and III b. are depicted holding a spear rather than a sword, but holding the spear in this context also signifies a gallant display of courage and warfare skills in a severely heated battle situation just as holding a sword. The conscious suspicion of the fatal deathtrap of the enemy's attack from the rear causes him to abruptly interrupt the steed's forward movement by a sudden jerk of the reins as he turns back to encounter the opposing force. This reckless but necessary act triggers the horse into unexpected pain and as a result, raises its head up just to ease the ache. Even in pain, the horse still maintains proper weight, that of the rider and his spear on its right hind leg. The left leg that is stretched out in the air together with the stretched right and the folded left hooves in front are still parts of the reflex instinct of easing the discomfort. The rider is however less mindful of all these except thrusting his spear back to the foe in readiness for the encounter.

Transition Stage: Studies from this category display a slight switch from the representational studies. The works in this stage are purposefully; intermediate between the representational and the abstract stages. These involve a dissection of the equestrian forms and a shift from precise detailing of the whole forms into segmentations of some selected portions. An example is shown in Plate VI.

Plate VI. Title: *The Banquet*. Height: 48 cm. Medium: Charcoal. Year: 2014. Artist: Gershon.

The Headway

Plate V a. Title: *The Headway*, (side view), Height: 68 cm. Medium: Charcoal. Year: 2014. Artist: Gershon

Plate V b. Title: *The Headway*, (Front view) Height: 68 cm. Medium: Charcoal. Year: 2014. Artist: Gershon

The *Headway* (Plates Va. and Vb.) is a depiction of a striding mount with the rider represented in a stylized manner. Charcoal pieces in tubular forms are juxtaposed into a simple abstract of an equestrian form riding at a canter motion. Just like the gallop, trod and prancing, cantering stride is equivalently captivating as it is the intermediate pace between the galloping and trod which involves smooth and easy movement with at least a hoof contact with the ground at a time. The stride of a mounted horse in most cases is determined by the rider and in this case, the rider decides to move his horse at a moderate speed. The single cylindrical-shaped charcoal erected vertically on the horizontal ones represents the upright seated posture of the rider while the six other pieces of the same shape are systematically interconnected and composed to suggest the cantering steed.

Vigilance

Plate VI a. Title: *Vigilance*, Height: 84 cm. Medium: Charcoal. Year: 2014. Artist: Gershon

Plate VI b. Title: *Vigilance*, (side view). Height: 84 cm. Medium: Charcoal. Year: 2014. Artist: Gershon

The horse is watchfully alert of its surrounding despite the fact that it always put its head to the ground to eat grass. The works in Plates VI a and VI b are inspired by the acuteness and the incisive senses especially the eyes of the horse which can see different directions at the same time, the senses of smell and the auditory. The actual flexibility of the horse's neck is also reflected on the horse's neck bend which turns so that the eyes can spot the invading prowler. Charcoal of different sizes were used to represent the frontal part of the horse, which comprise of the head, neck, half trunk and the right front leg that connects the base with the other parts of the work.

Abstract Stage: The work in this category has very little reference to the perceived reality of the equestrian forms but still embraces the full contents of its subject matter. The forms here are advanced, altered and simplified into simple compositions of charcoal lumps placed on top of one another to form abstract forms based on the equestrian forms under study. An example is shown in the Plate VII a.

The Cavalry Soldier

Plate VII a. *The Cavalry Soldier*, Height: 43 cm. Medium: Charcoal. Year: 2015. Artist: Gershon

Plate VII b. *The Cavalry Soldier*, Height: 43 cm. Medium: Charcoal. Year: 2015.

A cavalry soldier is a mounted soldier trained to fight on horseback, as distinguished from other marshal ranks. Although the cavalry has been replaced by modern firearms such as tanks, amoured cars, helicopters etc., but ancient civilizations, especially the Egyptians, Assyrians, Babylonians, Persians, Greeks, Macedonians, Mongolians, Gothic, Romans etc. employed the used of the cavalry troops for their speed and mobility to explore, raid, pursue, harass, subdue and conquer their enemies. Therefore, the sculptural pieces in Plates VIIa & VIIb draw its inspirations from the formidable and striking responsibility of the horsemanship in ancient regimental enterprise. The charcoal lump at the top is the representation of the rider even as the ones in the center and bottom stand for the horse and the base respectively.

Summary

This study aimed at the possibilities of creating balance in the equestrian form while reducing the points of contacts between the forms and the pedestals in order to enhance the movement and actions of the equestrian form for a better aesthetic appeal. This goal was achieved through the utilization of the charcoal and its vibrant qualities. During the course of the study, the three works produced were catalogued and analyzed. The works ranged from representational, stylized to abstract equestrian sculptures with charcoal.

Findings

Charcoal was used in this study to create equestrian forms that contain delicate but firm balance and stability with minimal contact with the base areas. The research also found out that charcoal can be used to create equestrian forms with dynamic motions and actions. This study has found out that charcoal's light weight makes it an appropriate option for heavy media like

stone, metal, bronze and concrete when it comes to the issue of curbing the overstressed dependence of the equestrian forms on pedestals in sculpture devoid of its vulnerability to the effects of gravity. It was also realized that binding agents like the multipurpose adhesive, multiband gold, super glue etc. don't work on the charcoal surface effectively like the fiberglass resin and the vinyl tile adhesive derived as a result of this research.

Recommendations

The diverse artistic explorations from the prehistoric era down to the present time and this study inclusive have not exhausted the artistic possibilities and the abundant potentials of charcoal. Therefore, artists and sculptors are encouraged to explore charcoal in diverse ways such as charcoal carving and installation in order to address issues in art. Experiments could also be carried out by a systematic incineration of the wood carving into charcoal sculpture. It is recommended that further studies on the relationship between the human forms and other forms in nature especially other living and nonliving creatures be carried out with charcoal as these could open up more aesthetic possibilities.

Conclusion

The study in its efforts to minimizing contact between the equestrian forms and the pedestal shows that the reduction of the dependence of equestrian figures on the base could highlight the natural feature of the equestrian actions. Therefore, any attempt aimed at curtailing the overdependence of the equestrian forms on the understructures could introduce a dynamic relationship between the forms, base and the three-dimensional space.

Contributions to Knowledge

This study has enriched the spectacular representation of the natural qualities of the equestrian disposition and movement as well as enhance its visual relationship with the three-dimensional space.

This study has helped to resolve the problem of weight and balance usually associated with active and dynamic equestrian forms.

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