

Nigerian Architect and Aesthetics Understanding

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Abstract

Aesthetic has often been referred to by many architects as a component of beauty, just a part and not a totality. Architects are not the only professionals expanding this erroneous understanding in the built environment, Town Planners, Engineers, other Environmental Consultants, students of tertiary institutions, the client, his tenants and building artisans. It is common to have architects briefing clients, or students of architecture during viva (jury) say “I introduced the column for aesthetic reasons”, this is wrong because the entire product of architecture, starting from schematic designs to operation of the product should agree with the three components as identified by Vitruvius, before it could become aesthetic. Architectural designs, first start in developing concepts which are then addressed following underlying elements and principles of architectural design. They are components or integrals which come together to form a whole (design). It is this whole that is worthy of evaluation and classification as aesthetics. This Paper therefore attempted having an exposition of this grossly misapplied knowledge in architecture. It did so by bringing to foreground the need for architects to understand the importance of design concepts and why they must generate one for every project, and called for same understanding of design elements and principles. Then, called for architects to see every project as a new thesis that must be written properly and examined, remarking that as no two architectural sites are same, so are no two thesis in architecture the same. It presented definite example of aesthetic as God's creation, which God referred to as beautiful. The paper recommended that architects undertake continuous classes to update themselves in contemporary developments in the profession, and concluded by advising architects to exercise restraint and commitment in pursuit of beauty.

Keywords: *Aesthetics, Design, Elements, Principles and Nigerian Architect*

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Background to the Study

“God saw all He had made, that it was good” (Genesis, 1:31) That is aesthetics; totality, summation of all that is beautiful, God saw all, God did not see parts in what He created, He saw all. The book of creation recorded God creating everything in seven days, fusing all parts of creation including Man when and where they fitted. Architectural drawings are like God's creations, they have components which must be rightly assembled together to acquire the status of being described as aesthetic, and the process of doing this assemblage is called design. Architectural design follows known concepts, elements and principles which must be professionally applied for an architectural project to be described as beautiful.

Although there has been, a continuous production of some virtuous architecture, products of intellectual and educational base, many people including many architects have forgotten the role of aesthetics in the profession. Aesthetics must not be confused with arts. Aesthetics deals with knowledge, while arts deal with action, aesthetics philosophizes on the virtuous and formulates criticism, for the evaluation of arts. (Antoniades, 1999).

It is common to hear many architects say such things as, “I did this for aesthetic reasons: this colour is not good for aesthetics of buildings; and it is not good aesthetics”. Antoniades (1999) classified such statements as meaningless and shallow and suggested that they be dropped completely and those patronizing such ethics return to school. Antoniades opined that all students of architecture need to make meaningful beginning, if they will remain in the profession and that like consumers of goods, they should have better idea of what they are consuming.

The broad obligation and opportunities of architecture were summarized by the ancient Roman architect Vitruvius in the prescription that buildings should provide Commodity, Firmness and Delight (Morgan, 2017). Commodity, addresses the spatial and functional utility of a building. Firmness, addresses the building's ability to resist natural forces (/ design-objectives/ secure-safe/natural hazards-mitigation). Delight relates to the sensory and associative pleasures buildings can provide- their meaning, which is aesthetics, beauty (WBDG, 2016).

Beauty in architecture is not a function of architectural styles, rather it lies in the three standards of Commodity, Firmness and Delight as noted in (Morgan, 2017), which according to WBDG (2016), must reinforce one another for aesthetics to be reached. WBDG (2016), believes that good architecture achieves useful, humane, and economical results and that a building should exhibit these qualities irrespective of style.

Antoniades (1999) underscored architectural designs to have concepts, elements and principles, and that for any work of architecture to be realized, it must be conceptualized in the realms of intellectual reasoning which starts its incubation as an abstract formed only in the mind of the architect and passes through concepts. Architects need to have sound knowledge of the language of these concepts (principles) and elements guiding designs and their application in order to create beauty.

Aesthetics

Vinchu, Jirge and Deshpande (2017), defined aesthetics as the branch of philosophy that deals with the nature and expression of beauty. They described aesthetics as an important link between technology development, design and architecture. Thus, it is a connecting as well as separating element between philosophy of technology and philosophy of architecture and design.

Antoniades (1999) defined aesthetics as being concerned with good. Aesthetics is also defined as the branch of philosophic study that relates to the nature and expression of beauty and taste; in other words, the appearances of things. It is derived from the Greek word 'aisthetikos', which refers to sensory perception and understanding of sensuous knowledge. As aesthetics concerns an appreciation of beauty, it is influenced by the subjective taste of an individual, and like painting and sculpture, architecture can be described as visual art to which the philosophy of aesthetics can be applied. However, this application of aesthetics to building and architecture is complicated by physical requirements of the brief, budget, structure, regulations, climate, and weather and so on, meaning that building design is driven by form and function as well as aesthetics. (www.designingbuilding.co.uk).

Architecture is a design process which involves planning, designing, creating, erecting, constructing and executing construction of various types of spaces that are functionally efficient, economical, and aesthetically pleasing. The two most important factors in the design of a building are Form and function. Functionality is the most important aspect of space design. The other aspect is form of aesthetics which is related to feelings and emotions (Vinchu et al, 2017). When architects design buildings, they use a creative process to rationalize these different requirements to create a unified whole. Smith (2011) is of the opinion that an understanding of issues in architectural design, particularly in terms of concepts, and principles, must be present at the beginning of the design process so that it can inform the initial schematic explorations. A response to the critical design issues must be at the core of any effective design, and not as an applied accommodation added later. This commitment from the architect at the inception of the initial schematic designs result into project that are aesthetically pleasing and socially meaningful, Smith (2011) concluded. Architects require specific terminology to describe fundamental elements of buildings, and to assess its design quality and this involves understanding the language of design composition which is made up of concepts and elements and principles.

Architectural Concept

When referring to architecture; a concept is an idea, thought, or notion that forms the backbone and foundation of a design project and one that drives it forward. It becomes the force and identity behind a projects progress and is consistently consulted throughout every stage of its development, all architectural projects should be derived from a concept (<https://www.archisoup.com/what-is-an-architecturalconcept?>).

An architectural concept is the meaning and reason to the end product (the completed building or structure) and is the very first part of the design process to be developed and

realized much like a seed is to a plant. And just like a plant seed, it can come from a vast array of sources, and produce a huge amount of variations and outcomes. It is also one of the only consistent element that follows a project from beginning to end and remains as important at the start as it is at the finish (<https://www.archisoup.com/what-is-an-architectural-concept?>).

An architectural concept in summary can be described as an: idea, notion, abstraction, philosophy, belief, inspiration, thought, intention, theory, image, plan, or hypothesis. An exemplar piece of architecture will always be more rooted and relate to its site and context, and so site analysis plays huge role in architectural concept generation and development. (<https://www.archisoup.com/what-is-an-architectural-concept?>). Design concepts will and should influence the whole project, and include: Exterior and interior- orientation, massing, form, apertures, height, light. The landscape - hard and soft surfaces, types of planting, scale of painting, arrangement of planting, Finishes – colour, styles, texture, materials, Fixtures and fittings - genre, style, scale, amount, vernacular (<https://www.archisoup.com/what-is-an-architectural-concept?>).

Need for Concept Generation in Architectural Designs

A strong architecture concept gives the architect/ designer a clear direction and frame work when making design decisions; it provides a methodology to thinking process by offering a type of rule book. When there is a question to be answered or a decision to be made, the concept is consulted and used to direct methods of thinking to provide a solution within its own parameters to maintain the clarity of the design intent. This stops the architect from branching off into never ending directions and tangents, that will hinder and water down the legitimacy of the architecture (<https://www.archisoup.com/what-is-an-architectural-concept?>).

In academics and practice, the difference between a successful project and an average one is judged by the strength of its concept, whether it clarity remained and was consistent throughout the design stages. Architecture needs to be grounded in depth and meaning. The more coherent and relevant the concept is, the more successful and interesting it becomes and brings richness to the design. Architectural elements and principles are mechanisms employed in realizing the objectives of the architectural concepts (<https://www.archisoup.com/what-is-an-architectural-concept?>).

Architectural Design Elements and Principles

Nagpal (2015) and Ching Francis (2007) see elements of design as collection of abstract tools, which can be combined and arranged in any way one likes to create some sort of visual statement and sees them as the raw materials or building blocks for any form of visual expression and believes that by appraising individual elements of design, the architect understands the reality of his design in terms of judgments. The elements and principles of design are the building blocks and fundamental ideas about the practice of good visual design used to create a work of art; any kind of design, be it architecture, interior design, or a painting. These elements are the basis of all intentional visual design.

The elements of design are the things that make up sketches, a painting, drawing, design, blueprint, etc. All designs contain most of if not all, the seven elements of design. This is because the way these principles are applied greatly determines their success of a design (Nagpal, 2015).

If the elements of design are the raw materials, or the building blocks for any form of visual expression, then the Principles of design are a list of things we can do to those elements. When considering any form of visual art, we can analyze each design element in terms of the individual principles (Nagpal, 2015).

Architectural Design Elements

There are various types of elements and principles of design some of them getting mixed up by some authors in different text and at times creating difficulties in appreciation. Authors like Antoniadis (1999) and Ching Francis (2007) have given commendable insights to understanding these. However, this paper prefers adopting the presentations by Nagpal (2015) in appreciating the terms; architectural design elements and principles.

The following elements and principles as listed and discussed in Nagal (2015) **are**; Point, Line, Plane, Mass/Volume, Form/Shape, Texture, Colour, Space, and Value. Principles of Design include; Balance, Rhythm, Scale and Proportion, Dominance/Emphasis, Unity, Harmony, Abstract, Contrast/ Variety and Order.

Point; A point is an element that has position, but no extension. It is a single mark in space with a precise, but limited, location. As the prime element in the vocabulary of form, a point can serve to mark: the two ends of a line, the intersection of two lines, the meeting of lines at the corner of a plane or volume, the center of a field.

Line; A line is an element characterized by length and direction. A Line is a critical element in the formation of any visual construction. Lines can exist as elements in themselves or they can be used to produce other elements. A closed line defines shape, hatched lines produces tone and buildup lines create texture.

Plane; In architecture, planes define three dimensional volumes of mass and space. The properties of each plane – size, shape, colour, texture as well as their spatial relationship to one another ultimately determine the visual attributes of form they define and the quantities of space they enclose.

Mass/ Volume; All volumes can be analyzed and under stood by; points or verticals where several planes come together, lines or edges which define the limits or boundaries of a volume. Sometimes mass refer to a positive solid, and volume refers to a negative, open space surrounded by material, as in a bowl or other vessel.

Shape; is a 2-dimensional line with no form or thickness. Shapes are flat and can be grouped into two categories, geometric and organic.

Form; - is a 3-dimensional object having volume and thickness? It is the illusion of a 3-D effect that can be implied with the use of light and shading techniques. Form can be viewed from many angles.

Form/Shape- is the simplest definition of shape being a closed contour, an element defined by its parameter. The three basic shapes are: circle, rectangle (square) and triangle. Positive shape is the totality of the mass lying between its contours; in three –dimensional work, the visible shape or outer limit of a form changes as viewer's position is changed. These outer limits are seen as shapes moving back and forth between major contours. Negative space is empty space defined by positive shape, sometimes referred to as occupied and unoccupied space.

Texture; is about surface quality either tactile or visual. Texture can be real or implied by different uses of media. It is the degree of roughness or smoothness in objects. Space; refers to variations in the proportions of objects, lines or shapes. How shapes are arranged in art or architectural work creates a sense of space.

Colour; is the response of the eye to differing wavelengths of radiation within the visible spectrum. It is the visual perceptual property. Colour categories and physical specification of colour are also associated with object, materials, light sources, etc., based on their physical properties such as light absorption, reflection or emission spectra.

Value; can be used with colour as well as black and white. Contrast is the extreme changes between values.

Principles of Architectural Design

Balance; is the arrangement of objects in a given design as it relates to **their** visual weight within a composition. Balance usually comes in two forms: symmetry and asymmetrical.

Formal/symmetrical Balance: equal visual units, right and left/top to bottom of an imaginary center point.

Rhythm; is like a movement in which some elements reoccurs regularly. Like advance, it has a flow of objects that will seem to be like the beat of the music. It creates a sense of movement, and can establish pattern and texture. There are many kinds of rhythm, often defined by the feeling it evokes when looking at it. Rhythm is the result of repetition.

Scale; refers to the size of an object or objects in relation to the surroundings. Size refers to definite measurements while scale describes the size relationship between adjacent objects. Scale is the proportion of one object to another. It also means the relationship of an object with designated standard such as building or a person.

Proportion; is the relationship in scale between one element and another, or between a whole object and one of its parts. Differing proportions within a composition can relate to different kinds of balance or symmetry, and can help establish visual weight and depth.

Dominance; relates to varying degrees of emphasis in design. Something in the work must dominate in the work or the domination of a motif or design element. Stress or prominence given to an element of a composition by means of contrast, colour, shape etc

Unity; the concept of unity describes the relationship between the individual parts and the whole of a composition. It investigates the aspects of a given design that are necessary to tie the composition together, to give it a sense of wholeness, or to break it apart and give it a sense of variety.

Harmony; is the visually satisfying effect of combining similar or related elements. Elements are combined to; accent their similarities, adjacent colours and shapes.

Abstract; abstracts indicate departure from reality in depiction of imagery in Art.

Contrast; means absence of monotony. In architecture, abstracts are used in creating interest and exhibiting variety. Different qualities or characteristics in a form; interest generated in a work by using a variety of shapes, forms, texture and others.

Order; this is related to the overall organization and structure of a design. Order without diversity results in monotony or boredom, Examples of order in design include axis, symmetry, hierarchy, rhythm, datum, and transformation.

Recommendation

The paper having made a case for aesthetics as not being a component of beauty but rather a totality of beauty, an expression of the complete product of design, it therefore expects architects to develop the instinct that will allow them judge their designs first.

The architect cannot appreciate his creation if he/she does not possess a critical thinking mind that will cause him to compare each stage of his design with the concept with stoic patience, which is only possible when the architect equips him/herself with the design tools of architectural concepts which has been noted as the backbone of all architectural designs, the elements referred to as the building blocks or materials to realizing aesthetic products and lastly the principles which provides the technical expertise to actualizing same.

The paper recommends that architects engage themselves in continuous development and assessment through enrolling for development courses in tertiary institutions and online, to enable them update their knowledge continuously with contemporary developments in the profession, engineering and some environmental courses. No two works of architecture and no two sites are the same. Architects should as a matter of rule and discipline see every project as new thesis that must be written properly, finished, bound and graded by external examiners, this external examiner are the consumers and will be the judges for aesthetics.

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