

Cultural Values and Aesthetic Functioning on Modern Architecture in Ghana

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Abstract

The study was a descriptive survey to examine the cultural values and aesthetic functioning on modern architecture in Ghana. The population for the study constituted professional architects working in the Department of Architectural and Engineering Service of the Ministry of Works and Housing in Ghana. Fifty (50) experts from the Architectural Department of the Ministry of Works and Housing in Ghana were selected for the study comprising of thirty (38) males and twenty (12) females. The study observed that all (100%) of the respondents were certain that; (a) modern architecture adopted in Ghana is important for the survival and transmission of traditional culture (b) the purpose or usage of the facility may be a significant influence on its design and (c) modern architecture adopted in Ghana is important for the survival and transmission of traditional culture and (d) conservation practices, regulation by government and practical inspection of architectural works can help to preserve the architectural heritage of Ghana. In the light of these findings, it is concluded that; (a) modern architecture in Ghana presents several positive cultural values as Ghanaian culture is dynamic and gives order and meaning to aesthetic practices of the people, and (b) Finally, regular training of architects, conservation practices, regulation by government and effective and practical inspection of architectural works can help to preserve the architectural heritage of Ghana.

Keywords: Cultural Values, Aesthetic Functioning, Modern Architecture

INTRODUCTION

Background to the study

The twentieth and twenty first centuries have brought radical transformations into the culture and aesthetics of people due to globalization and technological advancements (Ferraro, 2018). The term 'culture' refers to how people live which makes them distinct from others. It often manifests in food, clothing, language, environment, buildings etc. The Cultural Policy of Ghana (2004) defines culture as the totality of the way of life of our people evolved by experience and reflection to fashion a harmonious co-existence with the environment. This culture is dynamic and gives order and meaning to the peoples social, political, economic, aesthetic and religious practices (Cultural Policy of Ghana, 2004 cited in Gyekye, 2016).

According to Asare (2013), culture is the way a group of people live. The author explained that culture defines what people hold in high esteem and especially in their way of doing things (Asare, 2013). Meanwhile, in Armlor's study in 2014, it was observed that architecture and aesthetics are crucial elements in every culture. Aesthetics is the philosophical study of art and natural beauty and indicates pleasure or displeasure which comes from visual and aural elements and artifacts (Armlor, 2014).

Similarly, Adesi and Odi (2013) noted that, architecture and buildings are referred to and thus described as an embodiment of people's cultural heritage. Culture is dynamic, architecture as a cultural phenomenon changes as culture does. The authors said Ghana's culture presents several positive values. The architecture in Ghana in general has been very dynamic due to the social, cultural, economic, technological advancement and political changes which has a significant effect on the aesthetic output of the building styles. It is important to note that there has been a transformation in the country's architecture and the urban centers in Ghana have felt the most significant impact (Adesi & Odi, 2013).

According to Fredholm (2016), Ghana has several architectural heritages that have been captured by the United Nations Educational, Scientific and Cultural Organization's (UNESCO) and World Heritage List (WHL) four decades ago (Fredholm, 2016; UNESCO, 2018). These include Forts and Castles along the coast and Asante Traditional Buildings. The number captured on the WHL is relatively small considering the country's rich architectural heritage. Other architectural heritage from pre-colonial era in Ghana include

is the Larabanga Mosque in Northern region of Ghana. However, modernization of cities in the country has brought in many modern high rise buildings and other well designed structures such as the Octagon, Villagio Residential Towers, the National Theater etc. showcasing the development and advancement of Ghanaian architecture (Ekom, 2013).

Moreover, the cultural values and aesthetic functionality of architecture is very significant. For instance, Gavor and Dennis (2013) advanced that architectural heritage preservation helps current generations to understand and relive past memories and further gives identity to a place for direction into the future. Moreover, Kwakye-Opong (2011) contends that the architecture of the Ghanaian people is endowed with rich diverse culture with meanings and values well upheld by various ethnic groups that defines their group's very existence. It is also worth noting that, a building is a product of its function if it best facilitate or represent the supposed purpose. The relevance of architecture is the purpose the building serves or why the building was created or designed. The utility of architecture is an aesthetic in its context. The aesthetic (beauty) of a design cannot be limited to its size, shape and proportion but entails the practical meaning of its function (Kwakye-Opong, 2011; Twumasi-Ampofo & Oppong, 2016).

Research Gap

Aesthetics is the philosophical study of art and natural beauty and it is indicated by the feelings of pleasure or displeasure which comes from visual and aural elements and artifacts. Hence, aesthetics depends on animate or inanimate organization that can be perceived either subjectively or objectively. This aesthetic element is uniquely present in the traditional buildings and modern buildings in societies. Much aesthetic and architecture are viewed as heritages. Therefore, preserving them will help current generations to understand and relive memories and ways of lives and further gives identity to a future direction (Gyekye, 2016). Ghana has a richly diverse culture with meanings and values well upheld in the various ways. This diverse culture expresses tangible heritages in natural or built landscape, building, relics and monuments (Fredholm, 2016). Many studies have focused on changing the face of architecture in Ghana, however, very little research that has been conducted about examining the cultural values and aesthetic functioning on modern architecture in Ghana. This current study has become very important because it has bridged the knowledge gap in this area.

Problem Statement

One of the first things to notice and the last to forget when visiting a city or country is architecture. The architecture of the late colonial and early period of independence in Ghana is a visual representation of shifting ideologies in a rapidly changing world. While Ghana's former colonial power attempted to use the architectural style to shift perceptions of the complicated and often ugly past of colonization, Ghana used this architectural expression to define a new period of their own independence (Owusu-Addo, 2014).

In Herz (2015) study of "*African Modernism: The Architecture of Independence*", in Ghana, the dynamic use of designs, motifs, colour and other symbolic accents, used on both ancient and modern buildings brings to fore the unique architecture heritage the country has (Herz, 2015). Traditional Ghanaian architecture is driven by the raw material available for buildings, such as thatch for roofing and mud and wood for walls. In addition, British colonialism also left behind many landmarks, including Victorian-style towers, slave castle and forts. These buildings symbolized the culture and the history of the people. Thus buildings speak volumes of culture of the many different ethnic groups in Ghana. Even though some of the traditional buildings in Ghana lacked aesthetic beauty, modern architecture has been influenced by its illustrious history (Adom & Bekoe, 2012).

Today many of the traditional buildings are rare because they have been destroyed to pave way for urban development and modern architecture. Though modern architecture possesses all the aesthetic beauty, much of it mimics western lifestyles to the detriment of traditional architecture and its cultural values. While we seek to advance in modern architecture and its aesthetic functions in especially urban centers in the country, it is equally vital that the cultural values embedded in our traditional architecture are preserved and not sacrificed. Oppong and Brown (2014) noted that, preservation of the rich traditional architecture heritage is imminent. However, he noted that it seems to be under threat with declining awareness resulting in incessant

tearing down of historic buildings. The authors encouraged Government officials to adopt conservation practices that will help maintain the country's architectural heritage (Oppong & Brown, 2014).

Following the demolishing of historic sites for infrastructure development, spontaneous modern housing settlements and gentrification have rendered the redevelopment of most Ghanaian cities with little or no attention to historic buildings and sites. In order to maintain the cultural values of traditional architecture while seeking advancement in the aesthetic functioning of modern architecture in our urban cities, it is advisable to incorporate retrofitting and adaptation of buildings, preserving and maintaining our traditional architectural heritage (Adom & Bekoe, 2012). This study seeks to find out the cultural values and the aesthetic functioning of modern architecture in Ghana.

Objectives of the study

The objectives of this study are as follows:

1. To examine the importance of cultural values of modern architecture in Ghana.
2. To assess the aesthetic function of modern architecture in Ghana.
3. To propose measures that can be used to preserve architectural heritages in Ghana.

Research Questions

This study seeks to answer the following questions.

1. What are the cultural values in modern architecture in Ghana?
2. What are the aesthetic functions of modern architecture in Ghana?
3. What measures can be proposed to preserve architectural heritages in Ghana?

Scope of the Study

This study focused on the cultural values and aesthetic functioning of modern architecture in Ghana.

Definition of Terms

1. **Architecture:** It refers to the art and science of designing buildings and (some) non-building structures.
2. **Culture:** It refers to how a group of people lives and that which makes them distinct from others.
3. **Aesthetics:** Aesthetics is the philosophical study of art and natural beauty and it is indicated by the feelings of pleasure or displeasure which comes from visual and aural elements and artifacts.

METHODOLOGY

Study area

Ghana, officially the Republic of Ghana which was formerly called Gold Coast, is a colony along the Gulf of Guinea and Atlantic Ocean, in the sub-region of West Africa. Accra is the capital city of Ghana with a population of 4.2 million as at 2020. Accra is well known for its national history and availability of vital social amenities ranging from stadiums, educational institutions, museums, zoo, beaches, castle, and many more. The Ministry of Works and Housing is tasked with the conceptualization and classification of policies and programs for the systematic growth of the country's infrastructure. Architectural and Engineering Service is one of the Ministry of Works and Housing departments, consisting of a practicing professional group of Consulting Architects, Civil, Structural, Electrical and Mechanical Engineers located in the 16 regions of Ghana.

Research Design

This study employed a descriptive survey design, a type of research undertaken to describe characteristics of variables in a situation. According to Creswell (2003), a descriptive survey design is concerned with conditions or relationships that exist, opinions held, processes that are going on, the evident effects, or developing trends. The descriptive survey design enabled the collection of data without manipulating the research variables. The descriptive survey design optimizes on the strengths of both quantitative and

qualitative research methodologies. The survey method allowed data collection from a large sample population and generated findings to represent the whole population at a lower cost (Creswell, 2003).

However, one weakness of descriptive research is that it is time-consuming (Asamoah-Gyimah and Duodu, 2007). In order to overcome the disadvantage of time consumption, the researcher established a time management plan (framework) to enable her to systematically and timeously handle each aspect of the study.

Population

To Asamoah-Gyimah and Duodu (2007), a study population comprises elements or causes, whether individuals, objects, or events that conform to specific criteria. Thus, a researcher intends to generalize the results of the research. The population for the study constituted professional architects working in the Department of Architectural and Engineering Service of the Ministry of Works and Housing in Ghana. The department has fifty-seven (57) workers across the country's 16 regions, which belongs to the Architect Registration Council of Ghana.

Sample Size

A sample is the finite part of a statistical population where properties are studied to gain information about the whole (Asamoah-Gyimah & Duodu, 2007). Fifty experts from the Architectural Department of the Ministry of Works and Housing in Ghana were selected for the study comprising of thirty (38) males and twenty (12) females. A sample size of fifty (50) respondents for a descriptive study was justifiable. The sample size estimation was done using Slovin's formula;

$$n = \frac{N}{1 + N e^2}$$

Where; n- is the sample size

N – Is the total population (sum of architects of the Architect Registration Council of Ghana = 57)

e – Margin of error of 0.05% (confidence level of 95%)

$$n = \frac{57}{1 + (57 \times 0.05^2)}$$

$$n = \frac{57}{1 + (57 \times 0.0025)}$$

$$n = \frac{57}{1 + 0.1425}$$

$$n = \frac{1.1425}{1}$$

$$n = 49.8905, \text{ Approximately, } 50$$

Sampling Technique

Sampling is the process of selecting people from the population to take part in a study. A convenience sampling technique was employed in selecting samples for the study. According to Fraenkel and Wallen (2000), convenience sampling is a non-probability sampling method where the sample is taken from a group of people easy to contact or reach. This sampling method is extremely speedy, easy, readily available and cost-effective. This type of sampling is also known as grab sampling or availability sampling. This sampling technique ensures that available and willing participants are selected for the study (Fraenkel & Wallen, 2000). As a result, fifty (50) professional architects from the Department of Architectural and Engineering Service of the Ministry of Works and Housing.

Research Instrument

A structured questionnaire was the primary research instrument employed by the researcher. According to Creswell (2003), a questionnaire is a set of questions used to gather information in a survey. A questionnaire was used because it was less expensive, provided respondents with time to respond to statements. Furthermore, it offers a large and objective view of the study since respondents were given ample time to

complete the questionnaire. A questionnaire moreover aims to have a more direct sampling and broader coverage. However, one disadvantage of this instrument is retrieving all the questionnaires (Creswell, 2003).

Method of Data Collection

A questionnaire was designed for the collection of data. The questionnaire designed has two main sections: the respondents' bio-data and section two outlining the research objectives. Both closed and open-ended statements were used to make it easier for respondents to complete the questionnaire. They were also to make it easy for analysis and interpretation. The questionnaires were anonymous to ensure privacy and security for the respondents and to allay their fear of being identified and victimized. A sample of the questionnaire could be seen in the appendix of the study. The questionnaire was administered to all fifty (50) respondents.

Data Processing and Analysis

The quantitative data collected by using a questionnaire were analyzed by the use of the Statistical Package for Social Sciences (SPSS) version 16 and presented through tables indicating the frequencies and percentages.

Ethical Considerations

The researcher ensured that participation in this research was purely voluntary. All participants were informed of the purpose and nature of the research both verbally and in writing where necessary.

Consent: The respondents' consent was taken for their engagement in the study and their data usage

Confidentiality: The respondents were assured of the privacy of information provided.

Anonymity: The respondents were further assured of the secrecy of their identity and that no statement would be attributed to their names.

Deception: All misleading information as well as representation of primary data findings in a biased way would also be avoided.

Beyond these facts, usage of any secondary data from any source was acknowledged with appropriate reference.

KEY FINDINGS AND DISCUSSIONS

This aspect presents the results and discussions on data obtained from the administration of the questionnaire. Data were obtained from fifty (50) experts from the Architectural Department of the Ministry of Works and Housing in Ghana. The first part of this chapter describes the results from the field data, and the second part presents the discussions of results based on the research objectives with supporting literature.

Findings

Demographic data of respondents

The bio-data of respondents include gender, age, highest professional qualification and work experience.

Table 1: Demographic data of respondents

VARIABLES	FREQUENCY	PERCENTAGE (%)
Gender		
Male	38	76
Female	12	24
Age		
20 – 29years	5	10
30 – 39years	11	22
40 – 49years	29	48
50 – 60years	5	10
Highest professional qualification		

Masters	32	64
Bachelor	12	24
Diploma	6	12
Work experience		
1 – 5 years	2	4
6 – 10 years	8	16
11 – 15 years	10	20
16– 20 years	15	30
21 – 25 years	12	24
26 years and above	3	6

Field Data, May, 2021

According to Table 1, 38 (76%) respondents sampled for the study were males and the remaining 12 (24%) were females. Moreover, 5 (10%) respondents each were between 20-29years and 50–60years, 11 (22%) of them were also between 30-39years and 29 (48%) others were between 40-49years. On the highest professional qualification of respondents, 32 (64%) of them had a master's degree, 12 (24%) others had Bachelor's Degree, and the remaining 6 (12%) respondents also hold a Diploma. Finally, 2 (4%) respondents worked between 1-5years, and 8 (16%) worked between 6-10years. Also, 10 (20%) respondents had been working for 11-15years. Similarly, 15 (30%) respondents had worked for 16-20years, 12 (24%) of them have worked between 21-25 years, and lastly, the remaining 3 (6%) respondents have worked for more than 25years.

The information demonstrated in table 1 posit that majority (76%) of the respondents were males, with a few (24%) were females. The data also showed that most (88%) of the respondents hold a bachelor's or master's degree. Finally, the data indicate that respondents have vast experience in their field of work, and this is good for the study since the information provided is likely to reflect the views of experts.

Importance of cultural values of modern architecture in Ghana

Objective one focused on the importance of cultural values of modern architecture in Ghana.

Table 2: Importance of cultural values of modern architecture in Ghana

VARIABLES	SA		A		N		D		SD	
	F	%	F	%	F	%	F	%	F	%
1. Modern architecture in Ghana presents several positive cultural values.	32	64	10	20	8	16	0	0.0	0	0.0
2. Ghanaian culture is dynamic and gives order and meaning to aesthetic practices of the people.	11	22	39	78	0	0.0	0	0.0	0	0.0
3. The aesthetic appeal of architecture in some areas in Ghana provides a therapeutic effect which makes people admire nature and receive excitement.	2	4	28	56	1	2	14	28	5	10
4. Modern architecture in Ghana provide recreation for many people who travel to Ghana.	11	22	25	50	4	8	3	6	7	14

Field Data, May, 2021

Data presented in table 2 indicates that 32 respondents representing 64%, strongly agreed that modern architecture in Ghana presents several positive cultural values, supported by 10 (20%) others who agreed. However, 8 (16%) respondents were neutral. Again, 11 (22%) respondents strongly agreed, and 39 (78%) agreed that Ghanaian culture is dynamic and gives order and meaning to the aesthetic practices of the people. Moreover, 2 (4%) respondents 28 (56%) others either strongly agreed or agreed that the aesthetic appeal of architecture in some areas in Ghana provides a therapeutic effect that makes people admire nature and receive excitement. Meanwhile, 1 (2%) respondent was neutral, 14 (28%) of them disagreed, and the remaining 5 (10%) strongly disagreed. Moreover, 11 respondents representing 22%, strongly agreed, and 25

(50%) also agreed that modern architecture in Ghana provides recreation for many people who travel to Ghana. Besides, 4 (8%) respondents were neutral, 3 (6%) of them disagree, and 7 (14%) others vehemently disagreed.

Results presented indicate that majority (84%) believed that modern architecture in Ghana presents several positive cultural values though few (16%) respondents were neutral. Again, all (100%) the respondents maintained that Ghanaian culture is dynamic and gives order and meaning to the aesthetic practices of the people. Moreover, 60% of the respondents affirmed that the aesthetic appeal of architecture in some areas in Ghana provides a therapeutic effect that makes people admire nature and receive excitement. However, 38% of them thought otherwise, and 4% were neutral. Additionally, it was realized that a considerable percentage (72%) of the respondents agreed that modern architecture in Ghana provides recreation for many people who travel to Ghana.

Aesthetic function of modern architecture in Ghana

The main focus of objective two was to assess the aesthetic function of modern architecture in Ghana.

Table 3: Aesthetic function of modern architecture in Ghana

VARIABLES	SA		A		N		D		S D	
	F	%	F	%	F	%	F	%	F	%
1. Modern architecture adopted in Ghana is important for the survival and transmission of traditional culture.	42	84	8	16	0	0.0	0	0.0	0	0.0
2. There is a fundamental link between the type of architecture adopted and a community's cultural identity.	0	0.0	6	12	8	16	12	24	24	48

Field Data, May, 2021

According to table 3, 42 respondents representing 84% strongly agreed that modern architecture adopted in Ghana is vital for the survival and transmission of traditional culture and 8 (16%) others supported this. Also, 6 (12%) respondents agreed that there is a fundamental link between the type of architecture adopted and a community's cultural identity. However, 8 (16%) respondents were neutral, 12 (24%) of them disagreed, and 24 (48%) others strongly disagree.

Our analysis suggests that all (100%) of the respondents believed that modern architecture adopted in Ghana is essential for the survival and transmission of traditional culture. However, more than half (72%) of the respondents disagreed and stated a fundamental link between the type of architecture adopted and a community's cultural identity.

Table 4: Factors influencing an architect's choice for a particular design

VARIABLES	FREQUENCY	PERCENT (%)
1. Spiritual/cultural reasons	10	20
2. Beautification	48	96
3. Purpose/Usage	50	100
4. Security reasons	28	56

Field Data, May, 2021

Moreover, on the factors that may influence an architect's choice for a particular design, the information presented in table 4 revealed that while ten respondents representing 20% said spiritual or cultural reasons, 48 (96%) of them also said beautification. Additionally, all (100%) the respondents claimed the purpose or usage of the facility may be a significant influence and finally, 28 (56%) others said security reasons. The result suggests that beautification (96%) and the purpose or usage of a facility (100%) are the factors that may influence an architect's choice for a particular design.

Table 5: Aesthetic function of modern architecture in Ghana

VARIABLES	FREQUENCY	PERCENT (%)
1. Beautification	41	82
2. Attraction of tourists	23	46
3. Cultural preservation	14	28

Field Data, May, 2021

Furthermore, on the aesthetic function of modern architecture in Ghana, table 5 specifies that 41 (82%) respondents said beautification, 23 (46%) others said tourist attraction, and 14 (28%) of them said cultural preservation. Therefore, the data suggest that beautification (82%) is the aesthetic function of modern architecture in Ghana.

Proposed measures to preserve architectural heritages in Ghana

This section focused on proposed measures to preserve architectural heritage in Ghana.

Table 6: Proposed measures to preserve architectural heritages in Ghana

VARIABLES	SA		A		N		D		S D	
	F	%	F	%	F	%	F	%	F	%
1. Conservation practices enhances the aesthetic value of the environment	15	30	35	70	0	0.0	0	0.0	0	0.0
2. Regulation by government can help to preserve the architectural heritage of Ghana.	48	96	2	4	0	0.0	0	0.0	0	0.0
3. Regular training of architects can help to preserve the architectural heritage of Ghana	4	8	36	72	0	0	0	0.0	10	20
4. Effective monitoring/ inspection of architectural works can help to preserve the architectural heritage of Ghana.	42	84	8	16	0	0.0	0	0.0	0	0.0

Field Data, May, 2021

Table 6 illustrates the results of proposed measures to preserve architectural heritage in Ghana. According to the data, 15 (30%) respondents strongly agreed that conservation practices enhance the environment's aesthetic value, which 35 (70%) respondents supported. Again, 48 (96%) respondents strongly agreed that government regulation could help preserve the architectural heritage of Ghana and 2 (4%) respondents again supported this. Additionally, while 4 (8%) respondents strongly agreed that regular training of architects could help to preserve the architectural heritage of Ghana, 36 (72%) others agreed, but 10 (20%) of them strongly disagreed. Finally, 42 (84%) respondents strongly agreed, and 8 (16%) others agreed that effective monitoring or inspection of architectural works could help preserve Ghana's architectural heritage.

Data presented in table 6 indicate that all (100%) of the respondents claimed conservation practices, regulation by the government, and effective monitoring or inspection of architectural works could help preserve Ghana's architectural heritage. Also, 80% of the respondents affirmed that regular training of architects could help preserve Ghana's architectural heritage.

Discussion of Findings**Importance of cultural values of modern architecture in Ghana**

Table 2 indicates that the majority (84%) believed that modern architecture in Ghana presents several positive cultural values though few (16%) respondents were neutral. Again, all (100%) the respondents maintained that Ghanaian culture is dynamic and gives order and meaning to the aesthetic practices of the people. Moreover, 60% of the respondents affirmed that the aesthetic appeal of architecture in some areas in

Ghana provides a therapeutic effect that makes people admire nature and receive excitement; however, 38% thought otherwise. Additionally, it was realized that a considerable percentage (72%) of the respondents agreed that modern architecture in Ghana provides recreation for many people who travel to Ghana.

Studies by Adesi and Odi (2013), Essel & Amissah (2015) and Gyekye (2016) support these findings. Adesi and Odi (2013) noted that architecture and the building are referred to and thus described as an embodiment of people's cultural heritage. The authors said Ghana culture presents several positive values (Adesi & Odi, 2013). Again, Essel and Amissah (2015) reported that architecture in the context of aesthetic is the act of exhibiting concept of things that are possible through art and design, things whose form have a chosen purpose (functionality), and of doing so in other to achieve that aim, yet have aesthetics purposiveness. Furthermore, the aesthetic appeal of architecture in some areas in Ghana provides a therapeutic effect that makes people admire nature and receive excitement (Essel & Amissah, 2015). Lastly, according to the Cultural Policy of Ghana (2004), culture is the totality of life's way of life evolved by experience and reflection to fashion a harmonious co-existence with the environment. This culture is dynamic and gives order and meaning to the people's social, political, economic, aesthetic, and religious practices (cited in Gyekye, 2016).

The aesthetic function of modern architecture in Ghana

The data in table 3 suggest that even though all (100%) the respondents were of the view that modern architecture adopted in Ghana is important for the survival and transmission of traditional culture, more than half (72%) of the respondents disagreed there is a fundamental link between the type of architecture adopted and a community's cultural identity.

An assertion by Gavor and Dennis (2013) supports these findings. For instance, Gavor and Dennis reported that the cultural values and aesthetic functionality of architecture is very significant. The authors advanced that architectural heritage preservation helps current generations to understand and relive past memories and further gives identity to a place for direction into the future. Moreover, Kwakye-Opong (2011) contends that the architecture of the Ghanaian people is endowed with rich diverse culture with meanings and values well upheld by various ethnic groups which defines the very existence of their group (Gavor & Dennis, 2013; Kwakye-Opong, 2011).

The result in table 4 suggest that beautification (96%) and purpose or usage of a facility (100%) are the factors that may influence an architect's choice for a particular design. The data in table 5 suggest that beautification (82%) is the aesthetic function of modern architecture in Ghana.

Various studies support these findings and notable among them include; (Gavor & Dennis, 2013). Gavor and Dennis (2013) state that beauty is studied as part of aesthetics. Beauty in relation to form in an Architectural context of "first" perceived experience suggests physical external outlines that unite the entire image of an architectural piece. The authors added that aesthetic function of modern architecture is beautification. Meanwhile, Herz states that architecture satisfies the viewer when they have the elements of beauty; such as excellence, neat, rhythm, balance, proportion and brilliance or clarity (Herz, 2015).

Proposed measures to preserve architectural heritages in Ghana

Data presented in table 6 indicate that all (100%) of the respondents claimed conservation practices, regulation by the government, and effective monitoring or inspection of architectural works could help preserve Ghana's architectural heritage. Also, 80% of the respondents affirmed that regular training of architects could help preserve Ghana's architectural heritage.

Studies of Adom and Bekoe (2012), Owusu (2013), Mahadi and Jafari (2012) and MoT, (2013) backs these findings. For instance, Adom and Bekoe (2012) added that conservation practices are fundamental to preserving Ghana's architectural heritage (Adom & Bekoe, 2012). Architectural historians and international preservation organizations are working towards alleviating poor maintenance culture, and there is still a significant amount of work to be done. Owusu suggested that conservation practices and government regulation can help maintain Ghana's architectural heritage (Owusu, 2013).

Again, studies by Mahadi and Jafari (2012) indicated that as many of these cultural resources are "coming of age", their preservation is becoming increasingly important. The authors elaborated in their study that effective monitoring or inspection of architectural works and regular architects' regular training can help preserve the architectural heritage (Mahadi & Jafari, 2012). Moreover, Oppong and Brown (2014) noted that preserving the rich traditional architectural heritage is imminent. However, it seems to be under threat with declining awareness resulting in incessant tear down of historic buildings. Therefore, the authors encouraged Government officials to adopt conservation practices that will help maintain the country's architectural heritage (Oppong & Brown, 2014). Lastly, according to the Ministry of Tourism (2013), sustainable heritage conservation can be achieved through proper planning, monitoring and training of architects (MoT, 2013).

CONCLUSIONS

In the light of the findings, the following conclusions were drawn. It was concluded that;

- a) Modern architecture in Ghana presents several positive cultural values because Ghanaian culture is dynamic and gives order and meaning to the aesthetic practices of the people.
- b) The aesthetic appeal of architecture in some areas in Ghana provides a therapeutic effect that makes people admire nature and receive excitement.
- c) Modern architecture adopted in Ghana is essential for the survival and transmission of traditional culture and provides recreation for many people travelling.
The beautification and usage of a facility were the factors that may influence an architect's choice for a particular design because beautification is the aesthetic function of modern architecture in Ghana.
- d) Finally, regular training of architects, conservation practices, regulation by the government, and practical inspection of architectural works can help preserve Ghana's architectural heritage.

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APPENDIX

QUESTIONNAIRE FOR RESPONDENTS

Introduction

The research is purely for academic purposes and the questionnaire seeks to gather information on the cultural values and the aesthetic functioning of modern architecture in Ghana.

- There are no risks at all involved in responding to the questions.
- The information provided will be considered highly confidential and will not be exposed to any other person except the researcher and the supervisor.
- Your participation is totally voluntary and you are under no obligation to complete the questionnaire.
- It will take about 20-30 minutes to complete the questionnaire.
- As a participant of this survey, a summary of findings may be delivered to you on your request.
- Do not write your name.

This questionnaire consists of two parts, A and B, respond either by writing in the space provided or putting a tick (✓) where required.

SECTION A: DEMOGRAPHIC DATA

- Please indicate your gender.
Male [] Female []
- What is your age bracket?
20–29years [] 30–39 years [] 40–49years [] 50–60years []
- What is your highest professional qualification?
PhD [] Masters [] Bachelor [] Diploma [] Certificate []
Any other (specify).....
- How long have you work as an architect?
1–5years [] 6–10 years [] 11–15years [] 16–20years []
21–25years [] 26years and above []

SECTION B: RESEARCH OBJECTIVES

Importance of cultural values of modern architecture in Ghana

7. Modern architecture in Ghana presents several positive cultural values.
Strongly Agree [] Agree [] Neutral [] Disagree [] Strongly Disagree []
8. Ghanaian culture is dynamic and gives order and meaning to aesthetic practices of the people.
Strongly Agree [] Agree [] Neutral [] Disagree [] Strongly Disagree []
9. The aesthetic appeal of architecture in some areas in Ghana provides a therapeutic effect which makes people admire nature and receive excitement.
Strongly Agree [] Agree [] Neutral [] Disagree [] Strongly Disagree []
10. Modern architecture in Ghana provide recreation for many people who travel to Ghana.
Strongly Agree [] Agree [] Neutral [] Disagree [] Strongly Disagree []

Aesthetic function of modern architecture in Ghana

11. Modern architecture adopted in Ghana is important for the survival and transmission of traditional culture.
Strongly Agree [] Agree [] Neutral [] Disagree [] Strongly Disagree []
12. There is a fundamental link between the type of architecture adopted and a community's cultural identity.
Strongly Agree [] Agree [] Neutral [] Disagree [] Strongly Disagree []
13. What factors influences an architect's choice for a particular design? Tick as many that apply.
- | | |
|-------------------------------|-----|
| a. Spiritual/cultural reasons | [] |
| b. Beautification | [] |
| c. Purpose/ Usage | [] |
| d. Security reasons | [] |
14. What is aesthetic function of modern architecture in Ghana? Tick as many that apply.
- | | |
|---------------------------|-----|
| a. Beautification | [] |
| b. Attraction of tourists | [] |
| c. Cultural preservation | [] |
| d. Any other | |

Proposed measures to preserve architectural heritages in Ghana

15. Conservation practices enhances the aesthetic value of the environment.
Strongly Agree [] Agree [] Neutral [] Disagree [] Strongly Disagree []
16. Regulation by government can help to preserve the architectural heritage of Ghana.
Strongly Agree [] Agree [] Neutral [] Disagree [] Strongly Disagree []
17. Regular training of architects can help to preserve the architectural heritage of Ghana?
Strongly Agree [] Agree [] Neutral [] Disagree [] Strongly Disagree []
18. Effective monitoring/inspection of architectural works can help to preserve the architectural heritage of Ghana.
Strongly Agree [] Agree [] Neutral [] Disagree [] Strongly Disagree []

Thank you for your co-operation