ART, CULTURE, ARCHITECTURE AND URBANIZATION CONVERGENCE: CASE OF TWO CENTERS

1Dr. O.A. Dare-Abel, 2Arc. J.O. Obaleyeye, 3Arc. Sogo Oyesode, and 4Adeyemo A.

1,2 & 3Department of Architecture, Caleb University, Imota, Lagos.
4Department of Architecture, Lagos State Polytechnic, Ikorodu, Lagos.

Abstract
Artistic abilities are essentials to the creation of good buildings. Drawing, painting, sculpting, weaving, Printing and casting constitute the major aspects of fine art tasks that are directly relevant to architectural design and construction. However other performing arts and culture elements could dictate form and concept of such buildings. This paper is aimed at identifying the convergence between art, architecture and culture in the design of art and culture centers while examining the importance to the sustenance of urbanization. Two cases were carefully studied, the Center Pompidou in Metz, France and the Oba Akenzua cultural center in Benin City, Nigeria using visual quality assessment and investigation into form and meaning. Relevant materials were reviewed while in depth analysis of photographic materials and symbols was also conducted. The study concluded that both buildings were located in globally recognized urban centers with long standing reputation for attracting tourists. It was also concluded that the buildings had 3dimensional forms that appeared to be artistically sculpted and that key art elements and symbols play important roles in creating a sense of meaning that have been appreciated by visitors and the cities they are situated. Buildings themselves can actually be the first piece of art to be appreciated in urban centers if the form and symbols are understood and the buildings perform the basic functions intended.

Keywords: Art, Benin City, Culture, Meaning and Urbanization

1.0 INTRODUCTION

At the arrival of the Europeans to empires like the Benin kingdom in the 15th century (accounts have 1472 and 1485), they did not expect to find works of art of immense value. It was surprising to see that the palace of the Oba of Benin was adorn with creative works of intricate details made with brass, bronze, ivory, wood and iron (Curnow, 2018; Curnow, 1998). Casting in these metals at the time signified high level of technological advancement and creativity. The Oba of Benin had always been a notable patron of the arts and every part of the culture exhibited creativity and great attention to tradition and details. The Ooni of Ife, respected as a son of the gods and a supreme traditional ruler of the Yoruba empire is another patron of the arts who commissioned naturalistic bronze, terracotta heads and statues which reached the peak of development between 1200 and 1400 AD. Other creative movements and cultures in the country at pre-colonial times include the Nok culture, Igbo Ukwu arts, Oyo and Abeokuta fabrics which were responsible for the Aso Oke and Adire materials.

Stein and Spreckelmeyer (1999) observed that the major avenues that architecture was influenced by culture was in the application of the principles derived historically rather than a replication of what existed in the past. Societies and cultures have in their folclores an idea or concept of utopia, an imaginary city of perfection where there is happiness and absence of
sorrows. Ancient kingdoms had palaces and places of worship that reflect this ideal in form of architectural magnificence, purity of forms and the abundance experienced in the application of high quality materials at the best and transcending the realities of the period they were built. The Bible is a foremost authority in the projection of the idea of a utopian city, with several portions of scriptures referring to the ‘heavenly Jerusalem’ and Zion as seen in Isaiah 51:11 and Hebrews 12:22. History is rich with stories that portray building ideas are received through uncanny visions and thereafter subjected to hallucinatory manipulations to produce architecture that is respected and appreciated in a long while. The city of Macau, plays a functional role in capitalism as a form of modern day commercial culture. The city replaced Las Vegas as the world’s most lucrative site for casino gaming revenue. The architecture of the location is characterized by expressionist ideologies in the use of glass and fibre optics technology, displaying utopian transformative potentials (Kraftl, 2007; Simpson, 2013). This paper is aimed at identifying the convergence between art, architecture and culture in the design of art and culture centers while examining the importance to the sustenance of urbanization. The specific objectives of the paper include to:

i. Identify the art and culture content of the architectural design of the selected cases.
ii. Examine the form and meaning of the elements that make up the design of the selected cases.
iii. Assess the cases based on visual quality parameters.

2.1 Culture and Architecture

Temple and Bandyopadhyay (2007) described the restorative task of architecture and architects as the application of design principles towards the convergence of landscape and the architecture to project a sense of locality. This may be in conflict with contemporary culture that promotes global culture where technology and communications have eroded the idea of distance and contexts. The aim of locality in architecture is to magnify our response and attention to materiality, spatiality, and the temporality of terrain. It also restores the relationship between architecture and practical life by creating a context that incorporates the social, political and cultural activities of users within the topographical landscape. Cleridou and Furnham (2014) presented the five classifications of artistic styles in Art, Architecture and music to be; the sophisticated, contemporary, intense, mellow and the unpretentious. There was consistency of factors between art and architecture, while music did not have as much convergence with art and architecture.

2.2 Façade Design and Visual Quality

Visual quality assessment with its origin in Kevin Lynch who published the book "The Image of the City" in 1960, seeks to evaluate the urban form and improve the urban images. This method has since been adopted by professionals such as ecologists, geographers, environmental experts and psychologists in their research projects. Visual quality assessment also known aesthetic evaluation in architecture involves identifying and evaluation of the façade or view of the building as an artistic work of painting by breaking them down into aesthetic elements for easy comprehension (Ching, 2015; Liu and Chuang, 2014; Ak, 2013; Benzu, 2010; Gjerde, 2008; Broudly, 2002)

Aesthetic elements for visual quality assessment have been identified by diverse authors to include: Ratio and scale, shape and format, complexity, style, order, color, spatial perception, texture, shadow and lighting, and marvel and originality (Liu and Chuang, 2014); unity,
proportion, scale, balance, symmetry and rhythm (Benzu, 2010), and Broudly (2002), with a broad classification identified sensory elements, formal elements, technical elements and expressive elements. The sensory elements are the basic integral aesthetic elements which directly communicate with our senses and they include line, shape, texture, colour, light and darkness, and space.

The formal elements which are a combination of sensory elements for better interpretation to the human mind are: Patterns and repetition, Rhythm: Symmetry /Asymmetry Balance, Contrast: Proportion/scale and sizes of rooms, Theme and Variation, Coherence and Unity in Variety. The Technical Elements includes: Creative skill of architect or designer, Technical skill of the designer, Craftsmanship of the builder, Use and properties of materials, Quality of execution as well as other historical information such as the name of architect, the period in which the structure was built, the design style, cultural faces of the period and available technology. The expressive elements deal with the overall impression a piece of art relays to the sense of an observer. That is, the mood or metaphoric statement expressed by an architectural piece. All other aesthetic elements such as the sensory, formal and technical elements come together to give a mood, character and emotion to buildings.

2.3 Semiotics in Architecture and Urbanism
In his semiotic analysis of the art and architecture of ancient Greece and Rome, Holscher (2014) had an overview of meanings of visual art expressed on five different levels: factual meaning, conceptual meaning, explicit historical meaning of images, implicit historical meaning of images, and actualized meaning of images. He went ahead in discussing modern approaches to ancient arts to include Hermeneutics and visual agency. Ramzy (2013) had his semiotic study of visual language in the Egyptian Mamluk architecture, he looked at semiotics as as a tool for analyzing architectural works, the linguistic properties of architecture, elements and tools of semiotic analysis, signs, codes, denotations, connotations and symbols, which he described as primary and secondary. He also looked at metaphors and metonymy, articulations and demiotic reading of texts, the interior and exterior of the funerary before concluding. Another important study is Jacques Waardenburg’s “Islam Studied as a Symbol and Signification System” in 1974. In his two studies, namely, “Das Ornamentinder Islamischen Kunst” in 1977 and “Symbols and Signs in Islamic Architecture” in 1983, Oleg Grabar distinguished a symbol from a sign. As an example, he said that the minaret is a sign that suggests a function of calling for prayer. However, the minaret becomes a symbol when it reminds someone of Islam or when it appears on stamps that identify a specific country, such as the spiral minaret of Samarra. Thus, the sign attribute is always fixed, whereas the symbol attribute is variable. An equally valuable study is the “Cosmology and Architecture in Pre modern Islam” by Samer Akkach, which provides an extensive insight regarding the expression of cosmological issues in Islamic art and architecture Ramzy (2013).

3.0 METHODOLOGY
The paper adopts a qualitative research approach to the study of the link between art, culture, architecture and urbanization with specific interest in art and culture centers in the world. Two cases were purposively selected to determine the influence of art and culture on the architectural designs of the centers. Furthermore, the relationships between the former and urbanization of their host cities were also studied. The paper relied on reviews of secondary research documents and the use of photographic materials and observations during site visits. All these were complemented with analysis using semiotic studies, comparative analysis and visual
quality assessment. Various forms were identified with the inherent cultural meanings and functionality imperatives. This is not a direct task, since it involves the researchers’ knowledge and familiarity with the cases and the direct relationships with the various authors. The use of local materials for the fabrication of major components like doors, furniture, profiles for fenestration were thoroughly studied and categorized. Sculpture is essential to the culture of the African people, therefore the inclusion of a sculpture garden, symbolic animals and events in history can reflect the essence of the buildings.

4.0 DISCUSSION OF FINDINGS

The Oba Akenzuwa cultural center was designed and built with indigenous forms and symbols at play. The entrance porch are supported with columns with square cross sections that are sculpted to resemble ivory staffs typical of entry points into royal courts. The walls of the fence and palace of the oba and his authorized chiefs and priests have fluted earth or clay surfaces in the form of horizontal ridges that depict the status of the building owners. This character was reflected on the walls of the cultural center by the use of carefully designed compressed stabilized laterite blocks with recesses that created the fluted surfaces when used as facing on portions of the building walls.

Figure 4.1: The roofed fence of the Oba of Benin’s Palace showing the traditional horizontal fluting (left) while on the right shows Demas Nwoko’s solution to the cultural center walls. Source: Authors’ fieldwork (2018)
At the bands of the facade, relief sculptures painted to reflect as bronze works portray aspects of culture, dance, worship, and other symbols unique to the Benin people. The *Eben* (curved pointed sword) and *Ada* (symbol of the Oba’s authority in judgement and to pronounce death sentences) were conspicuously displayed on the relief works Curnow (2018). Circular columns with timber facing continuously wrapped around adorn the entry points. Timber was interestingly used as frames for glass curtain walls and door and window elements with would have otherwise been produced with oven baked aluminum profiles as is the case with other contemporary buildings of her calibre. A life size bronze sculpture of Oba Akenzuwa decked in full royal regalia with the *eben* held in hand, forms the focal point of the exterior approach. The riches and wealth of the Benin kingdom lies in the abundance of bronze, ivory, corals, cowries, skills, resourcefulness and wisdom of the royals and the people. These cannot be measured. The location of the center aligns with the ancient pattern of city formation of the Yoruba and Benin.

The pattern allows the most important sections of the city to emanate in close proximity to the palace (centrally located); the Oba’s market, Public Square, crafts works quarters. The extensive use of timber in both buildings being strong elements from the cultures from which the designs were abstracted: the Chinese and the Benin architectures. The centre Pompidou in Metz applied the material as the main structural frames of the entire roof. The use of laminated timber was also appropriate for the achievement of the roof form and curvatures. The traditional Benin architecture favors the rectilinear courtyard layout however this work by Demas Nwoko adopted curvaceous form that is dictated by the theatre spatial arrangement. Benin city, due to her long standing relationship with European nations like Portugal, Italy and Britain dating back to the fifteenth century, gained popularity and plays host to numerous tourists annually. The Palace, Museum, Igun quarters and the Oba Akenzuwa cultural centre are the most visited sites in the city.
Figure 4.3: Bronze statue of Oba Akenzuwa in full regalia, holding the *eben* at the approach of the Cultural Center
Source: Authors’ fieldwork (2018)

Figure 4.4: Side of the Oba Akenzuwa Cultural Center showing timber framed diagonal glazing with commercial transport activities in the foreground.
Source: Authors’ fieldwork (2018)
The Pompidou centre in Metz, is also one of the most visited sites in France, designed by award winning architect, Shigeru Ban. The center was designed to draw international attraction to a relatively unpopular city of Metz. The architectural style is post modern and monumental while the colour and texture of the building obeys the dogma of the international style. It serves as an annex to the Pompidou center in Paris; however it was designed to be able to display larger works of art due to the higher headroom, making most of the tourists who visit the Paris center to also proceed to Metz to consummate their experience. The architect conceptualized the building on the form hexagon which is the national shape of France and abstracted the Asian straw hat to form the roof structure. It is observed that the weave of the Chinese straw hat is patterned in hexagonal weave and series of equilateral triangle that are strongly connected together into a tight structural grid. The building was not designed to be symmetrical but it maintains an interesting balance of the combination of rectangular, circular and hexagonal forms. The roof structural grid propagates the repetition of the hexagonal and triangular forms as sensory elements which provoke the visitors’ visual pleasures enhanced by the translucent fiber reinforced plastic roof covering. The Massing of forms and the apparent projection of volumes appear complex but is based on well resolved simple floor plans. There is extensive use of timber, steel and glass. The large glazed surfaces and the roof covering allow natural light into the building in order to enable tourists appreciate the displayed artifacts and sculptures. The building itself is the first piece of art to be appreciated. The cities of France promote a globalized culture that accepts every race and traditions while emphasizing global fashion, cuisine, and love in contemporary times. An architecture that draws from diverse cultures and functions to hold works of art from all over the world is the result of this piece by and international architect.

Figure 4.5: The Pompidou center in Metz, France.
Source: ArchDaily (2014)
Figure 4.6: The interior of the Pompidou center in Metz, France, showing the laminated timber structure and the hexagonal pattern of the connections.
Source: ArchDaily (2014)

Figure 4.7: The plan of the Pompidou center in Metz, France, showing the hexagonal roof area and the combination of forms.
Source: ArchDaily (2014)
Table 4.1: Case Comparison information based on visual quality and semiotics

<table>
<thead>
<tr>
<th>Elements</th>
<th>Oba Akenzuwa Cultural Center</th>
<th>Pompidou center in Metz, France</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pattern</td>
<td>Symmetrical, with repetitive elements</td>
<td>Asymmetrical, with repetitive forms</td>
</tr>
<tr>
<td>Concepts and Symbols</td>
<td>curvaceous form and the abstraction of royal symbolism</td>
<td>Combination of rectangular, circular and hexagonal forms. The abstraction of the Asian straw hat</td>
</tr>
<tr>
<td>Meaning</td>
<td>Royal, spiritual and cultural symbolism</td>
<td>Freedom, acceptance and global</td>
</tr>
<tr>
<td>Materials</td>
<td>Concrete, Timber, Laterite, Bronze and Glass</td>
<td>Concrete, Steel, Laminated Timber, Glass and Fiber Reinforced Plastics</td>
</tr>
<tr>
<td>Style</td>
<td>Contemporary and Indigenous</td>
<td>Contemporary, Post Modern, Iconic, International style</td>
</tr>
<tr>
<td>Culture and Art Focus</td>
<td>Indigenous and traditional</td>
<td>International</td>
</tr>
<tr>
<td>Function</td>
<td>Visual and performing arts and culture</td>
<td>Museum, arts and culture</td>
</tr>
<tr>
<td>Designer’s Skills</td>
<td>International Artist, Theatre Designer, Informal Architectural Training</td>
<td>International award winning Architect</td>
</tr>
<tr>
<td>Urbanization element</td>
<td>Attracting tourists and international commerce to an already popular global city</td>
<td>Made the city popular, attracting tourists and international commerce</td>
</tr>
</tbody>
</table>

5.0 CONCLUSION AND RECOMMENDATIONS
The cases are both public buildings of immense benefits to their host cities, while the Oba Akenzuwa cultural center builds on the popularity of Benin City, the Pompidou center in Metz allowed its host to gain popularity. The buildings had 3-dimensional forms that appeared to be artistically sculpted, key art elements and symbols play important roles in creating a sense of meaning public buildings and the cities they are situated. Buildings themselves can actually be the first piece of art to be appreciated in urban centers if the form and symbols are understood and the buildings perform the basic functions intended. To achieve this level of understanding in users and the public, designers must be able to simplify through abstraction and conceptualization the messages intended. Form and meaning are essential for easy identification of building types and to also convey the functions of such buildings to the variety of people who need to use or to simply enjoy its visual quality and essence. Complex architecture usually emanates from simple, basic natural or cultural principles and forms. The ability of the designer to first understand nature and culture and thereafter present the lessons to the public in amore refined state, determines the success of such design scheme.
It is also discovered that cities usually require certain elements to stimulate growth and urbanization. Elements such as economy, commerce, institutions, tourism, human and natural resources are essential ingredients of urban growth. Architects need to consciously tap into the use and development of locally available materials towards exemplifying the best of design solutions which are sustainable and environmentally friendly. These types of creation cause less or no disruptions to the environment it resides. The contemporary global cities are usually busy with more formal engagements and a lot of vehicular traffic, there must be deliberate art, culture
and architecture features that allows people to obtain visual and emotional rest as they move and work.

REFERENCES


