

**OPPORTUNITIES AND CHALLENGES OF DIGITIZING MUSEUM COLLECTIONS:  
A CASE STUDY OF THE GHANA NATIONAL MUSEUM, ACCRA.**

**BY**

**BULLEY, FREDA NAA**

**(10199538)**

**A DISSERTATION SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN  
PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF MA  
MUSEUMS AND HERITAGE STUDIES DEGREE**

**June 2016**

**UNIVERSITY OF GHANA**

**DEPARTMENT OF ARCHAEOLOGY AND HERITAGE STUDIES**

**INTEGRI PROCEDAMUS**

## DECLARATION

I hereby declare that except for references and quotations of other scholars' works duly cited, this Dissertation presented is the result of my research work carried out in the UK and at the Ghana National Museum under the supervision of Prof Dr. Ing. H.N.A. Wellington, FGA. No part of this research has been presented anywhere for any purpose. I therefore accept full responsibility for the work.

Candidate's Name: Bulley, Freda Naa

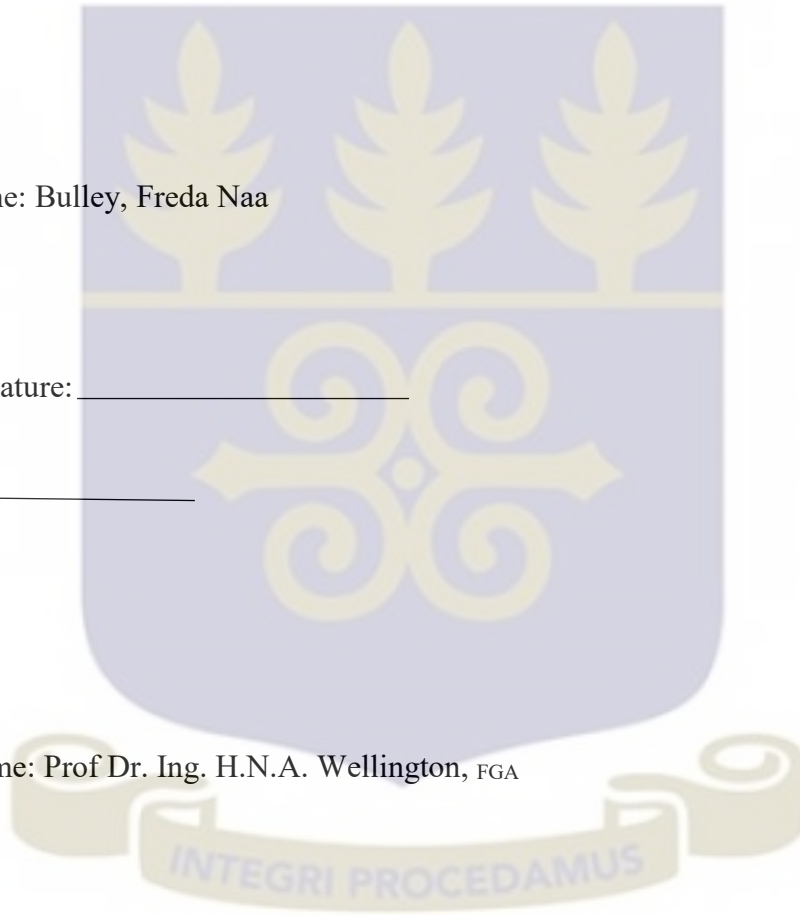
Candidate's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Supervisor's Name: Prof Dr. Ing. H.N.A. Wellington, FGA

Supervisor's Signature: \_\_\_\_\_

Date: \_\_\_\_\_



## ABSTRACT

Information Communication Technology (ICT) has become an important result oriented tool for organizations across the world in this 21<sup>st</sup> Century. For this reason, institutions are constantly delving into some of the creative ways by which they can use ICT to increase productivity. The purpose of this research centers on the digitization of the Collections of the Ghana National Museum, Accra. The researcher visited the British Museum, the Wallace Collection and the Black Cultural Archives all in London, UK and incorporated her findings into the work.

This Dissertation presents a contextual framework and a related template for objects digitization of collections at the Ghana National Museum, Accra. This is meant to be used as a means and a system to direct and guide the Museum in digitizing its vast Collections. Therefore, a number of research works were undertaken considering the Collections of the Museum, to develop the parameters for the proposed Database.

The scope of this research involves the process of proper organization as well as classification of the Ghana National Museum, Accra Collections so as to create possible relationships between the available different types of Collections. It also considered the process of ensuring that deteriorated artifacts are restored thereby ensuring their longevity.

With the aim of reaching a wider clientele by the Museum with its Collections, the researcher sought to address various ways of providing access to the relevant information on the World Wide Web as well as taking into consideration the professional method of capturing images of the Collections.

## **DEDICATION**

I dedicate this Dissertation to God Almighty, my parents and siblings and my beautiful daughter,  
Klarybel Naa Adei Bulley-Kotei.



## ACKNOWLEDGEMENTS

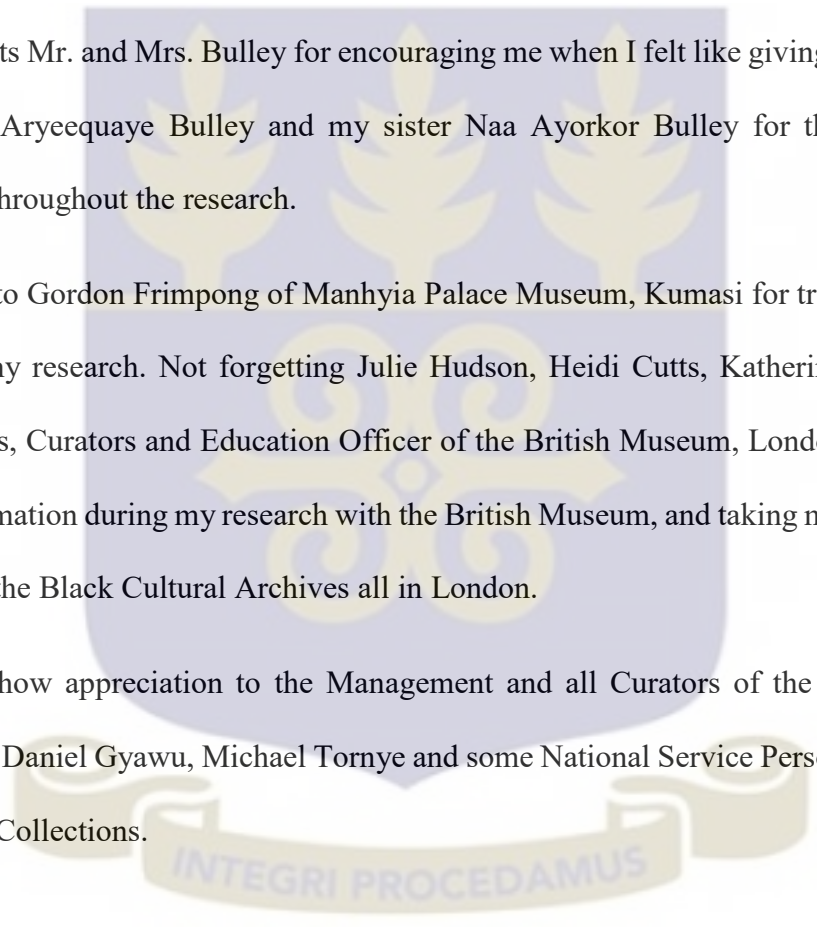
I am so grateful to God Almighty for the grace, strength and knowledge in conducting this research and in writing this Dissertation.

My sincere gratitude goes to my supervisor for pushing me to bring the best out of me. Prof Dr. Ing. H.N.A. Wellington, thank you so much.

I thank my parents Mr. and Mrs. Bulley for encouraging me when I felt like giving up. I also thank my brother Nii Aryeequaye Bulley and my sister Naa Ayorkor Bulley for their prayers and encouragement throughout the research.

I am so grateful to Gordon Frimpong of Manhyia Palace Museum, Kumasi for travelling with me to the UK for my research. Not forgetting Julie Hudson, Heidi Cutts, Katherine Coleman and Nicholas Badcots, Curators and Education Officer of the British Museum, London for giving me the needed information during my research with the British Museum, and taking me to the Wallace Collections and the Black Cultural Archives all in London.

I also want to show appreciation to the Management and all Curators of the Ghana National Museum, Accra, Daniel Gyawu, Michael Tornye and some National Service Persons for their help in digitizing the Collections.



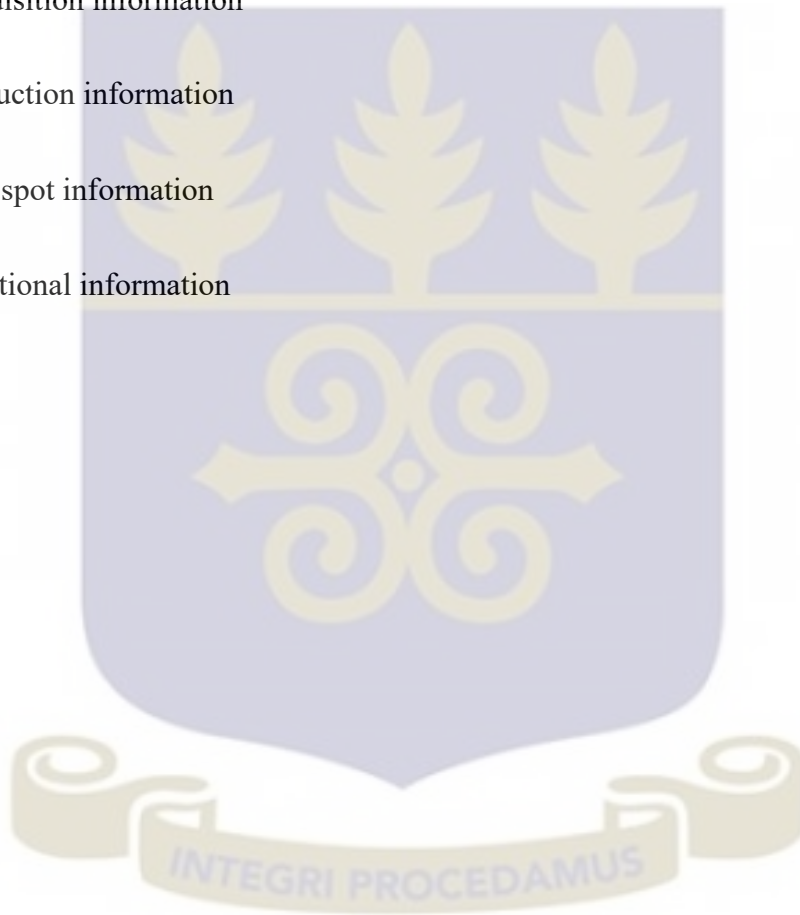
## LIST OF FIGURES

Figure 1. View of the Ghana National Museum Accra, Building	1
Figure 2. View of the main Storage area of the Ghana National Museum, Accra	2
Figure 3. View of the ‘Strong Room’ of the GNM (GNM), Accra	3
Figure 4. View of the ‘Textile Room’ of the GNM, Accra	4
Figure 5. Photo of the device containing recorded audio at the BCA in Brixton, London, further explaining the Exhibit to which the arrow is pointing	18
Figure 6. Visitors Listening to the Audio at the BCA in Brixton, London	19
Figure 7. A Visitor Wearing a Replica of an Armory in the WC, London.	35
Figure 8. View of a group of Basic School Children Learning about the Displays in the WC, London	36
Figure 9. The Interface of the Digitization Database	51
Figure 10. The Administrative Interface of the Database	52
Figure 11. The User Interface of the Database	53



## LIST OF TABLES

Table 1:	Identification information	42
Table 2:	Physical object information	43
Table 3:	Location information	44
Table 4:	Acquisition information	45
Table 5:	Production information	46
Table 6:	Find spot information	47
Table 7:	Additional information	48



## **LIST OF ABBREVIATIONS**

GNM – Ghana National Museum

GMMB – Ghana Museums and Monuments Board

NLCD – National Liberation Council Decree

BM – The British Museum

WC – The Wallace Collections

BCA – Black Cultural Archives

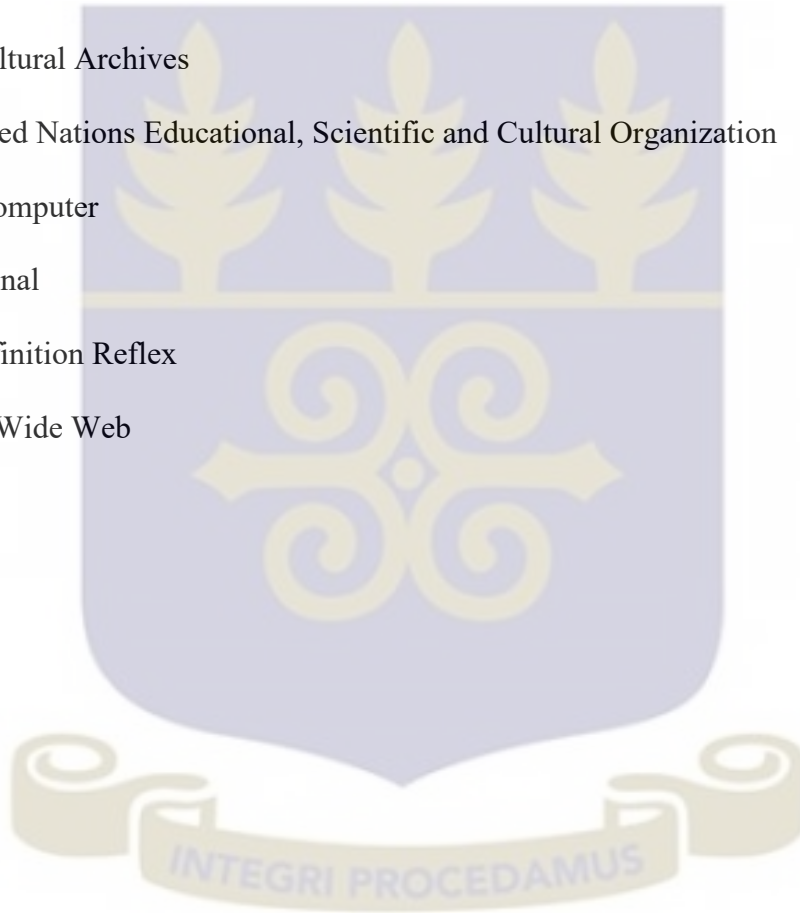
UNESCO – United Nations Educational, Scientific and Cultural Organization

PC – Personal Computer

2D – 2 Dimensional

HDR – High Definition Reflex

WWW – World Wide Web



## LIST OF PEOPLE INTERVIEWED

1. Julie Hudson - Curator, African Collections,  
Department of Africa, Oceania and the Americas  
The British Museum.
2. Heidi Cutts - Collections Manager,  
Department of Africa, Oceania and the Americas  
The British Museum.
3. Emma Bryant - Education officer,  
The Wallace Collection, UK.
4. Dr. Helen Jacobsen - Senior Curator,  
The Wallace Collection, UK.
5. Edwina Mileham - Community and Access Programmes Officer,  
The Wallace Collection, UK.
6. David Edge F.S.A. - Armourer/ Head of Conservation,  
The Wallace Collection, UK.
7. Len Pole - Private Museums Consultant  
Collections, Ethnography
8. Mr. Raymond O. Agbo - Deputy Director,  
Ghana Museums and Monuments Board.
9. Mr. Fred Amekudi - Head of Monuments Conservation,  
Ghana Museums and Monuments Board
10. George Apolala - Administrator,  
Ghana Museums and Monuments Board
11. Mrs. Akosua Saah Buckman - Senior Curator,  
Ghana National Museum, Accra
12. Mr. John Addai - Chief Technician,  
Ghana National Museum, Accra
13. Mr. Prince Larweh - Research Officer,  
Ghana National Museum, Accra
14. Miss Elizabeth Asafo-Adjei - Assistant Curator,  
Ghana National Museum, Accra

16. Mr. Charles Armah

- Technician,  
Ghana National Museum, Accra



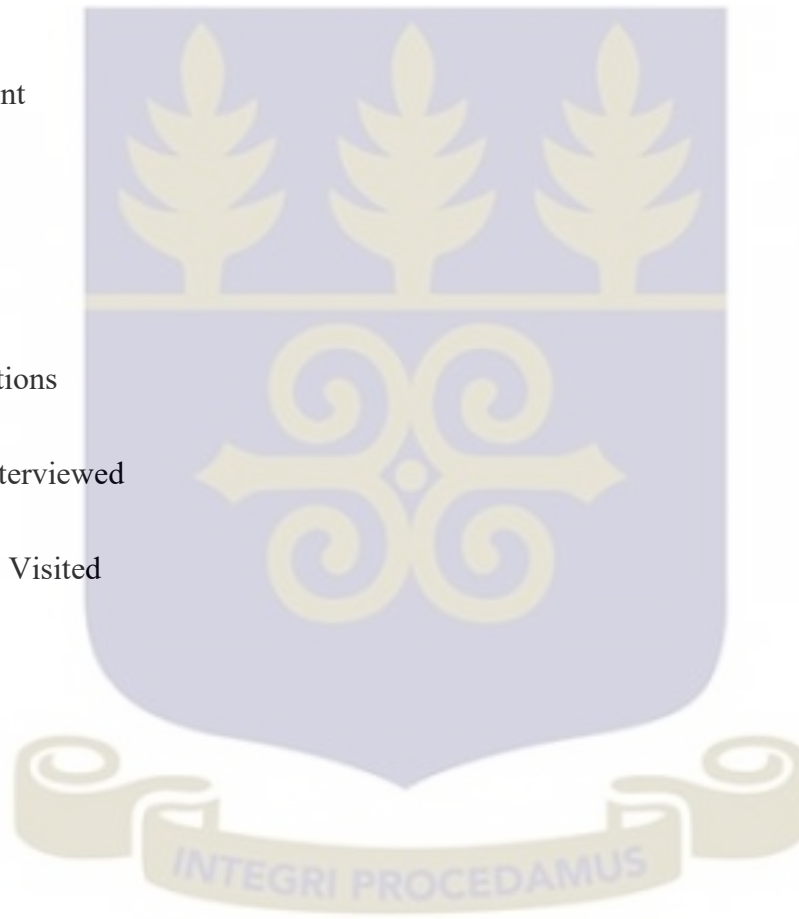
### **List of Museums Visited**

1. The British Museum, London.
2. The Wallace Collections, London.
3. Black Cultural Archives, London.



## TABLE OF CONTENT

Title	i
Declaration	ii
Abstract	iii
Dedication	iv
Acknowledgement	v
List of figures	vi
List of Tables	vii
List of Abbreviations	viii
List of People Interviewed	ix
List of Museums Visited	xi
Table of content	xii



## **CHAPTER ONE: THE RESEARCH IN PERSPECTIVE**

1.0	Introduction	1
1.1	Background to the Study Area	2
1.2	Aim	5
1.3	Objectives	5
1.4	Research Questions	5
1.5	Conceptual Framework	6
1.6	Research Methods and Data Source	6
1.7	Significance of the Study	6
1.8	Limitations of the Study	7
1.9	Organization of the Chapters	8

## **CHAPTER TWO: LITERATURE REVIEW AND HISTORY ON COLLECTIONS DIGITIZATION AT THE GHANA NATIONAL MUSEUM, ACCRA.**

2.0	Introduction	10
2.1	Definition of a Museum	10
2.2	Museum Collections Management	11
2.2.1	Types of Museum Acquisition	11
2.2.2	Accessioning of Objects in the Museum	13
2.2.3	Documentations in Museums	13
2.2.4	Preservation in Museums	14
2.2.5	Deaccessioning Museum Objects	14
2.3	Museum Digitization	15
2.4	The Museum Intangibles as a Marketing Product	19

2.5	The Ghana National Museum. Accra	20
2.5.1	The GNM, Accra Acquisition Policy	22
2.5.2	Functions of the GMMB	24
2.5.3	Other Services of the GNM, Accra	25
2.6	The Previous GNM, Accra Digitization Project	25
2.7	Why the Digitization Process stalled	27
2.8	What is The Nature of The GNM, Accra Collections	28

### **CHAPTER THREE: RESEARCH APPROACH**

3.0	Introduction	30
3.1	Data Collection	30
3.1.1	Primary Sources of Data	30
3.1.2	Secondary Sources of Data	31
3.2	Research Design	31
3.2.1	Pre Site Preparations	32
3.2.2	Experiencing Digitization Project in Some Museums in a the UK	32
3.2.3	Analysis of the Research Findings from the UK	37

### **CHAPTER FOUR: DEVELOPING A TEMPLATE FOR DIGITIZING THE GNM, ACCRA COLLECTIONS**

4.0	Introduction	38
4.1	Challenges of the GNM, Accra and Implementation for Digitization.	38

4.1.1	Based On Best Practices In Some Museums In The UK.	39
4.2	What Lessons Can be drawn from Standard Practices at the British Museum, the Wallace Collections and the Black Cultural Archives	40
4.3	Opportunities Available for the GNM, Accra when it Digitizes its Collections	40
4.4	The Parameters for the Database	42

## **CHAPTER FIVE: THE PROPOSED DATABASE FOR THE DIGITIZATION**

5.0	Introduction	50
5.1	The Interface	50
5.1.1	The Administrative Interface	51
5.1.2	The User Interface	53
5.2	Selection of Objects for this Dissertation	54
5.3	Ten Digitized Ethnographic Collections	55
5.4	Ten Digitized Archaeological Collections	75
5.5	Ten Digitized Artworks	95
5.6	Summary of the Chapter	114

## **CHAPTER SIX: RECOMMENDATIONS AND CONCLUSION**

6.0	Introduction	115
6.1	Recommendations	115
6.2	Conclusions	117
	Bibliography	119
	Appendices	121

## CHAPTER ONE

### THE RESEARCH IN PERSPECTIVE

#### 1.0 Introduction

The Ghana National Museum (GNM), Accra is the largest and oldest museum in Ghana (Figure 1) in terms of age, size and the volume of its Collections (Personal information from the GNM, Accra Curatorial body). Its development can be traced to the establishment of an Ethnographic Museum at Achimota College in 1929 (The GNM, Accra brochure, 2011). It was later transferred to the Department of Archaeology at the then University College of the Gold Coast now University of Ghana, in 1948 (Personal information from the GNM, Accra Curatorial body).



**Figure 1:** View of the Ghana Museum Building

However, on the 5<sup>th</sup> of March 1957, the eve of Ghana's Independence, the then Head of State of Ghana, Dr. Kwame Nkrumah with the help of Queen Elizabeth II of Great Britain opened the Ghana National Museum, Accra (Personal information from the GNM, Accra Curatorial body).

The Ghana National Museum, Accra is under the Ghana Museums and Monuments Board (GMMB). The GMMB is the statutory body established by the National Liberation Council Decree (NLDC 387) (now Act 387 of 1969) for the protection, conservation and management of Ghana's

material cultural heritage (Ghana's 1992 Constitution). The Museum is a government institution which runs the national museum's assets across Ghana.

### 1.1 Background to the Study Area

The GNM, Accra is an ethnographic, archaeology and art museum. Therefore objects acquired are based on that. The GNM, Accra has close to 33,000 ethnographic objects, with an uncountable archaeological objects and close to a thousand works of art. Though the Museum collects objects in the above mentioned areas, it also has quite a number of numismatic (medals and coins), and past stamps as well as past paper currencies of Ghana and that of some neighbouring countries.

The GNM, Accra has three storage areas. The first is the main storage area (figure 2) which measures 24.3843m x 13.8076m and houses the ethnographic and the archaeological collections.



**Figure:** View of the main storage area of the GNM, Accra (Author's documentation 18.3.2015)

The second storage area (The Strong Room; figure 3) which has a measurement of 4.2673m x 5.4865m, houses the art works, five thousand (5,000) Gold weights and some storage containers for gold, gold dust and jewels collected during the Gold Coast era. These receptacles are known as 'Foruwa' and 'Koduo'.



**Figure 3:** View of the Strong Room' of the GNM (Author's documentation 18.3.2015)

The third storage area (The Textile Room; figure 4) which measures 4.2673m x 5.4865m, houses different types of woven cloths like Ewe Kente, Ashanti Kente and the Northern Smock Fabric and other fabrics. One may also find royal umbrellas, different types of beads, royal regalia, fiber cloth as well as blankets.

Though objects in storage are classified, they have not been arranged by their materials used in making them. Rather wooden, metallic and organic objects are all stored together on the shelves.



**Figure 4:** View of the 'Textile Room' of the GNM, Accra (Author's documentation 18.3.2015)

## **1.2 Aim**

The aim of this study is to create a template for the digitization of museum objects using the Ghana National Museum, Accra Collections as a case study. This digital database when created by the GNM, Accra will constitute a framework for the GMMB to streamline its Collections management across the country.

## **1.3 Objectives**

To guide the focus of the study, the research hopes to achieve the following:

- To assess the nature of the GNM, Accra Collections
- To assess the opportunities for digitization of the Collections.
- To assess the challenges of digitizing museum objects.
- To propose a template database for digitizing the GNM, Accra Collections based on standard practices at the British Museum, the Wallace Collection and the Black Cultural Archives all in the United Kingdom (UK).

## **1.4 Research Questions**

In order to establish an effective basis for data collection, the following research questions were addressed.

- What are the state of the objects in the storage areas?
- How are objects classified in the storage areas?
- Does the GNM, Accra have trained curators to partake in the digitization process?
- Does the GNM, Accra have the essential resources required for the digitization of its Collections?

## **1.5 Conceptual Framework**

The researcher was guided by the concept of “virtual museum”. A “virtual museum” is defined as a logically related collection of digital objects composed in a variety of media which because of its capacity to provide connectedness and various points of access, lends itself to transcending traditional methods of communicating and interacting with visitors (Schweibenz, 1998). It goes on to assert that the virtual museum has no real place or space. Its objects and the related information can be disseminated all over the World Wide Web (www).

The Ghana National Museum, Accra at the moment, has a complete manual documentation system which will serve as a reference point for the digitization process. Presently, though the GNM Accra has classified storage areas, not all the objects in its Collection are classified.

## **1.6 Research Methods and Data Source**

The research method employed in this study includes the use of primary and secondary sources. The primary sources include the use of interviews, observations and photographs. Some Curators of the British Museum (BM), the Wallace Collections (WC), the Black Cultural Archives (BCA) and Curators of the GNM, Accra were interviewed. The researcher also used photography for the template in documenting the GNM, Accra Collections.

The secondary source used by the researcher was what other scholars have thought about museum objects digitization and their benefits.

## **1.7 Significance of the Study**

Digital documentation of the Ghana National Museum, Accra Collections will facilitate categorization of the objects in storage. This will bring about easier and faster retrieval of information on objects at the Museum. A digital database will also make it easier and faster to

locate an object in the Storage. A digital database can also serve as a reference in case of any eventuality such as destruction of the Accession Registers and Catalogue Cards.

The digitization process will also assist in the conservation to ensure the longevity of the Ghana National Museum, Accra Collections. This in plain language means that, through the digitization process, pictures will be taken of all individual objects to put in a database. These pictures taken, will serve as a reference source when any restoration work on an object is required. It will also aid in identifying objects when missing or stolen.

Through the digitization process, objects will be rearranged in the stores. This will give the objects new location references that will help in easier retrieval from the stores.

The Ghana National Museum, Accra is mandated by law to establish regional and district museums throughout the country. A successful completion of this digitization project will usher in an opportunity for the Ghana National Museum, Accra to aid the other districts and regional museums to digitize their collections.

If the above are achieved, then museums in Ghana will not only be digitally preserving Ghana's heritage but they will be informing and educating people world over by making the digitized database available on the internet for all and sundry to have access.

### **1.8 Limitations of the Research**

The researcher encountered some limitations in the course of conducting this research. They are as follows;

1. First of all, the GNM, Accra did not have record of what, why and when the previous digitization process was carried out. The Curators have just the oral information on how the

previous digitization project of the Museum came about and how the project was executed.

This is because the previous database became corrupted.

2. The researcher was limited in terms of lack of books and internet searches on museum digitization.
3. For the lack of resources, the researcher did not visit other museums besides the BM, WC and the BCA.
4. Curators in the WC and the BCA were reluctant in giving information besides what the researcher observed.
5. The corrupted database of the previous GNM, Accra digitization project could not be accessed in any way, neither could any part of it be printed.

## **1.9 Organization of Chapters**

Chapter Two is about the Literature review of what museum digitization is. It also looked at the previous Ghana National Museum, Accra attempted digitization project, how it stalled and what caused the project to collapse.

Chapter Three includes the approaches adopted in executing this research work, the findings of the research and the analysis of the research findings. The chapter also looks at the limitations of the research.

Chapter Four examines the findings for this research based on the previous attempted GNM, Accra digitization process and on best practices of some museums on digitization in the UK visited by the Researcher. It also looks at the parameters the Researcher and the Curators came up with for the Database.

Chapter Five focuses on the database, the administrative and the user interface. The Chapter also outlines thirty (30) GNM, Accra objects digitized for the purpose of this Dissertation .

Chapter Six presents the recommendations from the researcher to the GNM, Accra and the conclusion of the research.



## CHAPTER TWO

### LITERATURE REVIEW AND HISTORY ON COLLECTIONS DIGITIZATION AT THE GHANA NATIONAL MUSEUM, ACCRA.

#### 2.0 Introduction

This chapter is in two parts; the first part looks at the literature review of what museums are, museum collections digitization and the benefits that some museums derived from digitizing their collections. The second part looked at the first attempted digitization project of the Ghana National Museum, Accra Collections.

#### 2.1 Definition of a Museum.

A museum is a non-profit, permanent institution in the service of society and its development which is open to the public. It acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment (ICOM).

A museum is a repository for collecting and displaying objects having scientific or historical or artistic value. It is also a place where beautiful and interesting things are found (Navarrete and Owen, October 2011).

According to the American Heritage Dictionary, a museum is a building, place or institution devoted to the acquisition, exhibition and educational interpretation of objects having scientific, historical or artistic value.

One of museum's major responsibility is to educate the public. Museums are to look for ways to reach out to their publics. Especially with the increase in recreational activities competing with

museums. They are to look at modern and technological ways to present their services in order to attract people to them and to educate more people. Though other institutions deal in information, only museums uniquely collect, preserve, research and publicly display objects as an essential function of their existence (Dean, 1994: 1).

## **2.2 Museum Collections Management**

Collections management is the life cycle of museum objects from acquisition through to disposal or de-accessioning in the museum. The processes of museum collections management include acquisition, accessioning, documentation, preservation and in some cases de-accessioning.

### **2.2.1 Types of Museum Acquisition**

The processes of acquiring museum objects are through purchasing, donation, bequest, surface collection, excavation, loan and exchange.

#### **Purchasing**

Purchasing is done when a museum identifies an object as worthy of being in the museum. The museum then spends money or through sponsorship, to acquire the object. Purchases made are according to the typology of the museum acquiring the object.

#### **Donation**

Acquisition through donation is when an individual or groups of people identify the museum as the best place to keep a property. The item is then donated to the museum for safe keeping.

### **Bequest**

Some museum objects are acquired through bequest. Bequest is when some individuals will their personal belongings to the museum before or after their demise.

### **Surface Collection**

Surface collection is when a museum assigns a collector to go to towns and villages purposely to collect indigenous cultural objects peculiar to the community. In most cases, the objects acquired through this medium are based on the typology of the museum.

### **Excavation**

Excavated objects are acquired by museums through the findings of archaeological excavations.

### **Loan**

Acquisition in the museum can be done by acquiring objects on loan. Some cultural institutions also lend an object or objects to other cultural institution with the condition that the object or objects will be useful to the museum. Loaning object or objects can be on long or short term. The short term loan is usually within a day to a maximum of six months and the long term can be for over six months.

### **Exchange**

Museums do acquire also by exchange. Exchanging of objects often occur between two museums. A museum believed to have quite a number of the same collection can decide to exchange some with another museum which it does not have in its collections.

### **2.2.2 Accessioning of Objects in the Museum**

Accessioning an object in the museum implies giving the museum accessioning codes to a newly acquired object. Accessioning begins after the acquisition of an object, and a thorough check for any form of deterioration has been done. Deterioration in this sense refers to a situation whereby the object is free of insect infestation or rust. When accessioning objects from the perspective of the GNM Curators, the accessioning code is derived from the year the object is being accessioned as well as the number of objects being accessioned for that particular year.

Materials required for accessioning museum objects include the following; Indelible ink (black & white), paraloid B72 for coating the portion for the accession number, a fine brush for writing the accession number on the object and a rough brush for applying the paraloid on the portion for writing the accession number.

The accessioning is done by first choosing a discrete portion which is normally at the base of the object. This is done so that the accession number cannot be seen by visitors or the public. After identifying a portion for writing the accession number, paraloid B72 solution is applied on just the small portion. When the paraloid is dried, the accession number is then carefully written on the dried paraloid. After the ink dries, paraloid is applied again over the writeup. The reason for applying paraloid B72, is for the paraloid to serve as a protective coating for the ink not to rub off easily.

### **2.2.3 Documentations in Museums**

After accessioning the object, documentation of the object into the museums register follows. Documentation refers to the capturing of the object's accession number, the dimensions, the description, and the intangibles that came with the object during its acquisition into the Accession

Register and the Catalogue Cards. The Accession Register is the manual documentation book of the acquired objects in a museum and the Catalogue Cards are equally the manual documentation system of the Collection. Comparing the Catalogue Cards to the Accession Registers, the catalogue cards contain detail information of the objects.

#### **2.2.4 Preservation in Museums**

The next step one has to take into consideration is preservation. This commences right after the objects have been taken into storage. This is done from time to time to check the condition of the newly acquired objects in storage. In the storage area, certain factors have to be taken into consideration to better preserve the objects. These factors vary with respect to the form of the object (either wood or metal). If its wood, you ascertain as to whether the object is growing fungi or not. On the other hand, if it is a metal, there is the need to assess whether there is rust or change in the object's colour. After a thorough check and if none of these conditions are present, it implies that the macro condition in the storage area is okay. On the other hand if any of these aforesaid conditions are present, then the necessary steps have to be taken by the Collections Manager in arresting the situation.

#### **2.2.5 De-accessioning Museum Objects**

De-accessioning of objects is mostly avoided by museums all over the world. It implies, the discarding of an already accessioned object in a museum. Any time this is done, it means that the object in question will no more be identified as the museums object. Some reasons why objects are de-accessioned include; decay or deterioration beyond conservation, breakages beyond repair and sometimes return of objects to original owners.

Notwithstanding the above, most museums do not de-accession objects due to the never ending bureaucratic and other legal processes which they have to adhere to before undertaking that task. The objects are rather given as a donation or given on a long term loan to another museum who have the expertise to restore the object. Before any object is de-accessioned, a photographic documentation of the object is done to inform future curators of the museum on how the object looked like before it was given out to another museum.

### **2.3 Museum Digitization**

A computer is a new major technological addition to the museum tool box. Computers are machines designed to store and manage information in ways that are useful to people. The way information is stored, and its ease of recovery are key factors in how useful they can be. There are thousands of computer programs which support work outflow in organization, amongst these are three generalized applications suitable for museum work and these applications are as follows;

- Microsoft Word processors: used in museums to create text documents such as letters, labels, newsletters and other printed materials.
- Microsoft Access programs: to arrange and store pieces of information such as numbers, words and pictures in museums.
- Draw and Paint program: it allows museums to use the computer as a graphic tool (Dean, 1994: 133 - 134).

The worldwide web (www) and the Internet have become so ubiquitous that even institutions with more conservative attitude towards information technology such as museums have started recognizing the possibilities it offers for the dissemination of information to a worldwide public (Schweibenz, 1998: 186). Technology today allows museums to explore their goals of “education,

study and enjoyment” in previously unimaginable ways, reaching out to a much larger and wider community than their physical museums could ever support (Basalmo, 2011:146). In dealing with the communicative function of the museum, some researchers think that museums must communicate with the mass media. Example is Sharon MacDonald who is of the view that “museums clearly have much in common with other institutions and media” (MacDonald, 1996: 5). According to Roger Silverstone “museums are in the communication business” and offer a display of objects and artifacts which have been designed to educate, inform and entertain (Silverstone, 1988: 231).

The primary goal of museums today is to provide all visitors with the greatest amount of opportunities with which to access their information through as many channels as possible, largely dependent on individual preferences for learning and enjoying the largest amount of information that targets as many different audiences as possible (ICOM 2007).

Most museums realize that the Internet offers the ideal medium with which to do all this, and consequently they have begun transforming their websites to become more accessible. According to Vergo in 1980’s, a shift in paradigm happened in museology (Vergo, 1989: 99). The value of an object is determined through the information the object processes. Therefore, museums ought to emphasize on the objects information just as the objects. Others like George MacDonald and Steven Alford (MacDonald and Alford 1989; MacDonald and Alford 1991; Alford 1991; MacDonald 1992) described the museum as an information utility going as far as stating that museums need to think of information, rather than material objects, as their basic resource. Finally, museums are no longer thought of as being repositories of objects only but as “storehouses of knowledge as well as storehouses of objects” (Cannon-Brookes 1992: 501; Hooper-Greenhill 1992: 3f).

An important issue related to that shift of paradigms was the growing importance of museum education and visitor studies (Schweibenz, 1998). A number of studies on visitor interests were conducted by scholars such as Melora MacDermott (1988) and the Getty Center for Education and the Arts (1991). The outcome of this research proves that the literature of an object in a museum is as important as the object. This means that objects without their literature are equal to no object. Therefore, museum visitors behold the object for a few seconds only (Treinen, 1996: 65). As Laura Chapman states; the myth that “object speaks for itself” forgets that the meaning of an object is learned and established by the context (Chapman, 1982: 48). The importance of the literature of an object is as important as the object and how it is communicated. It is also emphasized by Treinen who reasons that communication is the key to the understanding of museum objects (Treinen, 1996: 65)

Communication in the museum includes ‘those aspects of the institution that have an effect on either the museum’s image, or on the general experience of the visit’ (Hooper-Greenhill 1994: 50). In most museums; if not all, there is literature on an object on display as a short text which is mostly referred to as a label. In the museum world, the texts and labels must contain a few words to explain an object on display. This is so because, the text of an object should not take more space than the object. Otherwise, the text takes attention off the object.

A digitized object online provides a museum visitor with detailed information on an object. Therefore, a digitized collection does not only provide the name of an object, what it is used for or where it is coming from but provides detail information like the measurements, the colour, the description, local name given to the object and everything required in the database.

At The Black Cultural Archives Gallery in Brixton, London, it was observed by the researcher that the Museum Management employed the use of a modern device to provide more information on

the exhibits displayed. This revelation came to light when the author travelled to London for research in May 2015. Since a conventional museum label is limited in terms of number of words, there were recorded audio to further explain the exhibits. These recorded audio devices were attached close to the labels in the exhibition gallery as shown in Figure 5.



**Figure 5:** Photo of the device containing recorded audio at the BCA in Brixton, London that further explains the exhibit (see red arrow)(author's documentation 14.5.2015)

Furthermore, for an extra fee in the situation of the BCA in figure 6 below, a visitor is given a similar device to hang around the neck. So if a visitor wants details of an exhibit, he or she can hold the device close to the one by the exhibit and if any of the devices beep he or she can listen to the audio describing the exhibit further.



**Figure 7:** Visitors listening to the audio recording at the BCA in Brixton, London.(author's documentation 14.5.2015)

## 2.4 The Museum Intangibles as a Marketing Product

According to Fiona McLean, goods can be defined in terms of their physical attributes, but museum services delivered are the intangibles which complicate the concept of the product (McLean, 1997; 105). This above statement by McLean implies that museums therefore provide services to their publics, and that of their services delivered are the intangible literature of their

collections. Though the collections of museums are an aspect of what the public patronizes, the literature accompanying these collections are what makes the collections meaningful to the public. Museums are not creating products to meet an unmet need of the public, but have a fixed product which are the collections and the museum buildings (McLean, 1997; 105).

Digitized museum collection made available to museum publics are the new trend. The intended GNM Accra Collections digitization therefore does not only involve the photographic images, but also the intangibles of the Collections.

## **2.5 The Ghana National Museum.**

The GNM, Accra is located at No. 2 Barnes Road in the Osu Klottey Sub-district under the Accra Metropolitan Assembly. It is an ethnographic, archaeology and art museum which collects artefacts relating to the typology of the Museum. The GNM, is under the Ghana Museums and Monuments Board (GMMB). Therefore it shares the Mission and Vision of the GMMB.

The Mission of GNM, is to acquire, protect, conserve and document the Nation's moveable and immoveable material cultural heritage for posterity, for the purposes of research, education and enjoyment of the public ([www.ghanamuseums.org](http://www.ghanamuseums.org)). The Vision is to be an effective, efficient and focused institution in the preservation and exhibition of the material cultural heritage of Ghana and West Africa, and in attaining and maintaining international standards ([www.ghanamuseums.org](http://www.ghanamuseums.org)).

The GNM, Accra prior to 2014 did not have an acquisition policy which guided and informed the Museum management on how to collect, and acquire objects for the Museum. However, in 2014, it became necessary to have an acquisition policy and so a committee was constituted to formulate the policy. The following are the positions of the committee:

- The Executive Director - Chairman

- The Collections Manager - Vice Chairman
- The Collections Registrar
- The Museum's Conservator
- The Research Officer (Archaeologist)
- The Head of Education Department
- Two Nominees of the Executive Director

The management committee together with the Board Members of GNM Accra, after examining the proposed Policy, accepted and adopted it. This policy paved the way for the GNM, Accra to start acquiring collections for the Museum.

In reviewing the GNM, Accra register, it has been observed that the Collections acquired before the Acquisition Policy came into being were through ethnographic collectors, archaeological researchers, exchange with other museums and donations from Artists.

The ethnographic collections were obtained mainly through some private collectors who collected objects and later sold their collections to the Museum. Others were also bequeathed to the Museum by private individuals who owned rare Ghanaian objects and thought the GNM, Accra was the safest place to keep them for posterity.

The archaeological objects are often acquired through archaeological excavations. The Ghana National Museum, under The National Museum Acts Law 387 of 1969, grants permission to anybody or a group to apply for a permit to excavate. After the excavation and analysis, all the objects excavated were to be returned to the Museum for storage and for educating people. The artworks are often donations to the Museum from some artists who made them, while others were also acquired by private institutions who donated them to the GNM, Accra. It must also be noted

that some of the artworks were acquired by government institutions to decorate their offices, but were later donated to the GNM, Accra for the Museum to preserve and exhibit them for Ghanaians and tourists to see and admire the creativity of early Ghanaian Artists. An example includes the collections of Kobina Bucknor, whose artworks were previously exhibited on the walls of the former Ambassador Hotel, now Movenpick Hotel, Accra, and was later donated to the Museum when the Hotel was being renovated.

### **2.5.1 The GNM Acquisition Policy**

With reference to the GNM policy, acquisitions in the museum are through: Chiefs and Community Leaders, Antique Sellers/Dealers, Renowned Artists, Private Collectors and Galleries etc.

The criteria for acquiring objects in the GNM, Accra in the 2015 Acquisition Policy are categorized below;

#### **Object Acquisition**

Before the acquisition of objects to the GNM, Accra, objects must be of value in supporting and promoting the objectives and purposes set forth in the GMMB Mission Statement or Mandate.

Objects yet to be acquired must be consistent with the Board's Collection's Plan given at any time.

#### **Rightful Ownership**

The rightful ownership implies objects must be the legal property of the donor, seller, or vender and must have legal authority to transfer ownership, sell or lend the object.

### **Authentication and Cost**

Objects must be authentic or if an object is a reproduction, it must have value for the Museum's purpose. The cost and expenditure of staff time and other resources in acquiring, researching, transporting, processing and storing the objects must fit within the Board's available resources.

The authentication implies that before objects are acquired for the GNM, Accra, the objects must be the original. And in terms of cost and expenditure in acquiring an object, the cost of the object must fall within the allocated money for the acquisition of objects by the GNM, as well as the cost of transporting the objects to the Museum and their preservation.

### **Condition and Size**

From the GMMB Acquisition Policy, the condition of the object must be such that the GMMB can adequately care for and preserve it, this must be done in keeping with current professional standards to the best of its ability and within the standard appropriate to the type of collection.

Also, an object acquired must be of an appropriate size and in good physical state so the Museum can provide storage space and security for it.

An object to be acquired must be deemed to pose no health risks or other hazards for staff, visitors, the Museum building and grounds or collection that are beyond the ability of staff and facilities to contain.

### **Intangible Literature**

Objects must have documentations on their origin, region, district or town, previous ownership, and circumstances of acquisition by owner, and adequate accounting of such as determined by the

Acquisition Committee and the Executive Director. Moreover, an object must be accompanied by as much information as possible regarding history and cultural context.

### **Legality**

In terms of the legality of acquiring objects for the Museum, the following must be complied with:

- i. United Nations Educational Scientific and Cultural Organization (UNESCO) Convention on the Means of Prohibiting and Preventing the illicit Import, Export, and Transfer of Ownership of Cultural Property, (November, 1970; Article 9 Convention under the Convention on Cultural Property Implementation Act 1983).
- ii. Any existing Conventions controlling or regulating Antiques Endangered animals and birds spices, biological materials, and Marine Mammal Protection of which Ghana is a signatory.
- iii. All other applicable local or District, National or International Laws and regulations.

Also, objects consisting of human remains and sacred materials will not be acquired especially if they are known by the Curatorial Staff and Acquisition Committee Members at the time of acquisition that their presence and use in museum collections, programs, and or exhibits will be considered to be offensive or inappropriate by the relevant cultural group, whether or not they are governed by Public Law (GNM, Acquisition Policy, 2015).

### **2.5.2 Functions of the GMMB**

The functions of the GNM, Accra obtained from [www.ghanamuseums.org](http://www.ghanamuseums.org) are as follows as

- To equip, protect, conserve and manage registered material cultural heritage of the Nation.
- To establish, equip and manage new national museums.

- To control the export, import, sale and change of ownership of material cultural properties through licensing and issuance of permits.
- To establish a national register and keep inventory of all material cultural heritage of the Nation.
- To identify and recommend for declaration as national monuments, structures and sites of historical and cultural significance.
- To undertake research and publish all matters relating to material cultural heritage.
- To facilitate tourism through the proper maintenance of museums and monuments.
- To provide interpretive service on the Nation's material.

### **2.5.3 Other Services of the Ghana National Museum**

- Provision of conservation services to museums, traditional councils and private individuals holding material cultural objects.
- Provision of exhibition space and exhibition services to artists, associations/institutions to organize temporary exhibitions and for conferences, workshops and lectures.
- Provision of outreach programs for schools and organized bodies. ([www.ghanamuseums.org](http://www.ghanamuseums.org)).

### **2.6 The Previous GNM Digitization Project**

In 2009, the Ghana National Museum, Accra with the help of a Dutch Institute (Koninklyk Intituut voor de Tropen) from the Netherlands started digitizing its Collections. There was a workshop in 2009 where some curators at the Ghana National Museum, Accra were taken through the processes of how to input data in the Database and how to retrieve information from it.

The theory behind the Collections Management System by digitizing the Collections was as a result of the rampant exportation of rare Ghanaian artefacts to Europe and the Americas. Most

foreigners from the above mentioned countries had interest in the Ghanaian artefacts because of their aesthetic work and value or the creativity in them. As a result, the GNM, Accra, sought to digitize its collections which was dubbed “Object Identification”. The GNM, Accra was to digitize its collections and to make them available on the internet for all, especially foreigners to have access to them. The digitized collections online was to inform and educate people around the world about what the rare Ghanaian artefacts are, and the ban on them from being taken out of the country unlawfully. The GNM, Accra sought to educate the people of Ghana on the importance of losing its heritage by means of exchanging Ghanaian antiquity for foreign currencies.

The GNM, Accra realized that majority of Ghanaians were exchanging rare Ghanaian family heirlooms for foreign currency. Some Ghanaians were also directing foreigners to loot some archaeological sites for foreign currency. The Museum realized this, because most of these foreigners, before leaving Ghana with these objects had to obtain export permit from the GNM, Accra (Personal information from the GNM, Accra Curatorial body).

Before starting the digitization process, the Dutch Institute helped the GNM, Accra to acquire some computers which were to be used solely for the digitization process. In all, five desktop computers were acquired.

Also, the Dutch Institute provided a database software which was used for the digitization of the collections. The software which was provided was called CDS/ISIS. The CDS/ISIS is a software package for generalized Information Storage and Retrieval Systems (ISRS). It was developed, maintained and disseminated by UNESCO. It is particularly suited for bibliographical applications and is used for cataloguing small and medium-sized museums (UNESCO).

Furthermore, with the help of the Dutch Institute, the GNM, Accra acquired tools like steel rulers, 50 tape measures, steel inside and outside calipers, an electronic scale and a 10 megapixel digital camera for the digitization process.

At the beginning of the digitization process, a workshop was organized for the Curators, during which the Curators were taught the significance of the digitization process and the systematic processes of gathering data of an object before eventually going to input everything in the Database.

At the training workshop, they were taught what the fields in the Database meant, why they were needed, how and where to get the information and how to input the information unto the Database.

After the workshop, some of the Resource Rersonnels of the Dutch Institute stayed and worked with the Curators in guiding and helping them to digitize a few of the objects before eventually departing. After the resource persons had left, the Curators who took part in the workshop also taught the other local Curators who were not present at the workshop. The digitization went on until 2010. In all, close to three hundred (300) objects from the stores were digitized but unfortunately in early 2010, for numerous reasons the project halted and later collapsed.

## **2.7 Why the Digitization Process Stalled?**

According to the GNM Accra Curators, the following are the reasons why the digitization project stalled and later collapsed. To understand these reasons, the researcher has categorized them into factors such as virus infection of database, lack of managerial role, inappropriate use of the peripherals, misplaced database and lack of effective training.

### **Virus Infection of Database**

The Personal Computer (PC) used for the project got infected with a virus. Consequently, the Database for the digitization project got corrupted by the virus infection, which caused most of the catalogued objects in the database to go blank. In view of this, the Curators could not identify which ones of the digitized objects in the database were corrupted. This was as a result of mismanagement of the computer used for the digitization.

### **Lack of a Managerial Role**

Because of lack of a managerial team to see to the update and upkeep of the Database, the digitization project collapsed.

### **Inappropriate Use of the Peripherals**

The camera used in capturing images for the database was not a professional one but rather a less professional. As a result, zoomed in objects on the Database were distorted.

### **Misplaced Database**

The supplied database for the digitization project did not suit the Ghana National Museum, Accra. Since the Curators had more data on an artefact to input unto the database than the fields available on the supplied Database. In contrast, the Database had fields the Curators did not have data to input.

### **Lack of Training**

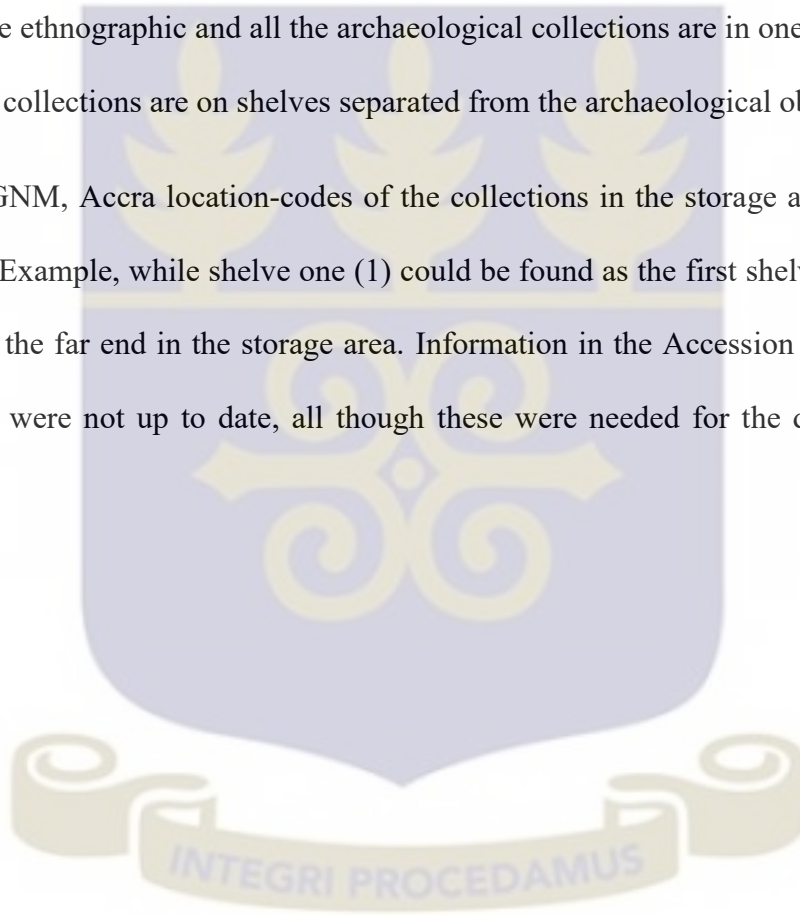
Though the Curators were given basic training on how to use the Database, other aspects like how to capture images of the objects unto the Database were not addressed and the trained curators

could not adequately teach the other curators who did not take part in the training workshop of the Dutch Institute.

## **2.8 What is The Nature of The GNM, Accra Collections?**

The GNM, Accra aformentioned is an ethnographic, archaeology and art meseum. Therefore, its Collections in storage have been classified accordingly. Though the Museum has three storage areas, some of the ethnographic and all the archaeological collections are in one storage area. But the ethnographic collections are on shelves separated from the archaeological objects.

Previously, the GNM, Accra location-codes of the collections in the storage area do not follow chronologically. Example, while shelve one (1) could be found as the first shelve, shelve two (2) was relatively at the far end in the storage area. Information in the Accession Registers and the Catalogue Cards were not up to date, all though these were needed for the digitization of the collections.



## CHAPTER THREE

### RESEARCH APPROACH

#### 3.0 Introduction

This research sought to identify the opportunities and challenges of digitizing the Ghana National Museum, Accra Collections, taking into consideration the volume of the Collections and also their differences in terms of their mode and the materials used in making them. Based on this, the research has attempted to develop a template that could be used in the digitization of the GNM, Accra collections.

#### 3.1 Data Collection

As aforementioned, the author employed the use of primary and secondary sources in collecting data for the research.

##### 3.1.1 Primary Sources of Data

###### Interviews

Informally, the researcher interviewed some British Museum Curators on why, when and how the BM started digitizing its collections. The researcher also employed the means of interview with the GNM Accra, Curators to know how some years back the Museum started digitizing its Collections but later collapsed.

###### Photography

The researcher also employed photography in the documentation of the research and also further explain the research works and findings.

## **Observations**

By observing, the researcher learnt other means of digitization from the WC and the BCA. By observing the researcher took down notes and made snapshots of the other means of digitizing the museum's collections at the WC and the BCA.

### **3.1.2 Secondary Sources of Data**

The Secondary sources employed by the researcher was through library and internet searches. The researcher did not find enough books at the University of Ghana Balme Library and the Department of Archaeology and Heritage Studies Library. Also, the GNM, Accra Library was used but no book was found from there on museum digitization. However through Google Scholar search, the researcher found some documents on concepts of what some museums around the world use to digitize their collections and what they do with the digitized collections.

The researcher therefore, had to use the analysed data collected from visiting the BM, WC, and the BCA as hands on practical works on museum digitization to develop a template for digitizing the GNM, Accra Collections.

## **3.2 Research Design**

This research work is in three parts: the first is the pre site preparations the second is experiencing digitization project in some museums in the UK and the third is the analysis of the information obtained from the museums in the UK. These are further explained below.

### **3.2.1 Pre Site Preparations**

The pre site preparation started with a visit to the GNM, Accra to ascertain if the Museum was ready to digitize its Collections. The findings revealed the attempted digitization of the institution's

Collection few years back but which proved unsuccessful. The lack of success with the attempt was as a result of not having a clear understanding of what constituted museum digitization and how the digitization had to be done.

Having obtained an overview of the attempted digitization by GNM Accra, I proceeded with further research. In general, I conducted library and internet research on museum digitization and also on how some museums around the world digitized their collections. And finally, I factored in the resources which included the tools, peripherals and the human resources needed for the digitization project.

### **3.2.2 Experiencing Digitization Project in Some Museums In the UK**

As an important part of the study, the researcher had eleven (11) days visit to London. In London, the researcher had the opportunity to visit the British Museum, the Wallace Collection and the Black Cultural Archives.

#### **The British Museum (BM)**

The researcher was invited as a curator of the GNM, Accra, to help the BM interpret and digitize some Ghanaian indigenous gold weights and fabrics. While at the BM, the researcher utilized the opportunity to study the BM digitization project. The researcher studied what led to the digitization of the Collections, when the project began, how it was executed and finally how it was being managed.

Among the key findings on the BM digitization project, it was established that, the BM started digitizing its Collections in 1976 with records of two-dimensional works (oral information from BM Curators). The Department of Africa, Oceania and the Americas (AOA) was the first

department in the BM to start digitizing its departmental Collections (Personal information from the BM Curators).

Before the AOA of the BM was to start digitizing its Collections, it had a complete manual documentation system of the Collections. That is, the accession register which contained the accession numbers, donor/vendor name and dimensions of the collections which were going to be the basis of the database were updated.

When the Department was set to digitize its Collections, the Departmental Curators were tasked to come up with the parameters for the database, taking into consideration objects to be digitized. Later, the Curators met to agree and disagree on what had to be done (Personal information from the BM Curators). Before the other departments in the BM would join in the digitization of their Collections, the database was revisited to add some parameters to be able to digitize the new collections (oral information from the BM Curators).

Though over 1,800,000 objects had been digitized, the BM still has more collections yet to be digitized because of lack of literature on some of the objects.

Objects without information on them are yet to be digitized only when research on them are conducted to gather information on them. As a result, objects without their intangibles were not worth digitizing to avoid misinforming the public.

### **The Wallace Collection (WC)**

While in the BM, the researcher was invited by the WC to interpret an Ashanti collection which the Museum had but had no literature on.

The Wallace Collection is a luxurious museum in terms of the museum structure and the exhibits. It is a national museum that can pride itself with having in their custody works of art collected in the eighteenth and nineteenth centuries by the first four Marquesses of Hertford and Sir Richard Wallace, the son of the 4th Marquess. It was bequeathed to the British Nation by Sir Richard's widow, Lady Wallace, in 1897. The collection is housed at Hertford House, in one of the family's London properties in the nineteenth century (The Wallace Collection Brochure, 2010).

In the 20<sup>th</sup> Century, it was turned into a museum. The Museum is limited in collecting objects. Therefore, objects acquired by the Museum must have evidence of being acquired by the Family. The WC has digitized collections online. The Museum uses its digitized collections online in particularly helping basic school children. Their digitized objects online, have been explained in simpler and clear English to make children understand them more easily.

The Museum has replica of objects on display in normal sizes and uses these replicas in teaching, especially basic school children who visit the Museum as shown in figure 7.

In the WC, snapping of pictures of the school children was prohibited unless taken from their backs without their faces showing. These were precautions laid down by the Museum to protect school children who patronized the Museum.

The WC does not have just the printed version of the digitized objects but have replica of some of the displays; like metal war armors used during the later years which visitors, who asked to have a feel of it were allowed to touch or even wear them as shown in Figure 7. This shows that, digitized

objects limit the public in terms of touch and feel of the objects. The WC addressed this limitations by making some replicas of the displays



**Figure 7:** A visitor wearing a replica armor in the WC (Author's documentation 18.5.2015)



**Figure 8:** View of a group of basic school children learning about the displays in the WC (author's documentation 18.5.2015)

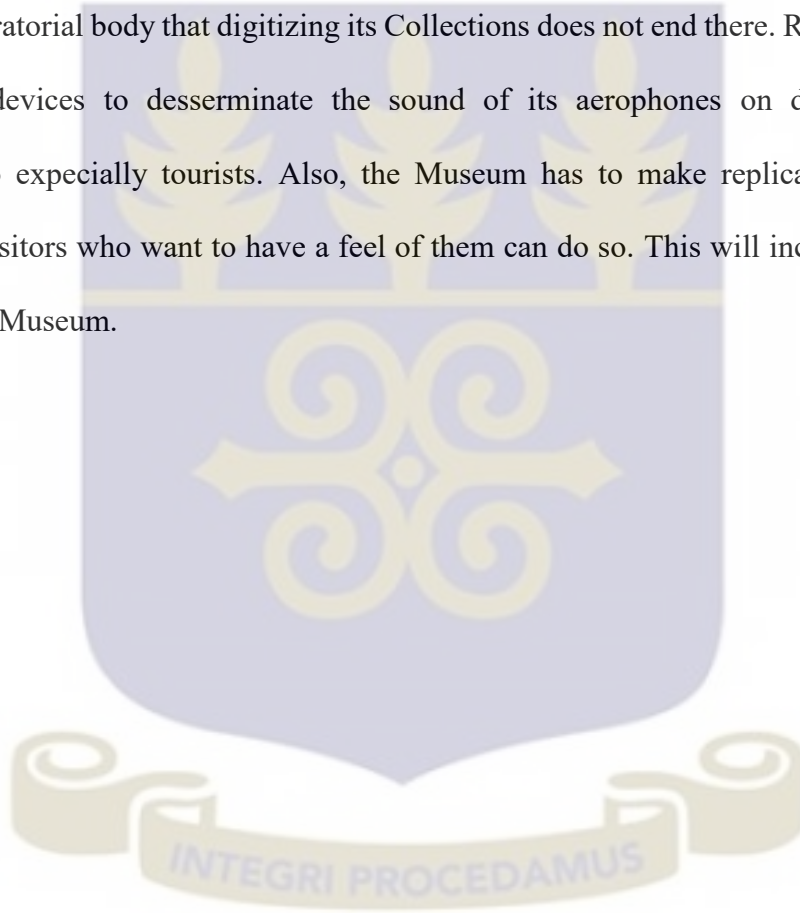
### **The Black Cultural Archives (BCA)**

The researcher visited the BCA because the BM thought it would provide an alternative perspective on museum collection digitization to the researcher. The BCA is an institution in the community of Brixton, UK for the Black Community to have a place to exhibit, a library to study and research and an archival centre.

### 3.2.3 Analysis of the Research Findings from the UK

The results of the research findings from the museums in the UK were analyzed and discussed with the GNM, Accra Curators and the Executive Director of what needed to be done and the cost involved in digitizing the Museum's Collections.

The researcher in a preliminary discussion of the findings from the UK, made it known to the GNM, Accra Curatorial body that digitizing its Collections does not end there. Rather, it can make use of simple devices to disseminate the sound of its aerophones on display for better understanding to especially tourists. Also, the Museum has to make replicas of some of its Collections so visitors who want to have a feel of them can do so. This will increase the number of visitors to the Museum.



## CHAPTER FOUR

### DEVELOPING A TEMPLATE FOR DIGITIZING THE GNM, ACCRA COLLECTIONS

#### 4.0 Introduction

The chapter presents the findings based on the attempted GNM, Accra digitization project in 2009 and the findings based on best practices of some museums in the UK. It also has the parameters for the database intended for the digitization of the GNM, Accra Collections.

#### 4.1 Challenges of the GNM, Accra and Implementation For Digitization.

##### **Incomplete Accession Registers and the Catalogue Cards of the Collections**

Though the GNM, Accra has Accession Registers and Catalogue Cards for their Collections, they were not updated in terms of the description of the objects and the dimensions of the objects. The Accession Registers have demarcated spaces for accession number, object name, description, dimensions, origin of the object, donor/vendor or collector of the object and the location of the objects in stores. Though the spaces were there, not all the objects had the requisite information.

##### **Location Codes In Storage Not In Order**

Location codes of objects in stores were confusing to the Curators. The numbering of the shelves in the stores were not following chronological arrangement thereby making the location codes very confusing.

##### **Objects In Stores Were Covered With Superficial Dirts**

Objects in stores were covered with superficial dirt which was causing wooden objects to have frass and metallic objects to rust.

#### **4.1.1 Based On Best Practices of Some Museums In The UK.**

##### **From The BM**

It was necessary to have a complete manual documentation system of the acquired objects of the museum before commencing any form of digital documentation process. The complete manual documentation are the accession registers and the catalogue cards. The catalogue cards serve as a backup to the accession registers, though the catalogue cards have another backup to them.

Also if for any reason, information on an object is not found, the object will not be digitized but has to await further research on it.

##### **From The WC**

Digitization of the Wallace Collection did not end there but the Museum made it a point that the write up explaining the Collections online was done in simple and understandable English words which made it easier for even basic school pupils to understand. This meant that, though the database was available for everyone with respect to gender and age, emphasis was laid on basic school pupils.

Also, the WC has printed versions of its artworks on display which are used to teach and further explain for basic school pupils to understand. Additionally, the Museum has replicas of its armor on display also for teaching school children who visit the Museum.

##### **From The BCA**

Digitization of museum collections is not just about having a database where all data of the collections are stored. At the Black Cultural Archives, to further explain the exhibits on display, recorded audio devices were attached to the limited displayed text.

#### **4.2 What Lessons Can be Drawn From Standard Practices at The British Museum, The Wallace Collections and The Black Cultural Archives**

The GNM, Accra must update and annotate its Accession Registers and Catalogue cards. The updated and annotated accession registers and catalogue cards will make it easier to develop texts on objects for exhibition. The information in the Accession Registers and Catalogue Cards can be used for the intended digitization of the Museums Collections. Updating of the Accession Registers and Catalogue Cards mean more research will be conducted on the Collections thereby making the data inputted in the Database tangible and informative.

Simple and comprehensible words must be used to input data on the Database. The words used must be everyday words which people relate to. These words used must be comprehensible to even basic school pupils.

Also, the GNM, Accra must have a printed version of its artworks on display. The printed versions can be used to teach especially basic school pupils who visit the gallery.

The GNM, Accra should have replicas of some objects for curious visitors who want to have a feel of objects on display.

The GNM, Accra should have various ways of interpreting objects on display together with the labels. Example is, for its traditional musical instruments on display, recorded sounds of the exhibits should be added to the labels for better understanding of them.

A completed digitized database on the World Wide Web will make the GNM, Accra reach a wider public both home and abroad.

#### **4.3 Opportunities Available for the GNM, Accra When it Digitizes its Collections.**

First of all, the digitization of the Collections will make the GNM, Accra to have an organized database of its Collections.

Digitization of the Collections will inform the GNM, Accra precisely on the number of objects in its possession likewise the types of objects.

This implies that the Curators will have relevant data available to them when they have to conduct research on the objects in the Museum's collections. The digitization will also serve as an opportunity for the curators to know the condition of the available collections.



#### 4.4 The Parameters

The parameters outline the fields required to systematize the digitization of the GNM, Accra Collections. The researcher carefully discussed with the Curators to generate them.

**Table 1: Identification Information**

NO.	NAME OF THE PARAMETER	FIELDS REQUIRED
1	Identification information	Accession No.  Previous/additional numbers

The table 1 contains the Identification information of the GNM, Accra objects. The identification information has two other fields. They are the accession number and the previous/additional numbers.

The accession number is the GNM, Accra number or code assigned to an object. The accession number makes an object unique from any other object in the Museum. Example is 2015.2.1. The '2015' denotes that the object was accessioned in year 2015 and the '2' denotes that it was the second collection in the year 2015. The '1' also means, the object was the first object amongst the first collections. The previous/additional number is useful for the identification of an object that have on them a previous museum accession number. Example is, if an object is acquired through

exchange or on a long term loan from another museum, therefore the object has the accession number of the previous museum.

**Table 2: The physical object information**

NO.	NAME OF THE PARAMETER	FIELDS REQUIRED
2	Physical object information	
		Object name
		Title
		Description
		Materials
		Technique
		Dimensions
		Classification

Table 2 contains the parameter known as the “physical information” of an object. The physical information has other fields; “object name” implies the name most obvious to the Curator when an object is seen. Examples are clay pot, basket, mask and so on. The “title field” is mostly required for artworks. They are mostly used for contemporary art or two dimensional (2D) art. The description is the physical characteristics of the object. That is, exactly what the curator sees on the object. The material field is needed for the material constituent used in making the object.

Examples are, clay, wood, brass, bronze and so on. The technique is the method or procedure employed by the producer in making the object. Examples are, carving, casting, weaving, and molding. The dimensions are the physical measurable attribute of the objects. Like the height, width, breadth and depth.

**Table 3: The location information**

NO.	NAME OF THE PARAMETER	FIELDS REQUIRED
3	Location information	
		Location in storage
		Location in exhibition/loan

Table 3 parameter is about the location of an object. The location is either temporary or permanent for the objects. These locations are where the object can be located whenever the object is sought after. The permanent location is in the storage area of the GNM, Accra and the temporary location is when the object is on exhibition in the gallery or on loan to another institution.

**Table 4: The Acquisition Information**

NO.	NAME OF THE PARAMETER	FIELDS REQUIRED						
4	Acquisition Information	<table border="1"> <tr> <td data-bbox="613 478 943 646"></td> </tr> <tr> <td data-bbox="613 646 943 751">Acquisition Method</td> </tr> <tr> <td data-bbox="613 751 943 919">Acquisition name and address of donor/vendor</td> </tr> <tr> <td data-bbox="613 919 943 1024">Provenance</td> </tr> <tr> <td data-bbox="613 1024 943 1129">Acquisition Date</td> </tr> <tr> <td data-bbox="613 1129 943 1224">Acquisition Notes</td> </tr> </table>		Acquisition Method	Acquisition name and address of donor/vendor	Provenance	Acquisition Date	Acquisition Notes
Acquisition Method								
Acquisition name and address of donor/vendor								
Provenance								
Acquisition Date								
Acquisition Notes								

The Table 4 parameter is the acquisition information of an object. The acquisition information are the intangibles mostly acquired with the museum objects. These intangibles make the acquired object useful to the Museum. Hence an acquired object without its intangible makes the object useless to the Museum. Under the acquisition information are the following fields as a drop down in the Database; Purchase, Bequest, Excavation, Exchange, Loan, Seizure and Transfer because they are the means of acquiring objects in the GNM, Accra.

The acquisition name implies, the name and address of the fellow who donated or sold the object to the GNM, Accra.

The provenance means the area or location of where the object came from, in terms of production, excavation and collected. It includes the name and address of the location.

The acquisition date implies the date the GNM acquired the object. The acquisition notes means any further information that the object was acquired with.

**Table 5: The Production Information**

NO.	NAME OF THE PARAMETER	FIELDS REQUIRED
5	Production Information	
		When made
		Producer/artist name
		Production place
		Production community/ethnic group

The Table 5 contains the parameter also known as Production Information. This information is mostly related to the production of the object. Under the parameter, Production Information, are these fields;

Firstly is the “when made” information. This is the exact date the object was made, produced or manufactured.

Then “producer/artist name”. Which implies the name of the producer of the object, if the object is ethnographic. But if the object is an art work, the given name is that of the artist.

The “production place” requires the name of the place the object was produced if the object is an ethnographic one but if it was an excavated one, the site details are given.

And finally, the “production community/ethnic group”. It is the name of the community or the ethnic group which made it. Probably the name of the community or ethnic group the object is peculiar.

**Table 6: The Find Spot Information Parameter**

NO.	NAME OF THE PARAMETER	FIELDS REQUIRED
6	Find spot information	Find spot association
		Find spot place

Table 6 contains the parameter known as the find spot information. The find spot information denotes the type of acquisition of the object and shows if the object was excavated, found or acquired. The information also includes the details of the site the object was found.

**Table 7: The Additional Information**

NO.	NAME OF THE PARAMETER	FIELDS REQUIRED
7	Additional Information	
		Contextual information Condition of object Conservation treatment Record created Record Amended

Table 7 parameters are for the additional information required for the Curators to know the conditions of an object. Under the additional information are;

The contextual information which includes information on use of the object or the local names given to the object if there is any. Also, the condition of the object in the Database has a drop down which best describes the state of the object when it was being digitized and this will either be: excellent, very good, good, poor and very poor besides showing the conservation treatment given to the object before digitizing. For this field the following pictures are required;

- "Before cleaning photos"
- "During cleaning photos"

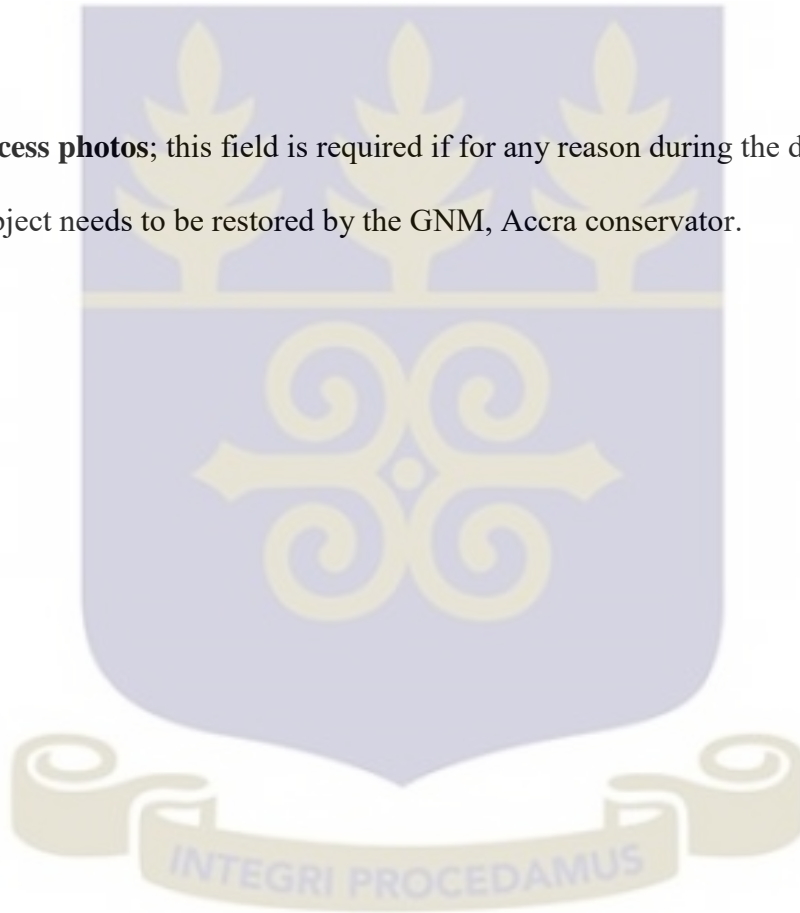
- "After cleaning photos"

"**Before cleaning photos**" are the snap shots of pictures taken prior to cleaning the object.

"**During cleaning photos**" are the cleaning processes required when accumulated dirt on the object is being cleaned off.

"**After cleaning photos**" are the images of the object when the object is cleaned from all sorts of settled on dirt.

**Restoration process photos;** this field is required if for any reason during the digitization of the collections, an object needs to be restored by the GNM, Accra conservator.



## CHAPTER FIVE

### THE PROPOSED DATABASE FOR THE DIGITIZATION OF THE GNM, ACCRA COLLECTIONS.

#### 5.0 Introduction

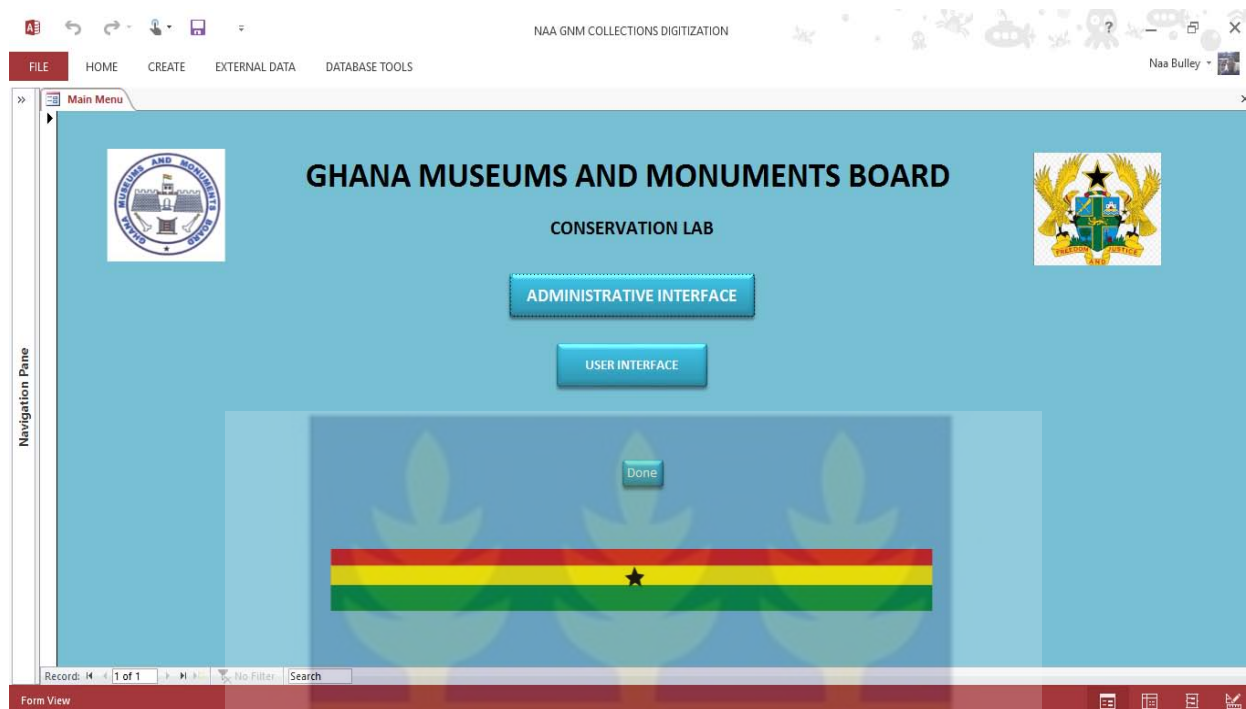
This chapter discusses the Database developed for the digitization of the GNM, Accra Collections. These include the Interface, the Administrative Interface and finally the User Interface.

#### 5.1 The Interface

The initial interface of the Database (Figure 9) is a window of how the Database will look like when launched. The colour blue was chosen as the main colour for the Database for two (2) reasons. Firstly, because blue is the official colour of the GNM, Accra and secondly because the colour blue appeals to both the young and old, the GNM, Accra will ensure that the imputed data will reflect this in the Database, which will be made available on the World Wide Web (www).

The GMMB logo was chosen and positioned on the top left side of the Interface layout because the GNM, Accra is a branch of the GMMB. Likewise the Ghanaian Coat of Arms is used because the GNM, Accra is a State Institution.

The Ghanaian flag was boldly positioned on the Interface to always alert non Ghanaians that the Collections on the Database are heritage properties of Ghana. Also on the Interface, are some three buttons which launch the Administrative User and the End User interface respectively.



**Figure 9: The Initial Interface of The Proposed Database**

### 5.1.1 The Administrative Interface

The Administrative Interface (Figure 10) is the window for the administrative users. In other words, for the Curators. It is the window that contains the parameters for the Database. This interface allows the Curators to input the data of the Collections to the Database.

The Administrative Interface has the following buttons: ‘Save’ for saving the inputted data, ‘New’ for a new sheet on the Database when it is needed, ‘Delete’ for any catalogued object that has to be deleted, ‘Print’ for the print command for any of the Database sheet and ‘Close’ if the Administrative User wants to close the Administrative Interface respectively.

Figure 10: The Administrative view of the interface

The screenshot displays the administrative interface for the CONSERVATION LAB (GMMB). The interface is organized into several sections for data entry:

- 1. Identification Information:** Includes fields for Accession number and Previous / additional numbers.
- 2. Physical Object Information:** Includes fields for Object name, Title, Description, Materials, Technique, Dimensions (with a dropdown menu), Length (cm), Height (cm), Width (cm), Depth (cm), Weight (g), and Classification.
- 3. Location Information:** Includes fields for Location (storage) and Location (exhibition\loan).
- 4. Acquisition information:** Includes fields for Acquisition method (dropdown), Acquisition name, Provenance, Acquisition date, and Acquisition notes.
- 5. Production information:** Includes fields for When made, Producer/artist name, Production place, and Production community/ethnic group.
- 6. Find Spot information:** Includes fields for Find spot association (dropdown), Find spot place, and Condition of object (dropdown).
- 7. Additional information:** Includes fields for Contextual information, Conservation treatment, and Condition of object (dropdown).

Below the main information sections, there are photo upload and description areas for different stages of the conservation process:

- Before Cleaning:** Includes a section for 'Before Cleaning photos' (PHOTOS) and 'Before Cleaning descriptions'.
- During Cleaning:** Includes a section for 'During cleaning photo' (PHOTOS) and 'During cleaning descriptions'.
- After Cleaning:** Includes a section for 'After Cleaning photos' (PHOTOS) and 'After Cleaning description'.
- Restoration Process:** Includes a section for 'Restoration process photos' (PHOTOS) and 'Restoration process description'.

At the bottom of the form, there are sections for recording the creation and amendment of the record:

- Record created:** Fields for 'When' and 'By'.
- Record Amended:** Fields for 'When' and 'By'.

The interface includes a search bar at the top right, a navigation pane on the left, and a set of control buttons (Save, New, Delete, Print, Close) at the top and bottom.

### 5.1.2 The User Interface

It is the interface for the End-users of the Database. This is the end product for the end-user when all the data for the individual objects have been keyed in. The User Interface (Figure 11) is programmed so the users cannot change data on the objects but has a button which allows the user to make suggestions if need be.



Figure 11: View of the User Interface.

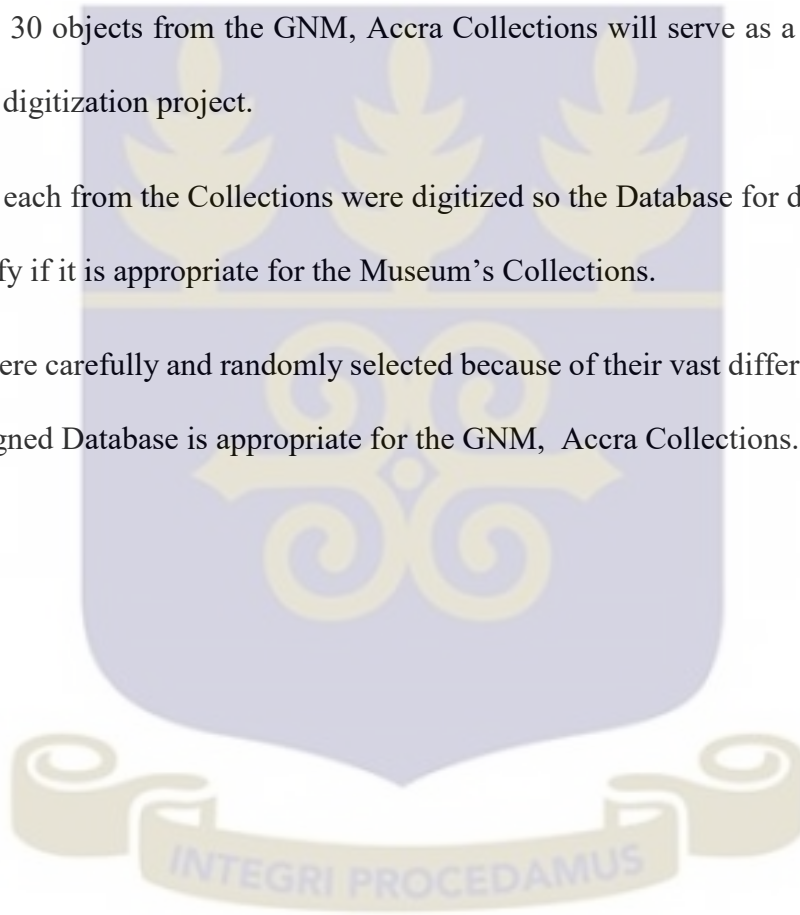
## 5.2 Selection of Objects for this Dissertation

For the purpose of this Dissertation, thirty (30) objects from the GNM, Accra Collections were selected. Ten (10) objects from sections in ethnography, archaeology and arts. These objects were randomly selected from sections of the GNM, Accra storage area and used in the Database for these reasons;

First of all, these 30 objects from the GNM, Accra Collections will serve as a pilot program for the GNM, Accra digitization project.

Also, ten objects each from the Collections were digitized so the Database for digitization will be put to use to verify if it is appropriate for the Museum's Collections.

The 30 objects were carefully and randomly selected because of their vast differences, in order 'to verify if the designed Database is appropriate for the GNM, Accra Collections.



### 5.3 Ten Digitized Ethnographic Collections

The following are the ten (10) digitized ethnographic objects from the GNM, Accra collections.

These information are for the End users of the Database.

#### Object one (1) is a clay pot

##### 1: Identification Information

**Accession number:** 69.1025

**Previous / additional numbers:**

##### 2. Physical Object Information

**Object name:** Water cooler

**Technique:** Molded

**Title:**

**Classification:** Ethnography

**Materials:** Clay

**Dimensions:** Length: cm, Height: 23cm,

**Width:** 21.5cm, **Depth:** 21.5cm, **Weight:** g

**Description:** Black clay pot with a circular base, a stretched, ringed neck and a flared mouth. It has some incised designs at the upper part of the body.

##### 3. Location Information

**Location (storage):** SP4/Rc

**Location (exhibition\loan):**  
Quarm. Omanhene of Assin

##### 4. Acquisition Information

**Acquisition method:** Purchase

**Acquisition name:** Nana Nata

**Provenance:** Dosii, Central Region

**Acquisition date:**

**Acquisition notes:**

##### 5. Production Information

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

##### 6. Find Spot Information

**Find spot association:**



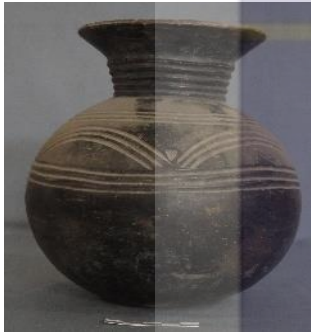

**Find spot place:**

##### 7. Additional Information

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During cleaning photo	After Cleaning photos
	<p data-bbox="673 541 943 579">Not Applicable (N/A)</p>	
		
<p data-bbox="203 1264 578 1293"><b>Restoration Process Photos</b></p>		
<p data-bbox="370 1346 428 1375">N/A</p>		

**Record Created By:**

When (Record created): 10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):

**Object two (2) is a small traditional stool.**

**1: Identification Information**

**Accession number:** 62.1271

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Wooden stool

**Title:**

**Materials:** Wood

**Width:** 31.5cm. **Depth:**

**Technique:** Carved

**Classification:** Ethnography

**Dimensions:** **Length:** cm, **Height:** 12.5cm,

**Description:** A small wooden stool with incised geometric and leaf-like patterns. It has some black paint patches on the seat and pedestals

**3. Location Information**

**Location (storage):** S2A/RVI

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:** Purchase

**Acquisition name Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**

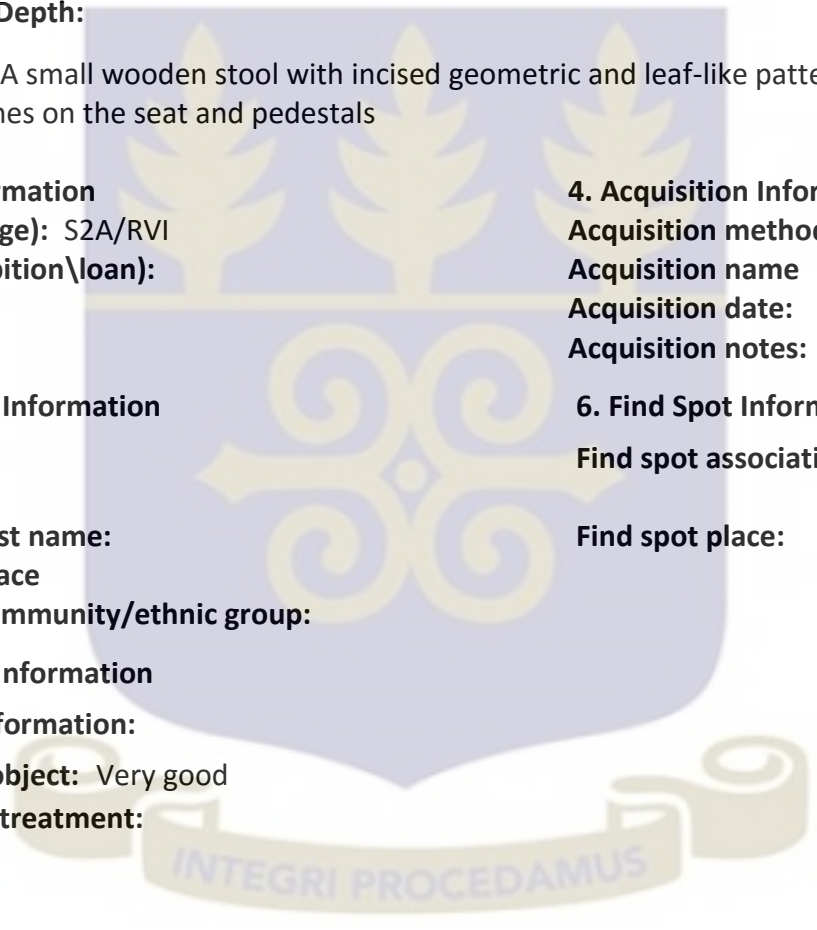
**Find spot place:**





**7. Additional Information**

**Contextual information:**

**Condition of object:** Very good

**Conservation treatment:**



Before Cleaning Photo	During Cleaning Photo	After Cleaning Photos
	<p data-bbox="781 447 841 478">N/A</p>	
	<p data-bbox="781 867 841 898">N/A</p>	
<p data-bbox="201 1150 578 1182"><b>Restoration Process Photos</b></p>		
<p data-bbox="394 1230 456 1262">N/A</p>		

**Record Created By:**

When (Record created): 10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended)

**Object three (3) is a 'Forowa'**

**1: Identification Information**

**Accession number:** 54.29a

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Forowa

**Technique:** Casting

**Title:**

**Classification:**

**Materials:** Brass

**Dimensions: Length:** cm, **Height:** 14.5cm,

**Width:** 12cm, **Depth:** 12cm, **Weight:** g

**Description:** A casted container made of brass sheet for storing Shea Butter Oil

**3. Location Information**

**Location (storage):**

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:** Donation

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition note:**

**5. Production Information**

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**

**Find spot place:**









**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**



Before Cleaning	During Cleaning	After Cleaning
	<p>N/A</p>	
	<p>N/A</p>	
	<p>N/A</p>	
	<p>N/A</p>	
<p><b>Restoration Process Photos</b></p>		
<p>N/A</p>		

**Record Created By:**

When (Record created): 10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):

**Object four (4) is a ladle**

**1: Identification Information**

**Accession number:** 74.1241

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Wooden ladle

**Technique:** Carved

**Title:**

**Classification:** Ethnography

**Materials:** Wood

**Dimensions:** **Length:** cm, **Height:** 28.5cm,

**Width:** 9.8cm, **Depth:** 6,9cm, **Weight:** g

**Description:** A wooden ladle with two domestic usage. The upper part is used as a ladle and the base is used as a grinder.

**3. Location Information**

**Location (storage):** S1A/IV

**Location (exhibition\loan):**  
Praka III. Chief of Tekyimantia.

**4. Acquisition Information**

**Acquisition method:**

**Acquisition name:** By Kwasi

**Provenance:** Tekimantia, Brong Ahafo Region

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**





**Find spot place:**

**7. Additional Information**

**Contextual information:** Locally referred as 'kwanta'

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During cleaning photo	After Cleaning photo
	<p data-bbox="808 323 865 359">N/A</p>	
	<p data-bbox="808 728 865 764">N/A</p>	
<p data-bbox="201 919 652 955"><b>Restoration Process Photos</b></p>		
<p data-bbox="396 999 456 1035">N/A</p>		

**Record Created By:**

When (Record created): 10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object five (5) is a small drum**

**1: Identification Information**

**Accession number:** 52.989b

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Drum

**Technique:** Carved

**Title:**

**Classification:** Ethnography

**Materials:** wood and leather skin

**Dimensions:** **Length:** cm, **Height:** 22.2cm,

**Width:** 77.5cm, **Depth:** 77.5cm, **Weight:** g

**Description:** A small wooden drum with a leather skin at the drumming part. The wooden part is black and there is a metal attaching the leather to the drum. It has a flared foot and from the base, the object is hollow.

**3. Location Information**

**Location (storage):** S1RC

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**





**Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photos
	<p>N/A</p>	
	<p>N/A</p>	
<p><b>Restoration Process Photos</b></p>		
<p>N/A</p>		

**Record Created By:**

When (Record created): 10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object six (6) is a small wooden male statue**

**1: Identification Information**

**Accession number:** S90.463

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Male figure

**Technique:** Carved

**Title:**

**Classification:** Ethnography

**Materials:** Wood

**Dimensions:** **Length:** cm, **Height:** 35cm,

**Width:** 10cm, **Depth:** 7cm, **Weight:** g

**Description:** A carving depicting a seated man. Probably a chief who is wearing a crown and a traditional cloth. It has a large bulging eyes, protruding nose and thick ear lobes. The neck is creased. Half of one foot is broken off and seat on which he sits has only two rear legs.

**3. Location Information**

**Location (storage):** S6/RC

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**


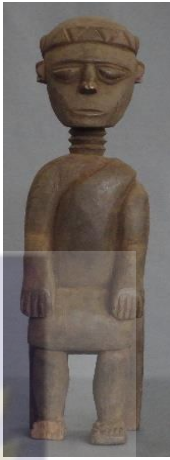
**Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photos
	<p>N/A</p>	
<p>Restoration Process Photos</p>		
<p>N/A</p>		

**Record Created By:**

When (Record created): 10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object seven (7) is a small straw basket with a lid**

**1: Identification Information**

**Accession number:** 54.1652

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Basket

**Technique:** Woven

**Title:**

**Classification:** Ethnography

**Materials:** Straw

**Dimensions:** Length: cm, Height: 17.9cm,

**Width:** 17.5cm, **Depth:** 17.5cm, **Weight:** g

**Description:** A woven straw basket with a lid. The colours of the straw are red, black, dark, brown and light brown.

**3. Location Information**

**Location (storage):** S9/R

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**









**Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photos
	<p>N/A</p>	
	<p>N/A</p>	
	<p>N/A</p>	
	<p>N/A</p>	
<p><b>Restoration Process Photos</b></p>		
<p>N/A</p>		

**Record Created By:**

When (Record created): 10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):

**Object eight (8) is a calabash head dress**

**1: Identification Information**

**Accession number:** 62.1469

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Head dress

**Title:**

**Material:** Calabash, antelope horns and cowries.

**39.6cm, Width:** 29cm, **Depth:** 34.7cm, **Weight:** g

**Technique:**

**Classification:** Ethnography

**Dimensions:** Length: cm, **Height:**

**Description:** A head dress made from calabash with two antelope horns on top and decorated with cowries-shells. The head dress is said to be used during a popular dance 'Gungun' among the Bimobas. It is said to be 15 years old during acquisition.

**3. Location Information**

**Location (storage):** S5/RD

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:** Donation

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**





**Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During cleaning photo	After Cleaning photo
	<p data-bbox="808 321 865 352">N/A</p>	
	<p data-bbox="808 625 865 657">N/A</p>	
<p data-bbox="201 951 570 982"><b>Restoration Process Photos</b></p>		
<p data-bbox="396 1035 453 1066">N/A</p>		

**Record Created By:**

When (Record created): 10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):

**Object nine (9) is a wooden mask**

**1: Identification Information**

**Accession number:** S90.058

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Wooden mask

**Technique:** Carved

**Title:**

**Classification:** Ethnography

**Materials:** Wood

**Dimensions: Length:** cm, **Height:** 40cm, **Width:**

**24cm, Depth:** cm, **Weight:** 4g

**Description:** A mask carved out of a piece of wood. It has projections like horns. The eyes are closed, it has a flat nose and a wide mouth closed.

**3. Location Information**

**Location (storage):**S4/BIII

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:** Purchase

**Acquisition name:** From Opanin

Adjei Denkyir

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**





**Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Very good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photo
	<p data-bbox="797 323 854 359">N/A</p>	
	<p data-bbox="797 810 854 846">N/A</p>	
<p data-bbox="233 1339 599 1373"><b>Restoration Process Photos</b></p>		
<p data-bbox="388 1423 444 1457">N/A</p>		

**Record Created By:**

When (Record created):10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):

**Object ten (10) is a wooden traditional stool**

**1: Identification Information**

Accession number: 56.883

Previous / additional numbers:

**2. Physical Object Information**

**Object name:** Stool

**Technique:** Carved

**Title:**

**Classification:** Ethnography

**Materials:** wood

**Dimensions:** Length: cm, Height: 39.5cm,

**Width:** 56cm, **Depth:** 28.7cm, **Weight:** g

**Description:** A carved traditional wooden stool. The middle section has been carved in a heart form

**3. Location Information**

**Location (storage):** S2a/VI

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:** Purchase

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**


**Find spot place:**

**7. Additional Information**

**Contextual information:** Called 'Asese Gwa'

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photos
	N/A	N/A
Restoration Process Photos		
N/A		

**Record Created By:**

When (Record created): 10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



## 5.4 Ten Digitized Archaeological Collections

The following are the ten (10) digitized archaeological objects from the GNM, Accra collections.

These information are for the End users of the Database.

**Object one (1) is glass a bottle, probably a wine bottle.**

### 1: Identification Information

**Accession number:** 67.1650c

**Previous / additional numbers:**

### 2. Physical Object Information

**Object name:** Bottle

**Technique:** Molding

**Title:**

**Classification:** Archaeology

**Materials:** Glass

**Dimensions:** Length: cm, Height: 27.3,

**Width:** 9cm, **Depth:** 9cm, **Weight:** g

**Description:** A green glass bottle with a long narrow neck. Between the edge and the lip is a small carinate and the lip is a little thick. Parts of the lip is chipped. The belly of the bottle is a little blotted but has a flat base. Around the belly are two bubbles.

### 3. Location Information

**Location (storage):** S11/R1

**Location (exhibition\loan):**

### 4. Acquisition Information

**Acquisition method:**Excavation

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:** Dug up while digging the foundation of the GNM, Accra Education Hall

### 5. Production Information

**When made:**

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

### 6. Find Spot Information

**Find spot association:** Excavation



**Find spot place:**

### 7. Additional Information

**Contextual information:**

**Condition of object:** Very good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning Photo
	<p>N/A</p>	
<p><b>Restoration Process Photos</b></p>		
<p>N/A</p>		

**Record Created By:**

When (Record created): 9/29/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object two (2) is a clear glass bottle**

**1: Identification Information**

**Accession number:** 67.1650b

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** A Bottle

**Technique:** Molding

**Title:**

**Classification:** Archaeology

**Materials:** Glass

**Dimensions:** **Length:** cm, **Height:** 24.5cm,

**Width:** 8cm, **Depth:** 8cm, **Weight:** g

**Description:** A turquoise blue glass bottle with a stretched narrow neck. It has a thick lip with a protruding and pointed in the base. It has the inscription '3604' at the protruding base. It looks like the bottle initially was transparent but the archaeological context has made it opaque, though it has some transparent spots.

**3. Location Information**

**Location (storage):**

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**Excavation

**Acquisition name:** Dir. Prof. Nunno

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**



**Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Very good

**Conservation treatment:**

Before Cleaning photo	During cleaning photo	After Cleaning photos
	<p data-bbox="769 394 824 426">N/A</p>	
<p data-bbox="203 999 570 1031"><b>Restoration Process Photos</b></p>		
<p data-bbox="367 1100 422 1131">N/A</p>		

**Record Created By:**

When (Record created): 1/10/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):

### Object three (3) a stoneware bottle

#### 1: Identification Information

**Accession number:** 54.980a

**Previous / additional numbers:**

#### 2. Physical Object Information

**Object name:** bottle

**Title:**

**Materials:** Clay

**Width:** 8.5cm, **Depth:** 8.5cm, **Weight:** g

**Technique:** Molded

**Classification:** Archaeology

**Dimensions:** **Length:** cm, **Height:** 10.5cm,

**Description:** A small ceramic carved bottle with a short neck. It has a flat base with a colour different from the body.

#### 3. Location Information

**Location (storage):** S13/R9

**Location (exhibition\loan):**

#### 4. Acquisition Information

**Acquisition method:** Donation

**Acquisition name:** By Prof. A.W.

Lawrence

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

#### 5. Production Information

**When made:**

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

#### 6. Find Spot Information

**Find spot association:**



**Find spot place:**

#### 7. Additional Information

**Contextual information:**

**Condition of object** Very good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photos
	<p>N/A</p>	
<p><b>Restoration Process Photos</b></p>		
<p>N/A</p>		

**Record Created By:**

When (Record created): 2/10/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object four (4) is an ancient stone tool**

**1: Identification Information**

**Accession number:** 54.2582 - 10

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Stone tool

**Technique:** Knapping

**Title:**

**Classification:** Archaeology

**Materials:** Stone

**Dimensions:** **Length:** cm, **Height:** cm, **Width:**

cm, **Depth:** cm, **Weight:** g

**Description:** A prehistoric chisel-blade tool

**3. Location Information**

**Location (storage):** S13/R9

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:** Donation

**Acquisition name:** Presbyterian  
Middle School,

**Provenance:** Kukurantumi

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**


**Find spot place:**

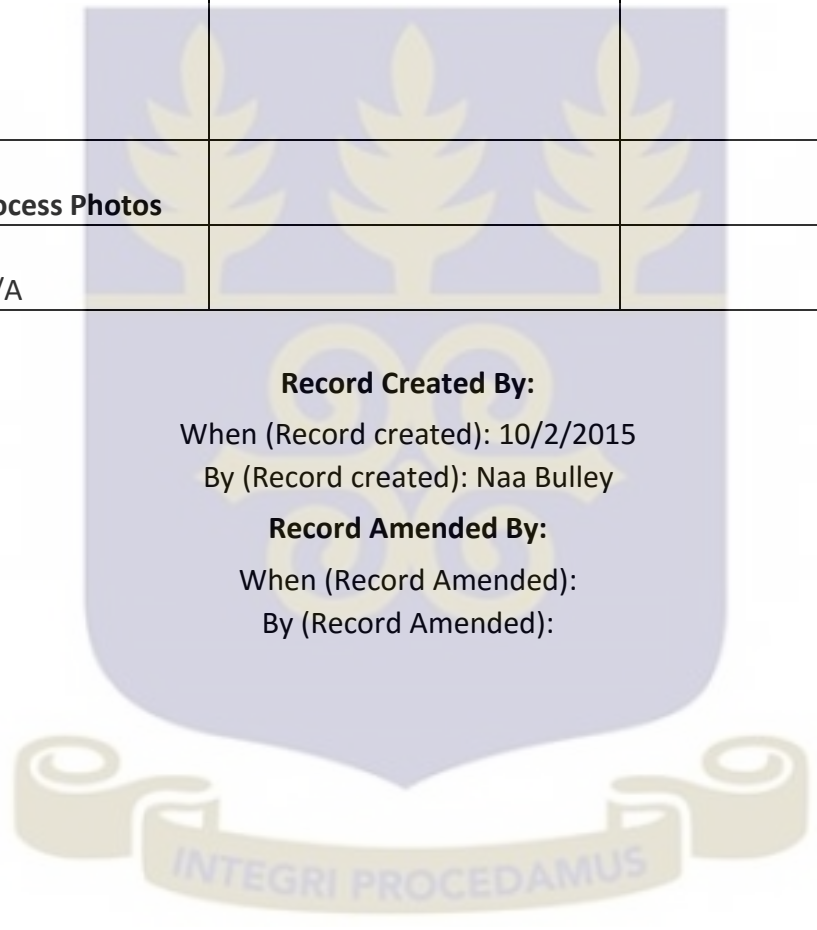
**7. Additional Information**

**Contextual information:**

**Condition of object:** Very good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photo
	<p style="text-align: center;">N/A</p>	<p style="text-align: center;">N/A</p>
<p><b>Restoration Process Photos</b></p>		
<p style="text-align: center;">N/A</p>		



**Record Created By:**

When (Record created): 10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):

**Object five (5) is a fragment of a clay smoking pipe**

**1: Identification Information**

**Accession number:** 55.885

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Smoking Pipe

**Technique:** Molded

**Title:**

**Classification:** Archaeology

**Materials:** Clay

**Dimensions:** **Length:** cm, **Height:** 5.2cm,

**Width:** 4.2cm, **Depth:** 3.1cm, **Weight:** g

**Description:** Fragment of an orange clay smoking pipe. It has some dotted parallel incisions on it.

**3. Location Information**

**Location (storage):** S13/R9

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:** Donation

**Acquisition name:** By Kwabena Nyarko

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**

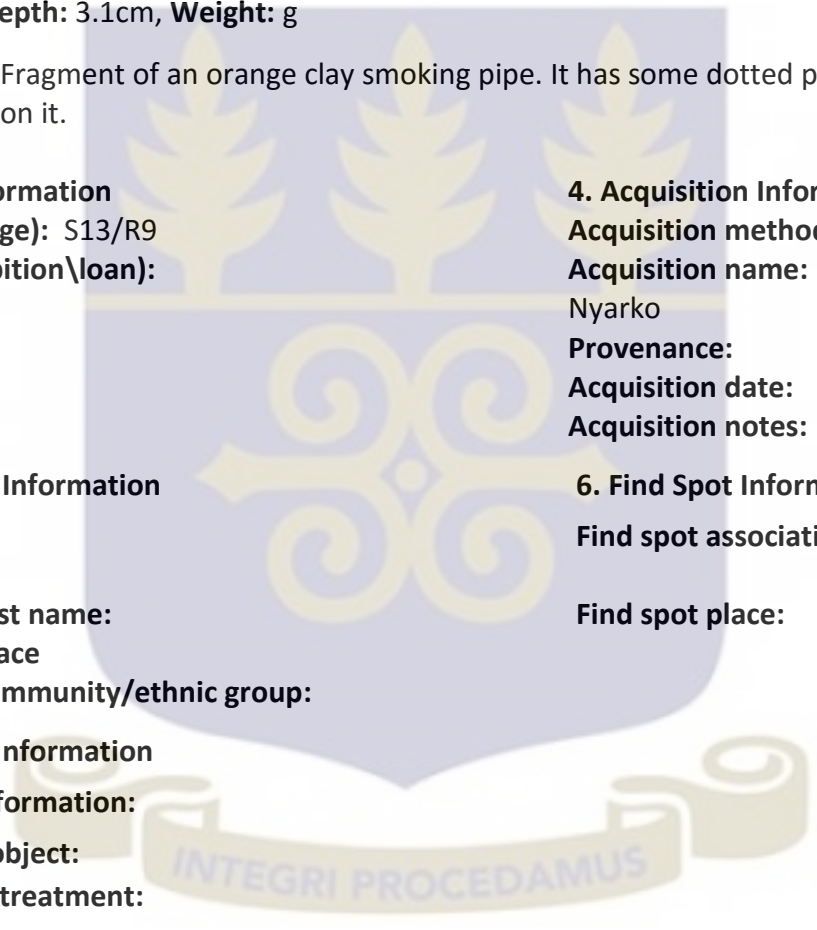
**Find spot place:**



**7. Additional Information**

**Contextual information:**

**Condition of object:**

**Conservation treatment:**



Before Cleaning photo	During Cleaning photo	After Cleaning photos
	<p data-bbox="760 365 813 394">N/A</p>	
<p data-bbox="201 741 553 770"><b>Restoration Process Phtos</b></p>		
<p data-bbox="375 827 428 856">N/A</p>		

**Record Created By:**

When (Record created): 10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object six (6) is a fragment of a white clay smoking pipe**

**1: Identification Information**

**Accession number:** 67.1286-5

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Tobacco Pipe

**Technique:** Molded

**Title:**

**Classification:** Archaeology

**Materials:** White clay  
**cm, Depth:** cm, **Weight:** g

**Dimensions:** **Length:** cm, **Height:** cm, **Width:**

**Description:** Fragment of a tobacco pipe. It is whitish with some chipped parts of the bowl of the pipe.

**3. Location Information**

**Location (storage):** S15/R9

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**Excavation

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**Excavation



**Find spot place:** Ningo, Greater  
Accra Region

**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photo
	<p>N/A</p>	
<p><b>Restoration Process Phtos</b></p>		
<p>N/A</p>		



**Record Created By:**

When (Record created): 10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):

**Object seven (7) is an ancient stone tool**

**1: Identification Information**

**Accession number:** 63.1130

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Thin axe

**Technique:** Knapping

**Title:**

**Classification:** Archaeology

**Materials:** Stone

**Dimensions:** Length: cm, Height: 15.2cm,

**Width:** 7.2cm, **Depth:** 3cm, **Weight:** g

**Description:** Danish unpolished butted axe

**3. Location Information**

**Location (storage):** S13/R13

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:** Excavation

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Excavation

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**

**Find spot place:**


**7. Additional Information**

**Contextual information:**

**Condition of object:** Very good

**Conservation treatment:**



Before Cleaning photo	During Cleaning photo	After Cleaning photos
	<p>N/A</p>	<p>N/A</p>
<p><b>Restoration Process Photos</b></p>		
<p>N/A</p>		

**Record Created By:**

When (Record created): 10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object eight (8) is fragment of a terracotta head**

**1: Identification Information**

**Accession number:** 67.1703a

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Fragment of terracotta

**Technique:** Molded

**Title:**

**Classification:** Archaeology

**Materials:** Clay

**Dimensions:** **Length:** cm, **Height:** cm, **Width:**

cm, **Depth:** cm, **Weight:** g

**Description:** Terracotta coarish grey or orange ware of a flat head

**3. Location Information**

**Location (storage):** S13/R13

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**Excavation

**Acquisition name:** Collected by  
J.A. Akosua

**Provenance:**

**Acquisition date:** 5/25/1969

**Acquisition notes:**

**5. Production Information**

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**



**Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning Photos
	<p>N/A</p>	
<p><b>Restoration Process Photos</b></p>		
<p>N/A</p>		

**Record Created By:**

When (Record created): 10/2/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object nine (9) is a fragment of a glass bottle**

**1: Identification Information**

**Accession number:** 55.1065b

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Fragment of a bottle

**Technique:** Molding

**Title:**

**Classification:** Archaeology

**Materials:** Glass

**Dimensions:** **Length:** cm, **Height:** 82cm,

**Width:** 6.8cm, **Depth:** 5cm, **Weight:** g

**Description:** Fragment of an old European glass bottle. The bottle is broken from the neck. The broken part is zigzag, sharp and pointed.

**3. Location Information**

**Location (storage):** S13

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**Excavation

**Acquisition name:** Prof.

Lawrence at?

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Excavation

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**



**Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning Photos	During Cleaning Photos	After Cleaning Photos
	<p>N/A</p>	
<p><b>Restoration Process Photos</b></p>		
<p>N/A</p>		

**Record Created By:**

When (Record created): 10/8/2015

By (Record created): Ahlijah, Mensah D

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object ten (10) is an ancient stone tool**

**1: Identification Information**

**Accession number:** 54.2018

**Previous / additional numbers:** 48.131

**2. Physical Object Information**

**Object name:** Achulian hand axe

**Technique:** Knapping

**Title:**

**Classification:** Archaeology

**Materials:** Stone

**Dimensions:** **Length:** cm, **Height:** 15cm,

**Width:** 8.2cm, **Depth:** 15.2cm, **Weight:** g

**Description:** A hand axe made from stone. It is shappedened at just one end of the stone.

**3. Location Information**

**Location (storage):** S13

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Excavation

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**

**Find spot place:**



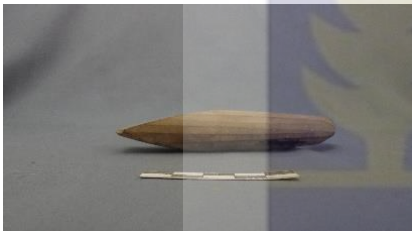

**7. Additional Information**

**Contextual information:**

**Condition of object:** Very good

**Conservation treatment:**



Before Cleaning Photos	During Cleaning Photos	After Cleaning Photos
	<p data-bbox="776 394 834 428">N/A</p>	
	<p data-bbox="776 728 834 762">N/A</p>	
<p data-bbox="203 1228 570 1262"><b>Restoration Process Photos</b></p>		
<p data-bbox="391 1312 449 1346">N/A</p>		

**Record Created By:**

When (Record created): 10/8/2015  
 By (Record created): Ahlijah, Mensah D

**Record Amended By:**

When (Record Amended):  
 By (Record Amended):

## 5.5 Ten Digitized Artworks.

The following are the ten (10) digitized artworks from the GNM, Accra collections. These information are for the End users of the Database.

### Object one (1) is a painting

#### 1: Identification Information

**Accession number:** 67.1375

**Previous / additional numbers:**

#### 2. Physical Object Information

**Object name:** Artwork

**Technique:**

**Title:** A moonlight night

**Classification:** Art

**Materials:** Acrylic and chipboard

**Dimensions:** **Length:** cm, **Height:** 44.6cm,

**Width:** 57.3cm, **Depth:** cm, **Weight:** g

**Description:** An acrylic on chipboard painting depicting a nocturnal painting of a village scene of a river with two mud houses at the bank and two canoes docked at the bank.

#### 3 .Location Information

**Location (storage):**

**Location (exhibition\loan):**

#### 4. Acquisition Information

**Acquisition method:**

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

#### 5. Production Information

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

#### 6. Find Spot Information

**Find spot association:**


J.B **Find spot place:**

#### 7. Additional Information

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photos
N/A	N/A	
<b>Restoration Process Photos</b>		
N/A		

**Record Created**

When (Record created): 10/6/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object two (2) is a painting**

**1: Identification Information**

**Accession number:** 68.1030

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Artwork

**Technique:** strokes

**Title:** Adankum Player

**Classification:** Art

**Materials:** Acrylic and chipboard

**Dimension:** **Length:** cm, **Height:** 73cm,

**Width:** 41.8cm, **Depth:** cm, **Weight:** g

**Description:** An acrylic on chipboard painting depicting a female shaking a rattle with a elongated neck. The painting was executed in chromatic colours and a secondary colour.

**3. Location Information**

**Location (storage):**

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:** 1967

Acquired

**Producer/artist name:**

**6. Find Spot Information**

**Find spot association:**

Kobina Bucknor **Find spot**

**place:**

**Production place**


**Production community/ethnic group:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photos
N/A	N/A	
<b>Restoration Process Photos</b>		
N/A		

**Record Created By:**

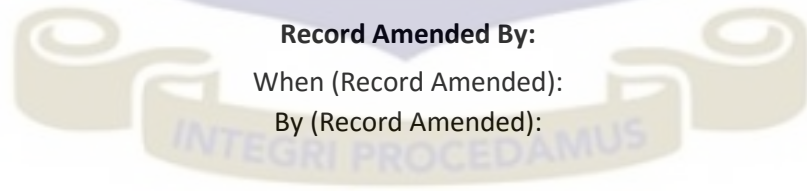
When (Record created): 10/6/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object three (3) is a painting**

**1: Identification Information**

**Accession number:** 62.1533

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Artwork

**Technique:** Polychromatic, cubistic

**Title:** Naming a child

**Classification:** Art

**Materials:** Acrylic and canvas  
**Dimensions:** **Length:** cm, **Height:** 61.3cm,  
**Width:** 90.8cm, **Depth:** cm, **Weight:** g

**Description:** An acrylic on canvas painting. It is polychromatic cubistic style of painting depicting an indoor gathering of naming a child. Someone is gracing the occasion by performing libation which is the focal point in the composition.

**3. Location Information**

**Location (storage):**

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**

P. Amonoo **Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photos
N/A	N/A	
<b>Restoration Process Photos</b>		
N/A		

**Record Created By:**

When (Record created): 10/6/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object four (4) is a painting**

**1: Identification Information**

**Accession number:** 67.1350

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Artwork

**Technique:**

**Title:** Plaiting the Hair

**Classification:** Art

**Materials:**

**Dimensions:** Length: cm, Height: 92cm,

**Width:** 69.9cm, **Depth:** cm, **Weight:** g

**Description:** Acrylic on chipboard with tonal values in layers. It is polychromatic figures with an elongated neck

**3. Location Information**

**Location (storage):**

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:** 1956

Acquired

**Producer/artist name:** Kobina Bucknor

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**


**Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Very good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photo
N/A	N/A	
<b>Restoration Process Photos</b>		
N/A		

**Record Created By:**

When (Record created): 10/6/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):

**Object five (5) is a painting**

**1: Identification Information**

**Accession number:** 74.1200

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Art work

**Technique:** Lampasto painting

**Title:** Untitled

**Classification:** Art

**Materials:** Oil paint and canvas

**Dimensions:** **Length:** cm, **Height:** 105cm,

**Width:** 69.9cm, **Depth:** cm, **Weight:** g

**Description:** An oil paint on canvas painting depicting a village scene of a man carrying firewood and the man is adorned in a traditional outfit.

**3. Location Information**

**Location (storage):**

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:** 1974

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**

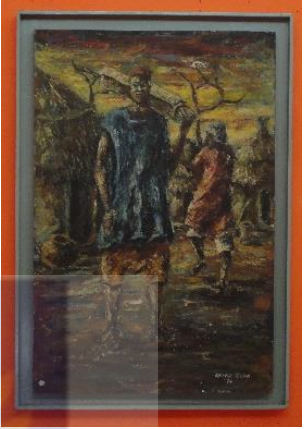
Reggie Quao **Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Very good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photos
N/A	N/A	
<b>Restoration Process Photos</b>		
N/A		

**Record Created By:**

When (Record created): 10/6/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):

**Object six (6) is a painting**

**1: Identification Information**

**Accession number:** 65.1804

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:**

**Technique:**

**Title:** Otofo Girl

**Classification:** Art

**Materials:** Plywood and acrylic paint.

**Dimensions:** **Length:** cm, **Height:** 83.5cm,

**Width:** 58.5cm, **Depth:** cm, **Weight:** g

**Description:** An acrylic on plywood painting depicting a girl posed in a three quarter view with beads in some neutral colours and secondary colours running from the neck to the waist with two bundles around the upper arms. The back of the artwork is tinted green.

**3. Location Information**

**Location (storage):**

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**

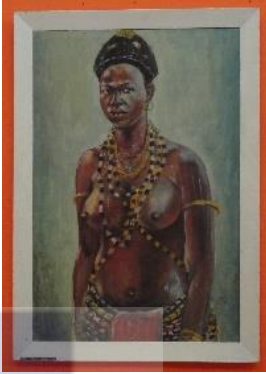
R.J. Amos **Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photos
N/A	N/A	
<b>Restoration Process Photos</b>		
N/A		

**Created By:**

When (Record created): 10/6/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object seven (7) is a painting**

**1: Identification Information**

**Accession number:** 76.1006

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Art Work

**Technique:**

**Title:** Fruit seller

**Classification:** Art

**Materials:** Chip board and oil paint.

**Dimensions:** **Length:** cm, **Height:** 83.9cm,

**Width:** 64.2cm, **Depth:** cm, **Weight:** g

**Description:** A self-tone painting. Oil on chip board depicting a plumb woman seated with the chin in the palm of the hand with a baby slipping from thigh. The painting is defined by strong visible colour tones.

**3. Location Information**

**Location (storage):**

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:** unknown

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**

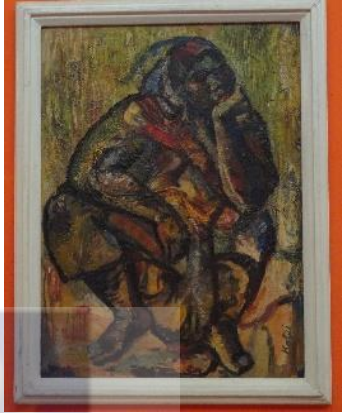
Amon Kotei **Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photos
		
<b>Restoration Process Photos</b>		
N/A		

**Record Created By:**

When (Record created): 10/6/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object eight (8) is a painting**

**1: Identification Information**

**Accession number:** 84.1003

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Art work

**Technique:**

**Title:** 'Obi nkyere komfu ba kosua di' **Classification:** Art

**Materials:** Acrylic and canvas **Dimensions:** **Length:** cm, **Height:** 66.5cm,

**Width:** 78.8cm, **Depth:** cm, **Weight:** g

**Description:** Polychromatic, Pointillist painting depicting a traditional scene of a priest in a focal point demonstrating to children on how to swallow an egg. The children are seated linearly.

**3. Location Information**

**Location (storage):**

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:** 1973

Acquired

**Producer/artist name:**

**Production place** U.S.T

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**

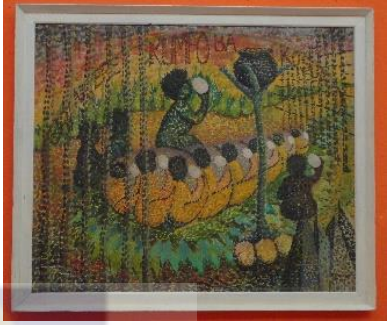
R.T Ackam **Find spot place:**

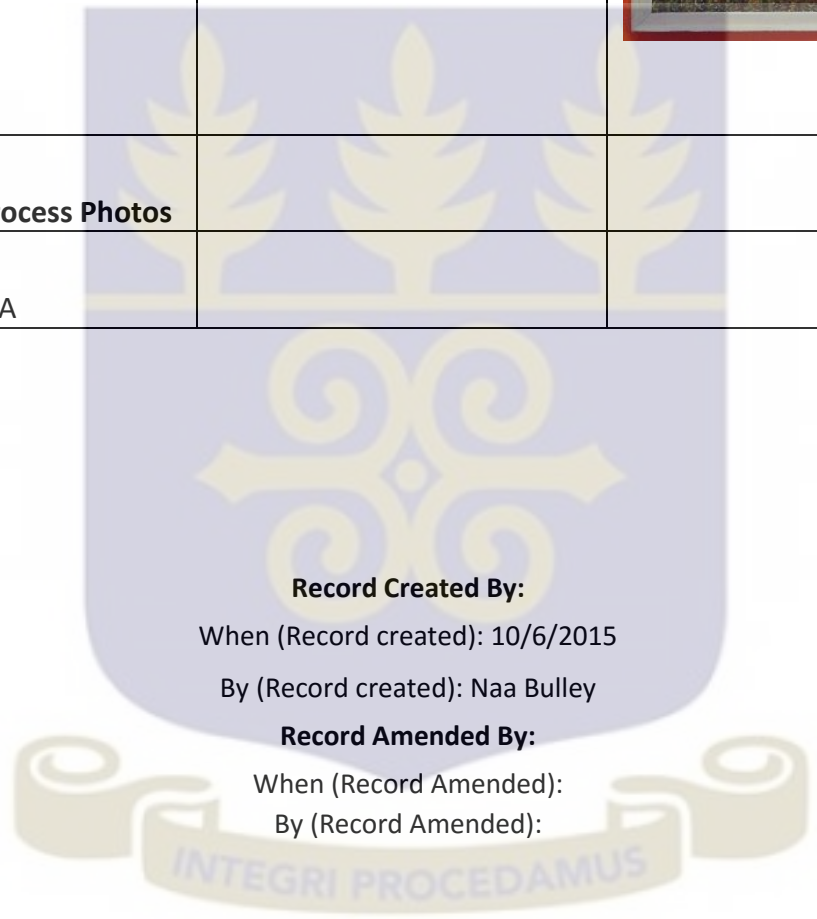
**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photos
N/A	N/A	
<b>Restoration Process Photos</b>		
N/A		



**Record Created By:**

When (Record created): 10/6/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):

**Object nine (9) is a painting**

**1: Identification Information**

**Accession number:** 87.1001

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Art work

**Technique:**

**Title:** Horn Blowers

**Classification:** Art

**Materials:** acrylic and canvas

**Dimensions:** Length: cm, Height: 67cm,

**Width:** 84cm, **Depth:** cm, **Weight:** g

**Description:** An acrylic on canvas painting depicting six horn blowers adorning Adinkra cloth. It is a realistic polychromatic art work.

**3. Location Information**

**Location (storage):**

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:** 1984

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**

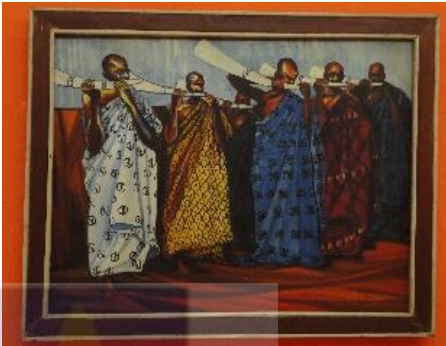
A. Amofa **Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photos
N/A	N/A	
<b>Restoration Process Photos</b>		
N/A		

**Record Created By:**

When (Record created): 10/6/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):



**Object ten (10) is a painting**

**1: Identification Information**

**Accession number:** 67.1376

**Previous / additional numbers:**

**2. Physical Object Information**

**Object name:** Artwork

**Technique:**

**Title:** A Palm wine market

**Classification:** Art

**Materials:** Acrylic and chipboard

**Dimensions:** **Length:** cm, **Height:** 44.6cm,

**Width:** 57.3cm, **Depth:** cm, **Weight:** g

**Description:** An acrylic on chipboard depicting a village scene with some mud houses, a palm wine seller under a shed with her clientele being the focal point serving them. There are some children playing in the background.

**3. Location Information**

**Location (storage):**

**Location (exhibition\loan):**

**4. Acquisition Information**

**Acquisition method:**

**Acquisition name:**

**Provenance:**

**Acquisition date:**

**Acquisition notes:**

**5. Production Information**

**When made:**

Acquired

**Producer/artist name:**

**Production place**

**Production community/ethnic group:**

**6. Find Spot Information**

**Find spot association:**

J.B **Find spot place:**

**7. Additional Information**

**Contextual information:**

**Condition of object:** Good

**Conservation treatment:**

Before Cleaning photo	During Cleaning photo	After Cleaning photos
N/A	N/A	
<b>Restoration Process Photos</b>		
N/A		

**Record Created By:**

When (Record created): 10/6/2015

By (Record created): Naa Bulley

**Record Amended By:**

When (Record Amended):

By (Record Amended):

## 5.6 Summary of the Chapter

The Database is not only geared towards digitizing the GNM, Accra Collections by using just images, but the Database will contains useful information to the Museum Curators, likewise to the End Users. The Database will be useful to the Curators because the Database will give them the opportunity to update the information on the Collections and this will make it easy when exhibiting the objects, because more will not be required. The Database will be usefull also to the Museum public, because both those near and far will be able to access it.

## CHAPTER SIX

### RECOMMENDATIONS AND CONCLUSION

#### 6.0 Introduction

This chapter presents the recommendations to the GNM, Accra and the conclusion of this research. These recommendations are subdivided into technical and managerial ways. These recommendations if adhered to by the GNM, Accra will prevent this digitization process from stalling like how the previous project did.

#### 6.1 Recommendations

For a successful digitization of the GNM, Accra Collections, the researcher recommends the following;

##### **Technical Recommendations**

There should be a computer with the digitization database dedicated to the digitization project. This implies that the Database Software should be installed on it. Therefore the dedicated computer would not be used for any other work besides the digitization of the Collections. This will prevent the computer from being infected with any computer virus. The computer should also be connected to the internet for regular update of the anti-virus software.

Also, there should be a regular backup to the project. There should be daily backup to prevent loss of data in case of any eventuality. To back up the daily project, the required external hard drives should be purchased and at the close of every day's work, the digitized objects should be saved on them.

The GNM should not only concern itself with just digitizing its Collections but should make replicas of some of the Collections of which visitors would want to have a feel.

The Database is designed in a way that, it records the name of the cataloguer and anyone who does any changes to any imputed data on the Database. This is for the GNM, Accra, the Database managerial team to notice if a change is done on the Database.

The GNM, Accra can also use modern technology to record the sound of its musical instruments and the story behind the arts Collections on display in the Gallery. Especially for foreigners not only to have a look at the objects, but also to listen to the sound and the intangibles of the objects on display.

### **Managerial Recommendations**

As an initial requirement, a management team for the digitization works in the GNM, Accra should be formed. The Managerial team should be drawn from the Curatorial body of the Museum, and should be responsible solely for the data collection for the digitization project.

Thereafter a managerial plan for the storage areas must be developed so that the Curators would know what is next to be digitized and when it has to be digitized respectively. The managerial team of the Database has to draw guidelines for the proper documentation of the objects.

The storage areas and the conservation area must be equipped with the necessary tools, equipment and peripherals like a high definition reflex camera for taking photos for the Database, plastic rulers and steel rulers for measuring the dimensions of the objects, tagging cards and catalogue cards for the objects, weighing scales for weighing the objects for the Database etc.

Also, the GNM, Accra should have a continuous training program for its Curatorial body on the usage of the Database.

Finally, for the use of the High Definition Reflex (HDR) Camera for the digitization project, the Curatorial team of the GNM, Accra should be trained on how to use the camera in capturing good and sharp images for the Database.

## **6.2 Conclusion**

Through the research findings, it has been identified clearly that if all managerial recommendations are met, digitizing the GNM, Accra collections will not be a challenge. If the Curators are assigned to various activities geared towards the digitization projects, it will make digitizing the Museum's collections easier.

The completion of the Database will go further to transform the GNM, Accra information on its Collection. This will further help in the re-organization that is currently underway in the storage area and the following will be achieved:

- Information gathered on objects will be made internationally accessible.
- Educators and researchers can have easy access to the Collection information, by means of the internet.
- Object conservation can be monitored properly.
- Information on collections will be well detailed and accurate.
- Retrieval of objects and information on the objects will be easily accessed, kept safe and well protected.

By these achievements, the GNM, Accra will become a world class collection center that will be attractive to not only local visitors, but visitors from the different regions of the world and thus attain a status of a 21<sup>st</sup> century progressive African Museum.



## BIBLIOGRAPHY

Alsford, S. (1991). 'Museums as hypermedia. Interactive on a museum wide scale', in D. Bearman (ed). *Hypermedia and International Conference of the MDA and the Second International Conference on Hpermedia and Interactivity in Museums. Newton Grphic (July 1985) V'115.*

Basalmo, A. (2011). *Designing Culture: The technological Imagination at Work.* Duke University Press.

Cannon-Brookes, P. (1992). The Nature of Museum Collections. In *Manual for Curatorship:a guide to museum practice.* J. Thompson., (2<sup>nd</sup> ed), London: Butterworth – Heinemann.

Chapman, L. (1982). The Future and Museum Education. In the bulletin of the Carcass and Social Theory and Art Education, Issue 3. *OUP Oxford,*

Dean D. (1994). *Museum Exhibition - Theory and Practice.* London: Routledge.

Hooper-Greenhill, E. (1992). *Museums and the Shaping of Knowledge. The Heritage: Care-Preservations-Management.* London: Routledge.

\_\_\_\_\_ (1994). Museum education: past, present and future. In Miles, R. and Zavala, L. (eds) *Towards the museum of the future; New European perspectives.* London: Roulledge.

MacDonald, G., and Alsford, S. (1989). *A Museum for the Global Village, Hull.* Quebec: Canadian Museum of Civilization. ISBN 0-660-10787-2.

\_\_\_\_\_ (1991). 'The Museums as Information utility'. *Museum Management and Curatorship.* No. 10:305-11.

MacDonald, G. (1992). Change and Challenge: Museums in the Information Society. In L. Karb, C.. Mullen Kreamer, and S. D. Lavine, (eds). *Museums and Communities. The Politics of public culture.* Washington: Smithsonian Press.

MacDonald, S. (1996). 'Theorizing Museums: An Introduction'. In S. MacDonald and G. Fyfe (eds). *Theorizing Museums.* London: Blackwell.

MacDermott, M. (1988). Through their eyes: What Novices Value in Art Eperiences. In annual meeting Sourcebook. Waashington, DC: *American Association of Museums.*

McLean, F. (1997). *Marketing the Museum.* London: Routledge.

Pearce, S. M. (1986a). 'Thinking about things': Approaches to the study of Arteacts: *Museums Journal* 85 (4): 198-201. 1986b *Museums Association, London*.

Schweibenz, W. (1998). *The 'Virtual Museum'. New perspectives for museums to present objects and information using the internet as a knowledge base and communication system*. Proceedings Internationalen Sysposiums for Informationswissenschaft (ISI 1998), Prag.

Silverstone, R. (1988). 'Museums and the Media: a theoretical and methodological exploration'. *The International Journal of Museum and management and Curatorship* 7.

Vergo, P. (1989). *The New Museology*. Reaktion Book Ltd.

### **Internet Sources**

ICOM definition of museum

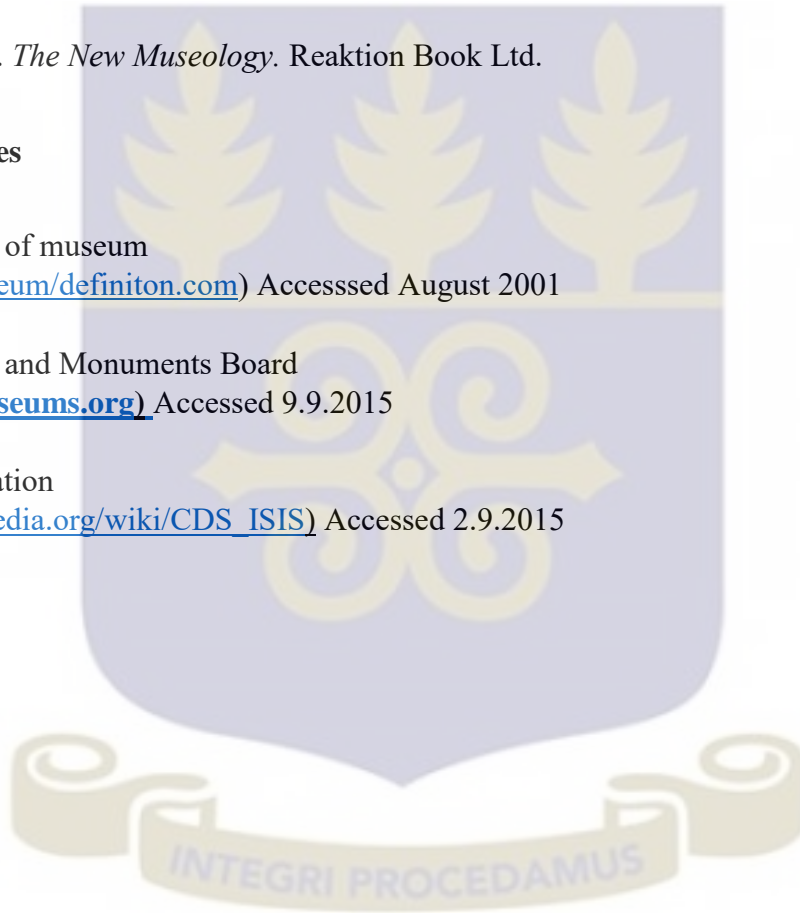
([www.icom/museum/definiton.com](http://www.icom/museum/definiton.com)) Accessed August 2001

Ghana Museums and Monuments Board

([www.ghanamuseums.org](http://www.ghanamuseums.org)) Accessed 9.9.2015

Museum Digitization

([https://en.wikipedia.org/wiki/CDS\\_ISIS](https://en.wikipedia.org/wiki/CDS_ISIS)) Accessed 2.9.2015



**Appendix1: List of Research Questions for the British Museum Curators.**

1. What was the theory that guided the British Museum digitization of its Collections?

.....  
.....  
.....

2. When did the British Museum start digitizing its Collections?

.....  
.....  
.....

3. How did the digitization project commence in the BM?

.....  
.....  
.....

4. Who manages the digitization project?

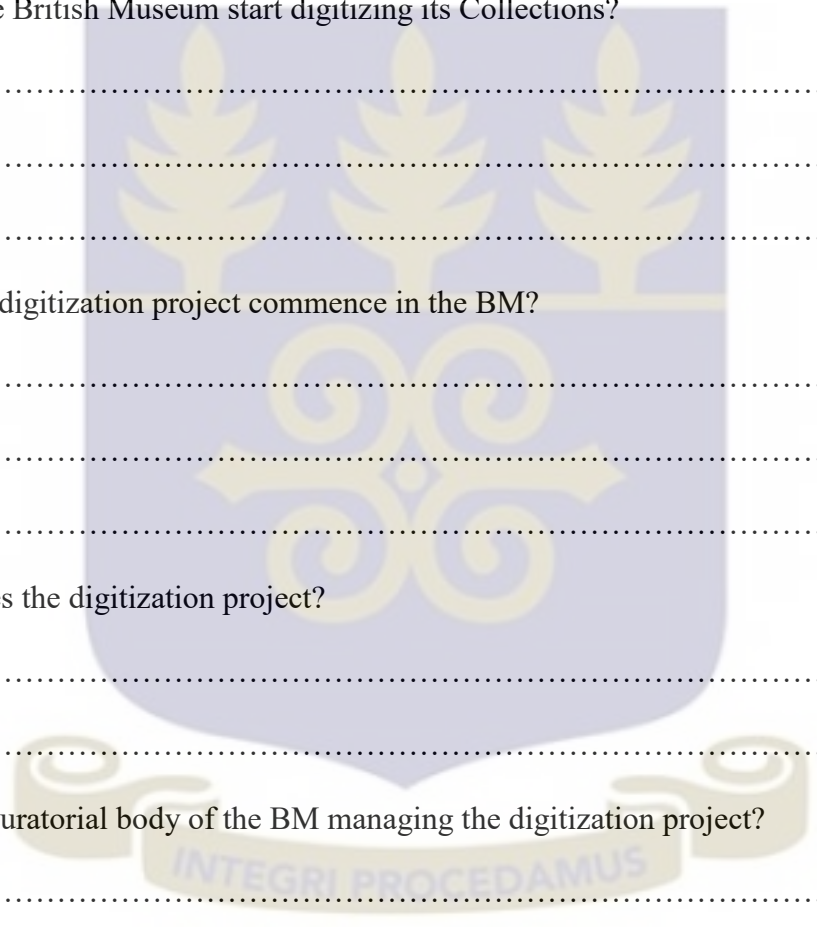
.....  
.....  
.....

5. How is the Curatorial body of the BM managing the digitization project?

.....  
.....  
.....

6. Have all the Collections of the BM been digitized?

.....  
.....  
.....



## **Appendix 2: Report on my Research Visit to the British Museum**

12-23 May 2015

### **Reason for the Visit**

In May 2015, the researcher was invited to the British Museum as part of a continuing programme of training and exchange program by the Africa Programme Initiative with African museums.

The main focus of the visit was on museum documentation systems – both manual and digital. Various activities took place within the Museum to support this learning and to extend the researcher’s existing knowledge. Importantly, the researcher brought cultural knowledge to share with colleagues at the Museum and in partner UK institutions.

### **Works in the British Museum**

The visit began with orientation tours of the two main African ethnography galleries established in 2001 and 2003 respectively.

The British Museum holds around 3,000 Akan goldweights in its collections. Approximately half of these have been catalogued and photographed. The researcher studied some of the remaining goldweights and helped staff of the British Museum to enhance the database records as well as identifying associated proverbs. This cultural expertise was vital in extending knowledge of these collections and helped their British Museum counterparts to enhance their own expertise. The goldweight records are available via the Museum’s website to a global audience.

Textiles form a significant part of the African collections at the British Museum with a wide range of cloth types from Ghana (some of which were collected in partnership with the University of Ghana in 2007). The researcher was introduced to some of the key techniques for storing,

documenting and labelling textiles under the supervision of the Textile Manager. Textiles require considerable specialist knowledge in order to handle and care for them appropriately. Recording textiles on the digital database also requires significant technical knowledge of weave structures, materials and post-weaving decorative techniques.

### **Visit to Some Museums and Other Institutions in The UK**

Several visits were made to other museums and cultural institutions to help consolidate some of the learning experience gained by setting it in a different context. A trip to the British Library enabled the researcher to discuss an upcoming major West African exhibition Cultures of the World with the lead curator. It was also an opportunity to share knowledge about Adinkra symbols and goldweights.

Two days were spent at the Wallace Collection, a national museum which displays works of art collected in the eighteenth and nineteenth centuries by the first four Marquesses of Hertford and Sir Richard Wallace, the son of the 4th Marquess. It was bequeathed to the British nation by Sir Richard's widow, Lady Wallace, in 1897. The collection is housed at Hertford House, one of the family's London properties in the nineteenth century. The researcher was invited to the Wallace Collection at the special request of the Director who wanted direct Ghanaian assistance with a proposed re-interpretation of the Asante gold collections.

On the second day at the Wallace Collection, the researcher met the schools education manager and the head of education to exchange experiences of museum education in Ghana and UK, and thoughts on teaching with Ashanti objects and representations of Africans in the collections at the Wallace. The researcher observed a taught primary school session on the Tudors using portraiture interpretation, an arms and armour demonstration and object handling. She was also able to visit a

local primary school to talk to Year 6 students drafting their tours to present at the Wallace as part of the Young Curators Programme. A final session with the community and access programmes officer explored different experiences of working with vulnerable adults.

The researcher also visited the Black Cultural Archives to research about what the Institution has digitized its Collections. At the Black Cultural Archives, the researcher learnt that the Institution is privately owned property, which run a library, a museum for mounting temporary exhibition which most of the Black Community patronize to mount their exhibitions and to run a cafeteria which is open for all.

At the Black Cultural Archives, the researcher learnt about the use of simple technology to enhance the exhibition in the Gallery.

### **Video Some Collections Management procedures to Teach African Museums**

The researcher was also able to support a new Africa Programme initiative during her stay in London. The team is creating a series of ‘how to’ videos for eventual use on a third party website available to all Africa Programme partners. The researcher prepared and delivered a short practical demonstration showing how to paint numbers on to museum objects. This was an excellent project, delivered clearly and competently. It demonstrated Ms Bulley’s grasp of the subject and her confidence in sharing her own expertise with others.