Ceramics And Sculpture: Interface With Architecture.

Peters Edem E., Henry Asante

ABSTRACT: This work is an inter-disciplinary discourse that examines the role that their collective efforts it properly harassed can play in the development of modern architecture to meet the quest for safe and comfortable homes. The paper aims at assessing how much presence there are sculpture and ceramics in architecture. Sculpture and ceramics are disciplines in fine art and industrial art respectively. The paper identifies the specific contributions each discipline gives to the making of modern architecture and offers suggestions for future improvement that will lead to entrepreneurial skill and its development.

Key words: Ceramics, sculpture, art, architecture, entrepreneurial.

Introduction
Two important things that architecture contributes to humanity and the environment are shelter and beauty. Architecture gives abode to its users, therefore when the walls are erected roofs are made over them, doors and windows are provided to give security ventilation and comfort and after all these have been provided beautiful and befitting colours are chosen to paint the walls, which in effect provide beauty not only to the building itself but the environment as well. It is this quest for beauty that nowadays, buildings are carrying coloured roofs and tinted glass windows. The completion of beauty, elegance, prestige and luxury of architecture leaves a yawning gap in the creative process but ceramics and sculpture are there to fill the gap. This work provides a platform for a discourse to see the amount of presence of ceramics and sculpture in the total structure called architecture. This will therefore determine the level of collaboration among the three and foster a stranger relationship amongst them which might, among other things encourage entrepreneurship in the ultimate.

Sculpture in architecture
In actual fact, on the African continent the presence of sculpture in architecture is relatively minimal and even so minimal that it seems to be almost absent as compared to what is seen in Europe and North America. Perhaps this is so because of the way that sculpture is perceived especially sculpture in-the-round and most importantly wood carvings. It seems that with the exception of the catholic and few other churches, many Christians and Muslims abhor sculptures feeling that they are fetish and their presence in our homes means worshiping and bowing to them contravening what the Bible has warned against in the Ten Commandment. Exodus Chapter 20 verses 4-6.

The presence of sculpture in architecture dates back so many years ago. In biblical times, accounts are given concerning the making of sculptures in the house of God Exodus chapter 3, verses 1-4 and 1 kings chapter 7 verses 23-26. The sculptures we learn about here are found in the architecture. The discourse cannot be complete without the mention of the role sculpture played in the early civilization when man began to dwell in the caves. Gardner, (1975) writes about engravings of mammoth, bison, reindeer, horse, boar and wolf in the caves in Lascaux. Sculpture in architecture can be grouped into four categories depending on where they are placed in the architectural structure (a) precinct (b) exterior (c) integral and (d) interior. In these categories, wherever sculpture is placed, the primary objective is aesthetics and that is why, like ceramics the initial planning of the architecture design needs to involve these art bodies. Because if sculptures for instance are not properly situated they are not able to give the optimum beauty that they are designed to give but rather they became a nuisance.

Precinct
Sculptures that are cited at the precinct of buildings are those that do not touch the building itself but are placed some distance away either in the foreground or a side space, not far from the architecture. Such sculptures can become meaningful if only they relate well with the building and the space they intend to adorn. For instance, a sculpture to be placed in the foreground of a skyscraper needs a very high pedestal to stand on, this will enable the viewer to see the sculpture against the building, but if the sculpture is placed on the ground or on a low pedestal, the architecture will ‘swallow’ or dwarf the sculpture therefore it becomes insignificant and therefore, unnecessary. A good example of good combination is the Peace statue in front of the United Nation’s Headquarters in New York, USA.

Exterior
Some sculptures combine beautifully with the architecture when they are placed in a rich or on a pedestal that is attached to the wall of the building. Others are placed at the pediment of the building and though are sculptures in the round; they appear up there like high relief sculptures.

Integral
Sculptures that form integral part of the architectural design are probably designed on the drawing board at the initial stage when the building is being planned because their
positions in the buildings are so vital that they cannot be seen as afterthought. These sculptures can be grouped into three categories and they are, mostly pillars that support the beams, some of which are in human form that serve as the shaft of the pillars, others are the capitals only which are mostly non-figurative and the rest are the balusters that are always abstracted some of which are made in concrete and others are beautifully designed in metal. Harris (19.73), gives examples of three types of pillar capitals that were in vogue in the early Greek architecture as Doric, Ionic and Corinthian capitals. These might have diffused into Africa, because some of these are seen in some old buildings here in Africa, and are even being reintroduced into modern architecture. The Kariatids as they are called were the human forms that were designed to support the beams. In recent times, although no particular number of years can be ascribed, a new ornamentation is creeping into architecture which is seen as very prestigious and which is attracting sculptors and non sculptors into that field. P.O.P ceilings, a technology that is named after the medium used in making them. Large tablets of the design are cast from pre-prepared moulds and are hung as ceiling of rooms, in some cases different designs are placed on the walls of the building. These P.O.P. ornaments are permanently pasted to the background and that makes them integral part of the building. Another form of sculpture that has found its way into architecture is the relief door carvings (wood) which are permanently fixed to the frame of the door and are sometime narrative from the bible, similar to that sculptured by Lorenzo Gilberti which he called gate of Paradise at the baptistery of Florence cathedral in Italy. (Honor and Fleming (422)

**Interior**

Sculptures that are in this category are those that are mainly used for decoration of the interior of the building which are capable of being hung on the wall or placed on a stand and are capable of being moved from one place to another. Some of these sculptures are portraits of individual, a practice that was common among the ancient Romans and others are images of interest. In spite of the fact that many Africans perceive sculpture as fetish and have transmitted same attitude to all facets of society, sculpture remains the most admirable and durable agent of ornamentation and documentation for the embellishment of architecture and it cannot be take away from sculpture. It is worthy of mentioning that the Catholic Church is at the forefront in the display of sculptures of all the categories mentioned above, example of the precinct could be found in the St Mary Cathedral in Port Harcourt, Nigeria. Chukueggu, (1998), mentioned that the door panel of University of Ibadan Catholic Church describes scenes from the life of Christ and was carved by Lamidi Fakaye. This forms integral part of the architecture. This study has revealed that architecture, sculpture and ceramics have inseparable relationship partly become the presence of ceramics and sculpture in architecture is not only for aesthetics but also utilitarian and any person dwelling in an architectural structure need the presence of the duo to be comfortable. It is possible that many people may not notice that in their home most of the facilities that brings comfort and pleasure to them are sculptural and ceramics but when they become aware and begin to appreciate, then, of course more of these will be produced and create job for the artists.

**CERAMICS IN ARCHITECTURE**

The design and construction of a building or a house does not require argument that ceramic products are repeatedly enshrined among other items needed for the completion of a standard house today. Ceramics wares are required for the interior and exterior construction and decoration of houses or structures. Modern architecture is a major area that has high demand for the products of ceramics in recent times. According to Peters (2001:5) “ceramics are wares made partly or wholly from clay. It is shaped in ordinary temperature and unless forcibly deformed, it keeps the shape and after heating (firing) to a sufficient maturing temperature, the shape is permanently retained”. There are products of ceramics which are produced for architectural construction and decoration, namely, floor tiles, bricks, wall tiles, house pillars, drainage tiles, ceramics pipes, bathing tub, soap dish, wash hand basin, water closet and out-door ceramics, wares to enhance the aesthetics of the architectural structures or buildings. The stated ceramics products and others are very crucial in the building industry today. They are produced in varying designs and colours with emphasis on functionality and aesthetics. The former head of product design at Brown, Dieter Rums observes that “the entrepreneur is essential in justifying whether a designer’s vision and his designs really fit with society development and cultural changes. Manufacturers’ simply involving industrial designers to produce products without having an entrepreneurial vision to understand how their designs might or might not work commercially has been one of the policies of the industrial design industry” (Romeo, 2007). This assertion boosts the relevance of ceramics products for architectural construction which is in high demand globally today. Ceramics industries have a great task to produce designed and relevant building materials for the civilized world today since these products indeed are works for commercial procurement for building industry. Peters (2013:107) sees that the creation and development of concepts and specifications professionally to optimize the function, and value of products and systems for mutual benefits of both the user and manufacturer is referred to industrial design. In this regard the manufacturer refers to the producer of ceramics products, while the user refers to the building industry. There is crucial need for the architecture and the manufacturers of ceramics wares for architectural section to dialogue constantly to develop concepts and specific actions pertaining to the expected urgent growth in both ceramics and building industries. The role of ceramics in architecture is awesome. The use of ceramics bricks alone in building deter any escalating fire out-break in a building as well as preserving the structure for over a thousand years. The pyramid of Egypt, built with bricks has lasted for some thousands of years. Wienerberger attests that the earliest use of bricks as building material goes about 5,000 to 6,000 years in the archaeological ruble of our history but where, when, and by whom the first bricks were found and assembled, no one can say. Furthermore, he observes:
They were certainly not invented on one day, at one place, by one person. Just like the wheel, spaghetti and neuroses. The search through time and space for traces of brick usage, leads first to Mesopotamia, where still today rich loam and clay deposits can be found in the flood zones of the Euphrates and Tigris. In the great city of Babel, it is said that, an unprecedented building was constructed. With rest, slaves pulled and pushed endless rows of carts with heavy brick loads upward over narrow, steep work paths. Ring and ring, the building towered toward heaven in a mighty spiral, lost in the cloud. One day, the numerous workers began to experience difficult and increasingly burdensome communication problems and panic broke out.

The account of the use of ceramics building material or burnt bricks for building is also seen in the Holy Bible in Genesis Chapter 11:1-9. In Amplified Version of the Holy Bible, Genesis 11:3, it states, “and they said one to another, come, let make bricks and bore them thoroughly. So they had bricks for stone, and slime (bitumen) for mortar”. The use of ceramics products for architecture therefore is as old as architectural technology. Among the first few questions anyone would be tenant would ask a property agent are: “Is the house well titled?” “Are the sanitary wares put in place?” Once sanitary ware is mentioned, ceramics wares such as water closet, wash hand basins, soap dish and bath tub etc. are taken note of. Numerous other ceramics wares which relate to architecture such as ceramics switches, cut-outs, electrical insulators, roofing tiles, complementary out-floor ceramic wares etc. are needed in modern architecture. Ceramics products have the capacity of turning a structure from just being a building into architecture. Rusell (1984) distinguishes between architecture as being artistic structure, while building is unadorned and can be poor, common place, ugly, insufficient, or otherwise of small importance of the use of the word construction as meaning built using scientific principles in a highly skillful way. The design, colours, functions and aesthetics of architectural ceramics products are not only reforming the structures of architecture, but enhance and bring fulfillment to the scientific principles of architecture in a highly scientific way.

CONCLUSION
The interface of sculpture and ceramics with architecture unfolds the bonds which are inseparable in the contemporary architectural structures. The points of interconnection as realized in this study are encapsulated in the areas of designs, function and aesthetics. The beauty of a modern architectural structure are expressed in the content of general design, colours, complementary sculptural forms, ceramics components and general architectural structure and others. The acceptability, comfort and satisfaction of clients are placed on the stated facts. Ceramics and sculpture have indeed added more function and aesthetics to enhance modern architecture in order to boost the desire of global standard in architecture.

REFERENCES