

**POST-INDEPENDENCE DEVELOPMENTAL
TRENDS OF THE GOLD JEWELLERY INDUSTRY IN GHANA: A CASE STUDY OF
ASANTES**

KNUST

BY

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DECLARATION

I hereby declare that this submission is my own work towards the PhD degree in African Art and Culture and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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ABSTRACT

This thesis studied the developmental trend of gold the jewellery industry in Ghana since independence with particular reference to the Asantes. As at the year 2011 Ghana was rated the world's 9th largest producer of gold and the 2nd in Africa. However, its gold jewellery industry accounts for very little percentage of the world production total. This discrepancy is an issue of concern since currently Ghana derives the bulk of its revenue from gold. Value addition to the nation's gold jewellery industry will improve the nation's fortunes significantly. The qualitative method of research was employed to gather and synthesize the data. Results obtained indicated that all the craftsmen involved in the jewellery industry were Ghanaians who were full time practioners, with a sizeable number (28%) of them being females, majority of whom are graduates from tertiary institutions. The issue of raw gold acquisition and absence of a refinery were observed to be major problems facing the industry. It was also observed during the field visit that much of the machinery being used by the craftsmen were outmoded. The use of the *adinkra* symbols was found to be the most popular or new trend of all the designs being used by the jewellers as the majority (75%) of the jeweller admitted using them. The apprenticeship system of training continues to provide the skill in the industry. It was evident from the interaction with traditional rulers that the socio-political and cultural roles of jewellery in Asante still survive despite the influence of education, religion and globalization. The study concluded that for Ghana to ensure a sustainable gold jewellery industry growth a concerted effort will be required by all the stakeholders (including, government, non -governmental agencies, jewellery industry and private sector players) to take full advantage of the country's significant endowment in gold and urgently take steps to revamp the industry.

DEDICATION

I dedicate this thesis to my dear husband, Dr. J. O. Fening and children, Kwadwo Opoku Fening and Kwadwo Nyantakyi Fening.



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CHAPTER ONE

INTRODUCTION

1.1 Overview

This chapter introduces the subject matter of this study. It covers, including others, the background to the study, the statement of the problem, objectives of the study, importance of the study, research questions, and research methods used. The background traces the development of the jewellery industry from the ancient Ghana Empire to the present Republic of Ghana and highlights the possible vehicles for the origin of the industry. The study indicates the status of the goldsmiths, their skills and tools used in the community of Asante before independence the legends and myths of the industry, and highlights the socio-cultural and economic significance of jewellery among the Asante. Furthermore, the background study gives an overview of the category of the jewellery industry in Ghana after independence and the establishment of a federation which is the mouthpiece of the industry in matters of policy with the government and in monitoring the performance of the industry.

1.2 Background to the Study

Ghana is endowed with significant mineral wealth. Minerals such as gold, manganese, diamond, bauxite, limestone, silica and salt are being exploited in commercial quantities, with gold being by far, the most important mineral mined (Bermudez- Lugo, 2006). Before Ghana gained independence in 1957, the country was known as the Gold Coast for its abundance of gold reserves. Vestiges of alluvial gold extraction activities have been found that date as far back as the sixth

century. As early as the seventh century AD, Arab traders were attracted to ancient Ghana because of the large gold deposits (Rodriguez, 1997). The rich gold deposits were largely responsible for the wealth and political strength of the ancient Ghana Empire and cultures. European colonial exploration of gold in ancient Ghana was at its peak by the fifteenth and sixteenth centuries (Keith, 1958).

The Gold Coast was not just a prime source of gold but of gold work by the Asante, from the sixteenth to the nineteenth centuries. Their 'jewellery' however, was not created for the adornment of women but to designate the rank of the ruling class. Gold was treated with great respect in Asante - and this bright, untarnishable metal was believed to have a life of its own, with spiritual powers. Ceremonies and rituals were associated with opening a new mine, and with making a rich find (Meyerowitz, 1949).

Gold in Ghana was probably first exploited in the fourth century AD, and for the next thousand years almost all the gold traded to North Africa came from West Africa. However, the Ashanti gold fields remained unknown to the outside world until about the fourteenth century. Most gold was obtained by the simple panning of sand, river gravel or gold-bearing soil. This is laborious work, and in a day one could expect to find only half a gram of gold dust. Swimmers would sometimes dive for gold, carrying a pan to scoop up the river gravel. Large nuggets were often found in this way. In richer gold fields, shafts were dug to a depth of ten to twenty metres wide enough to allow one worker to descend into the shaft. This was dangerous work and miners often lost their lives in the shafts.

Open-pit mines were also created to search for gold: A large hole was made and then dug systematically down towards the water table in the form of stepped terraces. Some miners worked as small family groups, while some chiefs and rich men used slave labour. Among the Asante, the practice was for certain days to be set aside for communal mining on behalf of the chief. Akan

chiefs levied small taxes on miners, including strangers, in the form of portions of their find. The gold extracted from the soil found its way into the hands of gold traders, chiefs and goldsmiths (Meyerowitz, 1949). The first pieces of jewellery were made from natural materials such as bone, animal teeth, shell, wood, berries, nuts, seeds, perforated stones, feathers, ivory and metals. Although bronze and silver had been used by primitive men and in modern day wrought jewellery, gold has been the preferred metal (Evan, 1989). Garrard (1989) also traces three possible vehicles for the origins of gold working in West Africa: firstly, an independent extension of the local blacksmiths craft. Secondly, the gradual diffusion of knowledge from North Africa and thirdly, a direct transfer of knowledge to the Sahel by immigrant North African goldsmiths.

In ancient Ghana, goldsmiths had a very high status and were often the only group other than the ruling families who had the privilege of wearing gold ornaments. Among Asantes, goldsmiths were believed to have magical powers. They formed an elite caste that handed down their technical proficiency and skills from generation to generation. Asante goldsmiths made items for public display and created original, dazzling, delicate and surprising fashion jewellery commissioned by wealthy clients. Of course, the Asante goldsmiths did not have access to modern technology, it is clear that the ancient goldsmiths of Africa possessed extraordinary skill, patience and dexterity. They used simple tools such as, small and large hammers for hammering the gold, an anvil to hammer upon, files and pincers, and a pair of goatskin bellows to keep a small charcoal fire alive for melting the gold.

Gold continues to represent Ghana's major mineral export commodity after independence, providing approximately 50% of Gross Domestic Product (GDP). Ghana is the world's 10th and Africa's 2nd largest producer of gold, with current production estimated in excess of 2.4Moz per annum, (Campbell, 2009).

Before written language, there was jewellery. The art of Jewellery is a window into the soul of humanity, and a poignant reminder of that which separates humankind from the animal kingdom — a desire to capture the essence of beauty, to possess its secrets, and to unlock its mysteries (Henshilwood and d'Errico, 2012).

The word 'jewellery' traces its origin to the Latin word 'jocale', which literally meant 'plaything', and from old French word 'jouel', which was anglicized in the 13th century (Holland, 1999). Jewellery has been used for ages, though not necessarily for the purpose of ornamentation. In the most basic form, jewels have been used since the times when early humans began to use tools and wear clothing. As humans became proficient in the use of tools and metals, the crude jewellery progressed to assume beautiful shapes and designs.

Gold has been worked by humans in all cultures where the metal is available, either indigenously or imported, and the histories of these activities are extensive. The Ghanaian tradition in gold jewellery making dates back to the 5th century B.C., when craftsmen from the ancient Ghana Empire developed a vibrant goldsmithery and jewellery making industry. Jewellery making skills were passed down through generations to the craftsmen of present day Ghana previously known as Gold Coast. Today, this tradition is evident in the local jewellery industry of over one thousand indigenous artisans across Ghana. There are also several medium sized companies employing between five and twelve bench jewellers that are located in Accra and Kumasi in particular and the Metal Products Design section of Kwame Nkrumah University of Science and Technology, which graduates skilled jewellers each year.

The majority of jewellers and goldsmiths in the country have come together under the Federation of Ghanaian Jewellers (FGJ). The federation is the mouthpiece of the industry in matters of policy with the government and establishes a forum for monitoring the performance of the industry and carrying out promotional activities.

Ghana's jewellery industry can be divided into three main sub-sectors:

1. The fine jewellery category comprises practitioners who deal in precious metal products, including gold, silver, diamonds and coloured gemstones. Products in this category are handcrafted meticulously by over 1,000 artisans working in small-scale workshops throughout Ghana. This fact notwithstanding, domestic production of jewellery in this category accounts for only 20 % of national sales, with the majority of demand being met by imports.
2. Custom jewellery is generally produced from base metals which are plated or gilded some but are also produced from wood, plastics and textiles. Custom jewellery are worn by many Ghanaians, with imports accounting for over 95 percent of the Ghanaian market.
3. The Accessories and Findings sub-sector produces such items as hooks, jump-rings, gold and silver coins, gold and silver sheets and claws. Apart from the Precious Minerals Marketing Company (PMMC) which has ventured into gold wire and sheet production, there is presently no other company involved in this sub-sector.

The Government of Ghana, acting through the Ministry of Trade and Industries (MOTI), the Ghana Export Promotion Council (GEPC) and the Ghana Investment Promotion Centre (GIPC) has put in place a number of promotional activities with the aim of boosting investment and productivity in the jewellery sector. These activities among others have led to a rise in the domestic production and sales of jewellery in the country.

1.3 Statement of the Problem

The value of the jewellery industry world-wide has been estimated at over US \$200bn, of which gold jewellery makes up the greatest proportion followed by diamonds, platinum and precious stones (Kaiser, 2001). Most of this jewellery is produced and consumed in Asia, which is not a source of the raw materials used in jewellery. Although Ghana is the second largest producer of gold in Africa, its jewellery industry accounts for a very little percentage of the world production total. The discrepancy between the country's resource capacity and its level of fabrication of those resources is an issue of major concern. Currently, the nation derives the bulk of its external revenue from gold, the primary product of jewellery, producing 91 tonnes – or 3.23% of world production of gold in 2011, worth some US \$4,6 billion. Value addition to gold at this price through jewellery could improve the nation's fortunes significantly.

It has also been noted that Ghana can compete effectively on the international jewellery market to rake in more foreign exchange to augment government's quest for a better Ghana. A legitimate question of concern is why this has not been realised. Are there any inadequacies in terms of tools and equipment, techniques, production skills, production standards and product variety. What is the impact of trade liberalization and its associated flooding of the Ghanaian market with foreign jewellery on the industry? Another issue of concern is to what extent has the Ghanaian jewellery products been influenced by universal cultural symbols and designs and what are the socio-cultural implications of these influences? The jewellery industry even though has been in existence since independence, the question is, what are the policies and guidelines that drive its operation? If there are, to what extent are they functional? These questions among others necessitated the conduction of this research to write this thesis.

1.4 Objectives

The objectives of this research are:

1. to trace the history and development of the gold jewellery industry in Ghana since independence.
2. to describe the significant changes that have occurred to the Asante gold jewellery industry in particular as a means of promoting national development.
3. to discuss the effect of foreign cultures on the growth of the Asante gold jewellery industry.
4. To make appropriate recommendations for addressing issues that may arise from this research.

1.5 Research Questions

- What is the history and development of the jewellery industry in Ghana.
- What significant changes have occurred in the Asante gold jewellery industry particularly in promoting socio cultural and national development
- What has been the impact of foreign cultures and trade liberalization on the gold jewellery industry?

1.6 Importance of Study

- Post-independence information on the developmental trends of the gold jewellery industry in Ghana will help the Government and the Private sector to initiate the necessary strategies that will drive the quest for a better industry.
- The study brings to the fore the kind and extent of foreign influences and threats that the gold jewellery industry faces and how the people of Ghana and the Asantes in particular could protect their cultural heritage.
- The research adds to existing knowledge of the local gold jewellery industry and can serve as reference material to guide policy making, with respect to the manufacture, export and distribution of gold jewellery in Ghana as well as how the industry could benefit from tourism sectors and consumers.

1.7 Delimitation

The research deals with the gold jewellery industry in the Asante tradition in Ghana, tracing briefly the history and development trends after independence in relation to foreign influence and its impact on the socio-cultural values of Ghanaians and Asantes in particular. In this regard the research focused on the developmental trends of the various stages in the industry including acquisition of the raw materials, production techniques, apprenticeship, design, sales, distribution, marketing, export, trade liberalization, and government policies. The study focused on the significance of fashion and symbolism associated with jewellery and its significance in contemporary cultural dynamism as well as the influence and impacts of modernization, religion and education on the jewellery industry.

Due to the large size of the Ashanti region and the fact that it comprises essentially culturally one people, and that the jewellery industry is found largely in the urban centers, only six towns were

used for data collection for the research. Although the study is limited to the Asante other related and relevant issues of other ethnic groups were also referred to.

1.8 Definition of Terms

Adinkra-visual symbols created by the Akans of Ghana that represent concepts or aphorisms

Amulets - objects attributed with magical powers; used to ward off evil spirits or attract benevolent ones.

Annealing- to make a metal or glass soft by heating and then cooling it slowly.

Artefact - An object made by a human being, especially one that has archaeological, artistic or cultural interest.

Casting- to make an object by pouring liquid such as molten metal into a shaped container to become hard.

Cire perdue- a lost wax process introduced in Egypt during the twelfth dynasty used in the Renaissance period for enameled jewellery.

Electroplating- a quick and inexpensive way to make base metal look like gold. The metal object is dipped in a gold plating solution and then an electrical current is used to coat the object with a thin layer of gold.

Embossing- a technique of creating a raised design by pushing metal out from its reverse side with hammers and punches.

Enameling- fusion of a coloured glassy substance of metal to create a design.

Engraving – the act of cutting or carving design on a metal.

Equipment- a device with moving parts, often powered by electricity, used to perform a task, especially one that would otherwise be done by hand

Etching - the act of creating impression or design on a metal piece with an acid.

Fabrication- to make or manufacture something from various materials.

Fine gold- gold containing no elements or metals. It is also called pure gold or 24 karats.

Filigree- a delicate open work design often made by binding and soldering fine wires

Furnace- an enclosed space or room for heating metal or glass to a very high temperature.

Galamsey- local artisanal gold mining in Ghana derived from the words ‘gather them and sell’

Gemstone- precious stones that are cut into shapes.

Gold alloy- a mixture of gold with other metals formed by melting them together.

Goldsmith- is a person who makes gold into ornaments.

Hallmark- an official mark stamped on gold, silver or platinum objects to indicate their quality, origin and maker.

Jeweller- a dealer in jewellery or maker of jewellery.

Carat (karat)-a measure of gold purity. One carat is 1/24 pure, so 24 karat is pure gold.

Motif - The distinctive and recurrent feature or symbol of a theme in a work of art.

Paraphernalia - Assorted objects or items of equipment, often things that seem amusing, strange, or irritating

Pure gold- same as fine gold; unalloyed gold.

Regalia - The ceremonial and symbolic objects and clothing used and worn by royalty or other holders of high office on formal occasions.

Repousse work - a method of ornamenting sheet metal by using punches and other various tools to make holes and designs in the metal.

Solder- a metal or metallic alloy used to join metals.

Soldering- the process of fusing two pieces of metals together with solder.

Solid gold- gold that has no hole in it.

Tools- device for doing work: an object designed to do a specific kind of work such as cutting or directing manually applied force.

Trademark- a mark that indicates the manufacturer, importer or seller of an item.

1.9 Research Methodology

1.9.1 Historical and Descriptive Methods

The research study work employed historical narrative in discussing the background and overview of the industry and its socio cultural and economic relevance to the country. Libraries and museums were visited and available data on jewellery tools, symbols and designs were collected. Goldsmiths workshops were also visited to obtain information on historical trends on tools and techniques of production. Traditional rulers knowledgeable in the history of jewellery and how it relates to culture were also contacted for information. The descriptive method was used to describe and interpret all the data that were obtained for validity and authenticity.

1.10 Facilities Available for the Study

- KNUST Main Library
- College of Art Library
- Balme library (Legon)
- George Padmore Research Library on African affairs
- University of Education, Winneba (Kumasi campus)
- Centre for National Culture (Kumasi)
- Metal Products Design Section – KNUST

- Ashanti Library (Kumasi)
- Internet
- Selected Jewellery workshops and selling centers

1.11 Organization of the Rest of the Text

The Thesis is organized into six chapters. Chapter One contains the introduction which covers the background of the study, statement of the problem, objectives, importance of the study hypothesis, delimitation, limitation, definition of terms, abbreviations used, assumptions, research tools and facilities used for the study.

Chapter Two is the review of related literature categorized under the following subheadings; history of jewellery, growth of the jewellery industry in Ghana, socio-cultural relations and jewellery industry, effect of trade liberalization on jewellery industry, gold jewellery and demand factors, the influence gold price on jewellery production and consumption trends, and consumer tastes on jewellery production.

Chapter Three which deals with the methodology that was used to obtain data for the study. Sampling techniques used including questionnaires, field visits, interviews and observations have been elaborated in this chapter.

In chapter Four an overview of the jewellery industry in Asante is provided. The chapter gives a brief history of the Asantes, and continues with gold as a raw material for jewellery, its processing, the myths and beliefs surrounding gold usage, gold Jewellery production techniques and the role of gold jewellery in the socio cultural development of Asante.

Chapter Five presents analysis and interpretation of information gathered from interviews during field visits and other secondary sources as well analysis of data from questionnaires.

Chapter Six gives the summary, conclusions and recommendation of the entire research.

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CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Overview

The purpose of this chapter is to draw from literature and present an overview of the gold jewellery industry in Ghana with particular reference to Asantes. The chapter is divided into two parts. The first part discusses the concept of jewellery and the socio-cultural and economic significance of jewellery. The second part examines the jewellery industry in a global context and brings to the fore issues relevant to Ghana. In the discussion key concepts that impact the industry are mentioned including; trade liberalization, gold price, globalization, consumer taste and culture.

2.2. Jewellery

Jewellery is a form of personal adornment and comes in the form of brooches, rings, necklaces, earrings, and bracelets. The exceptions are medical alert bracelets, military dog tags types normally

differs from other items of personal adornment in that it has no other purpose than to look appealing. The word jewellery itself is derived from the word jewel, which was anglicized from the Old French "jouel"(Holland, 1999) and beyond that, to the Latin word "jocale", meaning plaything. Humans have been producing and wearing jewellery for a long time – with 100,000-year-old beads made from Nassarius shells thought to be the oldest known jewellery historical evidence (BBC, 2006). Jewellery may be made from a wide range of materials but gemstones, precious metals, beads and shells have been widely used. Depending on the culture and times, material and methods jewellery may be appreciated as a status symbol, for its material properties, its patterns, or for function the meaning of its symbols. Jewellery has been made to adorn nearly every body part, from hairpins to toe rings.

2.3. Early history of Jewellery

Humankind's love of personal decoration has its roots in the awakened concept of the self- image which is developed in the unrecorded past. The first concrete evidence of body ornamentation is seen in the cave dwellers' wall drawings believed to be at least 20,000 years old (Untracht, 1985). The first signs of jewellery came from the people in Africa. Perforated beads made from snail shells have been found dating to 75,000 years ago at Blombos Cave. In Kenya, at Enkapune Ya Muto, beads made from perforated ostrich egg shells dating to more than 40,000 years ago. Outside of Africa, the Cro-Magnons had crude necklaces and bracelets of bone, teeth, berries, and stone hung on pieces of string or animal sinew, or pieces of carved bone used to secure clothing together. In some cases, jewellery had shell or mother-of-pearl pieces. In southern Russia, carved bracelets made of mammoth tusk have been found. The Venus of

HohleFels features a perforation at the top, showing that it was intended to be worn as a pendant. As indicated in plate 3 about 7,000 years ago, the first sign of copper jewellery was seen (Holland, 1999).

Gregorietti (1969) describes the history of the development of jewellery as it is linked with most advanced civilization of the past. Archeological finds traces the development of the characteristics of styles and forms of jewellery from various areas of region of the earliest cultures known to us. Jewellery is relatively small, easily transportable and liable to be damaged or melted down and remade.

2.4. Forms and Function of Jewellery

Jewellery has been used for a number of reasons: Currency, wealth display and storage; functional use in clothing and as garment accessories, symbols to show membership or status or religious affiliation for protection as in the form of amulets and magical wands (George, 1917). Most cultures have at some point had a practice of keeping large amounts of wealth stored in the form of jewellery. Numerous cultures move wedding dowries in the form of jewellery or create jewellery as a means to store or display coins. Alternatively, jewellery has been used as a currency to trade goods; an example being the use of slave beads. Many items of jewellery, such as brooches and buckles, originated as purely functional items, but evolved into decorative items as their functional requirement diminished (Holland,1999).Almost every part of the human body and almost every item of apparel, have, at one time or another in one culture or other been used as a location for wearing jewellery (Untracht,1995). It has been used on the head as crown or tiara; on wrist as bracelets or bangles; on the arm as arm bands; on the ankle as anklets; on the waist as waist bands; on the fingers as finger rings. Man has felt an instinctive need to adorn himself. Superstition and

prejudice awareness of social position and the desire to secure investment were, and still remain today, the fundamental urges behind man's desire to emphasize the solemnity and prestige of persons with ornamental symbols (Gregoritte, 1969).

Jewellery can also be symbolic of group membership, as in the case of the Christian crucifix or Jewish Star of David, or of status, as in the case of chains of office, or the Western practice of married people wearing a wedding ring.

2.4.1 Jewellery as a Form of Protection

Wearing of amulets and devotional medals to provide protection or ward off evil is common in some cultures; these may take the form of symbols (such as the ankh), stones, plants, animals, body parts such as the neck, arms, ankle and wrist or glyphs (such as stylised versions of the Throne Verse in Islamic art (Morris, 1999). Although artistic display has clearly been a function of jewellery from the very beginning, the other roles described above tended to take primacy. It was only in the late nineteenth century, with the work of such masters as Peter Carl Fabergé and René Lalique that art began to take primacy over function and wealth. This trend has continued into modern times, expanded upon by artists such as Robert Lee Morris, Ed Levin, and Alberto Repossi who are renowned contemporary jewellers.

2.4.2 Jewellery as an Art for Body Adornment

Beauty has always been an ideal that people have strived to attain. Whether moral or physical, beauty revealed itself as a goal, but also as a means to improve one's life from several points of view. Consequently, jewellery proved to be an excellent tool for achieving the ideal of beauty.

Necklaces, bracelets, earrings, rings and so many others, became in time a symbols of wealth, elegance, status, and of belonging to a certain social group (Mark, 2013).

People are inclined to associate jewellery with precious metals or precious stones. This tendency is partially justified, as the common techniques of producing jewellery involves using such material, or replace it with another that imitates the genuine one. Nevertheless, one thing we should know is that the material used for jewellery does not give its entire value. For instance, religious jewellery such as medallions, crosses or rosaries can be just as well be made from wood, as their worth is not an earthly one. Religious jewellery is not only a declaration of faith but it is often held to intensify the spiritual energy of the wearer (Richter & Carpenter, 2011).

The cultural significance of jewellery as a form of body adornment has seen many transformations. In earlier times, only people of certain ranks were allowed to wear jewelleries. The wearing of jewellery as a definite mark of rank and as such was restricted by law in England. King Edward of England in 1353 decreed that handicraft men and women were not to wear jewellery (Evans, 1970). Moreover, the meaning of wearing jewellery varies not only from a temporal perspective, but also from a geographic point of view. For instance, whereas in eastern cultures rings represented a common ornament for men, the western societies in the nineteenth century received that habit with prudence, considering it as a tendency of effeminate men.

Nevertheless, the western estimation of men's jewellery is not a universal one. The market of men's jewellery is not yet as developed as the female jewellery market; its tradition goes a long way back. The history of men's jewellery states that, in the beginning, men used ornaments as a sign of power. They were employed either for the sake of a mere adornment, or for more practical purposes, such as intimidating in warfare by exhibiting the fighter's rank or power. For more practical purposes rings such as poison rings whose ornamental upper part are hanged to the shank so that it can be

opened, exposing a small inside chamber large enough to carry poisonous substances such as concoctions, pills are said to poison enemies or the wearer himself

(Untracht, 1989).

In the course of history, common people somehow stopped wearing jewellery. Jewellery became the privilege of priests and kings, and that situation lasted until later times. Nowadays, though, men's jewellery recovered from that long period of darkness. At first, subtly, it was restricted to rings, pins, watches, but then ostentatiously via the hip-hop musical and cultural trend. New artists imposed the image of a man adorned with heavy golden chains, enormous rings meant to shine and show that the one who wears it has a certain style and status. They included golden teeth that should demonstrate that the wealthy one could afford to spend a little on their dentition, to embellish one's smile, or to simply mark the eccentricity of the owner (Fashion Café, 2008). Men's jewellery obviously regained its social significance. It is no longer regarded as a taboo or as a habit of dubious, peculiar individuals, but as a common routine. Of course, excessive display of jewellery remains a practice of some people that state in this manner their belonging to a particular group with which it shares a specific view of life, or tastes in music, art or part of their culture.

Jewellery is not mere fashion; not just something to complement an outfit. Nor is it simply a form of currency. Jewellery is in many ways the most intimate of art forms, both because of the personal meanings we attach to it and because of its relationship with the human form. Jewellery design is an organic and holistic process that responds to many conditions, not least of which is the physical environment itself. The topography or setting for jewellery or wearable sculpture is the human form and that setting imposes unique design problems and parameters (Young, 2010).

2.5. Jewellery Making Materials

The relationship between humankind and jewellery dates back to the old caveman days. When men and women used stones and animal horns, leaves and flowers to decorate themselves, especially women, who have always had an affinity towards jewellery and other things that make them look good and desirable. They have used everything they found around them as jewellery, which made them look pretty (Ogden, 1992).

There are many metals and materials that are used for developing jewellery. Gemstones, diamonds and other precious items such as gold, silver, platinum and other base metals are very often used for creating jewellery items.

2.5.1 Gold

Gold, a precious and lustrous metal was the second metal to be worked by early man. It is a good conductor of heat and electricity. Due to its high electrical conductivity it is used a lot in the electrical and electronic industry for plating contacts and terminals of printed circuits boards as well as for semi-conduct systems. Gold is a noble metal, malleable and very ductile. Because of its rarity and lustre and its ability to resist corrosion it has been valued by many cultures (McCreight, 1991). The structure of gold allows it to be stretched into wire or hammered into sheet so that it can become vastly extended without breaking down or changing its character. It has an atomic number of 79 and melting point of 1063°F (945°C). Fine gold is 24 carat (ct) or 1000 fine. An alloy of 75% gold is 18 carat or 750 fine. The alloy of nearly every metal has been used for developing jewellery items. The standard for gold alloy is the percentage of pure gold it contains. The standard alloys most used in modern jewellery are 916/000 = 22 carats, 833/000 = 20 carat, 750/000 = 18 carat, 625/000 = 15 carat, 500/000 = 12 carat and 375/000 = 9 carat (Gregoriette,

1969). All alloys diminish their malleability and increase their resistance. Thus something made of gold gains permanency as it loses in delicacy of workmanship therefore while working on gold it is important to anneal the material constantly so that it does not become hard and therefore brittle. Gold does not tarnish nor cannot be destroyed. Pure gold being too soft for all ordinary purposes, is generally alloyed with other material, silver and copper are the principal alloy used (Rose & Antonio Cirino, 1967).

Gold measurement: An ounce of gold is 31.3 grams and the price now is around 1,033. An ounce of gold can be flattened to a sheet that will cover 100 square feet or can also be drawn into a wire almost a mile long. Gold can also be made into a foil that is less than 5 millionth of an inch thick, at which point the gold is virtually transparent (Bovin, 1979).

Gold has to be scientifically tested or assayed in a laboratory. However, craftsmen employ two simple ways for testing gold. One is the testing with acid to determine whether an object contains gold and the other is testing to determine the carat of the gold object, that is to determine the quality of the gold article. These testing can be performed by all experienced jewellers in their workshops with simple tools and materials.

Although the researcher seeks to confine her study to Gold jewellery, other important materials need in jewellery making must be discussed. Silver, brass bronze, copper leather etc. are the other important materials in the gold jewellery industry.

2.5.2 Silver

Fine silver or pure silver is unalloyed silver. It is the whitest of all the metals and has the greatest lustre next to gold. It is the most malleable and ductile of all the metals. Silver is so malleable that it can be beaten to sheets about 0.00025mm of an inch thick. At this point the silver can readily transmit light. It is so ductile that a small piece of a gram weight ounce can be pulled into a wire

of about one mile. Fine or pure silver is too soft for most Jewellery work. It is usually alloyed with copper to increase its strength. The alloy of copper and silver with proportions consisting 925 parts of fine silver to 75 parts of copper per thousand parts is known as sterling silver. This particular amount of copper to silver has been found to give silver the necessary toughness without reducing its ductility and malleability too much. The small amount of copper in the silver allows it to be coloured in controlled ways. This colouring process often enriched the surface quality of silver objects. Hammering, bending, twisting, pulling, drawing into a wire and other such processes allow the material to harden but carefully heating to the correct temperature softens it once more (Neumann, 1982). There are other alloys of silver (ion silver consist of 90 parts fine silver and 10 parts copper. Much old silver jewellery used the alloy of 80 parts fine silver and 20 parts copper. This particular alloy is so close to that of medium and that silver solder. Repairs of such works are very risky. Therefore care must be taken when working on them.

2.5.3 Copper

Copper is believed to be the first metal used by man, since it was often found in the natural state. It is quite malleable and durable; it also has a rich red colour. Early man immediately found decorative and functional uses of it. Copper conducts heat and electricity very well; it can be formed and joined. Copper's tendency towards rapid oxidation and sulfurization may be controlled by the addition to other metals to form alloys with great range of characteristics. Many of these alloys may be used in jewellery making. Copper has a melting point of 1083 °C or 1981°F with specific gravity of 8.96.

2.5.4 Brass

Brass is basically an alloy of copper and zinc. The colour is yellowish or reddish depending on the zinc content in it. The combination is always tougher than either of the component (copper and zinc). The higher the zinc content in the alloy, the yellowish it becomes. Brass melts at different temperatures depending on its alloy composition. Yellow brass has 67 % copper and 33% zinc. Red brass 85 – 90% Copper + 10. It has a melting point of 954 °C or 1750 °F with specific gravity of 8.5. The name Brass and copper have been used interchangeably since early time (MacCreight 1991).

2.5.5 Bronze

Bronze is basically an alloy of copper and tin. It is a versatile metal that can be made to be soft as pure copper or as hard as some steel. It gave its name to the third phase of man's material developmental (the Bronze Age) following the Paleolithic and Neolithic ages and was being made as early as 3000 BC (MaCreight, 1991). Specific contents of copper are alloyed for desired result. Besides being tougher than its parent metal, copper, bronze is more easily melted and cast; its less susceptible to corrosion. By varying the proportion of copper and tin in the mix, several alloys of differing properties are possible. Today modern bronze contain besides copper and tin other elements such as phosphorous and aluminum alloys which are rarely used by craftsmen. Several modern copper alloys are called bronze, because they look like bronze even though they do not contain tin.

2.5.6 Diamonds

Another material which is in very much use in jewellery is diamond. Diamonds were first mined in India (Janse, 2006). Diamond is very common in rings, necklaces, nose rings, earrings, bracelets etc. Eighty seven percent (87%) of jewellery that is set with some precious stone is set with

diamond and is made of either gold or silver (Messinger, 1992). Diamonds are the hardest of precious stones. The word 'diamond' itself is a derivative of the Greek word *adamas*, which means “unconquerable”. It is the undiminished beauty of diamonds that has made them so highly prized throughout several centuries. This does not mean that a diamond cannot be damaged only that they are difficult to damage requiring a very precise strike in an exact location in order to damage the surface. It is believed that the first diamonds were discovered nearly 3000 years ago in India. They were considered valuable because of their ability to refract light and were used as either decoration or as talismans - for protection and warding against evil (Jones, 2012).

2.5.7 Gemstones

Often one or more gemstones can be used in jewellery making. These include precious as well as semiprecious stones. Rubies are among the most highly valued precious stones and are known for their intense red colour. Sapphire is the next precious stone; its most popular form is blue sapphire. The third stone among the three most precious stones is Emerald, known for its fine green to bluish green colour. The other gemstones include amber, amethyst, jade, jasper, quartz, turquoise (Nassau, 1980).

In Ghana today the most common material used for making jewellery is gold and silver. Semiprecious stones such as zirconium and cabochon shown in plate 4 are widely used in the Ghanaian jewellery industry where a stone setting has to be done. These are mostly used as settings for engagement rings and in other forms of jewellery items.

2.6 Costume Jewellery

Cera (1997) described costume jewellery as frequently bold in design and swift to reflect changing vogue of fashion, it has a status and appeal of its own. Its immense variety and versatility have been key elements in attracting collectors and enthusiasts. Costume jewellery also called fake jewellery, is jewellery manufactured as ornamentation to complete a particular fashionable costume or garment (Baker, 1986). Cera's description of costume jewellery explains how flexible and lively costume jewellery is and because of this quality it attracts collectors and enthusiasts. Truly costume jewellery is and as always been aesthetically good, with its trendiness and versatility, there is no doubt about it and the research agrees with this fact. As stated by Baker (1986), costume Jewellery is to complement a particular fashionable costume which the researcher agrees with. As having immense variety and versatility, costume jewellery can be worn any day and can suit any type of clothing. Costume jewellery came into being in the 1930s as cheap disposable jewellery meant to be worn with a specific outfit, but not meant to be handed down through generations (Young, 2012).

Cumming, et al. (2010) stated that the term costume jewellery was first used in the New Yorker magazine in 1933. They further explain that there had been much earlier experiments with glass, non –precious metals, such as pink beak and Berlin iron work and paste. But it was only when designers saw how well innovative jewellery could be used that it became important. It is jewellery designed and made to complement a specific fashion but using non-precious materials, such as beads, Perspex, wood etc. and it often makes a partnership between fashion designer and jewellery designer. Truly, costume jewellery brings the fashion designer and jeweler together as partners in creating new exclusive designs for the market that would achieve the aim of complementing a particular outfit as stated (Cumming, Cunningham, et al 2010), but the researcher does not agree with the point where jewellery created should only be meant for a particular outfit, the researcher also does not agree with the statement made by Young (2012) concerning costume jewellery being

a cheap and disposable jewellery made to last for a moment. The researcher believes that jewellery as an object should be made to last a life time and not discarded, therefore a good quality gold material should be used in jewellery making.

2.7 History of Gold Mining Industry in Ghana

The first records of gold trade in Ghana date back to the thirteenth and fourteenth centuries, when open pit gold mining and gold smithing were one of the core activities in the Asante kingdom. Between the fifteenth and the seventeenth century, the Gold Coast was the world's most important gold producer; hence the name "guinea" for British gold coins (Gnielinski, 1986). During peak production in 1700, some 40'000 workers were operating in the Asante mines (Asamoah, 1996). Travel reports from the 18th and 19th century point to the enormous riches of the Asante kings, and the versatility of their goldsmiths. With the beginning of the slave trade, the traditional pool of workers from Benin dried up, and gold mining activities in Ghana were stopped. Modern mining started with the rediscovery of gold at Tarkwa in 1878, and later at Obuasi with the foundation of Ashanti Goldfields in (1897), Prestea and Dunkwa. To show the extend of mining and the exploration of the jewellery material Anyemedu, (1991) expands on the extent to which mining was organised in the seventeenth century, where 450 mining co-operations were founded. Three thousand five hundred (3500) exploration licenses were issued and a railway line constructed between Obuasi and Takoradi harbour, to transport goods and services (Gnielinski, 1986).

A large number of companies were forced to close down or to merge, and gold production remained at around 200,000 ounces per annum until 1930. Only when the sterling value of gold was increased in 1931, dormant mines were reopened, and gold production soared to 818,000 ounces

in 1940 (Agbodeka, 1992). Until independence in 1957, the mines relied on cheap migrant labour from the North and saw no need for increasing labour productivity through education and training. In 1952 the Technical Training Institute at Tarkwa was established for apprenticeship training. In 1961, after independence, the Institute was changed into the School of Mines, offering a 3-year diploma course in Mining Engineering. Specific mining apprenticeship courses for mine mechanics were introduced in 1962. In 1976, School of Mines became part of the University of Science and Technology, offering degree courses in mining engineering (Agbodeka, 1992). In 1965, the government founded the State Gold Mining Corporation. The company took over five mines that had been left behind by foreign mining corporations. The mines had hit poorer gold reefs, and the owners were not willing to invest in the production in new reefs (Schmidt-Kallert, 1994). From then onwards, a combination of poor management, low productivity, lack of qualified and experienced staff, and rising production costs resulted in a continuous decline of gold output. In 1972, the government took ownership in all natural resource-based industries in the country, in particular a 55 percent share in the country's largest gold mine, Asante Goldfields (Gnielinski, 1986). Technical management was left to the minority owner, UK-based Lonrho. Nevertheless, the inability to get foreign exchange for equipment and supply purchases led to a decline of gold production from 533,000 ounces in 1972 to 232,000 ounces in 1982 (Winfred, 1996). One of the main measures in Ghana's economic reform program was the rehabilitation of the important mining sector. In 1986, the government of Ghana passed a new Minerals and Mining bill with the purpose of restoring current mines and to attract foreign investors. Specific actions included the provision of foreign exchange for the purchase of machinery and equipment, a new fiscal regime, and the foundation of the Minerals Commission. The World Bank provided finance and consulting

assistance for the rehabilitation of the State Mining Corporation and for the upgrading and expansion of Ashanti Goldfields (Anyenedu, 1991). The first foreign entrant, Southern Cross, came in 1988, followed by Teberebie and Bogosu in 1991, Gold Fields Ghana in 1993 (Anyenedu, 1991), and Barnex and Dunkwa in 1995 Ghana Chamber of Mines, (1996). Since then, gold production has soared.

2.8 Socio-Cultural and Economic Importance of Jewellery

Traditional goldsmiths of old combined technical skill with great artistic ability, but their identities are now lost in the past. Unfortunately, the few who remain are losing their consummate skill to satisfy customers because of resistance to change. Writing under the title “Gold of Africa” Garrard, (1989), provides a good overview of how gold is used in the Akan society of Ghana. He gives a systematic outline discussion of each type of jewellery and ornament and the role they play as emblems of wealth and politico-religious power. The

Encyclopedia Britannica(1965) mentions the overwhelming importance of gold jewellery by indicating that jewellery products were worn a great deal in England after the 1940’s and that it was during this period that costume jewellery evolve; In his article “Jewellery in the “1940’s and 1950’s” Raulet, (1987) discusses the important role of jewellery in the life of a country. Raulet explains that if jewellers melt down gold or platinum, “Britain received 20 percent of their value”. The state thus derives tax revenues from the production of jewellery. Jewellery making is therefore an important economic activity, capable of achieving economic development and growth for a country. Since this tax revenue can be used in providing social infrastructure such as schools, hospitals, roads, recreational facilities for a country. In her book “Africa Adorned” Fisher, (1987)

is noted as saying that when the Europeans arrived in the forest zone of West Africa in the fifteenth century, they observed that the people of the region were rich and many of the kingdoms at that time grew in affluence, which was derived from the long established TransSaharan trade in gold. Many centuries of trade between Africa and the Western world (Portuguese, Flemish, Dutch, English, French and Scandinavian merchants) also enhanced and increased wealth at that time. The emergence of gold in the forest zone occupied by the Asante caused major changes in their society and that of the surrounding peoples. The trade in jewellery especially gold effectively tied the Asante to the rest of the world and soon they became inextricably linked to the developing capitalist and industrial system of Europe, a system that, by the nineteenth century, came to dominate the whole globe.

The emergence of gold trade led to increase mining activity on a scale never known before. While this created employment for the people, it left behind its environmental consequences. The effect of mining on the environment has long been recognized as a major hazard to river systems and to human environment. One obvious effect even currently is the deforestation that is caused by open cast mining. Mercury is used both in formal extraction methods and by rogue individual panners called 'galamsey', who also use mercury to extract gold from their pans. The mercury is mixed with the sediment in the pan where it binds with gold. The resulting amalgam is heated, causing the mercury to evaporate while the gold is left behind. The handling and disposal of mercury by the 'galamsey' if go unchecked can contaminate soil and water as well as constituting risk to the 'galamsey' personal health in the form of mercury poisoning.

The people of the forest zone of West Africa were not the only group of people who benefited from trade in gold and jewellery. Immense quantity of gold trinkets for instance, was exported from Jenne and Timbuktu to the Middle East (Garrard, 1989). This brought in foreign exchange for these

empires, which helped in their development. These to the present writer, indicates that jewellery plays an important role in the socio-economic development of a people and a country as a whole. In another dimension Raulet (1987), emphasizes the importance of jewellery as an investment potential. Raulet claimed that between 1940s-1950s, jewellery became a form of investment and security. This according to the current researcher is very true because the nature of gold makes it a valuable possession such as jewellery that can be regarded as an asset, since in times of financial difficulties jewellery can be converted into cash. Such jewellery is also kept for future use by members of the family. Such use is very typical of most Akan societies including the Asantes of Ghana. It is known that heirloom jewellery is kept for funeral decoration and other such activities like puberty rites.

Raulet's further assertion that the overwhelming patronage of jewellery led to the establishment of jewellery firms in places such as New York, Beverly Hills, London and Monte Carlo, buttresses this researcher's view that jewellery is economically, socially and culturally important in the life of a people. This is because the establishment of these jewellery firms did result in the employment of people thereby helping to reduce the rate of unemployment, which meant an enhanced social life. One can also infer from this that the establishment of jewellery guilds, and workshops in Asante did enhance the economic and cultural life of the people since patrons were able to have access to exquisite jewellery.

The Compton's Pictured Encyclopedia and Fact Index also reports that gold jewellery provided work for medieval craftsmen who made gold jewellery for the nobles at the time. During the Renaissance, trade in gold jewellery also provided jobs for the artists who made superb jewellery designs. To further substantiate the fact that jewellery provides employment, which helps to develop the lives of a people, Snowman (1990) reports that Carl Faberge born in Russian in

1746, organized the jewellery firm he inherited in such a way that it did not become like “a tiny goldsmith’s workshop with two or three assistants, but rather an elaborate business enterprise, made up of about 500 employees, designers, craftsmen and salesmen”. Carl Faberge is not the only person Snowman wrote about. Others include Alexander Tillander also a Russian who established his industry in St. Petersburg. In the 1980’s St. Petersburg had well over 300 goldsmiths’ workshops that employed about 3000 people.

When the gold jewellery business of Alphonse Fouquet French born in 1928 flourished, Snowman writes that Alphonse employed about 30 assistants who produced items for export to other European countries and South America. The present researcher would not be wrong to conclude in this regard that jewellery has a great business potential that could help solve some of the country’s unemployment problems.

Raulet speaking on European jewellery contends that several families of jewellery have contributed to the worldwide fame enjoyed by some countries. Such families include: Peter Nadelhofferr, a jewellery expert, Boncheron, Manbonssin, Van Clef and Arpels, and Cartier who lived in France between the 1940s and 1950s. Likewise Arthur King and David Webb (two selftaught Americans who discovered for themselves the techniques of bijouterie) did contribute immensely towards the development of American Jewellery (Raulet, 1988).

Portraying further, the importance of jewellery, Adjei-Hene (1990) asserts that jewellery making could be commercialized in schools in order to raise money for projects. The current researcher agrees perfectly with Adjei-Hene because jewellery making as an economic activity has a whole lot of economic potentialities. These potentialities can be inculcated into the schools graduates to make them better equipped to be self-employable after school. Then also as Adjei-Hene further stated, if the jewellery making section of every Art Institution is commercialized, it may put those

schools on a sound financial footing. Money derived thereof can be utilized as a supplement to provide certain basic essential needs of those schools so that they may not rely much on the meager government subventions.

Portraying the economic significance of jewellery, Monda, (1993) once again indicates that the apprentice system is most commendable because it creates the much-needed employment in the private sector. In consonance with Monda, this writer is of the view that these trainees in future can be self-employed by setting up their own workshops. Eventually, they can in turn train and employ upcoming gold smiths by transferring these employable skills to them.

In portraying the use of jewellery in the culture of Asantes, Boateng (1996) indicates that in every family in Asante, grandmothers are regarded as custodians of traditions who keep the trousseau of gold jewellery. Such items used on ceremonial occasions such as birth, marriage and on other festive occasions. The current practice, which is in consonance with the above issue, is that when a female member of the family reaches her puberty, such ornaments are brought out to decorate the young lady. A part of such ornaments is also given to her as a trousseau. This has economic and cultural importance since the money that would have been used to buy such ornaments is saved. Also the ceremony undergone by the young woman affords her a sense of belonging to the community as well as a sense of maturity.

In Carlo Carducci's "Antique Italian Gold and Silver" (1964), he indicates that jewellery had an important role in the socio-cultural life of the people of Western and Central Europe when they migrated into Italy following the end of the Western Empire. According to him, this gave rise to changes in the living habits of the people, and the use of jewellery portrayed elegance and ostentation, which became the principal requirement of social success. The present writer agrees with Cardicci on this score since jewellery is known to wield an enormous economic and cultural value and its usage everywhere including Ghana has great influence on the owner.

2.9. Myths, Legends and Beliefs associated with Gold and the Gold Jewellery Industry

Several writers such as Visoná (1953), Garrard (1980) and Yeboah (1997), have recounted on myths, legends and beliefs of gold in Ghana, some of which are recorded by authors or repeated and passed on from generation to generation. In Southern Ghana, it is said to the present day that a person might see a dog or hen covered in gold dust emerging from the ground. Garrard elaborates that immediately after the apparition, gold and precious beads would also come out of the ground. These are believed to be signs to strike the animal. Some of the gold dust would drop, after which the prospector would beg the god concerned to allow him to collect the gold and beads. In appreciation, the man would slaughter a sheep and sprinkle the blood over the gold and precious beads.

Meyerowitz (1949) on the same supernatural animals narrates of a 'golden dog' if seen in the mine, is believed to bring death to the miner. A 'golden fowl' however, surrounded by chickens meant wealth and a live python implies the same. She further elucidates that the spiritual qualities inherent in gold forced a person to be honest. It was rare for anyone to pick a nugget from another person's land and claim it. All gold found was brought to the *Omanhene* and clan chief for the two-thirds deduction.

According to Garrard (1980), gold and precious beads were believed to grow. For this reason, golden nuggets were ceremonially reburied so as to multiply and attract gold to the area. Gin was often sprinkled to the earth. Linked with the emergence of gold and precious beads from the ground is Freeman's collection and account; as referred to by Dadzie. Travellers in the far interior when they journey through the wilderness at night sometimes see a tongue of flame rise out of the ground.

They at once proceed to dig on the spot whence the flame arose and presently they find one or more beads. A spiral evolves from the ground after which follows gold dust and beads. This fortune was believed to be found mainly by hunters and farmers in the forest. He always hides on seeing the vapour until after it clears. Otherwise if he shouts or causes a distraction the fortune sinks back into the ground. A fowl is then slaughtered in thanksgiving for the treasurer.

Among the Akan, prospecting for gold was done at night by the blacksmith. Meyerowitz, (1949) asserts that in Bono, the prospector would wash his face with herbal medicine believed to make him aware of a glow on the earth where the gold lay. He then cast a circle of ashes round the selected area and claimed it in the morning. When gold was actually found in trial pits, the author recounts that: the *Omanhene* would send a representative with a sheep for sacrifice. The discoverer supplied the fowls, eggs, and rum or palm wine for libation prayers were extended to the Earth goddess and owner of the gold, *Asaase Afua* or *Asaase Yaa*, the nearest river deity, or the national god of the state.

Menstruating women were forbidden to enter gold digging areas, because it was believed they defiled the spiritual purity of the metal. Neither was any man living in the area allowed to have intercourse with his wife. In some areas, Meyerowitz (1949) records, that even plantain and banana fruits regarded as phallic symbols were tabooed in the neighbourhood of the mines. If gold mining underground passages or tunnels fell in, the mine was immediately deserted and any buried people abandoned.

2.10 The Significance of Gold Jewellery in the Life of the Asante

Gold jewellery has great significance in the life of a people and touching on the cultural significance of jewellery, Monda (1993) indicates that jewellery is greatly varied according to the life-style of the people and their cultural contacts. The current researcher agrees with this assertion because the importance of jewellery is noticed in all the stages of Asante life: birth, puberty, marriage, and death. Goldsmiths played an important role in the growth of Asante's political control in the eighteenth and nineteenth centuries. The golden objects they created served to distinguish the various ranks of chieftainship, indicated the particular functions of the court officials and even helped to decide whether there should be war or peace. It is no exaggeration to say that without gold regalia the Asante political empire simply could not have functioned. And so of course at the very hub of the whole Asante political system was the ultimate gold creation, the golden stool or *Sikadwa Kofi*. The golden stool is priced above all other items of regalia and no royal candidate could truly assume Kingship until he had possession of it. Today the Asante believe the Golden Stool contains the soul of the Asante

Nation and see it as providing the essential link that joins all stages of their history together (Ayensu, 1997). There are several reasons for the flaunting of vast quantities of gold at Asante courts. Most important was the desire to impress the populace, rivals, visitors and outsiders with wealth and power. The Asante have a saying *sika ne hene* meaning gold is king. Political power and the possession and display of wealth are inextricably bound together in Asante society. Items of gold regalia also serve as important record of events in the state's history and in the career of its ruler or his predecessors. Some items may have been trophies seized from defeated enemy states; others may have been copies of coveted items once possessed by slain rivals. Sometimes an object was made specifically to commemorate a slain enemy. Items of regalia also had diplomatic function. As new areas were absorbed into the Asante Empire, the *Asantehene* sent such items to

the new vassal chiefs to cement their allegiance, strength and loyalty, (Bravmann, 1974). At the same time, such gifts helped absorb the new provinces into a common system of symbolism. On occasions when the King received in audience his chiefs and nobles, he would be decorated with gold ornaments, a nicely folded crown adorned with one or two slabs of solid gold, one on the forehead and another on the back; then two gold rings on one of his fingers and one on his feet (Anti,1974). The sight of the *Asantehene* on a state march looked like a scene from a world of legends. It was a great day when the Asante chieftaincy displayed its greatest in pageantry with all age groups of every social level taking part. The procession was characterized by a show of opulence and elegance; gold and precious beads copiously adorned the royal personalities who were surrounded by a profusion of womanly beauty and the swirling movements of colour and sound amidst palanquin, drums, horns, muskets, swords, stools and the marching hierarchy of captains. On festive occasions the *Asantehene* would be decorated with massive gold, chains of solid gold on his neck and slabs of massive gold on his crown, elbows, wrists, fingers, ankles and the ten toes. The gold ornaments on the ankles are so heavy that the King is forced to slow down his rate of movement. His sandals are all gold plated, his cloth is most colourful and decorated with slabs of gold (Martin and Meara, 1995). To all appearances an ancient King of Asante in a state march was a “gold mine key”. Also among the convoy would be the five Black Royal Chains, which are the traditional representative chains of the five ‘dukes’ of Asante, and striking symbols of unity. Each chain is adorned with gold and silver bells and artistically decorated with gold jewellery and aggrey beads.

The ancient kings of Asante worshiped their ancestral stool and the skeletons of the past kings preserved at the sacred mausoleum at Bantama. The big *Adae* festival was a way in which the kings went through some ceremonies to revive their relationship with the spirits of their past ancestors whom they looked upon as gods. The mausoleum is a long building partitioned into small cells; in

each cell was the sacred skeleton of a king in preservation. It is amazing to know that the different segments of each skeleton have been carefully and artfully joined together with gold wires, and placed in a coffin adorned with slabs of gold; stressing the enormous place of jewellery in the Asante culture.

In 1817, Bowdich led a British government mission to Kumasi. Among other things, the mission was required to report fully their opinion of the inhabitants and of the progress they have made in the arts of civilized life. The report of the mission, which was published by Bowdich in 1819, gave a vivid description of the early nineteenth century Asante's life as well as notes on Asante history since A.D. 1700. Bowdich was very much impressed by what he saw. He was quoted as saying that:

The Asante political system was highly organized headed by an astute King whose sense of justice and liberality would have ennobled the most civilized monarch. The state council with ministers and a civil service and an army of over 20,000 provided enforcement to government policies (Wilks, 1989).

Asante Empire covered territorially nearly the whole of present day Ghana. It had diversified technological system including Iron metallurgy gold and silver smithing, and elaborate centralized craft work in textiles, ivory, beads, wooden carvings and pottery. The buoyant and diverse economy of the Kingdom based on agriculture and commerce in ivory and gold, involved considerable organization of markets, the opening, maintenance and policing of trade routes and the use of currency such as gold dust. Asante's social festivals, royal durbars and state ceremonies were invariably graced by the display of Asante's unique traditional crafts and colourful regalia, accompanied by well-developed music and dance expressing the most profound surrogate language. Concerning the Asante royal court Bowdich had this to say: Gold covered the thrones and stools, and golden threads embroidered the robes of royalty. It was cast into every conceivable

form of ornament, from the king's crown to the courtiers' talismans and the gold leaf applied to ceremonial staves was even used to cover collars of doors at the court (Wilks, 1989).

The work of Fynn (1971) and that of Wilks (1975) more than substantiate the views of Bowdich. Once again, this writer wholly agrees with Bowdich because the grand adornment of jewellery worn by the Chiefs portrays their political opulence, power and prestige. This is a potent and remarkable cultural value, which is inherent in the lifestyle of the Asante from time immemorial.

2.11 Gold Marketing in Ghana

In an attempt to create avenues for small-scale miners to sell their products, the Precious Minerals Marketing Corporation (PMMC) was established. Although vestiges of the organization go as far back as 1963, when the Diamond Marketing Corporation was established and shortly after incorporated by Legislative Instrument (LI) No. 401 of 1965 as a state corporation, the Precious Minerals Marketing Corporation Law (PNDC Law 219) of 1989 officially established the PMMC. The law granted the organization authority to buy and sell gold in addition to diamonds. Its mission is to buy from small-scale miners, and to sell precious minerals profitably in order to enhance foreign-exchange earnings from the sector. The corporation has some 750 licensed buying agents and subagents who travel around the country, purchasing gold from artisanal miners and in turn sell it back to the corporation; only ingots are purchased by the Corporation, which mandates that all customers smelt gold in the form of dust before offering it for sale (UN, 1996). In addition to buying and selling, however, the PMMC performs a number of other tasks including the following: The grading, assaying, valuing and processing of precious minerals, the appointing of licensed buying agents for the purchase of precious minerals produced by small-scale miners; and promotion of the development of precious minerals and jewellery industries in Ghana.

2.12 The Jewellery Industry in a Global Context

Gold jewellery is a luxury product and a multibillion dollar industry, sufficient to prompt the governments of precious metal producing countries such as Ghana to make the beneficiation process of resources an imperative policy. There is no doubt that, worldwide, the sales of precious metal jewellery have made tremendous strides over the past two decades, increasing 200 percent in the case of gold jewellery and around 400 percent for platinum jewellery. This escalation in sales has resulted largely from the efforts of the World Gold Council (WGC) and Platinum Guild International (PGI), both organisations established and funded by the major global precious metal producers to promote and sustain sales of jewellery in their respective metals. Nevertheless, the role of the WGC and PGI has been secondary to the inherent significance of precious metal jewellery in particular markets. In many of the world's leading jewellery consuming markets, specifically in Asia, demand escalated dramatically subsequent to legislative reforms of the policies governing trade in precious metals. In the majority of cases, however, the lifting of restrictions in these markets opened up and accelerated the growth of a thriving jewellery industry that had existed informally.

The pattern of jewellery demand and fabrication has changed dramatically over the past two decades. The countries that then led the world in jewellery production have made way for markets that were previously insignificant in this sector. The world's leading jewellery producers are also not necessarily the highest consumers of the product. Whereas some countries, notably Italy, export more jewellery than is consumed in the domestic market, other countries rely on imports to meet their consumption levels. The changing global pattern of jewellery production and

consumption over the last three decades provides an index to understand not only the economic factors affecting jewellery demand, but also the impact of these factors in the context of specific countries. It is the cultural specificities of a country and its propensity for jewellery that often determine its fabrication and or consumption trends. The factors that have influenced the supply and demand of jewellery globally have impacted on the industry in Ghana as well. The response of the industry to these factors, and its capacity to adapt, has been affected by elements intrinsic to the country and the industry itself. It is through insight into the growth trajectories of the jewellery industry in different contexts that the evolution of Ghana's industry can be understood, and its potential for further development assessed.

2.12.1 Jewellery Retailing

Jewellery has been part of human civilization for a long time, and today, jewellery is used as symbols for celebrations such as engagements, wedding, and anniversaries. It is also used as symbols for communication and symbols for identity and individualism. The jewellery retail industry has changed and exhibited growth over the past decade due to increasing income and demand from the emerging economies across the world. The USA remains as the largest consumer for jewellery, followed by China, India, the Middle East and Japan. The UK and Italy are the largest consumers in Europe (Gem and Jewellery Year Book, 2010).

The global jewellery market had total revenue of \$181,454.8 million in 2009. This represents a compound annual growth rate (CAGR) of 3.7% for the period 2005-2009. The market is expected to reach a value of \$229,421.5 million by the end of 2014. In 2009, global jewellery sales had total

revenues of \$149,463.3 million which is equivalent to 82.4% of the market's overall value (Datamonitor, 2010)

The jewellery retail industry is highly competitive and fragmented. The top jewellery retail businesses only hold less than 50% of the market. This is rather encouraging for small jewellery retailers. Jewellery sales are partly dependent on consumer income. Therefore, small jewellers can effectively compete with larger jewellery chains as price is not the main factor determining sales. A company's profitability is dependent on good merchandising and effective marketing. Jewellery is not only sold by specialized jewellery retailers, but also by departmental stores, online, and mass merchants. Monda (1993) observed that in Ghana jewellery production is mainly for the local market and is mostly retailed through the craftsmen workshop or salesrooms, the middle men or suitcase traders, hotel lounges, boutiques and trade fairs,

2.13 Growth of the Jewellery Industry in Ghana

The jewellery industry in Ghana though old, attracts a lot of patronage locally because Ghanaians by their nature believe in body adornment for various occasions such as weddings, durbars, church services, naming ceremonies, funerals, Kotoku (2008), observed that the industry is bewildered with a lot of problems which hampers its growth. Writing under the topic "Ghana tries to boost jewellery production for export", Theija (1993) said among other things that, Ghana could earn millions of dollars annually through the exportation of its quantitative indigenous handicraft jewellery if adequate attention is given to the industry. He further pointed out that, the most important part of Ghanaian jewellery is the quality design, and finish obtained by using hands and tools rather than machines. This point to the fact that even though, Ghana cannot compete with the

developed countries in terms of machine made fine jewellery, Ghana has the unique advantage of handcrafted jewellery.

2.14 Socio-Cultural Relations in the Jewellery Industry

Culture can be broadly defined as the beliefs, value systems, norms, mores, myths, symbols, language, behaviour and structural elements of a given group or society (Parsons, 1999; Onibere et al., 2001; Hugo, 2002). Culture is not a timeless and motionless body of value systems that remains unaltered by social change: rather it is dialectic and incorporates new forms and meanings while changing or reshaping traditional ones (Parsons, 1999). Thus it is conceived as a coherent body of beliefs and practices which are dynamic and changing within particular historical periods.

Culture is multi-layered. Stephan (2004) suggests two layer (visible and invisible), Schein, (1999), Lee, (2004) propose three levels (basic assumptions, values and artefacts); (HampdenTurner & Trompenaars (1997) and Spencer-Oatey (2000) argue for four layers (basic assumptions and values, beliefs, attitudes and conventions; systems and institutions; artefacts, products, rituals and behavior).

Culture represents some form and degree of collective agreement; culture is collective oriented phenomena. For example, cultural values determine whether behaviour and attitudes are defined as good or bad, acceptable or unacceptable and worthy or unworthy. The common member experiences, most notably history, language, political, economic and social experiences, family aesthetic and religious, are among the most important influences on the development of cultural patterns. These cultural patterns and effects are transmitted across generations, and the social

influence of cultural patterns provides a set of compelling effective, cognitive, and behavioural orientations for members of that culture. An important external force that has influenced African cultures is globalisation. Globalization is the process of intensification of economic, political, social and cultural relations across international boundaries (Akindele et al., 2002). It is an evolution which is systematically restructuring interactions among nations by breaking down barriers in the areas of culture, commerce, communication and several other fields of endeavours, thus increasing the integration of world markets. In some respect, globalization has had disastrous effects on African culture in general. A postcolonial perspective reveals that globalization in its current neo-liberal form has been developed on the foundation of the old colonial empires.

The relationship between cultural values and globalization can be understood if people recognise that, while in the past the significant agents of socialisation were the family and school, at present, the media and the global communication industry is providing additional sources (Pillai, 2002).

The dynamics of the jewellery industry and the underpinnings of factors that govern their growth can therefore be understood if the socio-cultural environments within which the industries are based are considered. The jewellery industry in Ghana consist of a system of production involving a multitude of formally independent actors (local gold dealers, goldsmiths, customers and retailers) which operate together and thus create a high density of transactions amongst themselves. For these to function smoothly and result in cumulative gain, trust and reciprocity are paramount, not only for the functioning of the industry but also for collective action (Schmitz, 1993). The trust necessary to sustain collective efficiency is inherent in the industry itself by virtue of the social embeddedness of enterprises and a common socio-cultural base (Enrico and Grandi, 2004). Thus, Ottati (1994) defines the social environment of the ideal type of industry district as characterised by a common culture, frequent face-to-face relations, and norms of reciprocity accompanied by relevant social sanctions. The frequent interaction between local gold dealer agents facilitates the

development of trust through knowing each other, and the custom of cooperation characteristic of the industry helps to reproduce trust and make it easier to sustain, reducing the need to resort to costly safeguards and monitoring to conclude transactions (Ottati, 1994).

Common social identity can form around notions of family, caste, ethnic, racial, religious, educational, political and corporate backgrounds (Nadvi, 1999). Nadvi (1999) again points to three ways in which social embeddedness can influence the functioning of an industry and its institutional framework. One way is the religious and/or cultural attitudes that influence the work ethos. A second way is the social ties and socialized production relations that lower transaction costs by providing a basis for trust, social reputation and reciprocity in inter-firm relations. Being socially embedded allows for the social provisioning of market-related information. Local social networks, therefore, provide valuable social capital in the form of the reputation of local firms, suppliers, traders, artisans and workers. It is costly to build up personal trustworthiness and to look for agents who possess a specific trustworthiness but the social relations in a cluster mitigate these information costs (Ottati, 1994).

A third way in which social embeddedness affects local production is through the social milieu which influences and is influenced by, the process of innovation and technological change. According to this perspective, technology is a function of the social fabric in which it is located, and is founded on the tacit knowledge that exists of production and production processes. This knowledge culminates in innovation through recurring contracts between users and producers. Apart from facilitating relations between enterprises, social embeddedness generates an implicit code of behaviour, incorporating rules and sanctions, that regulate both social and production relations within the industry (Nadvi, 1999). Much of the empirical work on local industries supports the role played by socio-cultural networks. It is not only in the large, established industries that social networks have a bearing; McCormick, (1997), testifies to the “air” of sociocultural

identity that pervades the garment markets and the “common background that seems to create a cohesiveness and esprit de corps in the markets”. She also refers to the networks based on educational background which provide access to customers and market information, and, in turn, lead to higher profits and better sources of finance. These networks consist of colleagues, schoolmates, family friends, and stable customers and suppliers (McCormick, 1997). Van Dijk (1997) claims that ethnic affiliations also play a substantial role in labour networks and different forms of cooperation.

2.15 Influence of Culture on Jewellery Design

The concepts of culture and design complement each other to the extent that one is inconceivable without the other. Design does not take place in isolation but is embedded in the user’s culture. Evidence from literature, Cross (2002) suggests that integration of culture in designing products might lead to product innovation and product acceptance. Early links between culture and design became apparent in the domain of social anthropology where civilization was evaluated through the cultural characteristic left on those objects. Some researchers De Souza and Dejean (1995), imply that culture is linked with tradition as opposed to the notion of design, which is associated with modernity and innovation. Reconciling the two is a daunting task. However, culture generates diversity and it is naturally revealed in all human actions, including the products that people design. Moreover, it is argued that design shapes the culture and lifestyle of modern society. The design of artefacts produced and consumed in a society often reveals the cultural situation and the people’s life, education, needs, wishes and fears.

In terms of product design, identities will never dissolve completely, even in the global world. When products are exported, a glimpse into the cultural identity of the country of origin is

embedded in them. However, Zec (2002) argues that with increasing globalization of markets and competition, there are growing multicultural influences on national identities. That is, globalization is leading to greater similarity of perception and lifestyle in some cases, identity. It is observed that this occurs whenever global trade leads to a greater uniformity of product culture. It is apparent that as users' surround themselves with products, they change their way of living. This implies that cultural differences seem to become less important as users' grow towards a universal, global and homogenous culture. This claim by Zec, is not sustainable, as his notion undermines user's cultural preferences and is largely misleading. Cultural differences are here to stay and they will force designers to adapt and to differentiate the products for different cultures (Raij, 1997).

2.16 Effect of Trade Liberalization on the Jewellery Industry

In recent years the biggest challenge to the jewellery industry development has been the introduction of trade liberalization in Ghana. The effect of trade liberalization has been to force industries to compete with producers worldwide without the protective measures that previously cushioned local industry from more aggressive competitors. Market liberalization has resulted in a flood of imported jewellery products that compete strongly with locally produced products.

This has been the case for certain industries, such as the garment and metalworking clusters in Kenya (McCormick, 1999). Market liberalization seems to have a greater effect on demand than supply side cooperation. The greater availability of inputs at cheaper prices has reduced the benefits accruing to supply side cooperation. At the same time, liberalization has put new competitive pressure on firms' products, and manufacturing efficiency, improved quality and marketing strategies therefore have assumed new importance (McCormick, 1999). There is now

than before pressure to upgrade production methods and quality specifications due to the advancement of globalization.

2.17 The Demand of Gold Jewellery

Apart from global disruptions that can cause sales of jewellery and other luxury items to plummet, demand for jewellery is primarily influenced by the strength of a country's economy and, linked to this are the associated factors of the US dollar exchange rate and the price of precious metals, diamonds and gems used in jewellery making. Precious metal price increases tend to discourage jewellery consumption whereas higher disposable personal income strengthens jewellery demand. In oil-producing Middle Eastern countries, crude oil prices have a marked impact on gold jewellery demand. Other factors which also influence demand are fashion, marketing and promotional expertise, and the general availability and appeal of the precious metal in a changing economic environment (Glynn, 1979). In recent years jewellery has faced increasing competition from a wider range of consumer products such as electronic appliances, mobile phones, clothing items and accessories.

Precious metal use in jewellery is generally more price sensitive in non-western countries than in Western markets where income differentials have a more pronounced impact on fabrication volume. These differences result from the varying forms and styles of jewellery, and the role it plays in the culture and economy of each specific market. Jewellery in the Far East and Middle Eastern markets tends to be purchased not only as adornment but also as an investment, which means that the mark-ups on jewellery are extremely low, only 10 to 20 percent above the gold price of the day, and the jewellery can be sold back at any time, on a small discount to the prevailing price of gold. The jewellery in these markets are typically of high caratage, (between 21 carat and

24 carat gold) and has strong cultural significance, being used as a dowry item and as an insurance policy in areas where economies are unstable and the banking system underdeveloped (World Gold Council, 1996). By contrast, in Western markets, jewellery is mainly for adornment and retail mark-ups can range from 400 to 1000 percent on the cost of gold (Joffe, 2001).

In terms of product type, gold dominates the precious metals jewellery market (gold, platinum and silver), claiming an 82 percent share of the market. If considering only 59 gold and platinum items, gold's share rises to 97.2 percent (Kaiser Associates, 2001). Gold jewellery accounts for over 80 percent of annual gold off take; in 2003 this translated into over 2500 tons of jewellery (Klapwijk et al., 2004). A diverse range of gold jewellery exists, based on difference in preferences between and within countries, and manifested in different caratages. In Europe the most widely used jewellery alloys are 18 and 14 carat, with the exception of Britain which is predominantly a nine carat market. The United States, too, is inclined to lower carat items of primarily 14 carat, with some 10 carat jewellery as well. By contrast, jewellery in the Middle East, India and South East Asia is traditionally 22 carat (and sometimes also 23 carat), and in China, Hong Kong and some other parts of Asia "chukkam" or almost pure (24 carat) gold jewellery of 990 fineness, is popular (CBI, 2000).

Since 1990, jewellery demand alone has exceeded the amount of newly mined gold, the balance being filled by supplies of gold by central banks, private investors, or from the recycling of old jewellery (World Gold Council, 1996b). The 1980s saw consumer demand for gold jewellery soar, first in the developed markets of the United States, Japan and Europe (France, Germany, Italy and the United Kingdom), and then broadening geographically to include the developing countries of the Indian sub-continent, Far East, and Middle East. Several factors accounted for the rapid expansion in jewellery demand world-wide, among them the influence of the World Gold Council and, in the case of developing countries, the cultural significance of gold and the opening up of

markets previously closed to trading in gold and gold jewellery (World Gold Council, 1996b). The greater accessibility of jewellery to the consumer has also been dictated by changes in societal trends, the higher incidence of women entering the employment market, fashion dictates, and the emergence of new channels of distribution. To meet these new demand trends the industry has had to restructure and become more marketing orientated (Kiron Consult, 2000).

2.18 The Influence of Gold Price on Jewellery Production

Jewellery demand has gone through several cycles since 1970. The increased in the price of Gold in 1973 and 1974, at a time when the major Western economies were experiencing one of the deepest recessions since World War 1, caused the production of gold jewellery to plummet. Gold price in those two years soared to \$200 an ounce, a record level in comparison to previous years when the price had vacillated between \$35 and \$40an ounce. The drop in jewellery production in 1974 to 225 tons, from a figure of over 1000 tons in each of the years 1970, 1971 and 1972, led to bankruptcies, factory shut-downs, shortened working hours and staff lay-offs in the jewellery industry(Glynn, 1978). The industry quickly recovered from this slump, aided by a significant decline in the gold price, and the end of the depression. Another factor which assisted in equilibrating jewellery demand at this time was the tremendous surge in gold jewellery manufacture in the Middle East, which began around 1975 under the impact of vastly increased oil revenues. This development has been described as the single most important influence on world gold markets in the years since 1974 (Glynn,1978).By 1976 gold jewellery production already approximated its earlier levels prior to the price hikes, and between 1974 and 1980, consumer expenditure for gold jewellery in Europe quadrupled. In 1980, however, high gold prices that reached a peak of \$850, combined with severe economic recession in North America and Europe,

once more plunged jewellery consumption to new depths, with repercussions for the structure of the industry in the industrialised world. New gold for jewellery fabrication, which had surpassed the thousand ton level in 1978, fell by as much as 90 percent to 128 tons by 1980 (Boulay, 1983). Low disposable incomes and high unemployment occasioned by economic instability not only limited retail sales of jewellery but the strength of the US dollar pushed up the gold price, expressed in local currency terms, to extremely high levels, thereby inducing a wave of dishoarding (the selling back of old jewellery to the market), in countries such as Spain and Italy (Boulay, 1985). The crisis at the beginning of the 1980s led to a contraction of the jewellery industry through company closures and downscaling, consequently slowing down the industry to below 50 percent of its operating level. In the United States, the tight economic circumstances prompted a lowering of jewellery caratage, from the usual 14 carat to 10 carat (Management Horizons, 1981). As already discussed, the trend towards lower caratage jewellery was accompanied by a change in the structure of the industry with the advent of discount stores and other, non-traditional jewellery outlets.

One of the main elements influencing the pattern of global jewellery production was the trend in the industry towards mass production techniques and more aggressive marketing. These trends were, to a large extent, a reflection of the industry's growing international orientation as competition for export orders intensified. Between 1980 and 1981 jewellery consumption almost doubled, mainly due to increased demand for jewellery in the Middle and Far East. In 1981 the net use of gold for jewellery in the Middle Eastern region was 100 tons, in marked contrast to the 89 tons dishoarded the previous year (Boulay, 1982). In both the Middle and Far East jewellery is bought as the main form of saving and investment, and the falling gold price post-1980 enabled buyers to replace the jewellery they had sold during the peak prices of 1980. Italy was by far the

main supplier of exports to the developing world, but demand was also met by Japan, the United States, and other Western European countries.

Throughout the 1980s, increased jewellery production in Western Europe was primarily in response to export demand, rather than for domestic sales (Boulay, 1983); Milling-Stanley and Green (1986). As demand for jewellery consolidated in Western Europe, so it increased in the South East Asian countries. From the mid-1980s India, Thailand, Taiwan and Hong Kong started emerging as important jewellery fabricating centres (Milling-Stanley & Green, 1986; MillingStanley, 1989; Murray, et al, 1990). In the period 1986 to 1992, jewellery production in the Middle and Far East increased by 120 and 250 percent respectively. By comparison, the increase in the developed countries for the same period was 50 percent (Murray, et al, 1993; 1994). One of the most important factors enabling the increased production in the developing world was the gradual dismantling of restrictive laws that governed gold ownership and trading in many of these countries, most notably Turkey and India. Together with rising personal incomes, this liberalisation made gold more accessible to a larger consumer market.

In terms of jewellery consumption patterns, consumption figures for individual countries did not emerge until the end of the 1980s. One of the reasons for this is that most countries in the past were self-sufficient, with demand satisfied by domestic production (Murray et al, 1993; 1996). This situation began to change in the 1970s when Italian manufacturers of machine-made chain sought growth through exports to foreign markets, especially the United States. Since then, international trade in jewellery steadily increased as new factories were established in countries such as Thailand, Peru and Israel, dedicated to producing for export. Cheaper and more efficient distribution channels also facilitated the rapid growth in international jewellery trade. The result has been a marked distinction between jewellery fabrication and consumption at the individual country level (Murray et al, 1996). As already discussed, the dominant players in the jewellery

market in the early 1970s were the developed countries of Western Europe, Japan and the United States. Of these countries, The United States and Italy are still ranked as principal consumers of jewellery. With local production meeting less than half of the country's demand, the United States is also the world's foremost import market for jewellery.

2.19 Impact of Consumer tastes and sale of Gold Jewellery Products

A major factor that has affected gold jewellery consumption in recent years is consumer taste changes. In the medium to long term, changes in fashions can have a significant impact on gold consumption levels. The slump in Italian consumption since the mid-1990s, for example, has been attributed not only to economic factors but to a lack of consumer interest in plain, heavy pieces of jewellery which are perceived to be outdated (Klapwijk et al. 2003). In addition, there has been growing competition for gold from other forms of jewellery, including non-precious items. Often designs include a high use of materials such as glass, wood and leather, which contain gold but only as small accents. Such items are not classified as costume jewellery as they command prices on a par with precious metal jewellery. Indeed, it is claimed that retailers are keen to promote this jewellery as mark-ups tend to be higher than on plain gold items (Klapwijk et al, 2003; 2004).

Another aspect of consumer tastes that impacts on gold jewellery consumption is the preference for precious metals other than gold. The fashion preference since the late 1990s has been for white metal, hence the emphasis on silver, platinum, and even steel and palladium jewellery. Silver, for example, has been the metal of choice for fashion brands seeking diversification in jewellery and higher sales mark-ups (Klapwijk et al, 2004). The interest in silver and other mixed material

jewellery also stems from jewellery's changing status as less of a quasiinvestment item and more of an accessory to be discarded according to fashion dictates (Klapwijk et al. 2003).

The literature as reviewed above has brought to the fore the enormous rich heritage of the jewellery industry and its contribution to the social, cultural, political and economic development of a nation. These facts could only be known through research and documentation. Trends determine the direction, movement and orientation of every entity over a period of time to ascertain its performance. Some attempts have been made in the literature to analyze trends in the art industry such that of Yeboah (1997), who studied the trends in handicraft export in Ghana. No study has however concentrated on the trend of gold jewellery in Ghana and this thesis seeks to do that. It is believed that the information that will be gathered will go a long way to help build the capacity and output of the industry.



KNUST

CHAPTER THREE

METHODOLOGY

3.1 Overview

This chapter describes the various procedures that were used to gather and collect data during the course of this study. Data were obtained from both primary and secondary sources. This was done to ensure that information concerning the subject matter is fully explained and also to enable informed analysis and subsequent relevant conclusions drawn. The chapter highlights the following: research design, library research, population for the study, data collection instruments, types of data, administration of instruments, data collection procedure and data analysis plan.

3.2 Research Design

This study adopted the mixed methods research approach. That is qualitative and quantitative methods. Under the qualitative method, the descriptive approach was used to discuss and explain the key findings from the field. Numerical variables were also analysed quantitatively by the use of SPSS. This enabled the researcher to draw specific and definite conclusions on some of the

findings e.g. the trend of sales and income of the jewellery products. Data obtained from secondary sources were mainly through documentary sources such as theses, books, peer reviewed journals, internet sources, and other printed ephemeral literature like brochures and pamphlets, These data were evaluated and conclusions drawn from them. The data were presented in descriptive format as well as in figures and tables in the thesis. The descriptive method of research design was mostly used in this work and by so doing an indepth understanding of the jewellery industry and conditions that govern the performance of the industry was unearthed. The use of this approach enabled information to be gathered from direct observation, libraries, archives and museums and provided the opportunity for data gathered to be described which clearly represent the experiences and outcomes of the study. Direct observation was used to obviate some of the subjective errors likely to enter into data gathering through interviews. Direct observation is a method in which a researcher observes and records events, activities, tasks, duties and behaviour while something is happening. The procedure presented the opportunity that enabled direct information to be obtained on site. Dury (1992) indicated that the use of direct observation in research work produce results of high validity. Reiterating this fact, Gilly (1990), stated that detailed, accurate and effective information in research is obtained when direct observation is used. Visits to craftsmen workshops, palaces museums, festivals and funeral grounds made it possible for information to be gathered first hand. Photographs were taken during such visits and occasions which were used to corroborate information obtained from books, journals, internet and other sources.

3.3 Library Research

The search for documented information was indispensable in writing this thesis. The first major approach was to embark on a comprehensive research from various libraries. The library research served as a source of secondary data. The following libraries were consulted during the course of this work: the Balme Library and the Institute of African Studies Library, all at the University of Ghana, Legon, Accra, the British Council Library, Accra, the George Padmore Research Library on African Affairs, also in Accra. The others were KNUST Main and College of Art and Social Sciences, Libraries, Kumasi, the library of the University of Education, Winneba and the University of Cape Coast library. Information from the libraries was obtained from related text books of the subject matter, journals, magazines, and newspapers. Some of the text books consulted included, The completed Metal smith, Jewellery Concepts and Technology, The African Legacy of The World's most precious metal-Ashanti Gold. Furthermore, additional information was obtained from theses of undergraduate and graduate students of the Industrial Art Department of KNUST on jewellery.

The National Archives of Ghana in Accra and the Manhyia Palace in Kumasi were also visited to seek information on jewellery and culture in general and Ashanti in particular. Informal interviews and discussions relevant to the subject matter were also conducted with some of the traditional rulers who worked in the archives. Furthermore, visits were made to Manhyia Palace Museum, the Jubilee Museum (Centre for National Culture, Kumasi) for historical information on jewellery and culture, mostly from photographs and exhibits. Commentaries on these items were provided by the caretakers of the museum.

3.4 Population for the study

A research population is generally a large collection of individuals or objects that is the main focus of a scientific query. A research population is also known as a well-defined collection of individuals or objects known to have similar characteristics. All individuals or objects within a certain population usually have a common, binding characteristic or trait. Usually, the description of the population and the common binding characteristic of its members are the same. For example "Queen mothers" is a well-defined group of individuals who can be considered as a population and all the members of this population are indeed traditional rulers.

Target population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions. The target population usually has varying characteristics and it is also known as the theoretical population.

The accessible population is the population in research to which the researchers can apply their conclusions. This population is a subset of the target population and is also known as the study population. It is from the accessible population that researchers draw their samples.

The target population for this study consisted of four categories of people including:

- a) Jewellers and Goldsmiths.
- b) Traders in Jewellery.
- c) Traditional rulers (Chiefs, queen mothers, linguists, family elders etc.)
- d) The general public.

Out of the above categories, the accessible populations were 150 Jewellers and Goldsmiths, 70 Traders in Jewellery, 30 Traditional rulers and 150 members of the general public, giving a total accessible population of 400.

3.4.1 Sampling technique

A sample is simply a subset of the population. The concept of sample arises from the inability of the researchers to test all the individuals in a given population. The sample must be representative of the population from which it was drawn and it must have good size to warrant statistical analysis. The main function of the sample is to allow the researchers to conduct the study to individuals from the population so that the results of their study can be used to derive conclusions that will apply to the entire population.

The Simple Random Sampling technique was used in this study because it is the ideal choice and a 'perfect' random method. In this method individuals are randomly selected from a list of the population and every single individual has an equal chance of selection. The method thus minimizes bias and simplifies analysis of results. Four hundred people comprising the following were randomly selected for this study (Table 3.1):

Table 3.1. Category of population sampled

Category	Number of people accessible	40% of the accessible	Percentage of total
Jewellers/ Goldsmith	150	60	37.5
Chiefs and traditional rulers	30	12	7.5
Jewellery traders	70	28	17.5
General public	150	60	37.5
Total	400	160	100 %

Table 3.2. Category of population by the study sites

Towns	Jewellers	Chiefs and traditional rulers	Jewellery traders	General public
Kumasi	120	10	45	50
Bekwai	6	2	4	20
Ejisu	8	4	6	20
Offinso	4	6	5	20
Mampong	6	4	4	20
Konongo	6	4	6	20
Total	150	30	70	150

Even though the population sample was taken from a homogenous population the categories were not the same. Data collection was concentrated in the Ashanti Region, mainly in Kumasi, Ejisu, Konongo, Bekwai, Offinso, and Mampong (Table. 3.2) however, a large majority of data was concentrated in Kumasi since most of the craftsmen are based in Kumasi. In each town jewellery workshops, jewellery shops and traditional homes were visited. A cross section of the population including the youth were also interviewed. Gender balance was always taken into consideration during data collection.

3.5. Data Collection Instrument

Data for this study were collected mainly through direct observations at goldsmiths' workshops and showrooms, jewellery retail shops, during festivals and durbars, and visits to chiefs and traditional rulers' homes. Questionnaire and personal interviews to solicit information from respondents concerning the gold jewellery industry were also used in data collection. These data collection tools not only allowed for a true measurement of accuracy but also enabled the researcher obtain any unspoken observations about the participants while conducting research.

3.5.1. Observation

Marshall and Rossman (1989) define observation as "the systematic description of events, behaviors, and artifacts in the social setting chosen for study". Observations enable the researcher to describe existing situations using the five senses, providing a "written photograph" of the situation under study (Erlandson et al. 1993). DeMunck and Sobo (1998) describe participant observation as the primary method used during fieldwork. Fieldwork involves "active looking, improving memory, informal interviewing, writing detailed field notes, and perhaps most importantly, patience" (DeWalt and DeWalt, 2002). Participant observation is the process that enable researchers to learn about the activities of the people under study in the natural setting through observing and participating in those activities. Schensul et al. (1999) define participant observation as "the process of learning through exposure to or involvement in the day-to-day or routine activities of participants in the researcher setting". They provide researchers with ways to check for nonverbal expression of feelings, determine who interacts with whom, grasp how

participants communicate with each other, and check for how much time is spent on various activities (Schmuck, 1997). Participant observation allows researchers to check definitions of terms that participants use in interviews, observe events that informants may be unable or unwilling to share when doing so would be impolitic, impolite, or insensitive, and observe situations informants have described in interviews, thereby making them aware of distortions or inaccuracies in description provided by those informants (Marshall & Rossman, 1995).

In this study therefore visits to jewellers workshops were undertaken to observe the set-up of the workshops, tools and equipment being used, the presence of apprentice, techniques being used in jewellery making as well as products and symbols manufactured. Observations of the celebration of the festivals and the type of jewellery consumers wear also formed an integral part of this research. As part of the observation approach, an observation guide was developed (appendix 1) which focused on validation of findings and generation of new data on areas that were not adequately covered in the questionnaire. This method of information gathering provided a wonderful opportunity to test the veracity of answers and opinions gathered through the questionnaires and interviews. It furthermore, provided the opportunity to physically come into contact with some of the royal regalia, artefacts, the spokesman's staff and the emblems of the various Chiefs and the relevance of jewellery. Photographs which could help in bringing to light the relevance of jewellery were taken where appropriate. Data obtained were collated and subjected to simple descriptive analysis.

3.5.2. Interviews

Interviewing is a way to collect data as well as to gain knowledge from individuals. Kvale (1996) regarded interviews as an interchange of views between two or more people on a topic of mutual

interest, sees the centrality of human interaction for knowledge production, and emphasizes the social situatedness of research data.

In this study the Structured Interview which is sometimes called standardized interview was used (Appendix 5). In structured interview the same questions are asked of all respondents. Corbetta (2003) states structured interviews are "... interviews in which all respondents are asked the same questions with the same wording and in the same sequence." It would be ideal if questions can be read out in the same tone of voice so that the respondents would not be influenced by the tone of the interviewer (Gray, 2004). Bryman (2001) explains structured interview as administration of an interview schedule by an interviewer. The aim is for all interviewees to be given exactly the same context of questioning. This means that each respondent receives exactly the same interview stimulus as any other. The goal of this style of interview is to ensure that interviewees' replies can be aggregated. Questions are usually very specific and very often the interviewee a fixed range of answers (this type of question is often called closed, closed ended, pre-coded, or fixed choice). According to David and Sutton (2004) strength of structured interviews is "Prompting can be included with the questions and if a question is inappropriate, data on why no response was made can be recorded." Furthermore, non-verbal cues, such as facial expressions, gestures can be recorded.

An interview guide was prepared and used (appendix 5). This enabled the researcher to have control over the topics and the format of the interview. Through the interview guide a common format was followed, which made it easier to analyze, code and compare data. All interviews were conducted in the 'Twi' and English language, but the Twi was extensively used, tape recorded and later translated into English language for transcription. This type of communication was used because the study area is a Twi speaking area and the sample population spanned across the

educated and uneducated (old goldsmiths and traditional rulers), who could all speak Twi. This also afforded the respondents flexibility and freedom of expression. Interviews were conducted with the respondents in a form of conversation. Information obtained was very rewarding since the respondents were more willing to talk than write. In this way they got the opportunity to express and elaborate on their opinions. This also afforded some confidential information to be obtained.

3.5.3. Questionnaire Design and Validation

A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents. Although they are often designed for statistical analysis of the responses, this is not always the case.

Grinnell, (1990) define questionnaire as a method used for collecting data; a set of written questions which calls for responses on the part of the client; may be self-administered or groupadministered. The overriding objective is to translate the researcher's information needs into a set of specific questions that respondents are willing and able to answer. Questionnaires have advantages over some other types of surveys in that they are cheap, do not require as much effort from the interviewer as verbal or telephone surveys, and often enables quantitative data to be collected in a standardized way so that the data are internally consistent and coherent for analysis.

Questionnaires were designed (Appendix 1-4) to seek relevant primary data from relevant respondents, including raw gold dealers, goldsmiths, traditional rulers, consumers, jewellery shop operators and policy makers. The questions were both open and the close-ended type of answering in which the respondents had to score by ticking the answers that were suitable. A draft questionnaire was pre-tested on 50 respondents in the study areas to identify and eliminate potential problems. The pre-test groups were similar to the respondents in terms of their background characteristics, familiarity with the topic, and attitudes and behaviours of interest. All

aspects of the questionnaire, including question content, wording, sequence, form and layout, question difficulty, and instructions were tested. The result of the pre-testing helped in final restructuring of the questionnaires by incorporating missing variables or information, omitting irrelevant questions and paraphrasing questions that appeared ambiguous to the respondents. After the necessary changes had been made, another pre-testing was administered using the actual data collection approach. Based on feedback from the second pre-test, the questionnaire was edited, and the identified problems corrected. As a final step, the responses obtained during the pre-test were coded and analyzed. The analysis of the pre-test responses served as a check on the adequacy of the problem definition, and provided insight into the nature of the data as well as the analytic techniques that will be required. In addition, personal field observations were conducted using a checklist to supplement the questionnaires.

3.6. Types of Data

3.6.1 Primary data

Primary data are data obtained through the direct efforts of the researcher through surveys, interviews and direct observation. In this study data collected employed all these methods. In addition, photographs were taken at palaces and goldsmiths workshops as well as during festivals and durbars. Permissions were sought from the appropriate authorities before the photographs were taken. In certain instances explanations and interpretations were sought on some jewellery symbols and products in order to establish their meanings, relevance and cultural importance.

3.6.2. Secondary data

Secondary data is data obtained through published sources, usually more current and more relevant to the research project. The study consulted a lot of relevant written documents including books, magazines, brochures, newspapers and newsletters, journals and internet and unpublished works such as student theses.

3.7. Administering of Instruments

After the selection of the study sites a work plan was drawn as to when each of the sites would be visited. An initial visit was made to all the sites to identify the target population and to make the necessary contact and appointment for the administration of questionnaire. Copies of the questionnaire were administered to the various categories of respondents (goldsmiths, consumers, jewellery traders, general public) at all the study sites visited on separate days. Each study site was visited three times with the exception of Kumasi which took three weeks to complete. This was because the majority of target groups were located in Kumasi.

3.8. Data Collection Procedure

At each study site, respondents were randomly selected and the reasons for the questionnaires and what the information collected would be used for, were explained to the respondents and the importance of their honesty were impressed upon. Those who could read and write were given the questionnaires to complete while those who could not read and write well were assisted in

answering the questions. Completed questionnaires were retrieved there and then. By this way the retrieval rate was 100%.

3.9. Data Analysis Plan

Data analysis is a practice in which raw data is ordered and organized so that useful information can be extracted from it. According to Shamoo and Resnik (2003), various analytic procedures “provide a way of drawing inductive inferences from data. Raw data can take a variety of forms, including measurements, survey responses, and observations. The study collected data from various categories of people in the jewellery industry including goldsmiths, consumers, jewellery traders, general public and traditional rulers. Method for data collection included interviews, observations, questionnaire administration and field data. The data gathered were put into analyzable units. The survey results were tallied to obtain percentages and frequencies from which relevant tables and figures were drawn to interpret the outcomes of the study, the details of which is provided in Chapter Four.

CHAPTER FOUR

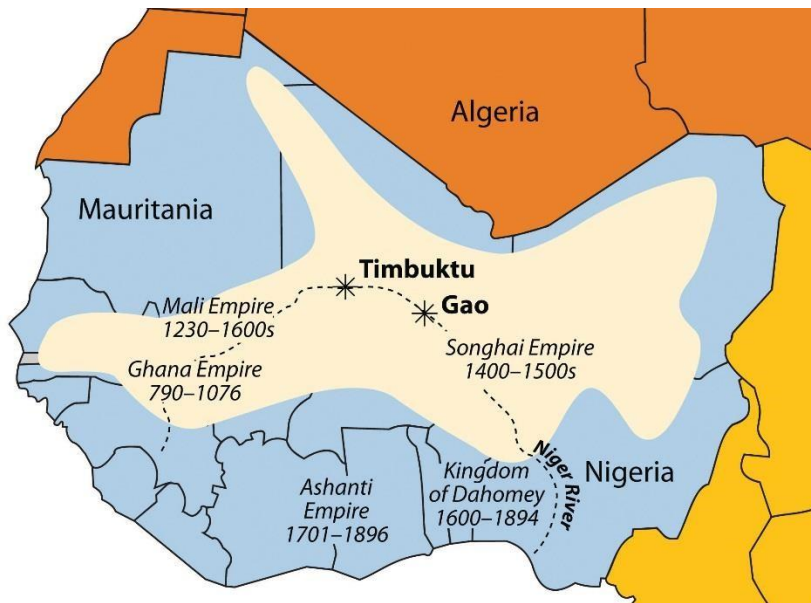
THE HISTORY OF GOLD JEWELLERY INDUSTRY OF THE ASANTES

4.1. Overview

This chapter provides a narration of the history of Gold Jewellery Industry of the Asantes. The chapter begins with a description of the historical origin and formation of the Asante kingdom and their governance structure. This is followed by a narration on gold exploration in Asante and the methods that were employed in gold extraction during the post-independence era, Some aspects of the tools that were used by the traditional artists and the production techniques used in the gold jewellery making are also discussed. The chapter further provides a narrative description of the symbolism and cultural undertones of gold jewellery usage and their significance in various traditional rites in Asante, as well as a detailed description of the significance of jewellery in Asante cultural rites. The information provided in this chapter enabled the researcher to trace the developmental trends of the gold jewellery industry through the data that were gathered during the field work, interviews and field observations, the analysis of which findings is discussed and presented in chapter five.

4.2. History and Ethnography of Asante

The Asante Empire, also known as the Asante Confederacy or *Asanteman* was a pre-colonial West African state of what is now the Ashanti Region in Ghana. The empire gained independence from 1701 – 1896. Their empire stretched from central Ghana to present day Togo and Cote d' Ivoire, bordered by the Dagomba kingdom to the north and Dahomey to the east (Map 1). Today, the Asante monarchy continues as one of the constitutionally-protected subnational traditional states within the Republic of Ghana.



Map 1. Map of West Africa with Kingdom of Dahomey

Source: <http://2012books.lardbucket.org/books/>

4.2.1. Origin of Asante

The Asante are a major ethnic group in Ghana. Oral tradition has it that the ancestors of Asante came out of a hole at Asantemanso near Asumegya. There is another school of thought that traces the origin of Asante from Mesopotamia to North Africa and the old Ghana Empire. The Akans moved downwards to the forest zone of present day Ghana to avoid Muslim influences. The Akans migrated to Adanse around the fourteenth century and they were a powerful, militaristic, and highly disciplined people of West Africa (Osei, 2000). The ancient Asante migrated from the vicinity of the north-western Niger River after the fall of the Ghana Empire in the 1200s AD. Evidence of this lies in the royal courts of the Akan kings reflected by that of the Asante kings whose processions and ceremonies show remnants of ancient Ghana ceremonies.

Ethnolinguists have substantiated the migration by tracing word usage and speech patterns along West Africa. Around the thirteenth century AD, the Asante and various other Akan groups migrated into the forest belt of present-day Ghana and established small states in the hilly country around present-day Kumasi. During the height of the Mali Empire the Asante and other Akan people in general, became wealthy through the trading of gold mined from their territory. Early in Asante's history, gold was traded with Ghana and Mali Empires (Edgerton, 1995).

4.2.2. Formation of Kingdoms

Akan political organization centred on various clans, each headed by a paramount chief or *amanhene* (Obeng, 1996). One of these clans, the *Oyoko*, settled Ghana's sub-tropical forest region, establishing a centre at Kumasi (Obeng, 1996). During the rise of another Akan state known as *Denkyira*, the Asante became tributaries. Later in the mid-1600s, the *Oyoko* clan under Chief *Oti-Akenten* started consolidating other Asante clans into a loose confederation that occurred without destroying the authority of each paramount chief over his clan. This was done in part by military assault, but largely by uniting them against the *Denkyira*, who had previously dominated the region.

4.2.3. The Golden Stool

Another tool of centralization of the Asante Kingdom by King Osei Tutu I (co-founder of the Asante Empire and *Asantehene*) was the advent of the 'Golden Stool'(*sika'dwa*). According to legend, a meeting of all the clan heads of each of the Asante settlements was called just prior to independence from *Denkyira*. At this meeting, it is said that the Golden Stool was commanded down from the heavens by Okomfo Anokye, the Priest or sage advisor, to *Osei Tutu I*. The

Golden stool as shown in plate 1 was floated down from the heavens straight onto the lap of *Osei Tutu I*. Okomfo Anokye declared the stool to be the symbol of the new Asante Union (*Asanteman*), and allegiance was sworn to the Golden Stool and to Osei Tutu as the *Asantehene*. The newly founded Asante union went to war with *Denkyira* and defeated it (Lloyd, 1964). The Golden Stool remains sacred to the Asante as it is believed to contain the '*Sunsum*' - spirit or soul of the Asante people.



Plate 1. The golden stool of the Asantes

Source: ashantikingdom.org

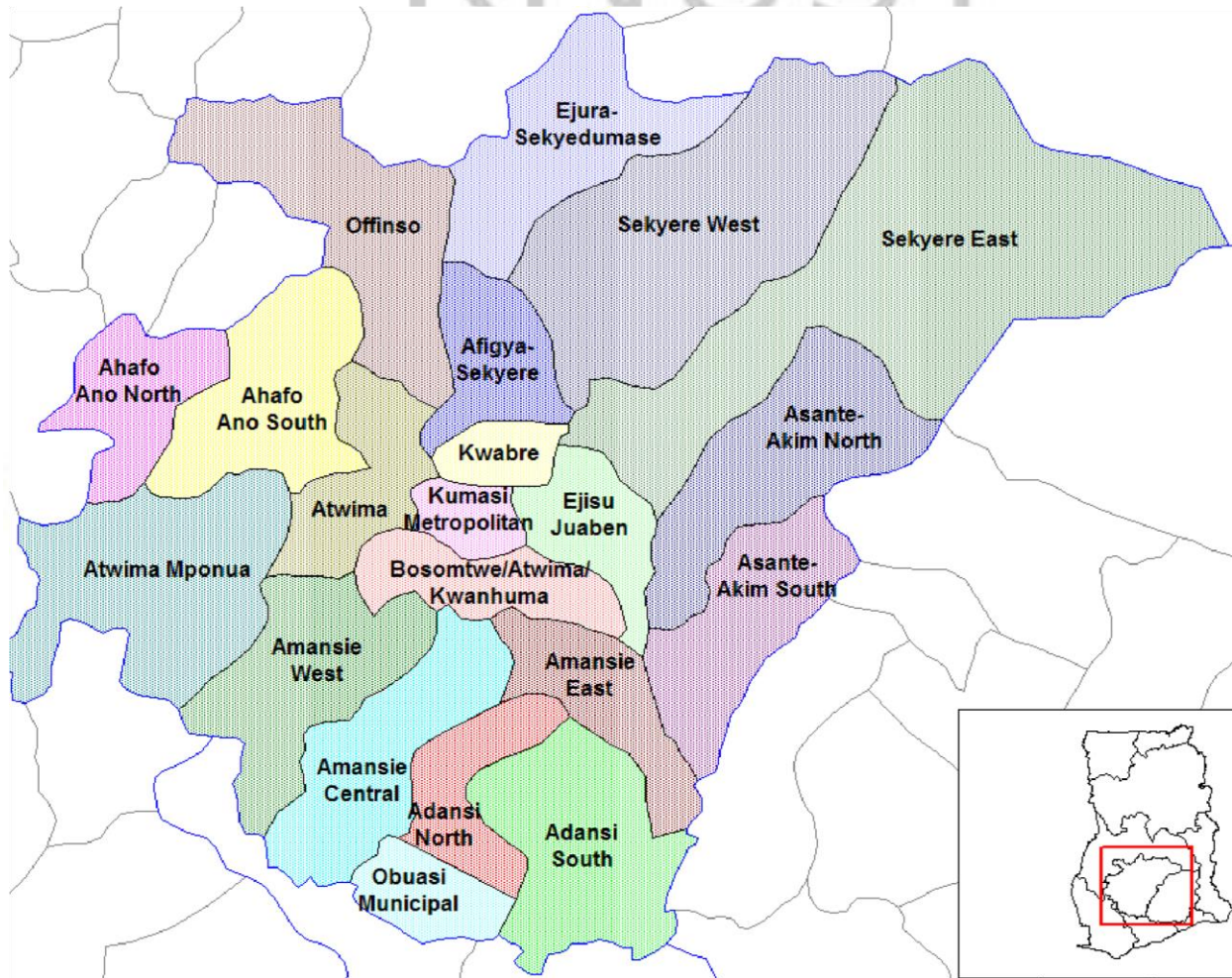
4.2.4. Government of Asante

In terms of government, each Asante state, town, or village is governed by two people a chief and the queen mother. They rule simultaneously with the male as the chief and the female as the queen mother who are selected from the royal families of the various towns and villages (Osei, 2001).

The Asante government was built upon a sophisticated bureaucracy in Kumasi, with separate Ministries to handle the state's affairs. They had a Foreign Office based in Kumasi, despite its small size, the Foreign Office allowed the state to pursue complex arrangements with foreign powers, and the Office itself contained separate departments for handling relations with the British, French, Dutch, and Arabs individually. Scholars of Asante history, such as Larry Yarak and Ivor Wilks (1819), disagree over the actual power of this sophisticated bureaucracy in comparison to the *Asantehene*, but agree that its very existence pointed to a highly developed government with a complex system of checks and balances. At the top of Asante's power structure is *the Asantehene*, the King of Asante. The Golden stool (*Sikadwa*) is an object which came to symbolise the very power of the King Osei Kwadwo, (1764-1777) began the system of appointing central officials according to their ability, rather than their birth.

As King of *Asanteman*, the *Asantehene* held immense power in Asante, but did not enjoy absolute royal rule, and was obliged to share considerable legislative and executive powers with Asante's sophisticated bureaucracy. The *Asantehene* was the only person in Asante kingdom permitted to invoke the death sentence. During wartime, the King acted as Supreme Commander of the army, although during the nineteenth century, actual fighting was increasingly handled by the Ministry of War in Kumasi. Each member of the confederacy was also obliged to send annual tribute to Kumasi. *The Asantehene* reigns over all the Asante and all the divisional chiefs of Asante nation, with Kumasi as the state capital as shown in map 2 of the map of Ashanti region. In this hierarchical structure, every chief swear fealty to the one above him from village and subdivision to division

to the chief of Kumasi, and the *Asantehene* swears fealty to the State. The elders and the people (public opinion) circumscribe the power of the *Asantehene*, and the chiefs of other divisions considerably check the power of the King. This in practical effect creates a system of checks and balances (Osei, 2002).



Map 2. Map of Ashanti Region

Source: http://commons.wikimedia.org/wiki/File:Ashanti_districts.png

When the king commits an act not approved of by the council of elders or the people, he could possibly be impeached and destooled. The existence of aristocratic organizations and the council of elders is evidence of an oligarchic tendency in Asante political life. Though older men tend to

monopolize political power, Asante instituted an organization of young men (*mmerantee*) that tend to democratize and liberalize the political process. The council of elders undertakes actions only after consulting a representative of the Young Men. Their views must be taken seriously and added into the conversation or discussion.

4.3. Materials for the gold Jewellery Industry

Throughout the vast continent of Africa, jewellery is greatly varied according to the materials available, the lifestyles of the people and their social cultural and religious contacts. Designs, materials and techniques are usually of local origin or brought along trade routes. Among some ethnic groups especially the Akans, traditional jewellery was made of precious metal gold, probably due to the abundance or otherwise of gold in the land. Gold to the Akans was like the sun the source of life. The Akans reverence of gold was observed to connote warmth. Gold represents prosperity, glory, maturity and prime of life, hence its dominant use by chiefs at durbars and special occasions (Kwakyee-Opong, 2012).

The sacred nature of gold among the Akan is also reviewed by Meyerowitz, (1949). She asserts that gold to the Akans was a symbol of the *Kra* of *Nyame*, the eternal spirit of the sun. Like the *Kra* of *Nyame*, gold was believed to be life giving. Its life – giving quality made it appropriate for its use in rituals related to kingship and state. It is also the belief of the Akans that gold could grow. For these reasons gold nuggets were ceremonially reburied so as to multiply and attract gold to the area (Garrard, 1950). However, no evidence exists to validate this assertion. It was said that every nugget of gold found in the ground was *Kra Sika* or gold for one's soul. Gold dust was used exclusively in trading and no other currencies such as cowries had any place in the Akan communities and their commerce.

4.4. The Traditional Gold Artist (goldsmith)

The Akan goldsmith is known as *sikadwumfo* or *sikananfo*, a worker in gold. He is one of the *adwimfo* or *adwunfo*: skilled craftsmen. The craftsmen were the spokesmen of the supreme deity (*Odomankoma*) (Sheales, 2013). Their work showed the hidden qualities of the universe, a communion with occult forces. They were respected men in the society who were seen as fearless and powerful, able to strike and control the glowing fire. According to Garrard (1980) goldsmithing was originally done by the class of artisans of Mande origin known as *Numu* who made tools for gold mining as well as brass weights. Garrard, (1989) also traces three possible vehicles for the origins of gold working in West Africa: firstly, an independent extension of the local blacksmiths craft. Secondly, the gradual diffusion of knowledge from North Africa and thirdly, a direct transfer of knowledge to the Sahel by immigrant North African goldsmiths. The *Aburahene*, the chief of heaths and forges, supervised the goldsmiths and ensured that there were no losses or theft of the gold. The goldsmith observed certain taboos and ordinances. He performed ritual preparations before he began work. Garrard (1980) reveals that he had to purify himself by washing all over, and abstain from sexual relations for a time. He then cited a prayer to the forge. An egg was broken and the yolk and white rubbed on the bellows. Palm wine was also poured on these articles. He continues to say that a hen was slaughtered and its blood smeared on the bellows. It was also allowed to drop on the stone that served as an anvil. This sacrifice was made to ensure successful casting. A piece of the flesh was sometimes hung in a wicker basket nearby as offering to the forge. It was believed that the smith's tools possessed special powers. Great care was taken to prevent their defilement. Gold-smithing was a completely male profession. It was a taboo for

women to go near the goldsmith's working area, let alone to touch the goldsmith's tools or equipment.

Akan goldsmiths learnt their trade over a number of years by an apprenticeship system or a guild. This guild was shrouded in secrecy while its members intermarried with each other handing over the craft from father to son. The latter inherited his father's gold weights and all his stock-in-trade to continue the craft.



Plate 2. A traditional craftsman soldering with the blow pipe

Source: Photographed by researcher

Oral tradition has it that the Asantes were first informed of gold and silver smithing from the Bono Kingdom in 1740. The indigenous craftsmen of Bono-Takyiman taught them how to decorate state emblems with gold as well as design gold and silver jewellery for the chiefs, and queen-mothers using the blow pipe in soldering as shown in plate 2. In a highly stratified society like the Akan,

gold regalia were used to assert as well as legitimize authority. For the Asante, the *Asantehene* was the supreme head of the nation as an administrative judge in his court; he has the unique role in giving judgement. He was the chief custodian of the land law and order. The *Asantehene* was the chief patron and upholder of traditions and culture.

A renowned Asante goldsmith is claimed to have learnt the art of goldsmithing through a god. His tools are kept to date and adored. The goldsmith was privileged to wear gold ornaments with particular designs and symbols otherwise restricted to chiefs and queen mothers. The wife of any goldsmith is “me yere” (my wife) to any other goldsmith, but he had no access to her. If anyone committed adultery with a goldsmith’s wife, the adultery fee would have to be paid, as well as special fine to cover the purification of his tools and stock-in-trade. The goldsmith was awarded a royal burial on his death. They were highly respected in the society. The goldsmith usually worked in a secluded place under a roof of palm leaves. A furnace “*abura*” was a thick-walled clay cylinder at the bottom of which were holes for the mouth-piece of the bellows. The goldsmith kept several hundreds of weights in a leather bag “*futuo*” together with scales, spoons, and other pieces of weighing apparatus.

There are three distinguish methods employed by traditional goldsmiths: one is gold leafing; the beating out of gold into thin strips of gold foil or leaf to cover carved wooden objects like stools, crowns and umbrellas. The second is employing cuttlefish bone moulds, in the manufacture of gold products by the process of negative casting. This method was used mostly by the Ga ethnic group. Thirdly, the application of the ‘lost-wax’ method or *cire-perdue*, especially in the manufacture of gold crowns, complex ornaments and masks. This method includes solid casting, hollow casting and openwire casting.

Today, other method of gold jewellery production includes piercing, forming, forging, sheet metal manipulation, chasing and repoussé, filigree and other wirework.

The traditional goldsmith produces various gold works. Among the array are rings which became a sophisticated art form worn by chiefs and others. They were used to adorn the arms, thumbs, toes and fingers of wealthy men and women. Silver and gold rings were also used to decorate long bamboo stems of chiefs' tobacco pipes. A striking feature of Akan gold rings is their wealth in proverbial and figurative imagery. They may convey a message of wealth, bravery, power or serve as a warning to enemies. The use of proverbial motifs or aphorisms on Akan is exactly parallel to their use in the gold weights.



Plate 3a. An Asante gold ring



Plate 3b. Asante gold ring

Source: www.karuncollection.com



Plate 3c. Asante traditional gold ring.



Plate 3d. Asante traditional gold ring Source:

www.karuncollection.com

Beads are also used extensively by the people of Ashanti. These include purely abstract and geometrical shapes as shown in plate 4a and 4b. Many were produced by the lost wax method. Assemblages of gold beads are worn by chiefs and mostly queen mothers. They are called *asuman* literally meaning ‘amulets’ or ‘talismans’ for magical protection or charm for the wearer.



Plate 4a. Cast gold beads



Plate 4b. Cast gold beads

Source: Photographed by researcher

Some other gold works include soul discs, soul washers' badges or pectoral discs called *akrafokonmu*. These discs are worn as badges of rank by the “*okra*” whose official duty was to purify the chief's soul. Some are worn by spokespersons, heralds or sub chiefs. Young women formerly displayed them at puberty ceremonies. These discs are multi-functional, worn in accordance with local traditional forms from one region to another.



Plate 5. Benfena: traditional arm band

Source: ghanarising.blogspot.com

Royal bangles *benfa*, *benfena* or *berenfena* are hollow-cast gold of remarkable size (plate 5). The bangles usually worn on the left-wrist or forearm is known as *benkumbenfra* and sometimes worn on the left ankle. They are often cast in two halves and secured by a pin. Some are made of wood covered with gold leaf. Other gold works include swords and sword ornaments, umbrella finials and spokesperson staffs, caps, helmets and crowns.

Traditional goldsmiths of old combined technical skill with great artistic ability, but their identities are now lost to the past. Unfortunately, the few who remain are losing their consummate skill to satisfy customers because of resistance to change.

4.5. The Traditional Goldsmith's Workshop

Akan goldsmiths have traditionally been always men. In Kumasi, the goldsmiths traditionally congregated together in the part of the town called Adum where they were under a measure of royal control and supervision. In other large towns, especially the capital of the states in the Asante confederation, there were goldsmiths' quarters. Traditionally, goldsmiths worked in or near their own homes, which were usually a group of rectangular rooms arranged on three or four sides around a small courtyard. In some cases they worked within this courtyard, perhaps sheltering from the fierce tropical sun in the shade of a tree or under a flimsy open-sided shelter made of a lead thatch. Alternatively, they might set aside a work area behind or beside their house, again with some sort of shelter. A typical workshop has an average size of about ten meters by eight meters (10m x 8m). The arrangement of the space is usually divided into two, the soldering and melting area. In the soldering area are a few work benches arranged to suite the number of equipment available. Workshops fortunate to have the rolling mill positioned it at the corner of the room. The melting area has a small furnace with a bellows which is usually moved away from the soldering area so as to prevent too much heat at the soldering area. Most craftsmen prefer to position the furnace outside their workshop because of the heat and smoke it produces while working.



Plate 6. Craftsman melting gold in a crucible.

Source: Photographed by researcher

4.6. Trend of Tools and Equipment of the Gold Jewellery Industry.

Two things which were essential to the goldsmith's workshop were a small shady area where he could create and safely lay out the various stages of his work as each is completed, and a furnace in which he could heat and melt gold in order to cast it into new forms. The furnace is critically important as it has to produce temperatures of over 1063°C (1,832°F) in order to melt the gold. The Asante furnaces were built of clay and fuelled with charcoal and an old oil drum was sometimes used, lined with clay or, more rarely, with cement. Holes are punched through the sides near the bottom so that air can be blown from bellows into the burning charcoal. The traditional furnace was basically cylindrical, rather like a stout, thick-walled chimney, perhaps 1 m (3 ft) in height with a central shaft. Near the base were one or more holes leading into the shaft. The shaft was filled with charcoal, which was sometimes mixed with oily palm nut shells that produce an intense heat when they burn. Originally the bellows used would have been of the Africa type. The simplest of these was a bag made of animal skin with a hollow wooden tube tied in at one end. As the operator pulled up on the top of the bag, air was drawn in. When the bag was squashed down air was forced down the tube and into the furnace.

Another form of bellows consists of a drum like wooden or clay cylinder with a loose sheet of skin tied around the top and a hollow tube inserted in its base. Similarly, when this skin was pulled up and then pushed down, air was driven out through a hole at the base of the drum and into the pipe. These bellows were normally used in pairs and in the hands of strong and experienced operators, they could produce the powerful blasts of air needed to create the high temperatures necessary for smelting iron and other metals including gold, copper, brass and bronze.



Plate 7: A bellow and furnace

Source: Photographed by researcher

Common tools used include iron anvil, hammer, tongs, files, and number of punches for chasing and repoussé and a few others. Important equipment is the oil lamp and the blow-pipe. The smiths use this equipment in soldering jewellery and other small articles. The oil lamp or burner is made of brass or copper. The top is a four-cornered container and contains palm-oil, which serves as fuel. A piece of rag is put into an opening in the corner of the container and lighted to produce a flame. The blow-pipe is a, tapered cylindrical brass tube with a very tiny opening at the tip and a larger opening at the other end. When the rag is lighted the blow-pipe is held at the ends and air is gently blown into it. The continuous streams of air through the pipe produce a hot flame, which is directed onto the work to be soldered.



Plate 8a. Pliers, hammers and mallet.



Plate 8b: An anvil

Source: Photographed by researcher



Plate 9: Oil lamp and blow pipe

Source: Photographed by researcher

The rolls or flattening mills are a pair of hardened steel rollers, worked by a wheel or handle and adjusted by screws as shown in plate 10. Sheet metal, wire, or ingot may be reduced to any

thickness by flattening in between the rollers. In feeding wire through the rolls to flatten it, care must be taken that it goes through exactly the same place between the rolls and at right angles to the rolls. If allowed to creep from side to side while being rolled it will emerge as a distorted ribbon of irregular width.



Plate 10. Rolling mill

Source: Photographed by researcher

The crucible is a container in which pieces of metal are put and melted on fire. In the past the crucible was made of ordinary clay and allowed to dry very well. The drying took quite a long time

for perfect dryness to be achieved. Such crucibles have been used over the years and are subject to breaking during melting. Properly composed ceramic clays are now used for making crucibles that are able to withstand the heat of the fire, but the Ghanaian jewellery industry continue to make use of these traditional clay crucibles which are much affordable.



Plate 11. Crucible with gold material

Source: Photographed by researcher

The draw plates are flat plates of steel with holes of different graduated sizes drilled into them. The holes are in different shapes of round, square oval, half-round and triangular, plate 12. They are usually used together with the draw tongs. The draw plate is used in reducing wire to smaller

diameters or in altering its cross section e.g. – changing a round wire into a square one. It may be held in a vice or cleats on a bench.

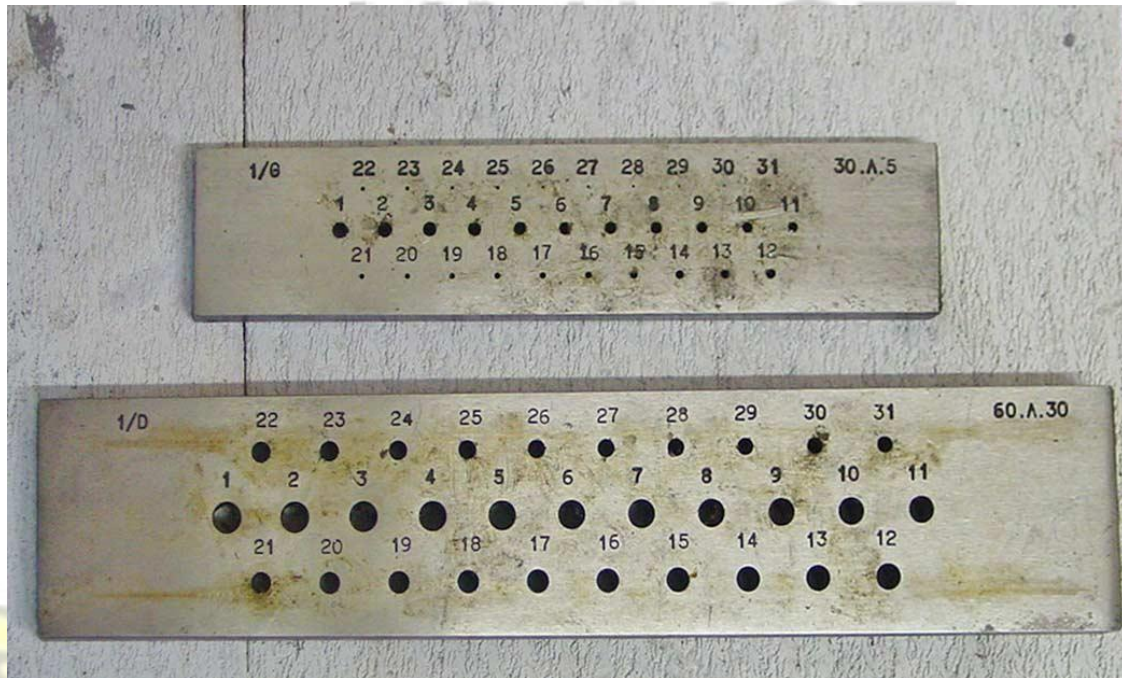


Plate 12: Draw plates

Source: Photographed by researcher

Another equipment of the smith of the past consisted of a large collection of carefully graded weights known as *Abramoo*. These were used by the smith in measuring the weight of gold dust. The care and value placed on gold dust led to a system of weighing and consequently led to the introduction of a system of weights. The weights were of two types; the seed weights, which represent the smallest units of weighing; and the metal weights. The shapes of the metal weights were mostly geometrical. The top areas of the weights were represented with complicated designs. The bottom part was usually smooth but sometimes some have cavities probably to reduce the weight if it is thought to be too heavy. In any case special heavy weights were cast for chiefs in

their capacity as the most important figures of the society. The chiefs used the weights to weigh the gold dust on occasions when they had to give out some gold dust for a work or as a gift. Other weighing equipment consisted of scales, a number of spoons for lifting gold dust into the pan of the scales and scoops for lifting larger quantities of gold dust. Modern and better weights have replaced these old ones. There are now different types of weighing scales. These are analogue and digital scales which give precise unit of each weight to decimal points. As shown in plate 13.



Plate 13a.



Plate 13b.

Different types of weighing scales

Source: Photographed by researcher

Most of these old tools and equipment are still being used. Some have however been improved on. More tools have also been added to make the practice of the craft easier and more efficient. Activities could be broken down into a few basic areas. These are the fabrication and constructing area, the annealing area, the acid operation or pickling and finishing, polishing or buffing area. There is also a space for the proper storage of tool.

4.7. Quality of Gold

Hallmarking is the only reliable indication of quality. Assaying and hallmarking are used to verify the quality of gold objects. Hallmarking and assaying are not readily available in Ghana therefore identification and the specific of gold jewellery are granted by the goldsmith selling the items. Gold jewellery items are sold per gramme weight. Design cost or creative ideas are not usually included in the final pricing of most jewellery items, the carats (the measure of the fineness of gold or gold alloy) also determine pricing which is now turning towards eighteen (18) carats unlike previously, especially before independence. Most gold jewellery objects produced were made in “African gold” (an alloy of gold and silver with a higher percentage of silver) which was gilded in high carat gold to give it a strong gold finish.

This type of gold item (African gold) needs to be gilded after using it for a couple of times to keep it from tarnishing. This is so because of the high contents of ingredient alloy in the material.

Ingredient alloy is the material added to the fine gold as an alloy material. An example of such “African gold” item is shown in plate 14a and 14b.



Plated



Before plating

Plate 14a. “African Gold” jewellery

Plate 14b. “African Gold” jewellery

Source: Photographed by researcher

There are no institutions in Ghana including the Ghana Standard Board (GSB) that insist on the expected international standard hallmarking of gold jewellery. Clients and customers therefore resort to trust as they purchase gold jewellery items.

4.8. Traditional Gold Jewellery Production Techniques

The knowledge and skill of ancient goldsmith is astonishing. Many of the jewellery items made today pay silent tribute to the inventiveness and skill of craftsmen of old. Goldsmiths were fully aware of the ductility and malleability of gold and its resistance to tarnishing and took advantage of these qualities. They also understood how the metal could be alloyed and how to control accurately the temperature to which it was heated. Goldsmiths were and still are supreme masters of casting gold by the cireperdue, (the lost wax) process. Other methods include wire-work, cold gold working, piercing, engraving, the lost beetle, and hollow casting. Many of these techniques were widely used and are still being used to make product that adorn their rulers and the general society. Armlets and bracelets, pendants and pectorals, as well as the motifs fastened to sandals and head bands and decorations on sword sheaths are made with a combination of various techniques. With the introduction of modern tools and equipment such as the rolling mill, flexible shaft, electroplating, draw plate, grinding machines and polishing motors, the jeweler/ goldsmith are able to speed up technique in production.

4.8.1. The Lost-wax Method

In theory, the basic lost-wax technique is very simple: the craftsman first makes an object in wax and then converts the wax object into metal. This is done by shrouding the wax with clay and allowing this clay encasement, or investment, to dry out and harden. The clay and the wax model are then gradually heated until the wax melts and runs away, either by soaking into the clay or by dripping out of a hole made through it, which is known as a sprue hole. When the wax has gone, it leaves behind a cavity of its original shape in the clay. Molten metal is then poured into this cavity. The metal cools and solidifies in the exact shape of the original wax model. The clay is then broken and the cast piece removed and cleaned up. The great advantage of the lost wax technique is that it allows a craftsman to work initially in wax, a material that is relatively easy to manipulate and shape. Wax can be molded or carved, rolled into fine sheets or threads. If mistakes are made, it can simply be re-heated and re-shaped until the craftsman is satisfied. Only when everything is exactly right thus their expensive wax does the more expensive and complicated processes begin. The wax typically came from the hives of wild bees either from the rain forest or from the drier Savannah lands to the North. It was first purified by pounding and then boiling in water. The molten wax floated to the top and skimmed off. It was then melted again and filtered through a cloth into water to set. Craftsmen use simple tools such as porcupine quill for making holes in the wax, bamboo modeling spatula for carving, a burner for heating the wax and a small working table.



Plate 15a. Stages of wax preparation for lost wax casting

Source: Krofofrom Casting



Plate 15b. Objects created from the lost wax-casting technique

Source: Krofofrom Casting

This lost wax-casting technique was utilized for many different types of metal throughout the Asante Empire. A more common craftsmanship and one that is less labor intensive involves heating and pounding the metal into thin sheets then the sheets would be cut and fabricated into various shapes. An example of an object formed from this technique is illustrated in Plate15. This technique was widely used throughout the Asante Empire. For centuries these various techniques

of gold craft were utilized to produce millions of varying shaped objects for trade throughout West Africa.



Plate 16. An example of an object created from the manipulation of sheets of metal Source:
Metal Product Design Section, KNUST

4.8.2. Cuttle fish bone casting

Over the years, goldsmith have used cattle fish skeleton as moulds. This technique provides a rich texture and immediate result at a very low cost, and also with very little and simple tools and equipment. The cuttle fish casting which is also known as cattle bone casting use the simple process of cutting two bones or one bone in half. These two pieces of the cattle fish are rubbed on coarse sand paper or the two bones are put together and rubbed against each other, (soft side to soft side) in a circular motion to make flat surface as shown in plate 17. A desired design is then carved or pressed onto the flat surface of the cattle fish a sprue funnel is also carved to allow pouring. Vents

are created to allow escape of gases from inside the mould. The two halves of the cattle fish (mould) are brought together and tied with binding wires. The gold is then heated in a crucible and poured into the mould. The cuttle fish casting was extensively used in the southern sector because of the availability of the material and its proximity to the sea. But it is now commonly used by Asante goldsmiths and jewelers.





Plate 17. Cuttle fish casting processes

Source: Photographed by researcher

4.8.3. The Lost-beetle Techniques

The goldsmiths also practiced casting techniques known as the lost beetle, rarely, if ever, found elsewhere. Considerable numbers of their brass gold weights were made in this way, which involved casting a real object rather than a wax model. The techniques involved building up a clay mould around a suitable small object such as a beetle, small fruit, flower, seed or groundnut and affixing a wax spruce rod to it. The mould was then heated in the same way as for a wax model. At a high enough temperature the encased object turns to ash and, eventually, molten brass was cast in the cavity.



Plate 18. Lost-beetle technique

Source: <http://www.scatoday.net/aggregator>

4.8.4. Hollow Casting

The Asante had vast amounts of gold but they used it economically. Most of the castings made for their kings and chiefs were not solid gold; they were hollow. An examination of many Asante castings from the 19th century shows that they were made in this way. The majority of pectoral of *kra* discs was made by gold casting, although some were made from gold sheet and decorated with repoussé work.



Plate 19. Hollow cast jewellery

Source: blogspot.com

4.8.5. Precision Casting

Many castings either brass or gold are distinguished by their great delicacy, the quality and precision of the details they show. Some have found it hard to believe that this was achieved by such simple techniques. It has even been suggested that goldsmiths swung their moulds and molten gold around their heads at the end of a rope so that the gold was driven by centrifugal force into the tiniest details in the mould. Although modern Western jewelers, technicians and craftsmen use centrifuges in this way to cast items which gives great precision, they achieved their superb results

far more easily and safely, without whizzing containers of molten gold around their heads. The precious of gold work can be attributed partly to their use of substantial quantities of charcoal in the investment. The importance of the charcoal was twofold. First, the fine powder could cover and enclose every detail, however delicate, of the wax model. Second, during the actual casting, the charcoal served to absorb any gases given off as the metal and the mould were heated up. It also acted as a good insulator, and therefore helped the molten metal to retain its heat. This was important because the gold, once it was melted, had to stay molten and fully liquid as it was poured into the mould if the casting was to be successful. If bubbles of air or other gases were trapped either in the metal or in the space it was intended to fill, the casting would have been faulty. Similarly, if the metal began to cool and harden too soon, the mould would not be filled. The presence of the charcoal-rich investment both prevented bubbles from forming and kept the metal from cooling too quickly.



Plate 20. Precision casting

Source: <http://www.vam.ac.uk/content/articles/a/asante-gold>

4.8.6. Wire-working technique

The earliest form of gold wire was produced by cutting long strips from a thin sheet of gold and then rounding them either by hammering or by rolling them between two hard surfaces, probably slabs of stone or wood. Down the centuries, gold wire has been woven into textiles, wrapped around thread that was used to embroider garments, or coiled around a core of some lesser material to produce brackets or rings. It has also been soldered to backing plates of gold to make elaborately decorated jewellery or joined together to make open work earring or pendants. The modern method of making gold wire, and wire from other metals, uses a draw plate. This is a slab of hard metal, through which holes of different diameters are drilled. To make a wire, a piece of gold is cast or hammered into a roughly pointed cylindrical shape so that one end will just protrude through the largest hole in the draw plate. The draw-plate is firmly anchored and the protruding length of gold is steadily pulled through the hole, stretching and thinning it as it goes. The process is repeated through the next smaller hole, then the next and so on, until it is sufficiently fine. At each stage the wire is annealed to prevent it from becoming brittle.



Plate 21. An example of gold wire jewellery

Source: Photographed by researcher

4.8.7. Filigree technique

Although filigree is an old goldsmithing employed since earliest time to create jewellery and ornamentation. Its usage is not so much applicable in the Ghanaian jewellery industry. The process of filigree uses fine threads or wire of gold that are twisted, curled or bent into intricate designs, often against a background of precious metal. It is then soldered using gold solder with a low melting temperature and blow torch to join the two metallic surfaces into one at a low melting point.

4.8.8. Cold Gold working technique

Cold gold as the name suggests, does not require heat. This includes the shaping of gold by hammering and bending, cutting and incising and by forging to give a form of raised decoration called a repoussé. Relatively, thick gold foil was used principally on objects created for the royal court. Its most common use was to cover wooden carvings, giving them a brilliant golden surface. The court objects adorned in this way were dazzling in appearance and served as a continual visual reminder of the wealth and power of the Asante rulers and those in their service. Other objects created in this way included the handles of curved-bladed swords which, at least by the 17th century, had ceased to be used as weapons, and were used instead as symbols of high office. The most important of these swords decorated with elaborate gold castings, were the ones on which the most senior Asante chiefs swore their allegiance to the *Asantehene* when they were installed in office. Royal servants, sometimes being used to prove that they were official emissaries of the court, carried lesser swords of various kinds. The wooden handles of the swords in the shape of two spheres joined by a cylinder, rather like a dumb-bell were decorated by covering them with gold foil. A third very large and unwieldy kind of a sword had three blades set at equal angles to

each other and three handles decorated with thick gold foil. Swords like this stood on the ground, handles uppermost, near a monarch when he sat in judgment. They seem to have been made in this especially large and elaborate form to impress supplicants and visitors with the king's power.



Plate 22. Products made from cold gold working

Source: <http://www.metmuseum.org>

4.9 Gold Jewellery Decoration

The decorative patterns worked on the surface of sheet gold were made by two distinct processes the metal workers often used in combination. They punched gold from the back and then cut or punched into it from the front. Patterns were formed by the repeated punching of the designs into the metal. Once the sheet was turned over, these patterns were revealed as raised areas on the surface of the gold. This technique was widely used in by the Craftsmen and can also be seen on items such as rectangular casings made to contain the talismans attached to royal sandals, headbands and war robes. Sheets of gold with this sort of repoussé work were also used to adorn

the personal stools of the Chiefs and the queen mothers. Thin gold sheet with repoussé decoration was also used on the small egg-timer wooden stands, on which the king's dishes were placed at meal times. Gold was sometimes wrapped over small wooden carvings, which were attached to the hats; sometimes the gold sheet was cut into elaborate strips that were sewn to the leather. Court messengers or criers had hats with elaborate rectangular gold-covered plaques at the front, and many chiefs wore thin strips of coloured velvet or silk embellished with small carved motifs covered with thin gold sheet around their foreheads. One of the most spectacular of all items of regalia decorated with sheet gold is the Golden Axe of Asante, a symbolic iron bladed axe enclosed in a leopard-skin sheath, elaborately decorated with both cast and sheet gold. The axe was formerly sent with royal emissaries on major diplomatic missions.



Plate 23a. Punches



Plate 23b. A ring decorated with punches

Source: Photographed by researcher

4.10. Types of Gold Rings

Rings are made of several techniques such as casting, piercing, chasing and forging, depending on the type and use.

4.10.1. Wedding Rings

A wedding ring which is usually worn on the second finger of the left hand, symbolizes that wearer is married. A man or woman may wear this ring. These rings range from very simple, smooth, light bands to intricate, elaborate and heavy bands, sometimes with precious stones such as diamonds. The ring is worn on the second finger of the left because years ago, it was believed that there was a vein that runs from the second finger directly to the heart.

However throughout history wedding rings have been worn on both fingers of the hands (Gilbert 2004). Goldsmith in Asante applies different methods in producing several types of wedding rings. The plate 24 shows different wedding bands with the simple smooth designs and different width.



Plate 24. Wedding Bands

Source: Photographed by researcher

4.10.2. Engagement Rings

This type of rings is given by a man to a woman he intends to marry in most contemporary cultures of the societies. These rings are worn to give the interpretation that the wearer is about to get married in the western countries. Wearing of engagement rings are traditionally non-Akan culture but has gradually crept into it. The Akan goldsmith uses simple gold working technique to produce these exquisite items as shown in plate 25.



Plate 25: Engagement Rings

Source: Photographed by researcher

4.10.3. Religious Rings

Jewellery also has embellished the teaching of religions since Christendom, biblical inscription have been engraved unto jewellery to protect people or to remind them of the precious brevity of life and the inevitable day of judgement. There are therefore broad ranges of reasons for wearing jewellery ranging from socially complex to purely decorative as shown in Plate 26.



Plate 26. Religious Rings

Source: www.kootation.com

4.10.4. Masonic Rings

Not all rings symbolise a romantic commitment. A Masonic ring is a type “signet ring” meaning it represents a sign of authentic affiliation to a group. Masonic rings are worn to honour allegiance to brotherhood, members of the secret society of Free Masons may choose to wear rings which often include the Masonic square and compasses with or without the letter “G” at the centre as shown in plate 27.



Plate 27. Free Masons Ring

4.10.5. Seal Rings

Seal rings invariably consist of a metal band holding a metal stone or shell form unto which a symbol or image, specific to the wearer was engraved or carved. This could then be used as sign and validate documents by impressing them into clay or tablet or soft wax as shown in plate 28.

In other words, they stood for, an attested to identity and also signify the power of status.



Plate 28. Samples of Seal Rings

Source: <http://antiquediamondsearrings.blogspot.com>

4.11. Cold Gold Leaf Working

One of the very few techniques as old and unchanged as the art of making gold leaf, is the cold gold working technique. This is datable to 1600 BC in Egypt with this technique.

Gold leaf is the art of reducing gold to extremely thin leaves by beating. This ancient technology is used today extensively by Asante craftsmen to cover their wood carvings, state swords, umbrella tops and spokesman's staff as shown in Plate 29.

Nana Yaw Boateng a gold smith at Adum, belief that although the technique of cold gold working is practiced today but to some extent is gradually fading out due to the high cost of the gold. Cold gold working requires working with fine gold, preferably pure alloy of gold, since the finer the gold quality the easier it is to beat into thin leaf. In the same vein the greater the alloy percentage the more difficult the beatings into thin sheets become.

Nana Yaw Boateng sees this technique which in the past used purely fine gold has given way to alloyed gold because of high gold price. This he thinks makes the working technique a bit difficult and needs experience and skills to beat out gold without experiencing cracks.

It is therefore not surprising to see some royal court objects like umbrella tops, spokesman's staff and swords with artificial gold covering to give that resemblance of gold colour due to the high cost of gold.

4.12. Wood Carvings With Gold

Thick gold foils were used principally on objects created for the royal court of the Asantehene. Its most common use was to cover wooden carvings, giving them a brilliant surface that reflected the bright rays of the sun by day and caught the flickering gleam of oil lamps by night. The court objects adorned in this way were dazzling in appearance and served as a continual visual reminder of the wealth and power of the rulers and those in their service.

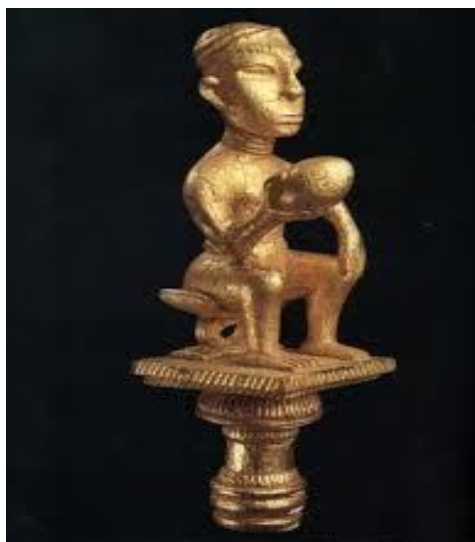


Plate 29. Gold Coverage on Wood

Source: africanarthistory.weebly.com

4.13. Symbolism and Cultural undertones of Gold Jewellery Usage

The use of traditional jewellery in the cultural context of the Asante is more than an adornment item. It is a visual representation of history, belief and political thoughts of a people. In accordance with tradition some jewellery are reserved for special occasions and not meant to be used for common place daily activities or as an ordinary wear. It can also be used as a special gift item during such rites of passage as child naming, puberty, initiation graduation, marriage, soul washing, and burial as well as ancestral remembrance ceremonies. Jewellery is used not only for its beauty but also for its symbolic significance. Each of the symbols in jewellery are denotes from historical events, individual achievements, proverbs, philosophical concepts, oral literature, moral values, social code of conducts, human behavior and certain attributes to plant and animal life.

These Ghanaian symbols have achieved tremendous international recognition and evolve into the tangible manifestation of an ever-growing sense of Pan-African Camaraderie.

The origin of the use of symbols as elements of designs for jewellery is not well documented.

Their infusion is associated with certain past events. The popular jewellery symbols to date in

Asante are the Adinkra symbols. These symbols are believed to have originated from Gyaman

(now in Cote d'Ivoire). Tradition has it that a famous king of Gyaman called *Adinkra* angered the

then *Asantehene*, Bonsu-Panin, by trying to copy the Golden Stool. *Adinkra* was defeated and slain

in an ensuing war. The designs in the cloth of *Adinkra* when he was defeated attracted the

craftsmen of Asante who started copying and gave it the name *Adinkra* that was the name of the

famous Gyaman king. Another account has it that the work '*adinkra*' means farewell or

goodbye, in the Akan language. It is therefore suggested that the cloth with its symbols had its

name because it is used on funeral occasions in saying farewell *nkradee* or goodbye to the departed

souls. The *Adinkra* symbols are varied and their usage is intended to portray the cherished truths

and values embodied in the symbols. These symbols are extensively used in all areas of art, be it

textiles, pottery, metal work, leather work, sculpture and all other arts works.

Its use in the jewellery industry cannot be over emphasized. Plates 34a and 34b are samples of

Adinkra symbols used in jewellery, their names and meanings.

Gye Nyame (Except God). A symbol of God's supremacy. God is regarded as the creator of the

world and humanity and therefore must be revered and worshiped. The symbol reflects the

supremacy, power, and dominion of God over all situations and creations. He is therefore regarded

as the omnipotent omniscient and omnipresent (Plates 34a and 34b).



Plate 30a. Gye Nyame



Plate 30b. Gye Nyame

Source: Photographed by researcher



Plate 31a. Nyame Dua



Plate 31b. Nyame Dua Source:

Photographed by researcher

Akoma (The heart).—*Nyaakoma* – take heart, that is be patient. The heart is believed to be responsible for a person's emotions, for example anger, hatred, love, joy, grief etc. a person is said to 'have his heart in his stomach', when that person is very tolerant. The symbol teaches the importance of tolerance in the face of provocation. It also stresses the need for patience in all

endeavours of life. The symbol is however universally used and understood as representing love (Plate 32).



Plate 32. Akoma

Source: Photographed by researcher

Sankɔfa is a proverb in Akan that goes like *sɛ wo wɛrɛfiri na wokɔfa a yenkyire* meaning it is not a taboo if you forget something and you go back to pick it. This is always shorten to read *Sankɔfa* “return and pick”. It refers to knowledge acquired from the past and improved upon. This symbol teaches about the importance of holding fast to our values and culture than adulterating it with foreign cultures. The bird looking backward symbol is a popular subject for gold weights. A proverb sometimes, associated with it is “regrets are vain”, but it is also sometimes used as a symbol of the omniscience of the king and the need for always remembering the past in order to plan for the present and the future. It also denotes of situations not too late to reverse to pick up the broken pieces. This symbol is commonly used in jewellery making. (Plate 33).



Plate 33. Sankofa

Source: Photographed by researcher

Funtunfunafu Denkyemfunafu (Siamese crocodile). *Funtunfunafu Denkyemfunafu* were the two crocodile with one stomach yet they fight when eating. The crocodile stomach is likened to common purpose a family, people or a nation where different views, ideas are shared debated and argued for a common good. It shows a democratic and unification of people of different background despite their divergent views and opinion about how issues should be addressed.



Plate 34. Funtunfunafu Denkyemfunafu

Source: Photographed by researcher

Kuntunkanta (Extravagant and puffed up). This is a symbol of arrogance and extravagance. This symbol highlights the nature of some antisocial individuals who are arrogantly pompous and bossy. The symbol serves as a warning against boastfulness and disregard for other people.

Akokonan (the foot of a hen) *Akokonantiaba, naenkumba*. This literally means that the hen treads on its chicks, but does not kill them. This symbol (*Akokonan*) noted in plate 35, signifies the

protective, corrective and loving nature of mothers and for that matter parents for their children. Children are reprimanded and punished when they go wrong. These punishments are corrective measures, which serve as good reformation. The symbol teaches the importance of nurturing children and warns against pampering them. It also encourages showing mercy to offenders on the part of chiefs and people in traditional authority.



Plate 35. Akokonan

Source: Photographed by researcher

The Asante historical tradition like most African states suffered a set-back when it confronted invading colonial values and technology. However, the resilience of the Golden Stool institution

prevented a sharp break with the past during this period; a substantial proportion of the craftsmen remained relatively untouched by the new cultural infusion. Consequently the *Adinkra* symbols are still the most popular in contemporary jewellery.

4.14. Other Products

The material cultures of the Akan people became increasingly diversified and elaborate over the centuries. The concentration of wealth and power was signaled by the types of items used and the degree of elaboration. As power shifted so were items in the regalia redistributed. Not all types of image had the same function or conveyed meaning in the same way. A broad distinction can be drawn between those images and regalia used to indicate status or to suggest the relationship between one status and another and those images, especially fertility dolls which were created to express an ideal female form, and even to help bring that form into existence. Considering available artifacts one can say that the people have an extensive critical plastic vocabulary.

Status and social roles are indicated by many images. Gold weights depict the tools of particular groups or show people engaged in activities characteristic of certain occupation or offices. Hair styles showing particular social roles (e.g. priests' uncut tresses, warriors' small moustaches, and beards) are shown on weights and funerary terracotta. Weights show items of dress or adornment indicating distinct occupations. Size also served to indicate status, and the form, size and elaborateness of regalia and the materials used are related to the standing and history of the office or stool to which they belong. In some cases, status is indicated by what the image depicts, in others by its size and the substance used to create the image.

It is probably that the significance of particular types of image differs from level to level. To those with knowledge of the history of particular chieftdom and offices, the regalia worn or carried and the images displayed might call to mind distinctions, which would not be apparent to the mass of the populace. To the later the sheer mass of golden regalia and its apparent infinite variety were the most significant features. Cutting across this distinction between the exoteric knowledge of the court and the impression regalia made on the less well informed was the fact that many artifacts possessed a verbal dimension or rather entered into an elaborate and flexible form of verbal discourse. Each artifact or element in an artifact, its form or decorate, could serve as the point from which verbal elaboration could proceed.

The actual images chosen, however, seem to have been selected on a variety of principles. Some were drawn from natural objects, which the people find attractive because of the symmetrical or balanced form: the fern-like *aya* leaf or the rosette-like leaf of the groundnut plant (a casting, which adorns the hilt of the *Bosommuru* sword of the *Takyimanhene* for example). Some are chosen because of distinctive physical properties: the resilient *babadua* reed, the elephant for its size, the pineapple for its yellow richness and sweetness, while others, cannons, swords or shields are chosen for their functions. In some cases, however, human images have a far more fixed meaning and do not always serve to communicate proverbs. Many express the primary significance by means of the stance posture and the hand movements. They are depicted as making, drawing upon a widely understood set of gestures used in Asante society. A person bending slightly forward for example, one hand cupped in the other in front of the body is begging or pleading, a man with a finger to one eye indicates a knowing watchfulness, while one with both hands on his stomach is interpreted as expressing humiliation at having to conquer his enemies. The most extreme case is that of the fertility *Akuaba*, plate 41 where there is little or no verbalization at all. Clearly it is

important for many Asante artifacts and images to be witty to express certain truisms concisely and pleasingly. Many of these images are thus absorbed into a wider system of debate and discourse: they suggest ideas about ideal forms of relationship and, by their public appearance, serve to keep them to the fore front of Asante's consciousness.



Plate 36a. Akuaba doll in pendant



Plate 36b. Akuaba doll in pendant Source:

hamillgallery.com

Three birds of the same variety on a stand. The proverb for this type of weight is the same as the English version 'birds of the same feather flock together'. The proverb in Asante is that, the bird's relation is the one it perches with.

It is sad that jewellery, as an art form has not been accorded its due recognition in contemporary culture of the people. It is surely the most humanistic of the African arts, it has closer links with oral literature than any other, and above all it alone can be said to encompass a whole way of life in its almost endless variety of subject matter. It is, or rather was popular art in practical use among the people and played a significant role in the dispensation of their culture.

4.15. Asante Royal Gold Art and Their Significant

Everything in the Asante palace or used by Asante chiefs have a meaning and are basically signs of power, unity, authority and integrity. For example:

i. The golden Stool: The abode of the souls of the Asante kingdom.

ii. The Sword: A symbol of leadership and war

iii. The staff: A sign of office of the orator (linguist)

iv. Umbrella Tops: Sign of power and authority of chiefs

v. Stools: It is believed to be the repository of ancestral spirits especially of chiefs and elders. A black stool is dedicated to each dead chief. These stools are kept at the stool house and command the performances of certain periodic rituals.

vi. Necklaces and rings: Status and identity symbol of a chief as a person of authority and power.

All these objects with the exception of the golden stool were made of alloyed gold, beaten to sheet metals and covered around objects like the sword, umbrella tops and all the other Asante royal golden Art.

During traditional festivals in Asante the *Asantehene* or *Otumfuɔɔ* (the overall ruler of the Asante Kingdom) wears best-designed cloth and jewellery. All the chiefs and subjects are seated before the *Asantehene* to ensure that no one wears his type of cloth or the Jewellery he uses. The court officials will check amongst the *Amanhene*, *Adikros* and all other subjects to ensure there is no duplication of the king's apparel. When he is seated, on his head is a golden crown, especially

designed with symbols made of gold. His elbows are decorated with bangles *Bafuru-Sebe* talisman, which contains charms to ‘protect him from evil spirits’.

On his wrists are heavy rings plated with *sikaafre* (talisman plated with gold). His fingers are decorated with different types of *Sikampatea* (rings). The ankles carry *Sikantakoa*. To make his ankle wear appear clearly, his feet are rested on special cushion on a footrest known as *podua*. Armlets are made of loops of gold rings, and suspended on the loops are symmetrically arranged motifs consisting of thinly cast objects representing horns bottles and magical charms. He wears the native sandals with gold symbols on them. His beautiful cloth is worn in a style to expose the lower part of his legs so that his ankles and feet could be well seen as shown in plate 37b.



Plate 37a. Adorned Asante King
Source: <http://www.nairaland.com>



Plate 37b. Adorned Asante King with feet showing
Source: Ashanti Gold

4.15.1. State Sword

Other objects treated in this way included the handles of curved bladed swords (Plate 38). The most important of these swords, decorated with elaborate gold casting, were the ones on which the most senior chiefs swore their allegiance to the *Asantehene* when they were installed in office. The communicative imperative that arose as the government of Asante was trying to meet the complex needs of the people led to some other inventive measures. Swords, which were previously used in wars, were converted to objects of royal significance with different decorations. The *afona* (sword's) war function was replaced by its use to mark social standing, and further to identify the bearers as coming from a specific chief or the king (McLeod 1981).

They became part of “letters of credence” by which senior royal officials in the eighteenth and nineteenth century communicated with their people. They had different kinds of swords.

Among them are the *akrafona* (used for the ritual cleansing of the king), the *mponpunsuo*, a large sword on which senior officials swear oaths of allegiance to the *Asantehene*, and others used by official messengers.

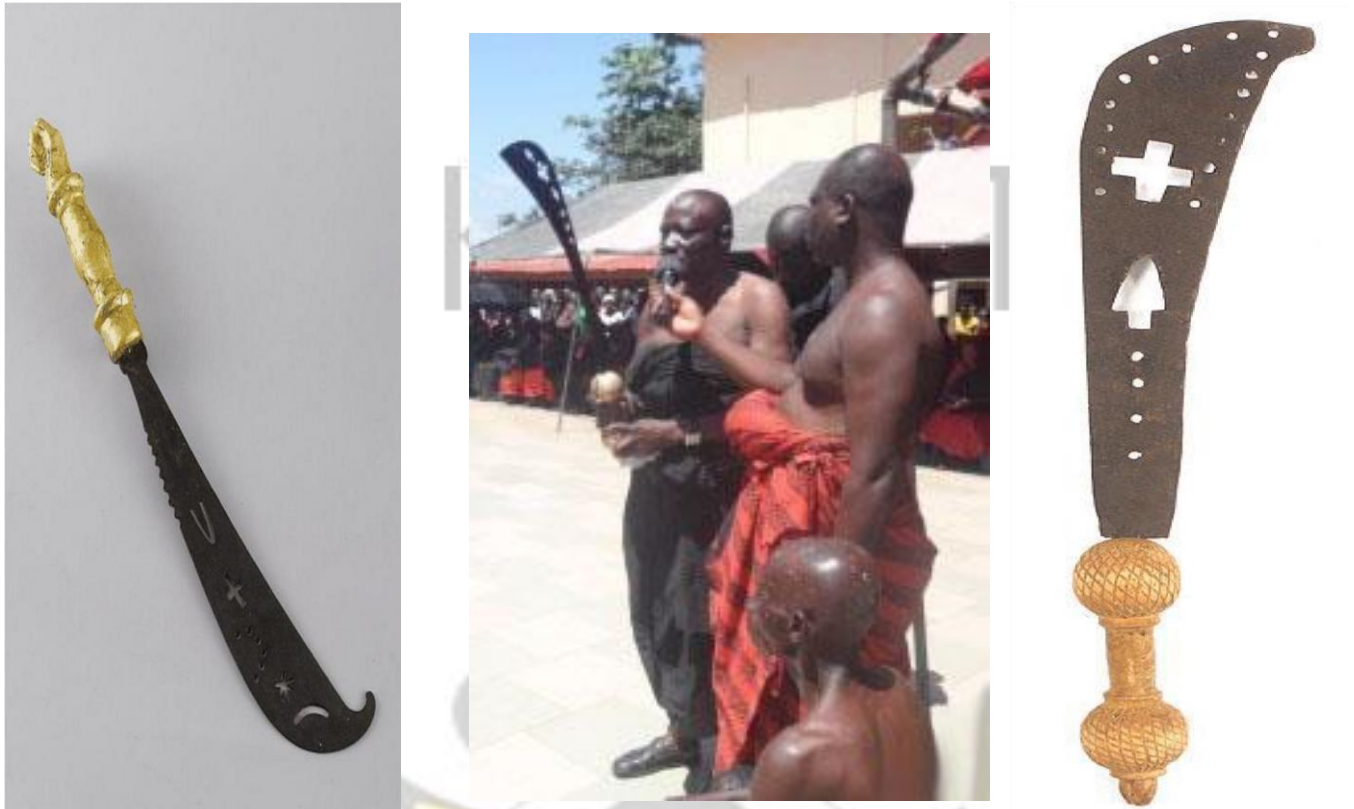


Plate 38. State sword

Source: vikingsword.com/vbshowthread

4.15.2. Umbrella Tops

It is not clear when the Asante began using umbrellas, but in the 1800s, the *amanhene* (senior chiefs) were using large multicoloured umbrellas. During festivals, the chiefs paraded the streets of Kumasi under brilliantly coloured umbrellas (Obeng, 1996). Among the most spectacular and noticeable items of royal court art are the umbrella tops. These carved wooden finials, covered entirely with gold sheet, or in a few cases with sheets of silver, are some 30-36cm in height as shown in plate 39. They crown the domes of the huge umbrellas that shade rulers when they appear in public. These finials are symbolic and may communicate popular traditional precepts or proverbs. The goldsmith carves of the wood and adds on thin foil of gold to produce the

finials.

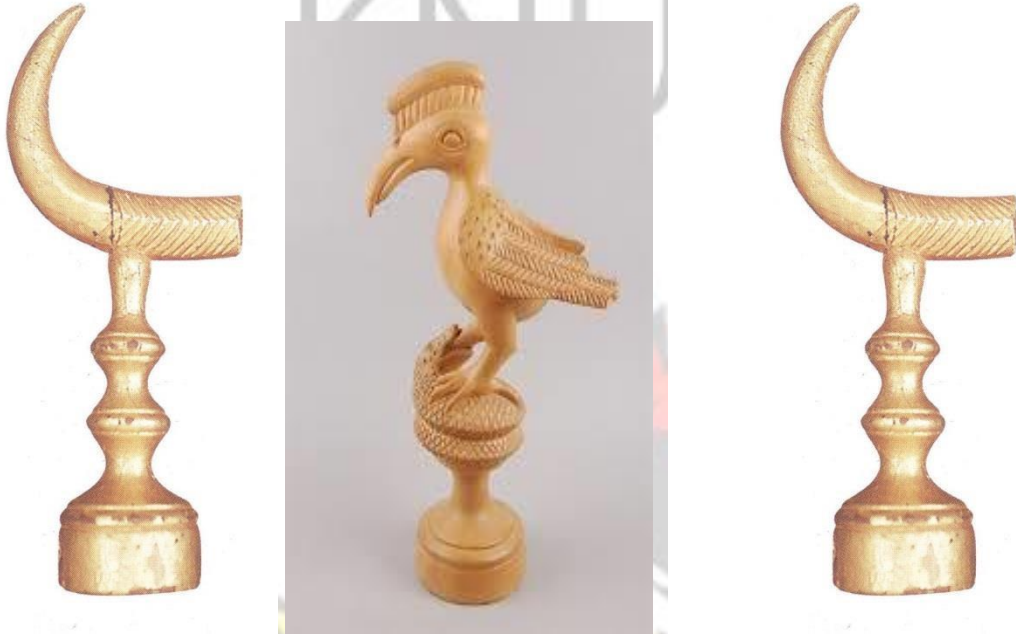


Plate 39. Umbrella Tops

Source: <http://www.conradiator.com>

4.15.3. Spokesmen's Staff

Another important and spectacular item of regalia covered with a sheet of gold was the special staff carried by the king's spokesmen and advisers. The finials on the spokesmen's staff indicate their rank. Like much of the gold work made for the court, the spokesmen's staffs are not just strikingly attractive objects they also have a deeper, proverbial significance. These objects are done by casting the pieces or mostly by 'covering'; that is carving the piece and then covering it with thin sheet of gold foil to make it look all like gold (Plate 40).



Plate 40a. The top portion of the Spokesman's staff



Plate 40b. Staff bearers holding spokesman's staff

Source: schools.nashua.edu

4.16. Significance of Jewellery in Asante's Traditional Rites

During the turn of the twentieth century, a Belgian anthropologist, Gennep, (1960), stated that all cultures have prescribed ways of handling significant transitional stages. For example, different cultures perform initiation ceremonies to mark the transition from one phase of life to another. Gennep (1960) refers to these ritualistic ceremonies as "rites of passage." Almost every culture in the world ritualizes the important milestones that their people go through throughout their lives, because it is said to create a happy mood in the communities (Lincoln, 1981). Asantes are people with a very rich culture. This culture is influenced and shaped by a number of myths and legends, which have come to be accepted today as part of the life and history of the people. There are

ceremonies, which stretch from personal rites of passage to the community festivals that are observed by all the chiefs and people. In all these, jewellery plays a very important role. In fact, occasions could be determined by the type of jewellery people wear.

The traditional personal rite, also known as the rites of passage marks the various stages in the life of Ghanaians. Rites of passage among the Akan of which the Asante are a major group, illustrate the concept of life as a progression from the spiritual world, through the living world, and back into the spiritual world. Naming, puberty, marriage, and funeral ceremonies represented different epochal stages in life's journey. The Akan's perception of the relative intimacy of the spiritual and living worlds associated with each phase of this progression is reflected in a minimal or profuse use of jewellery.

4.16.1. The Significance of Jewellery in Birth Rite

The birth of a new member into the Akan family is welcome with joy in all societies. With the Asantes to have many children is a sign of God's blessing, wealth and prestige. Boys are considered more important than girls. Charms and amulets are often worn to improve fertility because barrenness is a curse among the Akan. For this reason when a woman announces to her husband or parents that she is pregnant there is rejoicing and precaution (both medical and spiritual) is taken to safeguard the pregnancy. She wears protective amulets that are supposed to have the power of helping her through pregnancy and delivery. Since birth may be difficult and may even result in death, both the foetus and mother are carefully prepared for a safe delivery through fortification. These fortifications come in the form of amulets and charms, which are mostly the work of the goldsmiths. Should a mother die during child birth while the baby is yet unborn, a new disastrous dimension is added to an already serious state of affairs to make it spiritually more threatening.

There is therefore the need to wear protective charms in gold and other types of metals, to sustain the pregnancy and safe delivery.

After birth, the child is spiritually fortified and protected through medicines. If a mother has a succession of children who keep dying, the belief is that it is the same child who keeps coming and going. Here, the body of the child is marked so that it could be recognized when it returned. Mothers to such children wear a lot of protective charms in the form of jewellery such as bracelets, necklaces and anklets.

Children also wear jewellery in the form of protective amulets to help them against sickness and teething problems. It is commonly believed that some children are re-incarnated ancestors. Since each ancestor has a symbol, these symbols are pierced or cast into silver and strung among beads and put on the waist of the child believed to be an ancestor. This is a sign of recognition of the ancestors and also a form of acceptance. Such children may be given the name of that particular ancestor. With these children who keep dying and coming back to be reborn, their hair is left unkempt and coins, cowries, and shells, are tied to the end of their hair. The belief is that the attention of the ancestral world is distracted by the ugly and unkempt hairdo.

Twins are considered special in most Ghanaian culture and for that special reason wristlets with cowries are put on their wrists or ankles. They are believed to confer supernatural powers to the wearer. If one of these twins dies, a doll is carved to replace and represent the dead twin. Whatever protection measures are done to the living twin is done to the doll. Therefore, jewellery put on the living is also put on the doll. For instance metals are incorporated with beads and this Jewellery is worn by both twins on their wrist.

4.16.2. The Significance of Gold Jewellery in the Naming of a Child

In most Ghanaian cultures especially the Akans, children are born with names. That is, they bring their names from their mothers' womb. A male child born on Monday is named *Kwadwo* and a female is *Adwoa* by most Akan cultures. Likewise in the Volta region he may be called *Kwadzo* or *Adzo*. Such names are commonly used in most cultures.

A week after birth the actual naming ceremony is performed in most Akan and other societies. The mother and the child are dressed in white clothes with white beads and silver ornaments signifying victory. Relatives, guests and observers also dress in white. The child is given a personal name, which marks its ritual entry into the family. After the first week and precisely the naming ceremony it is believed that the child can now be taken outside into the open for the first time. Prayers are said on behalf of the child, the parents and the family as a whole. White beads are put around the baby's waist, knees, and arms to help build pleasant body shapes. This helps to build the forearm, into pleasant shapes and on the knee to give the calves a pleasant tubular shape respectively. These shapes were considered very beautiful. The significance of wearing these types of jewellery around such body parts is to observe the growth of the child. The jewellery on such parts becomes tight when the child is growing. The beads are also worn to indicate whether or not the body was growing on schedule. Three months after birth the mother adorns herself and her child with gold jewellery. After the three months both mother and child begin to adorn themselves in gold jewellery.

4.16.3. The Significance of Gold Jewellery in Puberty Rites

In the Asante culture, the attainment of puberty introduces the individual into the adult living world; it was a half way stop through life. The individual had become an adult, declaring his/her

independence. The major social transition in initiation was that it qualified the individual for marriage, to set up an independent household. Richards (1956) in his study refers the initiation for girls as the menarche rites for initiating girls into adulthood. Lincoln (1981) describes female initiation as a process that women go through, resulting in a change of status and becoming 'fertile', productive, experienced and whole. Today puberty rites among the Asantes are seldom observed. The Christian 'Confirmation' has gradually assumed the place of puberty rites. One of the main functions of nobility rites was to inform the community that a female had attained marriageable age. Women are taught about future duties, about the obligation of fidelity to their counterpart (husband), the rules of etiquette regulating relations with her in-laws and that their proper places are one of subordination and to obey their husband. In most Akan societies girls did not look for husbands, so it was necessary to publicize their availability when they reached maturity.

Until recently, some tribes like the Akan did not perform circumcision till the time of puberty and during this time a boy must demonstrate he was brave enough to be circumcised. It was believed that members of the royal family who were very close to the throne and could be enstooled did not circumcise because it was a taboo. If circumcised you cannot be enthroned. The boys were often separated from the rest of the society during the circumcision and given certain instruction after the ceremony. Instruction may include topics like how to be a good farmer, hunter or fisherman as well as a good husband. During this time the boy might be presented with a charm or an amulet by his father to protect him in life. He may also be given a cotton thread with bead believed to have magical powers to lessen the pain of circumcision. Girls go through puberty rites after having their first menstruation and this is a step towards marriage. A girl found to be pregnant before the initiation ceremony is a disgrace to her and the family. During the initiation ceremony the girl goes

through many rituals and she is adorned in beautifully made jewellery among other things. She is given mashed yam with palm oil and made to swallow a whole egg. The egg should not be bitten into. This is believed to make her go through labour with ease during childbirth. The girl is bathed shaved and her nails clipped. The hair is dressed in style. Shear butter mixed with soot is smeared all over the head. The skin is rubbed with shear butter cream. She then puts on white kente cloth, which symbolizes victory over childhood, diseases and mortality. Beads are put around the wrists, ankles, arms, waist and neck to adorn the body as shown in Plate 41.

After the ceremony, the initiates parade through the streets with friends and female relatives. During this time any man attracted to any of the ladies could go forward and ask for her hand in marriage if she is not already betrothed to another man. Since this ceremony ushers one into adulthood, presents are given to the initiate to enable her start life. These are mainly items that would be of need in her future. These include jewellery, which is normally gold, silver, beads and others. Grandmothers who are believed to be custodians to culture in some families give an amount of gold in the form of jewellery to such girls to start life.



Plate 41. Puberty rite

Source: www.kunstpedia.com

4.16.4. Significance of Jewellery in Marriage Rite

There are different types of marriages among Ghanaian cultures. In Asante there is infant marriage, which is converted into proper marriage when the girl or boy is of age. There is the polygamous

marriage where one man has more than one wife, and also the practice of monogamy, one man one wife. Until very recently the marriage ceremonies were very simple.

In some societies, just like the Akan, a bottle of palm-wine from the man was able to seal the marriage. Other cultures consist of elaborate bridal dowry. The Asante traditional marriage ceremony these days consists essentially of the paying of the bridal dowry and the acceptance of same by the woman's family. A day is set and the two families meet for this purpose. The presence of the groom and bride is required. The bride's wealth is mostly made up of alcoholic drinks and money for the in-laws and the extended family. Christians add a Bible, a hymn book and a ring to the requirements. There can however be so many additions like jewellery, cloth, watch, scarf and even a sewing machine. Plate 42 below is a picture of contemporary Asante traditional adornment for marriage.

Most marriages do not end with the bride wealth. They are usually followed by a blessing in a Christian church or a registration of some sort. The accessories used are normally the wedding ring, necklace, (this could be pearls, diamonds imitations or gold), brooch, bracelet and the crown. The crown could be made of metal or lace. On the next church going day the bride goes to church dressed with gold Jewellery accessories signifying prosperity.



Plate 42. Asante Traditional Adornment for marriage

Source: Photographed by researcher

In the typical Asante culture, the girl was sent to her husband by her mother and aunts. Her friends would also see her off. The young woman who is about to enter marriage prepares herself earlier by purchasing items like clothing, kitchen ware and especially jewellery. Madam Comfort Serwaa of Ampeyoo of Kumasi recount how in the course of her trading saved a substantial amount of money to buy a set of gold jewellery and other gold accessories to be used after marriage. She is of the view that gold last forever and with that idea she hopes her marriage will also last. The would-be wife goes to her husband dressed carefully to be attractive to him. She chewed roasted corn to give the mouth a refreshing smell and wore beads around the waist.

The bride after a successful marriage ceremony dressed up and went round thanking people for their help and support. In all these processes jewellery was displayed during the parading through the street. It is also very important for an Akan woman to have some gold ornaments in her jewellery collection so that her daughter also could be given some trinkets during her marriage. The daughter is expected to add on to this as her marriage matures. These concerns are therefore no doubt that jewellery plays a very important role in the culture of the people.

Christianity has introduced a new dimension into the usage of jewellery in marriages of modern society. The man entering into marriage provides all accessories both male and female for the ceremony. Those who can afford go the extra mile to provide for bridesmaids, best men, flower girls and page boys, all these provisions goes with some form of jewellery accessories and depending on who can afford to buy gold jewellery for such occasions.

4.16.5. Significance of Jewellery in Funeral Ceremonies

After leading a married and hopefully a peaceful long life, man must die naturally. Naturally death is not welcome and may be attributed to several things. When one dies the corpse is treated in a

manner befitting the sex, age and status. Funerals are the last traditional rites performed for a person as he or she enters the spiritual world. For this reason it is accorded a befitting attention. Responses to death and the rituals and beliefs surrounding it tend to vary widely across the world. In all societies, however, the issue of death brings into focus certain fundamental cultural values. The various rituals and ceremonies that are performed are primarily concerned with the explanation, validation and integration of a peoples' view of the world.

Among the Asante, after the death of a person, the corpse is washed and dressed in the best of robes and trinkets. Women who own wedding gowns are normally dressed in their gowns on their death. Alternatively dresses fashioned after wedding gowns are sewn for their corpse. Most often they are dressed in traditional attire like *kente*.



Plate 43. Some Jewellery used during Funeral Ceremonies (Awisiado)

Source: Photographed by researcher

Men may be dressed in their suits or in the traditional way; *Kente*. Jewellery is used extensively in the case of royals. The chiefs are even buried with ornaments. The corpse that has been laid in state is seen by the whole community, relatives, friends and loved ones are all expected to pay their last respect to the dead. Children of the dead person put ring on his or her finger to show their love and also as a sign of paying their last respect. Other relatives do the same thing. Various objects are put in the coffin like trinkets, weapons, tools, tobacco, food, cloths, beads and money. These are meant for the deceased on his journey to the spirit world so that the dead may not appear empty handed before the ancestors.

The children put on *awiseado*, a type of necklace as shown in plate 43. The grand and the great grandchildren of the deceased are dressed as *Adosoa* girls and *adosoa* queen. The girls are dressed with beads around their waist and a loin cloth, the ankle, wrist and calves are adorned with beads. Their necks have gold chains and pendants around them. The queen's dressing is more elaborate with her breast and waist covered.

4.16.6. Death of a King and the Use of Jewellery

When the king is seriously ill and it is feared that death is imminent and as the Asante court would express it, "the mighty tree" *Dupon* threatens to be uprooted", The Royal physicians make a report to the queen mother who must go and sleep by him. She sends for the *Akyempimhene*, head of the princes, when in the end he is about to draw his last breath. Meanwhile, she secures *bodom* precious beads, gold dust *sika-futoro* and some rum.

Upon his arrival the *Akyempimhene* lifts the body and supports it against his own body. The dying monarch is then offered water and rum from a beautifully, designed silver or gold jug, *kuruwa*, in which had been placed firstly the precious beads and secondly the gold dust. The gold-dust is

meant to seep into the system but not the precious beads. The jug is pressed three times against the lips of the dying monarch while the queen mother assures him that the lineage and the nation as a whole would not have shrunk from any price in an attempt to save his life but for the powerfulness and inevitability of death. After the announcement of the Kings death, elders meet to decide on the funeral arrangements. The corpse is subsequently richly dressed and laid in state. The forearms are smeared with gold-dust, some gold-dust is also put into his ears. His arms, chest and almost every part of the body is richly adorned with gold dust. Relatives put *nyaya* plant on their shoulders and heads. On the day of burial presentations are made to the deceased *adesiede* consisting of a whole piece of cloth, silk handkerchief, blanket of camel hair, pillow with silk or brocade cover and a small collection of gold dust tied in a handkerchief. Most of these items are put in the coffin and buried with deceased. The gold aspect of *Adesiede* is prepared by the *aburahene* who is the chief's goldsmith.

4.17. Symbolism and Cultural undertones of Gold Jewellery in Festivals and Durbars

Festivals are occasions during which the chiefs and people gather to celebrate special periods in their lives. The *Addae* and occasionally the *Odwira* are the main festivals celebrated by the Akan. The chiefs are custodians of culture and tradition. Around each stool are centered rituals, treasury, inheritance and other undertakings. The chiefs become focal points during such festivals and durbars. They dress in rich *kente* cloths or *Adinkra* cloths, crowns, footwear and most importantly jewellery dominate their outfits which portray the rich culture of Asantes (Plate 44).



Plate 44. Asantehene in colourful Regalia during Durbar

Source: <http://local-moda.blogspot.com>

The gold used specially on the crowns and footwear may not be solid gold, they may have other base metals. The smith works by skillfully covering these items with gold either through depletion gilding or foil cladding. The role of jewellery in the culture of the people comes to the fore during festivals. The executioners, the soul washers, the sword bearers and most importantly the traditional priests are all bedecked in gorgeous jewellery.

4.17.1. Executioners

They wear small leopard-skin caps and carry haversack containing *Sepo* the executioner's knives. These objects have been skillfully made by the goldsmith using various techniques such as forging and casting. During traditional ceremonies they carry guns and sit in front of the chief with their faces smeared with soot to make them look frightening. These guns are also the product of the smith who skillfully produces these items. The executioners as their names imply, carried out death

sentences imposed on the guilty by the chief or King. Their present modern role is mainly ceremonial.

4.17.2. The Sword Bearers

They carry the chief's swords. They wear the skull cup decorated with eagle feathers. The front of the feathered cap is decorated with gold plated ram horn and a band of decorated leather. They wear ceremonial breastplates, around their necks. Their cloths are rolled and fastened at the chest. The sword symbolizes the authority of the chief and is used during the swearing of oath of allegiance. Plate 45 are samples of sword bearers. The goldsmith plays a very significant role in the chief's palace, because objects like the bearer's sword and other art pieces found in the chief's palace are artistically and skillfully created with various techniques.



Plate 45. Sword bearers

Source: <http://victorenglebertphotography.blogspot.com>

4.17.3. The Announcer

He is the herald at the chief's court. He wears a black monkey skin hat decorated with metal pieces at the top. He announces the coming of the chief for people to make way for him. The goldsmith uses the art of chasing and repoussé techniques to create relief metal art pieces for the announcer.

4.17.4. The Soul Washers:

These are the officials in charge of soul washing ceremonies. When one offends the gods they do the cleansing ceremony with concoctions and the *odwira* plant. After washing the offender with the concoction and the *odwira* plant white clay is smeared on his or her fore head to signify purity after the washing ceremony.

4.17.5. The Traditional Priest

The traditional priest's objects of jewellery include cowries, metals, beads, strings and stones. These objects are believed to have some magical powers.

The traditional priest wears palm fiber skirt called *doso* around his waist. The *doso* has talismans, cowries and gourds strung into it. His hair is left uncombed; cowries (*Sedee*) talisman and metal are hung in the hair. An iron bangle known as *bansere* is worn on the right arm and cowry charms are worn across his shoulders. His wrists and ankles are tied with charms made of shells, beads and metals. The traditional priest plays a very important role in the society because he is the intermediary between the spirit world and the physical world. His position may even be somehow

superior to that of the chief because the priest advises the chief on what to do in times of troubles and disasters.

KNUST

CHAPTER FIVE

ANALYSIS AND DISCUSSION OF FINDINGS

5.1. Overview

The overarching goal of this study is to assess the developmental trend of the gold jewellery industry in Asante since independence and provide suggestions and recommendations for improving its performance and contribution to the socio-economic development of Ghana. In so doing information were gathered through library search, field visits to relevant institutions, and conduction of interviews. In this chapter the processed data and the findings are discussed and presented in descriptive and figurative forms. Inferences are drawn from the study and compared to other related research work on the subject matter to confirm or contradict the findings.

5.2. Background of Craftsmen

All the 150 craftsmen interviewed were Ghanaians and full time practitioners who were in active practice. Twenty percent (20%) of them were below 40 years of age. The majority (75%) were

between the ages of 40 and 50 years. The remaining 5% were 60 years and above. Most of them work in groups of between three and six. All the craftsmen interviewed had some level of education, spanning from basic education (5%), secondary (18%) and tertiary which comprise graduates from technical colleges, polytechnics, diploma awarding institutions and the universities (78%). Seventy two percent (72%) of the craftsmen were males and 28% female. This observation is contrary to what Garrard (1980) recounts that females were not allowed to touch object of the goldsmith let alone be recruited to join the trade in Asante.

Garrard recount in terms of myths and beliefs that surrounded the goldsmith profession and for which reason the trade was strictly a male profession. So sacred was the trade that it was a taboo for women to go near working areas of the craftsmen. Presence of women in the jewellery trade has demystified the myth surrounding the trade. The trend in this regard as obtained from this study showed that a sizable number of females are now into the profession, majority of whom are graduates from the Faculty of Art, KNUST, Kumasi.

The involvement of women in the trade is one important cultural change which is of great significance to national building. The researcher finds this development very encouraging and argues that women ought to be allowed by culture and tradition to exercise whatever legitimate skills God has given them. After all, creativity and industry is not gender determined. The evidence that female goldsmiths are equal to the task just as their male counterparts in terms of the quality of their output is there for all to see. This could be seen in the output of quite a number of female jewellers / goldsmith in the industry such as Arnies Jewellery, Cindy Jewellery and May-Gash Jewellery. The continued practice of women goldsmiths without any consequent adverse ramifications to themselves or their community physically or spiritually, seems to counteract the old belief that characterized the trade as a male occupation. This trend of development is in the

right direction since it has also opened employment avenue and trade opportunities for females' thus solving some of the unemployment problems in the country.

Two (2) out of the sampled gold jewellery workshops were established before Ghana's independence of 1957. The others were established between 1960 and 2004. This confirms that the industry has seen a tremendous expansion after independence. The upsurge could also result from a number of factors including the increase in the number of graduates who studied jewellery and had gone into the trade and the diversification of the economy in accordance with the nation's Economic Recovery Programme (E.R.P) objective of promoting substantial growth in the export sector and enhancing the country's earnings through the development, diversification and promotion of non-traditional exports. Most of the visited workshops were small and limited in size. A few of the showrooms attached to the workshops were small and limited in size. Those without showrooms display their products in small show cases just within the workshop.

5.3. Gold Acquisition by Craftsmen

Almost all the craftsmen (95%) interviewed complained about lack of easy access to raw gold and its high cost. Data on the cost of gold indicates that the price of gold has increased over 100% since 2000 (Fig 5.1), which confirmed the assertion by the craftsmen.

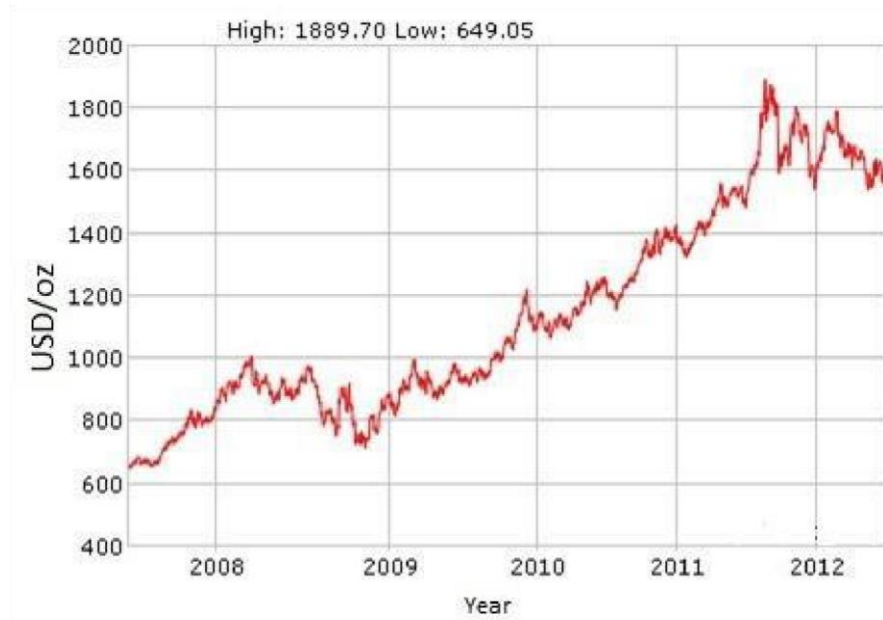


Figure 5.1. Five year gold price in US Dollars per ounce. Source: goldprice.org

The trend in the set-up of gold jewellery industries and the acquisition of gold and other material as observed by the researcher is that most jewellers/goldsmiths acquire the bulk of their raw material supply from designated licensed gold dealers who operate in shops close to the craftsmen shops or sometimes in the same shop. The licensed gold dealers on the other hand indicated that they obtained their supplies mainly from small scale miners.

It was observed that jewellers/goldsmiths who operate in areas close to small scale mining areas obtain or purchase gold directly from these small scale miners. When the craftsmen were asked about the quality of gold obtained from the small scale miners, they indicated that such gold materials come in several qualities and usually not of the highest quality, so they subject the materials to refining before they are used. Mr.K. Nimo of Asafo is one of the main gold dealers in Kumasi who has worked for over 20 years. When he was contacted, he confirmed that the small scale miners were the main source of supply to his business. He also added that apart from the small scale miners, he buys trinkets from the general public. Trinkets are the old jewellery items,

sometimes with broken parts and pieces. Individuals who want to exchange their gold for money sell such trinkets to the gold dealers.

Another gold dealer, popularly known as "Elder", who also double as a goldsmith confirms that the sale of trinkets has really added raw gold acquisition to the jewellery industry in Kumasi. The craftsmen indicated that the trinkets which are usually referred to as "African gold" have a larger percentage of silver with a small amount of gold in the alloy. When the craftsmen were asked how the trinkets are used, they indicated that they usually refine the trinket to separate the silver and gold. They successfully melt the trinket for a long period of time, which allow the gold to reach its highest quality, depending on how long it was heated. At Asante New town (Ash town) a small area of about 200" - 250" square meters where 55 - 80 master goldsmiths with their apprentices are working or are engaged in the vocation.

The quality of the raw gold used by the craftsman was also an issue of concern to them. Out of the 150 jeweller/goldsmiths interviewed, 20 (13.3%) of them indicated getting their gold supply directly from small scale miners while 60 (40 %) also indicated getting their gold from gold dealers. The remaining 70 representing 46.7 % get their supply from both small scale miners and gold dealers. The craftsmen indicated that the gold they buy from the gold dealers is slightly higher priced than those from the small scale miners.

Historical beginnings of gold acquisition by individual craftsmen in Asante (Akan) are incomprehensively documented. Before the nineteenth century, prospecting for gold in Akan was by the simple method of panning of sand, river gravels or gold bearing soil and also from gold nuggets found from the ground or rivers. Nuggets of specific weights were given to chiefs who were regarded as custodians to such property irrespective of who found them. Such gold materials were given to craftsmen who in turn used them for jewellery production.

During the nineteenth century prospecting for gold in Asante was done at night by the craftsmen and every nugget of gold found was taken to the state treasurer who cut them into three pieces and the finder is given one third and the state kept two thirds. The chief of heaths and forges supervised the goldsmiths and ensured that there was no loss or theft of the gold.

This trend of gold acquisition probably continued until the twentieth century when the PMMC was established by an Act of Parliament 179 of 1963. The mission of PMMC is to buy gold from small scale miners and sell to end users and manufacturers. The company operates in all the small scale gold centres of the country namely Accra, Kumasi, Tarkwa, Wa and Bolgatanga.

Some (65%) of the craftsmen interviewed belonged to the Federation of Ghanaian Jewellers of the respective regions. Though the craftsmen indicated that they were aware of the operations of PMMC, most of them did not purchase gold from them because of proximity and also their high price. Some of the craftsmen previously purchased gold from the Bank of Ghana. Besides the PMMC, some local companies such as Precious Metal Refinery also refined gold and sell to jewellers.

The issue of raw gold acquisition by craftsmen continues to be a major problem to the Ghanaian jewellery industry. Jewellers/Goldsmiths always make use with whatever material available to them. Acquisition of raw gold has led to the problem of most craftsmen manufacturing under carating products while a few also do over carating.

It was observed that the absence of a refinery for raw gold has created a problem where gold dealers, goldsmiths/jewellers refine their gold close to their workshops in the bid to improve upon the quality of the raw gold they have. This practice creates a high environmental hazard when such refineries are made in the vicinity; poisonous gases are inhaled through the emission of toxics gases and disposal of corrosive substances from the use of nitric acid for the refining. This is

dangerous not only to the health of the user but also people living around since most of these workshops are cited close to residential areas which are heavily populated.

As a way to overcoming this problem The Chief Executive Officer of AsanSka Investments Ltd., producers and exporters of gold and diamond jewellery, Mr. Kwabena Asante-Asare contributing to discussions at the second annual Gold Statement exhibition in Accra in 2008 under the theme, "Branding Ghana in Gold through Jewellery Production for Tourism and Export: the Way Forward, "Suggested the establishment of an in-house gold refinery at a Gold Market village to refine gold for sale to local jewellers. This he explained, will ensure a reliable and regular supply of raw and clean gold for production and suggested the use of refined gold of 999.9 or 24kts to alloy to 18kts, 10kts 9kts etc instead of Ghana's standard 18kts finished products. Figure 5.2 gives a summary of the quantity of gold material that is used on weekly basis by the craftsmen. It was observed that majority of the craftsmen use an average of 23 grams of gold every week.

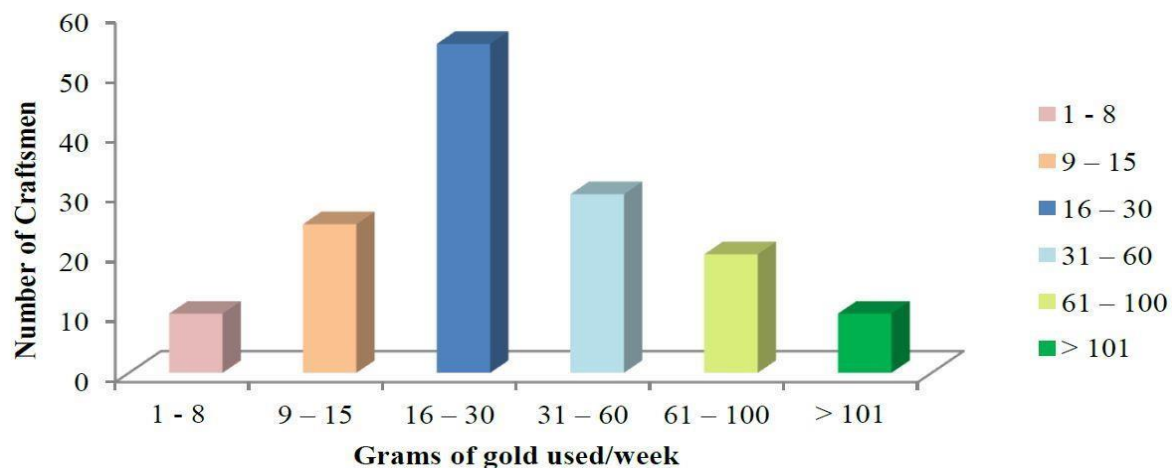


Figure 5.2. Raw Gold usage by craftsmen per week

All the craftsmen interviewed pointed out that they work in silver products as well. Similar to gold, silver is also acquired from gold dealers or P.M.M.C. But unlike gold most (60%) of the craftsmen

obtained their silver from P.M.M.C even though prices are slightly higher because they charge VAT on their materials. The craftsmen however, indicated that they prefer buying from P.M.M.C because they claimed their products are of high quality. Besides these direct sources of obtaining gold or silver raw material for jewellery works, the craftsmen also mentioned that they occasionally obtain materials from the sale of jewellery products such as old rings, necklaces, arm bands, brooches etc.

5.4. Trends in Tools and Equipment

In the past the goldsmiths array of tools were just a few items but was able to utilize such tools to make astonishing impact on the works they created. With the help of simple tools such as big and small hammers, bellows and blow pipe the goldsmith could work gold in the cold state in trinkets that are delicate. Today however, the craftsmen have added modern tools and equipment to boost the efficiency of the industry. Tools such as drawplates, rolling mill, both manual and electronic; drills, more organized systems of melting, machines for electroplating and gilding, polishing motors are now used by jewellers.

During the survey it was observed that majority of the workshops had some of these basic tools. The tools were however, used by between 2-6 master goldsmiths/jewellers and their apprentices working in the same workshop. And in areas where there are clusters of workshops some tools are moved around and craftsmen also move from one workshop to the other to use particular tool of need. This makes the usage of tools and equipment very demanding and stressful. In Asafo a suburb of Kumasi for instance, a distance of about 100-500 square meters houses about 20-30 master jewellers, with between 30-65 apprentices. The trend is that sharing, borrowing and lending are some trademarks of the industry. Indeed there is a level of brotherly love among all goldsmiths

and jewellers. It is very easy for one worker or apprentice to walk into another workshop to complete a work piece or use a particular tool or equipment. Nobody denies a colleague of such accessories.

It was observed during the field visits to some goldsmith's workshops, that much of the machinery being used by some of the craftsmen is outdated. The ageing machinery also raised concerns about operating efficiencies. When the goldsmiths were asked why they kept using that old machinery, the goldsmiths were quick to indicate that, new machinery is expensive and that both hardware and spares parts need to be imported. This raised the issue of lack of access to funding.

Over 80% of the respondents agreed that the availability of equipment such as the rolling mill and flexible shaft has really helped to facilitate effective and efficient production. The survey revealed that less than two-thirds of them cannot boast of basic tools needed for jewellery production. The survey further discovered that the usage of the flexible shaft is catching up with a number of jewellers. The flexible shaft machine is a versatile tool that has become a standard bench side friend to some jewellers. It is simple to operate and maintain. All the craftsmen interviewed attested to the magnificent role the flexible shaft machine plays in jewellery production, especially in the area of polishing very small, intricate and inner most articles as shown in plate 46. Out of the 85 workshops visited, 25 of them had the flexible shaft in operation. When respondents were asked why this shift from purely hand finishing and polishing to the usage of the flexible shaft, over 80% of them were quick to admit that it had really helped to facilitate the speed of work and also gave a good finishing. When there is the need to work on smaller objects such as pendants, rings, earrings and very intricate designs with inner filings the flexible shaft is very efficient, they concluded.



Plate 46. Flexible shaft for polishing intricate and interior parts of objects.

Source: Photographed by researcher

Another interesting trend discovered was the paradigm shift from the usage of the blow pipe to LPG usage. Of the 120 respondents, 120 have moved from the blowpipe and oil lamp for soldering and melting to LPG. 25 of the jewellers/goldsmith interviewed use the blow pipe and oil lamp and LPG and the remaining 5 use only the blowpipe and oil lamp. The interesting observation made by the researcher is that the remaining 5 who still use only the blowpipe and oil lamp are old men who are above 60 years of age. Asked why they continue to using it, they responded that they are more comfortable with using the blowpipe and oil lamp. The researcher also observed that the real reason to their continue usage of the blowpipe and oil lamp is the nature of work they do. Four out of these five craftsmen who only use the blowpipe and oil lamp mostly do wire work like filigree and therefore to them regulation of the temperature of heat is easier using the blowpipe and oil lamp. There is also the blowpipe with bellows where a longer tube is connected to toot bellow. A few craftsmen also used the micro torch for soldering as shown in plate 47.



Plate 47. Micro torch for soldering

Source: Photographed by researcher

A new trend observed in tools and equipment is the usage of LPG and oxygen for melting. This is very efficient and can melt quantities of metals depending on the tip of the torch being used. The usage of this type of equipment is a bit capital intensive, therefore not many craftsmen are interested in investing in this area, however, a few craftsmen interviewed attested to its efficiency in terms of melting large quantities of material. Apart from melting large quantities of metal it is also ideal for soldering complex, intricate and delicate jewellery pieces depending on the skills of the user and also the tip of the torch.



Plate 48. LPG gas for soldering

Source: Photographed by researcher

5.5. Techniques of Production

All the workshops visited used almost the same basic technique in production. The methods included the following:

5.5.1. Filigree technique

Although gold filigree is an old goldsmithing technique that has been used since earliest to create jewellery and ornamentation. Its use in the Ghanaian jewellery industry has not been extensive. Respondent in the industry were asked to comment on the application of this very technique and about 45 percent of respondent affirm they can apply this technique in making a number of jewellery items such as ear rings, pendant, finger rings and even in chain making as shown in plate 49. A number of craftsmen are also not very conversant with this technique. When the researcher enquired why the craftsmen will not apply this technique, and had left it to only a few goldsmith, they were quick to answer that filigree making is time consuming and also one needs a very high carat gold to work with. Other techniques practiced by craftsmen are chasing and repoussé, casting, forging and piercing.



Plate 49. Filigree items in three dimensional forms

Source: Photographed by researcher

5.6. Design trends

Jewellery design, today, exploits the prevailing technical abilities within the craft, so that art and the practical approach are inextricably combined to produce an adornment that is a visual delight. Design trend is the line of direction, movement or orientation that jewellery has taken since the traditional times. The trends in jewellery designing have been subjected to change with the changing times. The jewellery designs and styles keep on changing with the change in lifestyle and tastes of people.

Before independence Goldsmiths predominantly cast their gold jewellery following the traditional system, which involved casting from lost-wax moulds or cuttlefish bones. This gave the gold jewellery a uniform heavy two dimensional characteristic. A new trend has however, evolved. Flat sheets of metal are pasted with graphic designs often *adinkra* symbols. The sheet is pierced or cut out and soldered.

During the survey it was observed that even though goldsmiths are still drawing from *adinkra* symbols, they are now experimenting with three dimensional effects as shown in plate 50. The standard of craftsmanship is quite exceptional, with the emphasis on precision. It was also observed during this study that piercing, doming, modelling, folding and wire work are at play where *adinkra* symbols are now adapted, combined, twisted and created into various forms of jewellery as shown in plate 49.



Plate 50. An Adinkra symbol, Gye Nyame earring. Source:

Photographed by researcher

Earlier these aphorisms and *adinkra* symbols were produced as original designs with little or no innovation. When asked why this shift or change in production, the craftsmen indicated that this was being done to suit international market and specifications of clients.

Long before independence the traditional kings in Asante had the unique role as chief custodian of culture and heavily patronized gold jewellery. Today however, Jewellery has become a vital element in everyone's life. Men, women and even children love to wear jewellery articles all the time. Wearing jewellery is the demand of modern fashion. A few years back jewellery was used only on special occasions like festivals, weddings, engagements and other formal ceremonies and it was associated with the brides and married girls only. But nowadays it is worn casually as well as formally and everyone likes to wear beautiful and elegant jewellery items. People nowadays

have a passion for jewellery which in part accounts for the growth of the industry in Ghana in recent years and has also amplified the export and import of jewellery.

Asked to comment on customers preferences to designs, majority of the craftsmen indicated that customers are very demanding about their jewellery and want to have specific or customized design. They further indicated that customers also like to have the designs they dream of and they take those designs of their own choice to the craftsmen and ask for similar designs to be made for them. Some of the designs encountered in some of the craftsmen's shop include *adinkra* symbols, personal names of celebrities, designer's brand names and others.

5.6.1. Designs in Rings

Rings are a favourite form of jewellery and a treasured possession. Today, rings are worn not only to make a fashion statement and flaunt individual tastes, but also worn as an adornment for expression of love or a gift for a special occasion or for protection. Rings have been used over the years from birth, puberty, adulthood and death. At birth rings are still given to new born babies by grandparents as a symbolic gift for babies to grow to become like them. Children named after certain prominent individuals within Asante such as the extended family are given rings as a sign of appreciation and honour accorded them. In the case of children named after people outside the family, such grandparents also provide rings for the new born babies, they also do this to show their appreciation. Fathers who give rings to children who have their resemblance are also compelled to make rings for their sons and daughters. In such "baby rings", the design is of utmost importance to the manufacturer.

There are two main categories of designs for such rings; male and female. The female designs are mostly of oval or round top shape with either the initials or name of the child or mostly the love

symbols as the main design on top. The male designs are mostly square shaped with initials, name of the child or the love symbol at the top of the ring are shown in plate 51. These simple shapes signify the African concept of beauty where females are considered to be round or oval shaped whereas males are masculine and square and rectangular shaped.

There have been several innovations in ring design. During the early part, the designs were delicate and imaginative, borrowing from culture and the natural world. Most rings were besotted with designs in gold representing objects such as birds, bees, butterflies and dragon flies.



Plate 51. Baby rings and bangle
Source: Photographed by researcher

5.6.2. Designs in Necklaces/Chains

Chains are used decoratively as necklaces, bracelets, belts, hair ornaments or fillets. Functionally, they can support other ornaments, earrings, watches, medals, keys, glasses and in endless ways be used as devices for connecting parts of an ornament. Symbolically, the chain alone evokes an image of bondage. (This may mean willing bondage to a loved one). This can serve as a link with ancestors in the past or in abstract form, a symbol of eternity. In its basic form, a chain consists of

similarly shaped units that intercept or pass through one or more preceding units. Each unit is normally able to move freely within the last so that the total chain length becomes flexible. Repetition of units, flexibility and endlessness are some ideas inherent in the concept of chains. However not all chains follow this concept of repetition and flexibility. Therefore any construction having these qualities may rightfully be designated as a form of chain. Links and loops are also basic forms of chains and are extensively used by all jewellers. Ordinarily it is made of wire of special shape or form. Shapes such as oval, flat, round, square, twisted or patterned are used in chain making. It was realized that these shapes are extensively being used unlike in the past when the craftsman had access to only a few forms of wire to work with.

Linking and inter-working are the basic division when it comes to chain grouping so far as their construction is concerned. Linked chains have both soldered and unsoldered parts. However in general, most chains are soldered. There are different kinds of linked chains. Examples are the simple link chains, in which units are under formed and also constant throughout. Interlinked is a series in which one link intercepts the other.

80% of respondents assert to the making of chain with wire in gold and silver. However, in the case of heavy chain making, client prefers to order for silver instead of gold because of the high price of gold. Heavy object of chains made in gold will drain their pockets. Also, quite a number of consumers are drifting to the use silver chains since that is assumed to be invoke. The hip life and hip pop artist mostly use this heavy silver object and this is catching up with most jewellery users especially the youth.

5.6.3. Choice of Designs


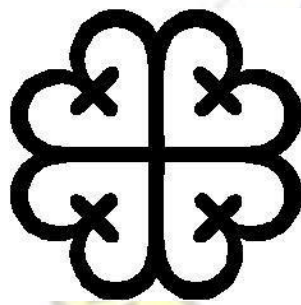

When the craftsmen were asked to give their comments on their choice of designs for production, 45% indicated that clients had most often seen jewellery made for a friend or someone and would want same or with slight changes. Thirty five percent (35%) made their choice (selection) from catalogues and 20 % leave their choice of design to the jeweller. The craftsmen added that the use of particular designs these days are more a choice of the customer than the craftsman. This, the craftsmen think has led to over production of some designs or symbols.

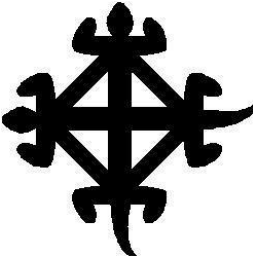
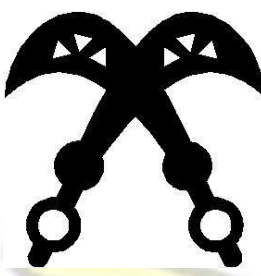

One outstanding observation of this study is that in the past not everybody was privileged to wear gold ornaments of particular design or symbol especially those reserved for traditional rulers. Presently however, there seems to be no such restrictions. This may be attributed to several factors including education, trade liberalization, globalization and the current political dispensation which gives people the right of choice and makes it difficult to control production, designing and sale of products. This trend of affairs may have both negative and positive implications on the jewellery industry. While in one breath it gives every Ghanaian the right to any jewellery and also enhances the export drive in jewellery, it on the other hand offsets the preservation objective of the Asante culture. Thus some particular types of jewellery that was once considered a valuable heritage and formed a tangible part of Asante's historical culture may lose its value. Also items meant for both domestic and international tourism would all lose their value.

5.7. Influence of Foreign Culture and Design Trends

Seventy five percent (75%) of jewellers/goldsmiths interviewed admitted utilizing the *adinkra* symbols than all the other designs. It was interesting to know that respondents were very familiar with some known *adinkra* symbols such as *gye nyame* the most widely used adinkra symbol in Asante society (Table 5.1).

Table 5.1. Adinkra Symbols Used by Craftsmen

symbol	Name	Meaning
	GYE NYAME : A symbol of supremacy	<i>Gye Nyame</i> means (except God). This symbol reflects the supremacy of God.
	NYAME DUA : A symbol of worship	<i>Nyame</i> refers to God who is the almighty and the supreme being. <i>Dua</i> also refers to “tree” which signifies a place of worship.
	AKOMA: A symbol of patient	Meaning take heart or have heart.

	<p>FUNTUNFUNEFU</p> <p>DENKYEMFUNEFU :</p> <p>A symbol of unity in diversity</p>	<p>This reptile is joined together and share common stomach yet they fight over food.</p>
	<p>AKOFENA:</p> <p>A symbol of authority, meaning war sword</p>	<p>It symbolizes gallantry and loyalty and warrior who protect a particular chief.</p>
	<p>GYAU ATI KO:</p> <p>A symbol of valour</p>	<p>Meaning <i>Gyau's</i> hind head <i>Gyau</i> is the name of a former brave and self-confident Kumasi chief '<i>Atiko</i>' is the back of his head.</p>

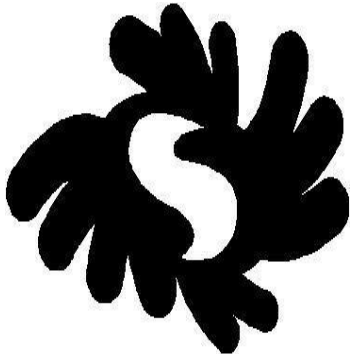
	BIN NKA BI / OBI NNKA OBI A Symbol of harmony.	One should avoid strive for peaceful co-existence to prevail.
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Plate 52. Personal Names

Source: Photographed by researcher

Another trend is the usage of brand names and their logos such as Calvin Klein, Channel, Louis Vuitton, plate 53, Giorgio Armani, Polo Raphael and others and their logos. Other known designs encountered during the field visits were the usage of the cross; the crucifix was also widely used especially in the area of silver production where both light and heavy weight items are mostly produced in pendants, earrings and on rings.



Plate 53a. Louis Vuitton



Plate 53b. Channel

These are brand names used in jewellery making

Source: Photographed by researcher

Several reasons could account for the use of particular jewellery symbols and designs. This is because symbols seek to convey messages. The message may lay emphasis on power wealth or fashion. Some are also social or religious in content, conveying a moral message to society. Although a significant number of the general public interviewed particularly the males were familiar with a great number of jewellery symbols and designs, most of them did not know the meanings to these symbols.

The symbol which about 80% of the sampled individuals knew about was the "*Gye Nyame*." It was interesting to know that about 80-85 % of respondent who are not jewellers/goldsmith referred to the *Adinkra* symbols as *Gye Nyame*. To them all symbols are *Gye Nyame* and this reason may account for the wide usage of this particular symbol in all areas of production in art objects. When the *Adinkra* symbols were shown to the general public and the jewellery consuming categories of

respondents, about 80% of them referred to the symbol as *Gye Nyame* symbol. Again when they were asked to mention names of specific symbols they were also quick to ascribe the same *Gye Nyame* to most of the *Adinkra* symbol.

The number of younger consumers of jewellery products has increased over the past few years. The youth of today are fashion-conscious and putting a great emphasis on the design element. In many cases, they are influenced by the trends in clothing fashion, mainly through magazines, movies and internet. In terms of product trends, jewellery designs have been increasingly influenced by clothing fashion. Consumers, especially women, are opting for more accessories like jewellery to express their sense of style. More women are now adding jewellery accessories as a way of their dressing. Demand for male jewellery is on a rise, as men are becoming more fashion-conscious. The concept that "jewellery is feminine" is fading. Men have realized that jewellery can be masculine. They have begun to acknowledge that fine jewellery is essential to a complete look, and has therefore become an integrated part of men's dressing. They may buy bracelets, rings and pendant necklaces to suit their looks. They may also wear jewellery such as cufflinks and tie-pins to build up a smart look. Yet, articles of men jewellery are still quite limited, and thus its market may be of a huge potential.

A variety of finished jewellery products, including chain, bracelet, bangles, rings, earrings and pendants are produced. Interviews with jewellery manufacturers give a good indication of the products manufactured by the jewellery sector, with rings being by far the largest product category (Fig 5.3.)

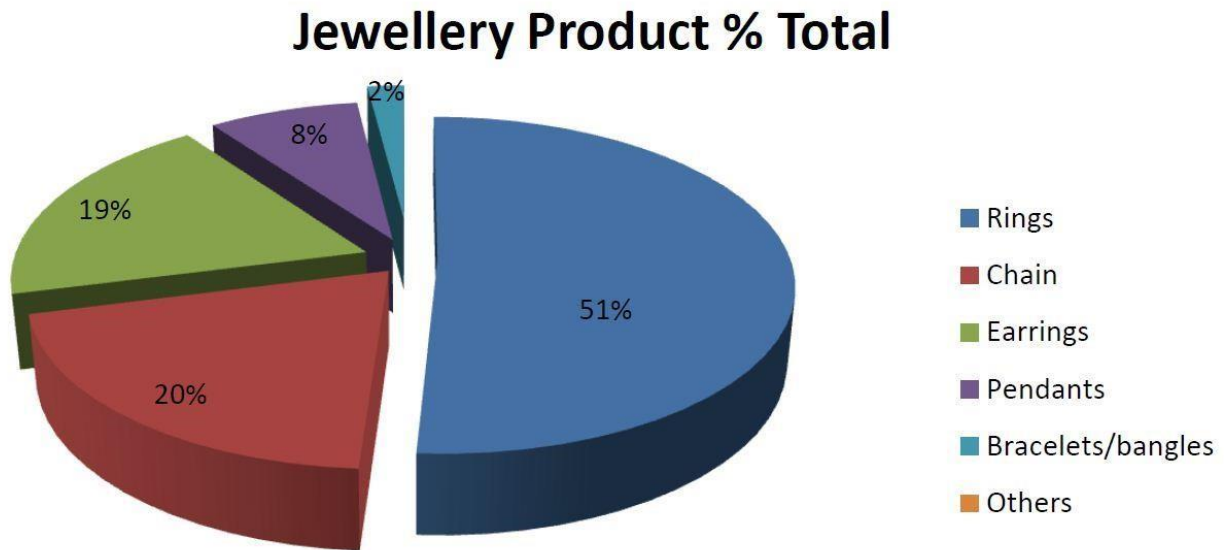


Figure 5.3. Category of jewellery products manufactured by craftsmen.

Commenting on the symbols trend, the craftsmen were of the view that technological advancement and the use of modern equipment have contributed immensely to the fine tuning of process designs and symbols. While this adds some splendor to the finished product and also more conforming to international standards, they were of the view that it also tends to promote the loss of important features. Thus the resulting symbol may fail to convey or carry the same message that the original symbol carries.

5.8. Customer Attraction

Asked to comment on how they get or increase their .customer base, about 40% of the jewellers/goldsmith indicated that they get their customers through previous works they have made that is a friend may introduce another friend and through that they add on more customers.

Another 42% said it is through the display of their items in their showrooms and the remaining 28% also indicated that client just walk into their shops and make orders. The craftsmen asserted however, that the drastic increase in the prices of gold in recent years has not proved to be much beneficial for the gold jewellery industry as the customers are switching towards artificial and imitation jewellery. They explained that people who used to buy and wear gold jewellery now cannot afford to have gold articles due to their high prices. Imitated jewellery is easily available from the street-side vendors and shops.

Craftsmen also added to the fact that, notwithstanding all these obstacles in gold price hikes which has made finished gold product very expensive, still a good number of clients who visit the imitation jewellery shops will still come back to order for original good carat gold items and would testify to the fact that such imitation items needs to be bought or changed every now and then which makes it even more expensive. It is therefore advisable to buy gold and keep it forever.

5.9. Service Delivery

The craftsmen were asked to give their views on their service delivery and 45% of them indicated that they are able to meet their deadlines. Thirty percent (30%) said they can deliver on time most of the times, while 25% are not always able to deliver on time. This the craftsmen considered as being some of the hazards of the occupation.

5.10. Quality of Products

It is generally perceived in Ghana that imported manufactured items are of a higher quality than those locally made. It was therefore no surprise that majority of the general public interviewed attested to this assertion by indicating that imported jewellery products from for example Italy, China, Thailand and Turkey found in the Ghanaian market were better in terms of quality and finish than those produced by Ghanaian Jewellers. This is an area of concern and a threat to local manufacturing capacity. The fact that there are no standard systems of certifying the quality of gold articles made, it is very difficult for consumers to ascertain, the actual quality of an article purchased. Retailers of gold jewellery products on the other hand expressed concern about the fact that the local craftsmen were way behind in the latest developments and fabricating techniques, such as various methods of gem-setting and the manufacture of hollow jewellery.

The craftsmen on the other hand felt that jewellery products from Far Eastern countries such as China were not yet at par with locally produced items with respect to quality and durability. They agreed however, to the fact that in the mass market, especially where lightweight jewellery items are concerned, the decisive factor is price rather than quality. It is therefore, difficult for local jewellery manufacturers to compete internationally.

5.11. Training and apprenticeship

In growing any industry the development of human capacity is fundamental in order to provide skills into the industry and bring new enthusiasm in an ever changing environment. The opportunities of jewellery exist in recapturing local market share and accessing global markets.

This coupled with the need to strive towards developing competitive edges in all aspects of technological, bench and design skill, marketing the jewellery industry can then think about competing against the rest of the world.

Historical beginnings of human capacity development in the jewellery industry in Asante had it that through trade and in matters of technology the Mande of Cote D'Ivoire had a considerable influence on the Akan goldsmith, and as the industry grew craftsmen saw the need to train more people to boost up production and the growing demand in the industry.

Close family members particularly sons and nephews were admitted into the trade and trained as apprentices. The young apprentices admitted into the trade did not pay fees. It was purely a family business and outsiders were not considered. Over the years, that is after independence the industry expanded and there was the need to take on non-family members as apprentices to boost up production.

Before independence the apprenticeship system followed a procedure which started with a form of initiation. This begins with the father or guardian of the apprentice who went to see the master craftsman with the hope of becoming an apprentice. A token fee in the form of hen, a bottle of gin and an unspecified amount of money is paid to the master. The initiation begins when master craftsman slaughter a hen and drops the blood unto the apprentice; some of the blood is also dropped onto the anvil and the hearth. The gin is also poured into a crucible and libation poured as he drops the gin into the fire or hearth. Incantations are made to remind the inductee things to know as he begins to learn the trade. He is made to understand that he is coming to work with nobles, kings and the higher class in the society. He should therefore know how to keep secrets. People do business to profit not to make loses, so whatever he sees or witness should remain in his head. He must be truthful, obedient and respectable. As these words are pronounced by the master craftsman,

drops of the gin is poured into the fire as he recite the incantation and ends by saying that if the inductee fails to adhere to the rules and regulation governing the trade, may he know no peace as the flame of the fire consumes him.

The second phase of the initiation begins with the learner seated to the anvil, he is given gold, silver, copper or brass and taught how to hammer the material on the anvil. At this stage, libation is poured again and blessings are pronounced onto the inductee as he begin to learn the trade and be fruitful, whatever he touches be it copper, silver or gold be turned into gold.

The master then sprinkle some gin from his mouth unto the apprentice's face and end this phase.

The next part of acceptance of apprenticeship is merry-making. The apprentice is given some money to prepare sumptuous meal with the hen and all apprentices are invited to partake of it. Apprentices lived with their masters and their families; they serve them in their homes as they learn the trade. Training periods depend on the apprentice themselves, how fast they can learn, how humble they can also be to allow the masters to teach them more techniques. But in all, learners could take five to seven years before they become masters themselves. After learning the trade most apprentices continue to stay with their masters and work on their own, others leave to settle on their own and take on other apprentices.

Around the middle of the 1960, another dimension of human capacity building was introduced into the trade. With the introduction of the Metal Product Design Department of the then Kumasi College of Technology formal trainees into the industry was established. Ever since, there has been an upward increase of people in the jewellery industry. Every year, the Kwame Nkrumah University of Science and Technology turn out a number of students who graduate from the

Metal Product Design Section where jewellery is taught as a programme. This numbers keep increasing with each passing year. The previously male dominated trade is now open to everyone of both sexes. A few second cycle institutions such as La-bone Senior High, Achimota Senior High, Mawuli Senior High, and Prempeh Senior High study jewellery as a taught subject and at the tertiary level, other than KNUST where jewellery has existed for a period of over 40 years as a programme of course of study, Cape Coast University and the Wa Polytechnic have also introduced jewellery as a course to their existing programmes. The Weija School of Technology has also produced many jewellers within the few years that it was established. One can therefore infer from the ongoing analysis that the human capacity building is growing.

It was observed during the survey that the apprenticeship system continues to provide effective informal training of craftsmen for the jewellery trade. About 60 % of the craftsmen visited had an average of two apprentices while the rest had between 3 to 6 apprentices each who worked with the master craftsman. To be enrolled as an apprentice these days is simple and the trend cuts across all the section of craftsmen interviewed. The parents or guardians of the prospective apprentice would agree with a master craftsman the conditions for an apprenticeship which would bind the minor for a period of time usually, 2-3 years. They would pay a premium to the craftsman and the contract would be recorded or agreed upon. The premium varied from place to place but basically consisted of a drink in the form of money.

Most of their training is done while working for the master craftsman who helps the apprentices learn their trade, in exchange for their continuing labour for an agreed period of time after they become skillful. A master craftsman was entitled to employ as many young people as he can afford. The apprentice serves as an inexpensive form of labour in exchange for providing food, and informal training in the craft. Most of the apprentices were males (96%), but female apprentices

were also found (4%). Eighty eight percent (88%) of the apprentices interviewed aspired to becoming master craftsmen themselves on completion of their contract, while the remaining (12%) were not certain to acquiring their own workshop.

Alongside the informal apprentices' form of training is the formal training system that was introduced into tertiary education in the 1960s.

Discussions to solicit the views of the master craftsmen revealed a mismatch between the training provided by the institutions and the needs of jewellery manufacturers when they employ graduates. Although students continue to graduate every year from the KNUST and other tertiary institutions after completing jewellery courses, a lack of the skills required by jewellery manufacturers was cited by the fabricating sector as a major concern. In parallel, was the manufacturers' contention that existing training programmes are turning out graduates insufficiently schooled to be able to take their place at a jewellery bench without considerable additional training and tuition. The training institutions counter that jewellery manufacturers have unrealistically high expectations of graduates. They suggested that the real reason behind the reluctance on the part of jewellery manufacturers to acknowledge the training courses was a financial one in that, by not acknowledging the qualifications, the jewellers were not obliged to pay graduates appropriate salaries. While many jewellery manufacturers denied this, others noted that there was an element of truth in the concern raised. The institutions also argue that the manufacturers fail to consider the structure of the jewellery course content which is not structured to address industry requirements.

5.12. Start-Up Capital.

It was gathered from the researcher's interaction with the craftsmen that one of the major obstacles facing the development of the industry is funding. All the craftsmen who were interviewed indicated that they have only two options to expand their business: they may either fund their businesses using their own capital or borrow from commercial banks. The former is usually not an option - a problem not unique to the gold jewellery industry but experienced by small businesses in general. For the latter the craftsmen are disadvantaged on a number of issues.

1. They indicated that interest rates are as high as 22 - 26 % on loans.
2. The high cost of start-up: Discussions with the craftsmen revealed that even a small workshop, for example, with two jewellery benches, a small furnace and equipped with basic tools and equipment, such as facilities for plating, can cost up to GH¢25,000. Chain-making machines, imported from Italy, cost about GH¢15,000 each.
3. The escalating price of gold as a raw material: The often volatile behaviour of the price of gold is a disadvantage to the jewellery fabricator more than other manufacturing sectors.

The strength of the Cedi against the Dollar, British Pound and Euro, was cited by the craftsmen not only as a barrier to the development of the industry but also a threat to market entry and survival of the industry. With the Cedi/Dollar exchange rate rising all the time, the craftsmen reported that imported products could cost less than the manufacturing cost incurred by local manufacturers for the same or very similar product. This is so even after taking into account import duty into the country and a clearance fee. The craftsmen also noted that an unknown volume of foreign-manufactured gold jewellery is being smuggled into the country to avoid import duties and this has served to further disadvantage the local manufacturers, since such goods are sold cheaply.

5.13. Traditional and Cultural Trends of Jewellery

A total of 30 traditional rulers were interviewed. 18 of them were chiefs, twelve of them comprised queen mothers and the rest were family heads. Their ages ranged between 35 and 73 years. Four of them were University graduates, 12 secondly school graduates and the rest first cycle education graduates. The traditional rulers interviewed had ruled for varied number of years. Two of them had been chiefs for over 30 years. The queen mothers had ruled for between 3 and 18 years respectively, while the family heads have been heads for between 5 and 25 years. The chiefs and queen mothers interviewed said they had their family goldsmiths who produced their jewellery. Notwithstanding that, they bought other jewellery products from other sources. All the traditional rulers interviewed affirmed that they inherited some jewellery products. Asked whether they wear special jewellery symbols, some of them answered that they wear the symbol of their family or clan. This special jewellery is used on specific occasions such as during durbars and festivals.

They claimed that the regalia were proverbial and as such different from those of other traditional rules or tribes. Interestingly all the traditional rulers could mention and give the significance of so many jewellery symbols. Among them were '*oheneaniwa*' (symbol of vigilance and wariness), '*Osranensoromma*' (symbol of faithfulness and fondness), '*fihankra*' (symbol of security and safety), '*sunsum*' (symbol of spirituality) etc. They further explained that some were restricted to selected few because of their social status. To be able to understand the meaning of the symbols, one has to undergo cultural learning said the traditional rulers. Commenting on the trend of the designs, the traditional rulers said that even though traditional designs such as '*adinkra*' are still followed, in their view the quality of products has degenerated. They claimed the gold fabric is

often poor and heavily alloyed with copper. They observed that some jewellery are merely brass, casting plated in gold. They concluded by saying that present day jewellery lacks the delicacy of former times. Judging from these discussions, the writer would not be far from right to say that the socio-political and cultural roles of jewellery in Asante still survive to some extent today despite years of competition with foreign influence, education, religion and globalization. There is no doubt that the type of jewellery traditional rulers wear during occasions such as enstoolments, durbars and festivals are significant today as they were before independence.



CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1. Summary

The research work was directed towards the following specific objectives:

1. to trace the history and development of the gold jewellery industry in Ghana since independence.
2. to describe the significant changes that have occurred to the Asante gold jewellery in particular as a means of promoting national development.
3. to discuss the effect of foreign cultures on the growth of the Asante gold jewellery industry.

The first objective was addressed through a review of related literature as contained in chapter two, to identify information that was related to the topic. However, since the reference of the Thesis is Asante, chapter four was dedicated to the historical development of jewellery in Asante to supplement addressing objective one. Objectives two and three were addressed through the data gathered from the field. Various methods were used to address these objectives. The main research methods employed was descriptive approach. Data collection were concentrated to the Ashanti Region, mainly in Kumasi, Mampong, Offinso Ejisu, Konongo and Bekwai. In each town jewellery workshops and traditional homes were visited. Cross sections of the population including the youth were also interviewed. Gender balance was always taken into consideration during data collection. Primary data were obtained from interviews and attendance of some festive occasions, such as *Akwasidae*. Secondary data were also derived from documentary sources both published and unpublished.

6.2. Principal / Major Findings of research as contribution to knowledge

- A comprehensive review of the literature was done to find out if there had been any study on the topic. Quite a number of related studies were found in the process. There was however, no study which had been done earlier with a subject the same as this one. This therefore means that this study and its results are a new contribution to knowledge in general.

- There are related studies in which some aspects of the jewellery industry are studied separately. These studies have mostly looked at the socio - cultural and economic role of jewellery and not delved deeply into the development and trend of the industry since independence. This work therefore, having studied the developmental trend of the industry since independence, seems to be the first attempt to providing information on the performance trend of the industry with reference to the Asantes.
- Another contribution to knowledge is that the study have observed that globalization and foreign culture have influenced the significance of jewellery in Asante to some extent. Even though the traditional rulers share the view that the type of jewellery worn by traditional rulers during such occasions as enstoolments, durbars and festivals continue to exhibit the socio- political, cultural and economic significance today as they did before independence
- Another aspect of this study's contribution to knowledge is that it has revealed that there is a mismatch between the training provided by the formal educational institutions and the needs of jewellery manufacturers who employ the graduates. Although students continue to graduate every year from KNUST and other tertiary institutions after completing jewellery courses, their lack of the skills required by jewellery manufacturers was cited by the fabricating sector as a major concern.
- Furthermore, this study has shown that the export trade in gold jewellery among jewellers in Asante is at its infancy, despite the long history of the industry, the vast deposit of gold and the seemingly rich and prolific culture and tradition of jewellery creation and production.

This study also unearthed some information that adds to existing knowledge that:

- The myths and beliefs that surrounded the jewellery industry as a male dominated profession before independence has changed. More and more women are now involved. This is an important cultural change which is of great significance to nation building
- Acquisition of raw gold by craftsmen continues to be a major problem to the Ghanaian jewellery industry. Jewellers/Goldsmiths always make use with whatever is available. This has led to the problem of most craftsmen manufacturing under carating products while a few also do over carating.
- One of the major obstacles facing the development of the industry is funding. There are only two options for the craftsmen to expand their business: they may either fund their businesses using their own capital or borrow from commercial banks. The former is usually not an option and for the latter the craftsmen are disadvantaged because interest ranged between 22 - 26 % on loans at the time of the research.
- A new trend of jewellery design has evolved. There are new innovations in the production of old aphorisms and symbols that has been influenced by foreign culture. This is reflected in the usage of brand names and their logos as well as the initials of customers' names in making jewellery.
- Before independence not everybody was privileged to wear gold ornaments of particular design or symbol especially those reserved for traditional rulers. Presently however, there seems to be no such restrictions. This may be attributed to several factors including education, trade liberalization, globalization and the current political dispensation which gives people the right of choice and makes it difficult to control production, designing and

sale of products. This trend of affairs may have both negative and positive implications on the jewellery industry. While in one breath it gives every Ghanaian the right to any jewellery and also enhances the export drive in jewellery, it on the other hand offsets the preservation objective of the Asante culture. Thus some particular types of jewellery that were once considered a valuable heritage and formed a tangible part of Asante historical culture may lose its value. Also items meant for both domestic and international tourism would all lose their value.

6.3 Conclusions

This thesis has explored the developmental trend of the gold jewellery industry in Ghana since independence with particular reference to the Asante. The findings obtained have answered the objectives and the research questions that were set up. Through the analysis of the data obtained the performance trend of the industry has been noted and challenges facing the industry identified. The study observed among others that the majority of the gold jewellery industry found within the study area was established between 1960 and 2000. Although it was a taboo in the tradition Asante society before independence for women to practice goldsmithing, this trend has changed. The gold jewellery industry in Asante is largely made up of micro enterprises, consisting of the ‘one-man’ self-employed type, operating in the craft mode, using outmoded equipment. Many craftsmen lack the requisite technical skills and are unable to keep abreast with modern trends. Others cannot work out the required alloy components accurately and are therefore unable to correctly prepare the various gold alloys and their solders. The supply of gold to the sector is erratic and informal. A major portion of the required tools and equipment is imported and expensive. The aggregate equipment level of the sector is thus low which hampers efficiency and effectiveness in product

delivery. An important factor that affects the jewellery industry apart from the high cost of gold and its erratic supply is the absence of quality raw material inputs such as refined gold and the other additive metals that go into the preparation of the various gold alloys.

Modern technology in the jewellery industry has remained largely untapped in this country. Over the years the craftsmen have evolved unique handcrafting techniques for executing exquisitely designed gold ornaments. While traditional know-how is indispensable to the sector, modern trends in jewellery production have completely revolutionized jewellery making especially for the mass market, to such an extent that it is no more globally competitive to operate solely in the craft mode as obtains in the country.

Jewellery design is of a major importance in the marketing of jewellery. The consumer's choice of a particular piece of gold jewellery over others may be based solely on design and aesthetic appeal and nothing else, all things being equal. The importance of design especially in a competitive global environment cannot therefore be over-emphasized. Ghana has a unique gold jewellery heritage and identity in terms of designs and traditional techniques. There is the need to transform some of these uniquely Ghanaian handcrafted jewellery forms into designs that can lend themselves to mass production. Ghana's *Adinkra* symbols, stools, umbrella tops and linguist staff finials, are all elements that can be adapted for gold jewellery design and production.

Design itself has been revolutionized through the advent of Computer Aided Design and Manufacturing which makes the design activity in jewellery production more efficient. Jewellery design software now make it possible to interface design with manufacturing via rapid prototyping of master models/patterns or one-of-a-kind pieces. The Ghanaian gold jewellery sector is yet to take full advantage of technology in this regard.

Technology and research-led innovation are key factors in the long-term future of an industry, where they are needed in both design and manufacturing (Cross, 2002). While use of better designs can enable jewellers to differentiate in the market and attract higher premiums, technology can enhance productivity and the quality (finish) of jewellery produced. Innovations in jewellery design are needed in order to meet the changing needs and tastes of customers (Klapwijk et al. 2004). While the industry is adept at traditional designs, there is a lack of designed innovations and a gap in adoption and development of modern designs, particularly in the large fragmented sector. This could be a crucial limiting factor in meeting the demands of the export market. A design focus is also becoming important in the domestic market, with changing consumer preferences and wider awareness and acceptance of western designs (Klapwijk, et al, 2003; 2004).

The consumption demand for jewellery is fast evolving, and there is a growing demand for new designs and higher value addition. These changing customer requirements are increasingly creating a need for a more highly skilled workforce. However, there is a growing gap in skill availability as the skill development process in the fragmented part of the industry is primarily achieved through an apprenticeship model and on-the-job training. This leads to longer training time and gaps in the availability of modern jewellery manufacturing and polishing skills. Sustainable growth for any industry requires an on-going inflow of new talents. Unfortunately, the gold jewellery industry faces difficulties in attracting younger workers. There are several reasons for this, including inadequate working conditions for manufacturing, low salaries, and an overall small-scale and fragmented image of the industry. Inadequate working conditions and limited compliance of health and safety standards in the manufacturing industry have also led to low interest in the industry (Fening, 2001). The working conditions, particularly for jewellery manufacture, have not kept pace with advancements. Most workshops are small in size, with artisans working without

fans (so as to prevent loss of gold). These factors make it challenging to attract new, young talent to the industry (Fening, 2001).

6.4 Recommendations

This research work was set up to study the developmental trend of gold jewellery industry in Ghana and Asante in particular, since independence. The following recommendations are therefore put forth for further action, to ensure that the optimum potential of the industry in contributing to the socio-cultural and economic development of Asante and Ghana for that matter is realized.

- The cost of producing the same piece of gold jewellery item in Ghana is far higher than that imported from the far East. Thus the industry lacks competitive advantage in the export market. The industry also lacks large-scale production capacity to enable it to export to major markets such as the United States. Trade liberalization of the Ghanaian economy has also led to importation of various kinds of low standard jewellery products that are sold cheaper in the open market and therefore compete with the local products.
- In order to overcome these problems it is imperative that the industry cooperate and work collectively, in order to achieve scale economies that it otherwise lacks. Joint arrangements will overcome the problems of producing for large orders, and also facilitate producers in meeting the marketing costs associated with obtaining export orders.
- One of the ways of gaining entry into export markets is by attending trade shows. The Government of Ghana has support measures to assist with the costs of participating in trade shows, but these facilities do not extend to many of the small-scale jewellers who claim

that the support incentives are still financially inadequate to enable them to attend. Government may need to augment the resources available in the scheme to facilitate greater attendance at trade shows.

- The gold jewellery industry should also exploit the advantage of the cultural and historical link with Africans in the Diaspora who will serve as business people for the exportation of Ghanaian products.
- The jewellers have since independence lamented on the problem of obtaining raw gold in its refined form. To alleviate the problem involving raw material acquisition, schemes should be designed by government agencies and other parastatals to assist the jewellers.
- Financing is cited by the industry as a critical factor hampering its development. The Cedi/dollar exchange rate, value added tax (V A T) and the high interest rates are all factors which contribute towards the high price of gold and other operational materials in the country. Financial related problems should be solved by encouraging joint ventures among the jewellers.

The Government must also provide incentives in the form of tax relieves.

- The country's light engineering companies and ITTU's should be given incentives to explore the feasibility of manufacturing the important essential jewellery making equipment such as rolling mills, soldering torches, polishing machines and bench tools locally to make them affordable and readily available. In addition, industry associations and academia will also have an important role to play. Industry bodies will need to participate in driving consultations for policy making and highlighting issues and requirements of all stakeholders. Universities and other research institutions need to be an integral part of initiatives focused on innovation and capability building.

- Jewellers and goldsmiths should form a strong national association to promote the wellbeing and progress of the industry. They should be self-policing so that recalcitrant bad nuts in their fold are sanctioned to protect the image and reputation of the profession. Such well-organized professional association can set up apprenticeship training centres where JSS and SSS gradautes may be trained in various facets of jewellery production. Refresher workshops and other activities can be mounted periodically through the sponsorship of the association and other stakeholders. Jewellers and goldsmiths can also form cooperatives and set up production enclaves where resources can be pooled to acquire equipment, tools and material inputs.

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APPENDIX 1

QUESTIONNAIRE FOR TRADITIONAL RULERS / ELDERS

Topic: Post Independence Development of Gold Jewellery Industry in Ghana: A Case Study of Asantes

Name (optional).....

Sex:

Male

☐

Female

☐

Age 18 – 35

☐

40 – 60

☐

Above

☐

Educational Background

None

☐

Middle / JSS

☐

SSS

☐

Tertiary

☐

Others (specify)

1. For how long have you been a traditional ruler / elder?

2. How did you become a ruler?

3. Who produce your jewellery / Regalia?

4. Is it by inheritance?

Yes ☐ No

5. If yes, do you add on to the existing ones?

6. How different are your jewellery from other traditional rulers?

7. Do you wear special or particular jewellery?

8. On what specific occasions do you use some particular jewellery and why?

9. Can you mention some specific symbols or designs linked with your chieftaincy /clan?

10. Are these symbols / motifs open to public use?

11. Do you attach any special belief or attribute for using any jewellery?

Yes ☐ No ☐

12. As a statesman, do you have control over jewellery making / mining in your area?

Yes ☐ No ☐

13. What has been the trend in the use of jewellery by traditional rulers?

14. Do you see jewellery making as a lucrative activity that should be encouraged in your traditional area?

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APPENDIX 2

QUESTIONNAIRE FOR CUSTOMERS OF JEWELLERY PRODUCTS

Topic: Post Independence Development of Gold Jewellery Industry in Ghana: A Case Study of Asantes.

Name (optional).....

Sex of customer

Male

☐

Female

☐

Age 18 – 35

☐

40 – 60

☐

Above

☐

Educational Background

None

☐

Middle

☐

/ JSS

SSS

☐

Tertiary

☐

Others (specify) -----

1. For how long have you been purchasing jewellery products?

5yrs

☐

6-10yrs

☐

11-20yrs

☐

20yrs above

☐

2. What kind / type of jewellery product do you normally buy?

3. Are you a regular customer to any particular jewellery, /goldsmith, /company or jewellery shop?

4. How do you normally buy your jewellery product

Where do you prefer to buy your jewellery from (goldsmith, gold jewellery shops, company open market)?

5. What do you think about the quality of jewellery products from your clients?

Excellent ☐ Very Good ☐ Good ☐ Fair ☐ Poor ☐

6. What is your opinion about gold jewellery prices?

Very high ☐ High ☐ Average ☐ Low ☐

7. Does product quality affect your mode of purchasing?

Yes ☐ No ☐ somehow ☐

9. How do you grade the services of your jewellery producers?

Excellent ☐ Very ☐ Good ☐ Fair ☐ Poor ☐

10. How in your opinion think jewellery producers can improve their services?

11. Do you buy your products on instincts of advertisements?

Yes ☐ No ☐

12. If yes what do you like about the advertisements?



APPENDIX 3

QUESTIONNAIRE FOR JEWELLERS / GOLDSMITH

Topic: Post Independence Development of Gold Jewellery Industry in Ghana: A Case Study of Asantes.

Name of jeweller / goldsmith

.....optional Address.....

Educational Background

None ☐ Middle / JSS ☐

SSS ☐ Tertiary ☐

Others (specify) _____

1. How long have you been practising this trade?

1-5yrs ☐ 6-10yrs ☐ 11-20yrs ☐ 21-30yrs

31yrs above ☐

2. When did your establishment start operation?

3. Do you engage designers?

Yes ☐ No ☐

4. How many apprentices?

Yes ☐ No ☐

5. If yes, how many do you have?

1 ☐ 2-4 ☐ 5-8 ☐ 9-10 ☐

6. How do take on apprentices?

Eg. cleaners ☐ sales person ☐ receptionist ☐ others?

7. Please list some tools and equipments used in your set up (workshops)

8. Do you do handcraft, mechanized or both methods of jewellery production?

9. What method do you normally use for your jewellery production?

Casting, ☐ piercing, ☐ embossing, ☐ filigree, ☐

granulation, ☐ engraving, ☐ combination of technique ☐

10. Are different methods or techniques used for gold production?

11. How do you acquire your gold?

12. Do you use other materials apart from gold for production?

13. What are they?

14. How would you best describe your product?

15. Abstract, traditional symbols, contemporary, copies of known designs)

16. Do you normally combine gold with other materials?

Yes ☐ No ☐

17. Please state the type of other materials in order of frequency.

Beads, ☐ Ivory, ☐ Silver, ☐ stones, ☐

Ebony, ☐ brass, ☐ copper, ☐ leather ☐

18. Do you export any of your products?

Yes ☐ No ☐

19. Please write country of import in order of highest quantity.

20. About how many pieces do you export annually?

21. Apart from export do you get others from abroad through friends and relatives?

Yes ☐ No ☐

22. How often do you receive such orders?

23. About how many pieces annually?

24. Do your customers usually select or come with their designs?

25. How do they normally arrive at their finally choice of designs?

26. Which designs are most patronized?

Names ☐ Symbols ☐ *Adinkra* ☐ Contemporary ☐ Abstract ☐

27. What is your perception about jewellery since you started this craft?

28. What have been your challenges as a jeweller / goldsmith in production?

28. What main obstacle do you face as a jeweller/goldsmith / craftsman?

APPENDIX 4

QUESTIONNAIRE FOR THE GENERAL PUBLIC

Topic: Post Independence Development of Gold Jewellery Industry in Ghana: A Case Study of Asantes

Name (optional).....

Address.....

Educational Background

None ☐ Middle ☐ JSS ☐

SSS ☐ Tertiary ☐

Others (specify)

1. What type of jewellery do you usually use and why?

Age 18 – 30 ☐ 31 – 45 ☐ 46 – 60 ☐ 61 above ☐

2. What is jewellery?

3. Mention some types of jewellery worn by people?

4. Which group of people are very familiar with some of the jewellery?

5. Can you tell a person's background / tribe from the jewellery he/she is wearing?

6. Which occasions do you normally use jewellery?

7. Do you order for your jewellery or buy them from the open market?

8. Do you prefer some specific design and symbols? Yes ☐ No ☐

9. What other reasons accounts for your acquisition of jewellery

Gift ☐ wealth creation ☐ personal ☐ others

10. What value do you place on jewellery as compared to your other belongings?

11. Do you see jewellery making, sales and use as a contributive factor to national development?

APPENDIX 5

QUESTIONNAIRE FOR TRADITIONAL RULERS / ELDERS

Educational Background

1. For how long have you been a traditional ruler *I* elder?
2. How did you become a ruler?
3. Who produce your jewellery *I* Regalia?
4. Is it by inheritance?
5. If yes, do you add on to the existing ones?
6. How different are your jewellery from other traditional rulers?
7. Do you wear special or particular jewellery?
8. On what specific occasions do you use some particular jewellery and why?
9. Can you mention some specific symbols or designs linked with your chieftaincy/clan
10. Are these symbols *I* motifs open to public use?
11. Do you attach any special belief or attribute for using any jewellery?
12. As a statesman, do you have control over jewellery making *I* mining in your area?
13. What has been the trend in the use of jewellery by traditional rulers?
14. Do you see jewellery making as a lucrative activity that should be encouraged in your traditional area?

QUESTIONNAIRE FOR CUSTOMERS OF JEWELLERY PRODUCTS

1. For how long have you been purchasing jewellery products?
2. What kind *I* type of jewellery product do you normally buy?

3. Are you a regular customer to any particular jewellery, /goldsmith, /company or jewellery shop?

4. How do you normally buy your jewellery product?

Where do you prefer to buy your jewellery from (goldsmith, gold jewellery shops, company open market)?

5. What do you think about the quality of jewellery products from your clients?

6. What is your opinion about gold jewellery prices?

7. Does product quality affect your mode of purchasing?

8. How do you grade the services of your jewellery producers?

9. How in your opinion think jewellery producers can improve their services?

10. Do you buy your products on instincts of advertisements?

11. If yes what do you like about the advertisements?


QUESTIONNAIRE FOR JEWELLERS / GOLDSMITH

Name of jeweller / goldsmith (optional)

Address

Educational Background

1. How long have you been practising this trade?
2. When did your establishment start operation?
3. Do you engage designers?
4. How many apprentices?
5. If yes, how many do you have?
6. How do you take on apprentices?
7. Please list some tools and equipments used in your set up (workshops)
8. Do you do handcraft, mechanized or both methods of jewellery production?
9. What method do you normally use for your jewellery production?
10. Are different methods or techniques used for gold production?
11. How do you acquire your gold?
12. Do you use other materials apart from gold for production?
13. What are they?
14. How would you best describe your product?
15. Abstract, traditional symbols, contemporary, copies of known designs)

- 
16. Do you normally combine gold with other materials?
 17. Please state the type of other materials in order of frequency.
 18. Do you export any of your products?
 19. Please write country of import in order of highest quantity.
 20. About how many pieces do you export annually?
 21. Apart from export do you get others from abroad through friends and relatives?
 22. How often do you receive such orders?
 23. About how many pieces annually?
 24. Do your customers usually select or come with their designs?
 25. How do they normally arrive at their finally choice of designs?
 26. Which designs are most patronized?
 27. What is your perception about jewellery since you started this craft?
 28. What have been your challenges as a jeweller /goldsmith in production?
 29. What main obstacle do you face as a jeweller /goldsmith / craftsman?

QUESTIONNAIRE FOR THE GENERAL PUBLIC

Name (optional)

Address

Educational Background

What type of jewellery do you usually use and why?

- 1.What is jewellery?
- 2.Mention some types of jewellery worn by people?
- 3.Which groups of people are very familiar with some of the jewellery?
- 4.Can you tell a person's background / tribe from the jewellery he/she is wearing?
- 5.Which occasions do you normally use jewellery?
- 6.Do you order for your jewellery or buy them from the open market?
- 7.Do you prefer some specific design and symbols?
- 8.What other reasons accounts for your acquisition of jewellery
- 9.What value do you place on jewellery as compared to your other belongings?
- 10.Do you see jewellery making, sales and use as a contributive factor to national development?