

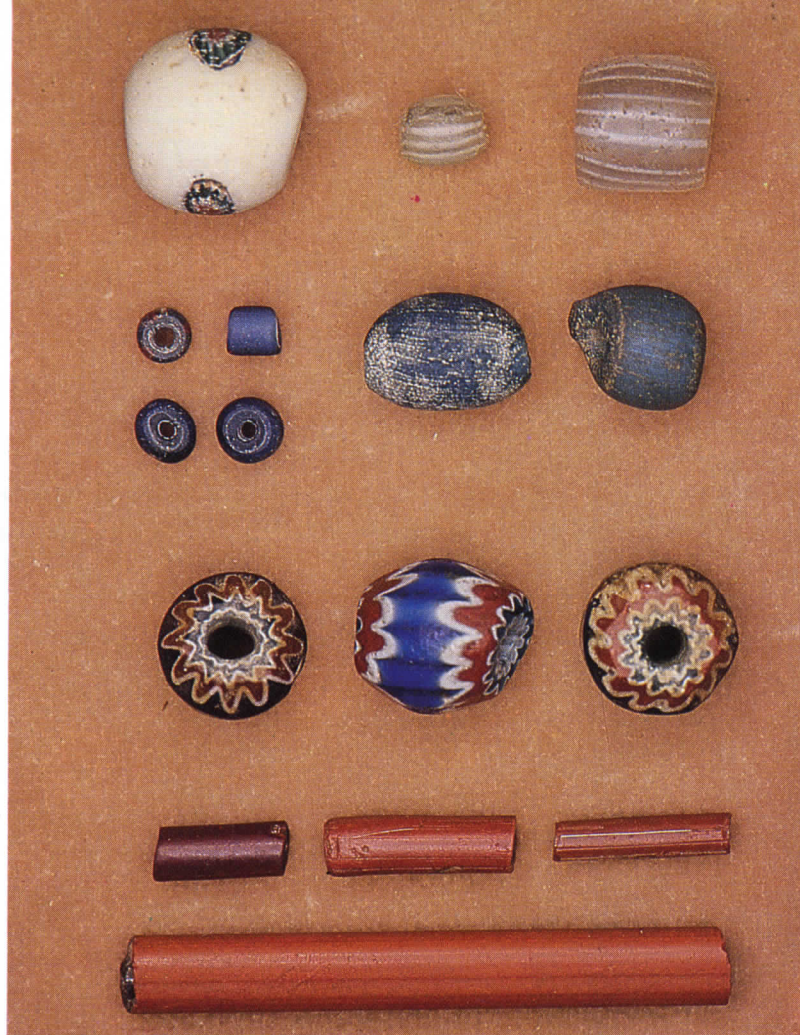
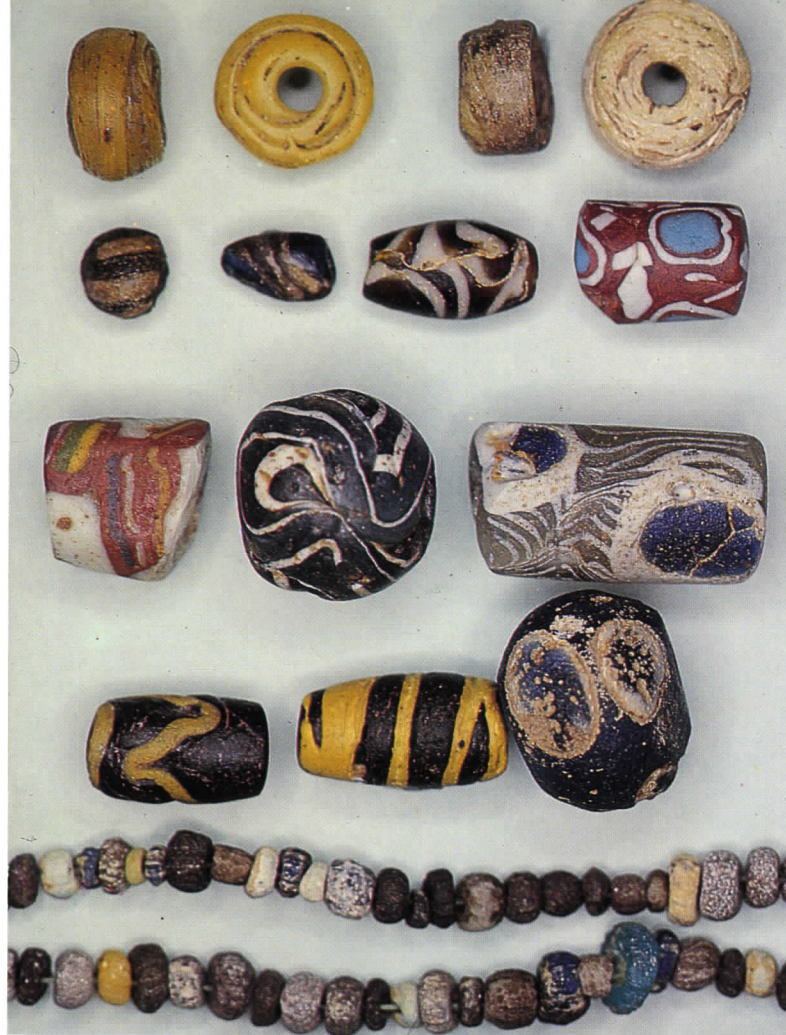
*Beads and People 2 :*

GHANA, WEST AFRICA

WHERE BEADS ARE LOVED

PETER FRANCIS, JR.

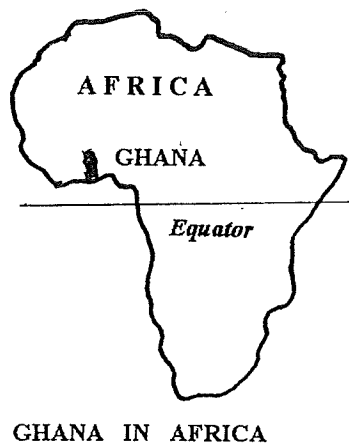




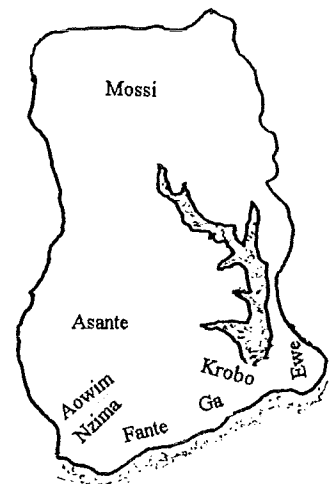
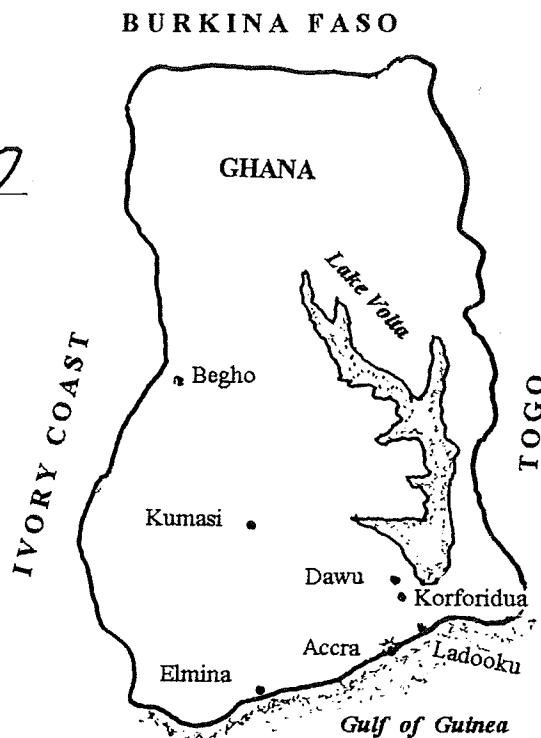
# WHERE BEADS ARE LOVED

(GHANA, WEST AFRICA)

Peter Francis, Jr.



GHANA IN AFRICA



SOME PEOPLES OF GHANA

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**1993**

Lapis Route Books  
The Center for Bead Research  
Four Essex Street  
Lake Placid, N.Y. 12946 U.S.A.

This book has been published by Lapis Route Books in conjunction with  
the Center for Bead Research, Lake Placid, N.Y.

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LAPIS ROUTE BOOKS

Lake Placid, New York

Typesetting and graphics by the Bead Press, Lake Placid, New York

Covers printed by Shayam Press, Poona, India

Text Printed by Winooski Press, Winooski, Vermont

Bound by the Bead Press, Lake Placid, New York

Manufactured in the United States of America

ISBN 0-910995-15-X

*Beads and People Series 2:*

Where Beads Are Loved (Ghana, West Africa)

CAPTIONS (Plates 1 and 2)

**Plate One (Front Cover)**

A bead dealer shows off her wares of Korbo-made powder-glass at the weekly market in Agomenya, Ghana. Other women in the market were shy about having their pictures taken, and were given a chance to move or hide their faces (as the girl in the background is doing).

**Plate Two (Inside Front Cover)**

**2A** (Upper Left): Beads from the Islamic trade. Row 1: Beads made in Hebron; the two on the right are from Elmina. Row 2: A striped folded bead, two agate-glass beads and a mosaic bead. Row 3: A mosaic bead, a torus-folded bead and stratified eyes on a folded agate-glass bead. Row 4: Furnace-wound beads of the type made in Fustat, Egypt. Rows 5 and 6: Indo-Pacific beads. Longest bead 1.9 cm.

**2B** (Upper Right): Beads from the early European trade. Row 1: Flush eye bead and two gooseberry beads. Row 2: Four multi-layered blue/white/blue beads and two "early blues." Row 3: Sixteenth century seven layered chevrons. Rows 4 and 5: Green hearts, with green cores. Flush eye bead 1.0 cm. long.

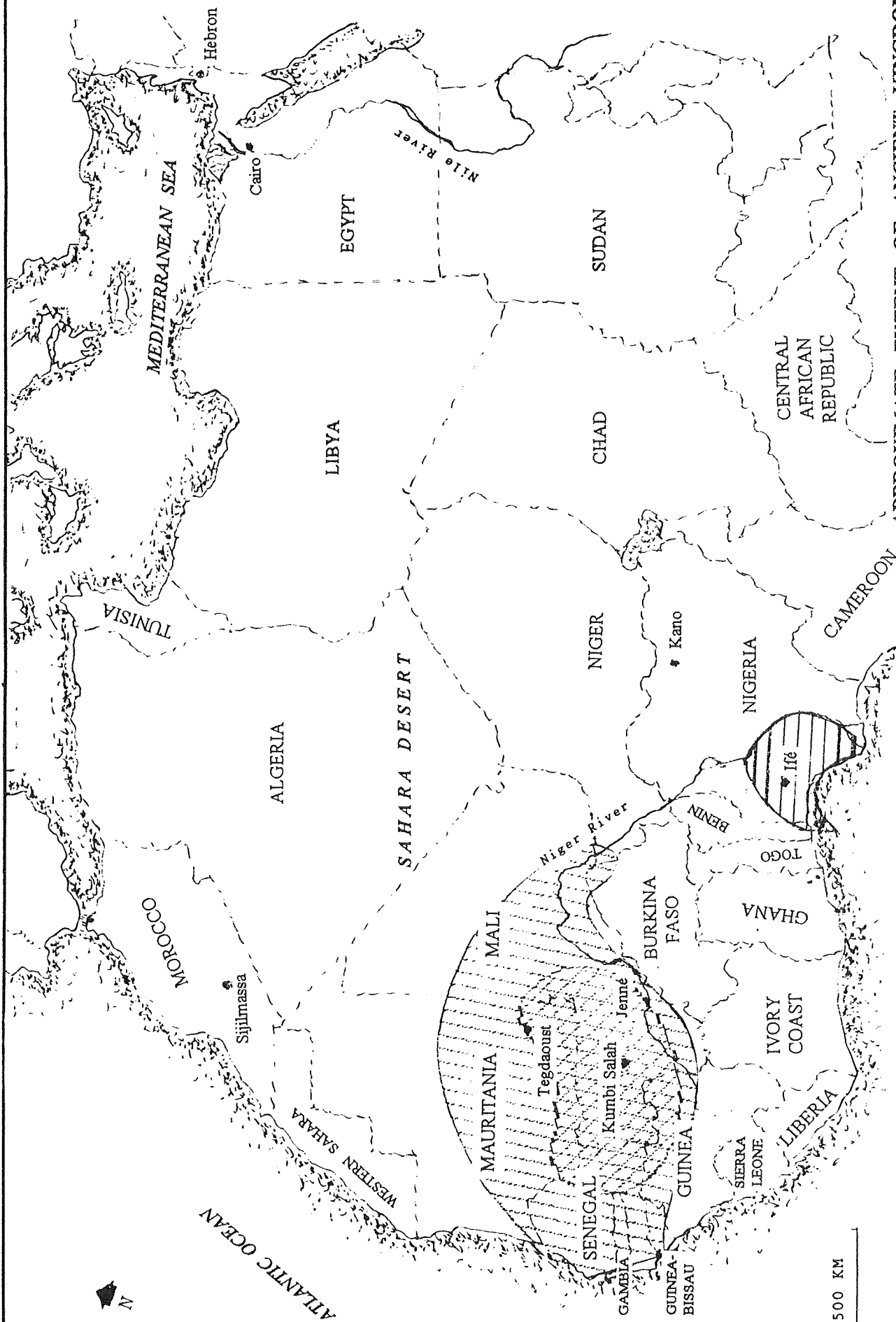
**2C** (Lower Left): Venetian sample cards from the J.F. Sick & Co. in the Museum of Archaeology, University of Ghana, Legon. These all have the "Laughing Girl" trademark in the upper left corner. The beads are all lamp-wound, those on the two left cards are millefiories.

**2D** (Lower Right): A worker in Asamang fills clay molds with layers of powdered glass, later to be fired into beads.

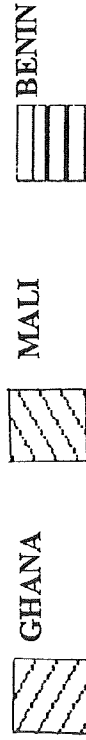
Photos on all plates by the author.

Captions for Plates 3 and 4 are opposite Plate 3.

# NORTH AND WESTERN AFRICA



APPROXIMATE EXTENT OF ANCIENT KINGDOMS



GULF OF GUINEA

500 KM

# **C O N T E N T S**

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# FOREWORD

Beads are intimately connected with the lives of many people around the world. The Beads and People Series is designed to illustrate that by concentrating on the trade, use and local manufacture of beads in different regions or within specific societies. Each title in this series will be concerned with one or more issues which highlight the many ways in which beads play a role in human affairs, in this case in the lives of the people of Ghana, West Africa.

The series is designed to be useful to a wide audience: those whose interest in beads is new, those who have long been interested in the subject and those with a professional interest in beads and related topics. In order to be accessible to readers with varying concerns, the series is arranged to be read simply and at the same time to be academically useful. The text is kept as concise as possible, with technical terms defined in the text or in introductory sections. References in the text are kept to a minimum.

For issues which require more explanation or fuller details, symbols († \* ‡ § †† \*\* ††) in the text signal that more information is available in the Notes section on pp. 15-17. These notes are arranged according to the sections of the main text, with one or more marked items which discuss particular matters in more detail.

The bibliography is limited to the references cited in the text or the notes. Many other works were consulted in the preparation of this volume, and while not claiming to be exhaustive, every effort has been made to gather as much information as possible on the topic. Glass beads are by no means the only beads used in Ghana, but our concentration on this topic has limited our discussion of other beads. Much of the work is the result of personal investigation in Ghana.

# ACKNOWLEDGEMENTS

As always, any major research project requires the cooperation of a great many people, without whom the work could not have been done. These people include artisans, dealers, scholars and others in Ghana as well as in the United States. To all of them go my deepest gratitude.

In Ghana, much thanks goes to: James Anquandah, Fritz Biveridge, Bredwa-Mensah Yah, L.B. Crossland, and Kwase D. Quarm of the Department of Archaeology; J.E.J.M van Landewijk of the Department of Geology; and Brigid Sackey of the Institute of African Studies, and many other department workers and librarians, all at the University of Ghana, Legon; Peter Shinnie of the University of Calgary and of Kumasi; Elizabeth Maamu Bruce and Jemimah Sackey of Teshi House; Larko Sackity and Kofi Nadu of Odumanse; Kwakwa Abuaham, and George and Mamlah Mensah of Aboabo; Dominck Ogbordjor of Sikaben; Attah Gyamfi of Asamang; Emmanuel Nyamache of Ohwim, Opoku Mensah of Kapro, Ntin Kwabena and Jyasi Kojo of Dabaa; Martin (Bibia) Abuga, Nataniel (Natos) Dubois Adibuer, Phyllis Gyen and Kassimu (Orlando Parking) Ibrahim, all of Medina.

In the U.S.: Herbert Cole of U.C. Santa Barbara, Christopher DeCorse of Syracuse University, David Killick of Arizona State University, Susan McIntosh; Merrick Posnansky of U.C.L.A., Howard and José-Marie Oppen of Washington, D.C., Philip Ravenhill of the American Museum of African Art, and Mrs. Phyllis Francis, Jim Owens and Greg Peacock of Lake Placid.

# WHERE BEADS ARE LOVED

Peter Francis, Jr.

**I** *t was a humid night; the sweet smell of the day's rain hung in the air. Over a beer, my friend told a waitress he fancied that I had bought beads that day.*

*"Beads?" she said, "Mother knows a lot about beads."*

*That didn't surprise me; this was Ghana. I said I had one in my pocket a dealer gave me. Maybe her mother would like to see it.*

*We walked over to the house and the young woman called her mother to come out under the light. I handed her a large egg-shaped yellow bead.*

*"Where did you get this?" she demanded. "How did you get this? Do you know what this is? It's an Akosu. It's a very good bead. Where did you get this!" She wasn't angry. She was just astounded that a foreigner would have such a treasure, even that a foreigner would know about it.*

*I showed another bead to another lady. Elizabeth Bruce was 91. She remembers as a child walking with her grandmother from Teshie village to the Accra market to sell beads. The family had been so successful they moved to Accra and continue the trade to this day, a tradition that must go back at least 150 years.*

*Elizabeth is nearly blind, but as sharp as ever. She took the Bodom -- another present -- and scrutinized it. She held it in her hands, turning it over and over. She didn't stop talking about it for half an hour. "This bead can only be worn by a very great man. It's a fine bead. He can wear it around his neck with other beads of lesser rank or on his wrist with smaller beads. Only a powerful man can wear this bead."*

*Beads evoke strong reactions in a land where they are loved.*

**A**ll people love beads in their own ways, and Africans are no exception. Indeed, beads are especially important in many African societies. I have traveled the globe researching them, and can attest that there are few places where they

are so cherished as in the small West African country of Ghana. There beads have many different uses, and hold many different meanings.

The story of beads in Ghana is complex, for it has been woven over the centuries into a rich tapestry. There are still details we do not understand, but its outlines are now clear. As an introduction, we begin with a quick sketch of the country and the technology and history of glass beads, which are our focus. We then examine the bead trade, local glass beadmaking and the use of beads in Ghanaian society, starting with traders and beadmakers in modern Ghana and tracing their roots into the past.

## Introduction to Ghana

**G**hana, a small rectangle on the African map, is a microcosm of the region. Its 15,000,000 people make it the eleventh most populous country in Africa and the sixth most densely settled. It is young; over half of Ghanaians are under 18 years of age. Most people live in the countryside and about half are farmers, raising root crops, fruits and domestic animals. Agriculture accounts for nearly 60% of the nation's income, trade for about a quarter.

Although just a majority of the people are literate, Ghana ranks in the upper third among African states, and in the upper tenth of those whose people have a higher education. It has the fourth highest rate of daily newspaper circulation on the continent.

Ghana is a slice of West African geography. In the north is a savanna region of semi-arid scrublands, part of the great belt that cuts across the continent below the Sahara desert. South of that is the forest zone, which covers a third of the land area. Further south is a coastal strip where all but one of the major cities are located, including the capital, Accra, with nearly a million inhabitants. The east is dominated by the world's largest man-made lake, Lake Volta, whose Akosombo Dam provides electricity to make aluminum from the abundant bauxite. Manganese, wood, textiles and gold are other leading industries.

The country is a demographic mosaic. The Akan, including the powerful Asante (or Ashanti) of the forest zone, the Fante of the coast and others, are in the majority. Next (about 16%) are the Mossi in the north, related to the dominant people of Burkina Faso. The Ewe (about 12%) live mostly between

Lake Volta and Togo, where their relatives predominate. The Ga-Adangme (about 8%) live along the southeast coast, many around Accra (named for the Ga); the Krobo of the Shai Hills are their kin. There are also smaller groups, including immigrants from Nigeria and beyond. English is the official language; the native languages belong to the Niger-Congo family, all but Mossi in the Kwa group. The Akan language is called Twi. Such ethnic and linguistic complexity is common in Africa, where Europeans drew boundary lines to suit themselves disregarding those who lived there.

Ghana is also religiously diverse. The Mossi are Muslims. About two-thirds of Ghanaians are Christians, more than half of them Catholics. Traditional believers account for about a fifth of the population, and indigenous fusions of Christianity and traditional beliefs a bit less.

**A**lthough the prehistory of Ghana is still imperfectly known, farming villages and the increased use of metals formed the basis of society for a long time. North of modern Ghana, trade with North Africa started perhaps as early as 1000 B.C. By the seventh or eighth century A.D. the Kingdom of Ghana (in what is now Mali and Mauritania) traded extensively with Arab North Africa, exchanging gold and slaves for manufactured goods. The center shifted south by the thirteenth century to the inland Niger delta and the ancient kingdom of Mali. By the late fourteenth century the Mande (or Mandingo or Mali) people established outposts in what is now Ghana at Begho and later Gonja, bringing Islam with them and linking the land with the trans-Saharan trade. The new influences gave rise to the Asante kingdom, which reached its apogee in the seventeenth century.

Europeans called the West African coast the Guinea Coast, perhaps after Jenné, the great inland emporium. From west to east, they named the Grain Coast (modern Guinea), the Ivory Coast (whose name survives), the Gold Coast (Ghana) and the Slave Coast (Togo and Benin). The Portuguese built Elmina (The Mine) in 1482, a fortress of the gold and slave trade. The Dutch were granted Elmina in 1642 for giving up claims in Brazil. Then the Danes and British arrived, and during much of the eighteenth century fought the Dutch over the spoils, which included the lucrative slave trade and the gold the English minted into Guinea coins. By the early 1800s the British had the upper hand on the coast; they secured

Asante and pushed northwards to the borders of French controlled territory. To the east, the Germans seized Togo. During World War I the French and English divided Togo, and British Togoland joined the rest of the Gold Coast colony when Ghana became the first independent sub-Saharan country in 1957.

Beads are very much a part of everyday life in Ghana. They are everywhere, and nearly everyone you meet knows about them or has someone close who does. Both men and women are involved in their manufacture, trade and in wearing them.

## Introduction to Glass Beads

**G**lass is the most important bead material, and glass beads are the center of our interest here. For readers not familiar with standard bead terms or how glass is made into beads, this subsection covers the important techniques and the major industries we shall encounter.

The oldest way to make glass beads is to wrap hot glass around a rod or wire, first done directly in the furnace (furnace-winding), later by melting a prepared glass rod over a small flame (lamp-winding). The bead can be decorated with other colors or paddled into shape. The fabric and inclusions of wound beads encircle the perforation (fig. 1).

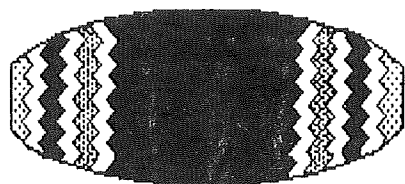


**Figure 1: Some typical wound beads. Notice the fabric encircling the perforation.**

Another important method is to form a hollow glass gather and pull or draw out a tube, which is commonly cut into sections. These are agitated over heat to round off their sharp edges and make drawn beads. In drawn beads the fabric and inclusions run parallel to the perforation (figs. 2 and 3).



**Figure 2: Typical drawn bead with stripes. This one has been left as a tube after being cut from a longer tube**



**Figure 3. Chevron bead.** As with the bead in Figure 2, the fabric and decoration run parallel to the perforation. The chevron is made in multiple corrugated layers,

The first glass beads in West Africa were from the Islamic world, which acquired skills from the Classical world beginning in the seventh century. They used furnace-winding and several techniques now no longer used (Fig. 4). One of these was to heat one or two plaques of glass, fold them around a wire and join the edges (folded beads). Another was to manipulate a glass ring up and around a core to make a wavy design (torus folding) (Plate 2A). Segmenting was done by crimping a tube and cutting apart the bulges for beads. "Agate-glass" was made by combining opaque and translucent glass. Fancy solid mosaic rods (canes) with multiple layers or added elements were made; slices of them decorated wound beads or were melded together into mosaic beads.



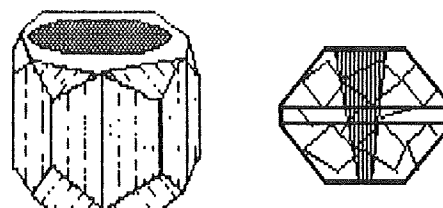
**Figure 4: Left, a folded bead showing seam; right a segmented tube which has not yet been cut apart into beads.**

In the twelfth and thirteenth centuries the Islamic world was hit hard by European Crusaders and Asian Mongols. Beadmaking was disrupted, surviving as a remnant centered in Hebron near Jerusalem.

**T**he modern European bead industry began in Venice, Italy, around 1480, just as Europeans started to explore the globe. Beads of this period were mostly drawn. Some were layered, such as green hearts (opaque red over translucent green). Another popular type has corrugated layers formed in molds, which reveal chevrons when

the edges are beveled, giving the bead its English name. The earliest chevrons were red, white and blue in seven layers with faceted ends; after 1600 there is a variety of color schemes, fewer layers, different shapes and usually rounded ends. By the nineteenth century many popular Venetian beads were hand-made lamp-wound types. The Venetians made little use of mosaic canes on beads until the late nineteenth century, when they covered wound beads all over to make a millefiori (thousand flowers) effect. Before World War I, most such canes were built by bundling monochrome rods together, leaving fuzzy outlines. After the war, these were replaced by molded canes, made much like chevrons.

Many European countries tried to break Venice's monopoly, but none succeeded as well as Bohemia (in the Czech Republic). In 1705 the garnet-cutters of Turnov sent two brothers to spy on Venice, which was imitating their garnets. On returning, they developed a translucent red glass which they cut like garnets. Soon came tong molds and beadmaking. Most Czech beads are molded, leaving an encircling seam, which is sometimes ground or tumbled off. Some are faceted by grinding, an echo of garnet-cutting. One of their most popular beads was the cornerless hexagonal, usually a blue tube with six sides with the corners ground off. Another is called a Vaseline bead by collectors due to their (uranium) yellowish-green color. These were molded and then had facets ground onto them (Fig. 4).



**Figure 5: Two popular Czech beads. On the right is a cornerless hexagonal, drawn with six sides and ground at the corners. On the left is a "Vaseline" bead; note the conical perforation.**

Ghanaians make beads by the powder-glass method, which we shall detail later. Basically, it is done by crushing glass, pouring it into a mold and heating it just enough so that the particles stick together.

## THE BEAD TRADE

### Teshie House and Altering Beads

**I**mposing Teshie House, in the James Town area of Accra, was literally built by beads. The women of the house have been trading in beads for generations, first from the village of Teshie, and since 1912 in Accra.

Elizabeth Maamu Bruce, whom we have already met, is the matriarch of the business. She and her family have been making a good living selling imported European beads for a long time. However, the ones she sells are not necessarily the same as those she has bought. Many of them have been changed.

A little appreciated aspect of the bead trade is the altering of beads after they leave the manufacture. Many people have definite preferences in beads, and rather than rely on the manufacturer to produce them, they do the work themselves. This may seem like a lot of extra effort, and it often is, but then the beads have a local component, which is highly valued by Ghanaian bead lovers.

Women are hired to string beads on a wire and grind them lengthwise on a large sandstone block with water to cool them (Plate 3A). The blocks are similar to, though coarser than, those used to grind grain. As the grinding stones wear down, they are carefully stacked outside the house as an emblem of the work that goes on inside. Bead ends may also be ground flat at an angle so they fit with their neighbors on a strand. To do this, a stick is put through the perforation to grind beads individually (Plate 3C).

Such work is not new. Peter DeMarees described it along the Gold Coast around 1605: "They also use [a] great store of Venice beads, of all kinds of colours, but they desire some colours more than others, which they break into four or five pieces, and then grind them upon a stone, as our children grind cherry stones; and then put them upon strings, made of bark of trees, ten or twelve together, and therewith traffic much: those ground corals [beads] they wear about their necks, hands and feet." [Purchas 1905:282] The grinding of beads to smooth or bevel them and the breaking of beads still goes on, the latter most obviously with millefiories (Plate 3C).

A notable case of grinding beads are eighteenth and nineteenth century Hebron beads in opaque yellow and green, once popular in much of Africa, including Ghana (Plate 2A). Production stopped around 1880 and by the 1930s they were out of fashion. Hausa traders bought them for a song in what are now Sudan and Chad to add to their stock. They ground down the ends of the large ones, and now sell them to the granddaughters of the women who once gave them away. The altered ones are called "Kano beads," after Kano, Nigeria, the Hausa center. They were not made there, as once believed, but only altered there [Francis 1990a:25-9].

Beads are also ground on the sides to remove decorations, which not everyone appreciates, or to alter their shapes. One common shape millefiories are ground into is a square cylinder; some of these were ground in Europe. It is not yet clear who is doing these operations (Plate 3C).

**A**nother way to alter beads is by heating them. Elizabeth Bruce demonstrated how this was done (Plate 3B). Drawn European beads are layered with organic matter (she used the husks and shells of palm oil nuts) in a small pot. The pot is closed and put on a charcoal fire for about an hour, during which time the woman attends to other chores, returning occasionally to stir the beads. When finished, the beads are usually rendered opaque. Air bubbles that lie near the surface often expand and break open, creating striations some mistakenly call "stretch marks."

The most important heated bead is a blue one known as Koli when finished. Other beads subjected to heating include So-so (quickly), a translucent yellow bead; Numli Koli (water Koli), white beads that look yellow when held up to the light; and several drawn striped beads (Plate 3C). Sordinas [1964] reported on Koli and So-so; his informant used different plant materials than Elizabeth Bruce. He said this work was common then, while Bruce told me no one does it any more.

## The Roots of the Glass Bead Trade: Blue Beads in the Arab Trade

**T**he beginning of the bead trade is lost in the mists of time. Locally made beads of stone and organic materials were exchanged in West Africa for thousands of years. Glass beads came later, from the outside. There is no evidence for Roman bead trading in the area, despite such rumors; the most southerly Roman finds in Africa are in Algeria [Wheeler 1954:107-11; Posnansky 1973:150]. Most "Roman" glass beads from West Africa are actually Early Islamic in date. This applies to West Africa; East, Central and South Africa have their own bead stories to tell.

The glass bead trade opened in the eighth century A.D. as Arabs blazed routes from north African cities across the silent expanse of the Sahara into the savanna region they called *Blad es-Sudan* (Land of the Blacks), watered by a great river system dominated by the Niger. South of this is the forest zone, and beyond is the sea.

The Arabs were merchants, and for centuries monopolized commerce with the outside. The trade was profitable. The wealth in gold and slaves of the ancient kingdoms of Ghana and Mali was a wonder. When the king of Mali, Mansa (Sultan) Kankan Musa, stopped in Egypt on his way to Mecca in 1324 he distributed so much gold that twelve years later El Omari said it was still devalued against silver by twelve percent! [Davidson 1964:76-7]

**W**hat did the Arabs bring in turn? The Greek Muslim Yaqut reported early in the twelfth century that the goods sent by Moroccan traders south were, "salt, bundles of pine wood. . . blue glass beads, bracelets of red copper, bangles and signet rings of copper and *nothing else*." [Levtzion and Hopkins 1981:69; emphasis mine]

Nothing else? Surely this was an exaggeration, but most contemporaries listed beads as an essential commodity in the trade. The intrepid Ibn Battuta told his fourteenth century readers heading for Africa not to bother with food or money. They would do quite well with, "a bit of rock salt, orna-

ments or trinkets of glass, which they call *nazhm* [beads], or strings of beads, and a few aromatic substances." [Defrémery and Sanguinetti 1922:392-4]

Much work remains to document the beads used in this trade. There have been rather few scientific excavations in the region. Poor governments cannot afford much archaeology, and some make it difficult for outsiders to dig. Even when allowed, campaigns may not turn up many beads, as happened at Jenné-jeno, Mali [McIntosh and McIntosh 1980:164] or they are inadequately described. Nonetheless, we can piece together some information from excavations and beads privately (and illegally) gathered from old sites (Plate 2A).

As Yaqut suggested, blue was popular. Round translucent blue furnace-wound beads with simple stratified "eyes" of blue or black on white, sometimes with a white median zone, are common. There are also furnace-wound tubular beads of dark blue, green or black with white or yellow spirals, some combed into waves. Both types were likely made at Fustat (Old Cairo), Egypt.† The other important blue bead came to be called the Aggrey (see next subsection).

There is also a wide variety of fancier beads, especially in the old Sudanese kingdoms. They were no doubt expensive and are scarce as far south as Ghana.\* They include folded beads, torus folded beads with striped rings, mosaic beads with eyes or other multicolored elements and beads of mixed translucent and opaque glass. There are also segmented beads, some with two layers and a foil of gold or other metal between them.

Perhaps the most amazing beads, considering their source, are the most easily overlooked. They are small monochrome drawn Indo-Pacific beads, named for their wide distribution.‡ They were made in India, Sri Lanka, and several Southeast Asian nations and reached central Ghana by the eleventh or twelfth century. They likely traveled through the Arabian Sea to Persia and on to Egypt, across North Africa, down through the desert and the savanna into Ghana's forest zone. What a journey for such little beads!

## The Most Famous Ancient Bead: The Aggrey

**T**he Aggrey is one of the most celebrated beads in history, yet you will have a hard time seeing one. Ghanaians do not use the name today except when hawking beads to foreigners. As soon as Europeans arrived in West Africa they noticed them and wrote about them for centuries. In time, they became linked to many different beads. Museums and many writers are as confused about them as anyone. Only by carefully sifting the evidence can we begin to understand what they were. We have not solved all the mysteries surrounding them, but historical and archaeological data are helping to unravel their story.

The early European visitors described a valuable bead nearly always as blue.<sup>†</sup> One observer, Samuel Brun [Jones 1983:69] looked more closely. He said, "If one looks at it, it is sky-blue; but if one looks through it, it is entirely sea-green." This is an effect called dichroism, two different colors depending upon the light source, in this case reflected ("looks at it") or transmitted ("looks through it"). Also in the early 1600s, Emmanuel Ximenes, a Portuguese living in Amsterdam, asked the great glass authority, Antonio Neri, to help him imitate a valuable bead in the African trade by making a dichroic blue/green glass [Zecchin 1964:24].

These beads were found east of the Gold Coast, mostly in what is now Nigeria.\* Europeans bought them there and took them to the Gold Coast to sell at a good profit. In the sixteenth century they were called *cori*, in the seventeenth *accori* or *akori*, and by the eighteenth known as Aggrey, variously spelled. It is all the same name. The original *cori* had an /a/ prefixed, common in the Twi and Fante languages. The change from /k/ to /g/ is linguistically simple, and seems to have been made by the Europeans. In time *cori* became Aggrey.<sup>‡</sup> The trade in these beads ceased by the mid eighteenth century.

The material of Aggreys were variously reported.§ Some writers called them coral, but the local blue coral is unsuitable [Mauny 1949a; 1958]. The word "coral" is used for "bead" in several languages, including Dutch, and nearly everyone who called Aggreys coral were Dutch, worked for them or used Dutch sources. Others called them stone, but no known stone beads match the characteristics of Aggreys. In one case "shell" was mistranslated from the Portuguese word for "bead." Other materials proposed in-

clude tektites and glassy iron slag. None have solved the problem.

There were also imitation Aggreys. A Portuguese pilot in 1540 said the imitations melted easier than real ones [Blake 1942:153]. Bowdich [1966:268] around 1814 said they were heavier than the genuine beads.

**O**nly one material answers all the recorded characteristics of Aggrey beads: dichroic blue/green glass. Were all Aggreys of this glass? It is likely. People do not usually observe beads very carefully unless they have a special interest in them. Few Europeans would have examined them closely, so they would have appeared blue to them. Drawn tubular dichroic beads and chemically similar drawn corded (with striated surfaces) blue beads have been found at many West African sites linked to the trans-Saharan trade, including Ifé, Nikrowa and Old Oyo in Nigeria; Gao and Kumbi Saleh in Mali; Tegdaoust in Mauritania [Davison, Giauque and Clark 1971]; and Diouboye in Mali [Oppen and Oppen 1990:28].

Their place of manufacture has not been identified. Dichroic blue/green glass was rare in Europe until the nineteenth century, though it was made in medieval France [Davison, Giauque and Clark 1971:647]. Bottles of this glass are known from the ninth/tenth century in Egypt, Armenia, Azerbaijan, Georgia and nearby [Kurinsky 1991:374]. These products of the Muslim world are likely related to the sources for the dichroic beads.

Ifé, Nigeria, seems to have attracted many of these beads. Some were melted down and reworked there, and others appear to have been associated with shrines.<sup>††</sup> Ifé apparently flourished between about A.D. 1100 and 1450 [T. Shaw 1976:158-61], a period of intense trade with the Arabs. After direct trade with the Arabs ceased, Ifé may have become the principal source for Aggrey beads, as they were dug up from graves and other deposits, explaining why they were imported from this area to the Gold Coast.

**I**mitation Aggreys were said to be heavier and melt more easily than genuine ones. New dichroic beads in modern markets have much more lead than the old ones [Davison, Giauque and

Clark 1971], which would account for both characteristics. They also usually have "stretch marks" from gas bubbles breaking when heated. In other words, they are Koli beads with features that match imitation Aggrey beads. In Ghana they have been excavated at Elmina and Ladoku, both occupied from about the fourteenth to the nineteenth centuries. The Fante call Koli beads *kor* or *ekaur* [Fage 1981:208-9; Quarm 1989:73]. All these names -- Koli, *coti*, *kor*, *acoti*, *ekaur* and Aggrey -- are linguistically very close.

If Aggrey beads were blue or dichroic blue/green, why has there been so much confusion about them? Make no doubt about it, people are perplexed. Since the early nineteenth century there has been a rash of speculations about Aggreys. Despite some sober assessments, chaos reigns in publications and collections. Chevrons, millefiories and other beads have been called Aggreys. They have been pronounced to be Phoenician, Roman and Viking.\*\* Even historians are caught in the trap; Claridge [1915:26-7] used the "established fact" of Phoenician Aggrey beads to prove that ancient sailors landed on the Gold Coast!

We can identify what caused this. Blame rests, as it does so often, on the lack of appreciation of local customs and beliefs and the complexity of bead lore. T.E. Bowdich muddled the water. Arrogant and self-serving, he manipulated himself to head the first English mission to the Asante around 1814 [Ward 1966]. His book of adventures was widely read, but he was badly confused about beads. He reported blue, green, yellow, red and variegated Aggreys; the

latter probably Early Islamic mosaic beads. He said Aggreys could breed, a privilege of Bodom beads (discussed in the next section). He confused powder-glass beadmaking and bead altering, but didn't believe the natives could do such work anyway. In a long, rambling footnote he drew parallels from as far away as England and India [Bowdich 1966:267-71].

How could he have been so wrong? The Asante don't use the word Aggrey; their precious blue bead is *gyanie* (pronounced "janny" -- does this hark back to Jenné?††). We can envision the scene: the haughty Englishmen asks to see Aggrey beads, by then no longer being traded. When the Asante asked what they were, he said they were valuable old beads and they replied, "Sure, we have lots of those...."

In sum, Aggrey beads were of blue or dichroic blue/green glass brought through the Arab trade to West Africa. Ifé appears to have attracted many of them, and after its decline the beads were dug up from the old areas of the site, recycled and resold. By then they were scarce, and bought by the wealth of the Gold Coast. Newer beads imitating Aggreys were reworked in Ghana from European beads and are known as Koli. After the trade had ceased, Bowdich lead many astray with his uncomprehending and unsympathetic approach to African culture.

This is not the last word on Aggrey beads. We need to know more about glassworking in Ifé, royal collections in Ghana, the history of Koli beadworkng and Islamic glass. We also need more excavations in the cities involved in the trans-Saharan trade. But the once great enigma is no longer so mysterious and the fantasies evoked not as powerful as they once were.

## The European Trade

The Arab lock on the West African trade did not last. Toward the end of the fifteenth century new merchants appeared via a different route. The Europeans did not cross the "Sea of Sand," but sailed the Ocean Blue. The trade in European beads grew into a significant share of African commerce. Collectors are often astounded by the numbers and varieties of European beads being reexported these days from West Africa. Could it be that so many were once imported there? In a word: Yes.

To consider the European bead trade in West

Africa and Ghana in particular, we examine several interrelated problems. One is the nationality of the traders who brought beads to Africa, another the origin of the beads themselves. We also want to know what beads were brought and in what quantity. We do not have complete data for all 500 years, but can form a picture of the trade by examining what we know.

The Portuguese were the first Europeans to reach West Africa. The earliest account of their dealings is the diary of Duarte Pacheco Pereira, a governor of Elmina. Written about 1515, it was jealously guarded,

hidden and forgotten for centuries. He mentioned no trade in European beads, discussing only two kinds of beads several times each. One was *alague-quas*, Indian carnelians obtained by the Portuguese from Muslims.† The other was the local *cori* bead, the Aggrey [Kimble 1937:81; Mauny 1956:64-5].

The Portuguese quickly realized the value of European glass beads. By 1540 an anonymous ship's pilot said that at Elmina the natives buy "principally glass necklaces or rosaries, and another kind of blue stone [the Aggrey again]." [Blake 1942:153]

The floodgates had opened. Nearly every subsequent visitor mentioned trading beads, often specifying Venetian ones. European nations carved out zones of influence, many of which evolved into colonies, but dealers from all over Europe were involved. The internal African trade was also given a boost. Around 1605 Peter DeMarees\* wrote, "we sell many Venetian Madrigetten [rosary beads] and corals [glass beads] (for the common people traffic much therewith by grinding and selling them one unto the other)." [Purchas 1905:302]

The glass beads traded from the fifteenth to the seventeenth centuries‡ are indistinguishable from those found in contemporary American sites. They are nearly all drawn Venetian beads, including seven layered chevrons, green hearts, beads with blue/white/blue layers in cross section, "gooseberries" (clear beads with white stripes), "early blues" (opaque blue round or barrel beads with striated surfaces) and round beads decorated with a few added mosaic canes, known as "flush eyes" to American archaeologists (Plate 2B). Their similarity to beads from American sites is not surprising since they were brought by the same people and came from the same sources.

**B**eads were very important commodities in the early years. In Gambia, an English colony on the west coast, they accounted for a remarkable 39.9% of total imports in 1684-88, 13.9% being glass beads, 11.4% amber, 7.6% quartz crystal and 7.0% coral. These figures dropped over time. By 1841-50 beads constituted 13.7% of Gambian imports [Curtin 1975:252; 1978:90].

During the 1800s the bead trade was also large in Ghana, especially early in the century.§ Between 1827 and 1841 the Gold Coast (Ghana) imported an average of 74,952 pounds (34 metric tons) of glass beads annually, or 2.3 pounds for every man, woman,

and child every year! Within a few years everyone would have far more beads than they could wear.

In money terms, the trade was also substantial. In 1846 the value of glass beads amounted to 15.7% of all imports to the Gold Coast. Between 1846 and 1848 fully an eighth of the import bill went to buy trade beads. This dropped to only 2.2% in 1856-1861 and thereafter to about one percent, with around 100,000 pounds brought in annually. Given the growth in population, the per capita share diminished significantly. Yet, we are still talking about a lot of beads, 50 tons a year, into a small country.

**I**n the late 1800s we have a remarkable record of beads being sold in Ghana since some 30,000 were excavated from a presumed trader's house in the native quarter at Elmina. This quarter was set afire during the Asante War in 1873 [DeCorse 1989], and the beads give us a "snapshot" of the trade at that time (Plate 4B). Most were European. Venetian lamp-wound beads were popular in opaque red, green, black and muted yellows, decorated with simple trailed-on loops or short multicolored bent ribbons. There were no mosaic or millefiori beads in the collection. By this time Bohemia had become a major beadmaker, and among the Czech beads were Vaseline beads, cornerless hexagonals in blue and other colors and small molded faceted beads. Two non-European beads were also found: locally made powder-glass beads (see p. 10), and the small furnace-wound beads from Hebron (Plate 2A).

By the twentieth century, the bead trade no longer occupied the large segment of imports it once had. Nevertheless, it remained a staple of commerce and several large European firms engaged in the business. One of them was the J.F. Sick & Co., a German-Dutch concern. We have an excellent idea of the beads they handled in the 1930s because the Archaeology Museum of the University of Ghana at Legon preserves 178 of their sample cards.†† Sample cards have beads strung on them, and are used by agents of a company to order particular styles (Plate 2C).

The largest group of cards, about 40%, are Czech, many marked "Made in Czechoslovakia." Over half their beads are molded into special shapes: corn cobs, roses, reels, twisted melons, crosses, flowers, discs with hubs, and various interlocking beads. There were many "Marjorie" beads, simple molded spheres or barrels tumbled to remove the seam lines, still a leading Czech product. There were also drawn

beads. Some were gilded or silvered inside, others were striped, or had hexagonal cross sections (called "macca" in the trade) or were coral imitations. Four cards have Prosser beads, made by putting a dry mixture into a machine at great pressure (most interlocking beads are made this way).\*\* One card has plastic coral imitations and five have Vulcanic beads, thin black or colored discs of vulcanized rubber (later replaced by plastic), sold by the yard and popular in north Ghana. Only one Czech card has plain wound beads (Plate 4B).

About a third of the cards have beads from Venice,

many with the company's logo, "The Laughing Girl." Over half the Venetian beads are millefioris or mosaics, often with added bands of solid color. Most are round cylinders in shape, but others are

square, bent ("elbow beads") or barrel shaped. Lamp-wound beads are next most common, both monochromes and decorated ones, followed by chevrons. A few cards have monochrome plain drawn tubes and one has small drawn "seed" beads.

Sixteen cards (9.0%) have fancy red borders and French titles. They can hardly be anything but French in origin, made around Lyons. All these beads are drawn. Many are plain or have simple or multicolored stripes. Four cards have chevrons of only three or four layers and relatively unusual color combinations.

Some cards are not marked as to origin but labeled only Accra or Kumasi, cities with J.F. Sick & Co. offices. Others have beads sent as requests (marked "your sample") and those meant to match them (labeled "our countersample"). The other unidentified cards have mostly small drawn "seed beads."

**T**hirty-six of the cards can be dated. Dates written in pencil were evidently done locally. Most with French inscriptions have 1935 in the card title. Some "Laughing Girl" cards have rubber stamps on the back with months abbreviated in Italian. Eleven cards with "Made in Czechoslovakia" are from late 1938 to late 1939; this was the spelling of Hitler's "Second Republic." All datable cards fall between 1929 and 1941 (this last card also

has a 1937 date), with 78% between 1935 and 1937, and 39% from 1935 alone. Thus, the collection represents the years just before World War II.

Another source of information for imported beads are official government records, called Blue Books.†† Until 1925 they showed the nationalities of importing merchants rather than the manufacturers. England imported more than half the beads, with Germany close behind. From 1925 on, the records reflected bead origins. Table One records the origins of beads on the J.F. Sick & Co. cards, and Blue Book data for 1931 and 1936, by both weight and value of the beads.

Table One: Bead Imports into Ghana in the 1930s

B E A D S I N T O G H A N A	1931 Blue Book		ca. 1935 J.F. Sick & Co.		1936 Blue Book	
	value	weight	cards	per cent	value	weight
Italy	45.9 %	57.7 %	59	33.0 %	31.5 %	46.8 %
Czechoslovakia	24.1 %	17.5 %	73	41.0 %	45.7 %	30.3 %
France	12.0 %	9.8 %	16	9.0 %	12.0 %	11.1 %
Germany	13.1 %	9.6 %	none recognized		6.1 %	5.3 %
Others	5.0 %	5.3 %	30	16.8 %	4.6 %	6.5 %

Table One shows that the Venetians and the Czechs dominated the trade in the 1930s. Between them they never had less than 70% of the market. However, France and Germany were

also important to a lesser extent. The Germans do not show up in the sample cards, but import figures show they were about equal to the French. No one else came anywhere near. The leading member of the "others" group is Britain, which accounted for only about 1.0% of imports by weight or value.

The glass bead trade in Ghana reflects the trade in the rest of West Africa. It began over a thousand years ago as Arab merchants crossed the Sahara with beads from Cairo and other Mid-Eastern glass centers and as far away as India. One bead they brought, a blue or dichroic blue/green glass tube, came to be especially prized along the Gold Coast by the time the Europeans arrived, and was eventually known as the Aggrey.

The arrival of the Europeans 500 years ago changed the market. Their beads came to dominate the coastal trade quickly, and eventually displaced the Arab monopoly throughout West Africa. Nearly all their early beads were Venetian, whose industry grew up with European exploration. At times, the volume of importing was enormous, reaching up to 40% of the total. This figure dropped as commerce became more complex, but the number of beads always remained high. By the mid 1800s Czech beads were rivaling Venetian ones, and by the 1930s had become as important. The sale of French and German beads was also surprisingly large.

## BEADS MADE IN GHANA: POWDER-GLASS BEADS

**B**ead markets in Ghana are colorful and lively (Fron Cover). At some, European beads are sold, but the most interesting ones feature beads made in Ghana. These include a wholesale market for Krobo beads on early Thursday mornings at Koforidua, weekly markets in large Krobo towns, and shops in Kumasi, where the bulk of Asante beads are sold. These beads are special because they are locally made. Just as work done altering European beads adds to their merit, so does the work expended making the beads from scratch.

These are called "powder-glass" beads because they are made by pulverizing glass, shaping it into a bead and heating it. The heat is not enough for the glass to melt, but only to join the particles where they touch (technically called sintering). They have acquired various collectors' names such as "pot beads," "sand-cast beads" and "priest beads," but none are remotely appropriate. They are often dismissed by collectors as crude, common or uninteresting, but the more we know about them, the more fascinating their story becomes.

The craft flourishes in two regions: in the southeast among the Krobo and in the center in Asante country. Both areas have several villages where these beads are made. Production in some resembles that in others because workers learned the craft one place and took it to another. However, there are enough variations to ascribe many beads to particular villages (Plate 4A).

In the Asante region, people in at least eleven villages make beads.<sup>†</sup> Each has a different story. For example, in Ohwim there are about 60 furnaces, where mostly small colorful beads are made. At Asamang, production is controlled by one man, Attah Gyamfi (or Jamfi), a veteran of 30 years; his beads are fairly large and complex. Kofi Adjame learned beadmaking at Adankwame and took it back to his village of Abrade, but since he moved to Tantokro, beadmaking in Abrade has stopped.

I always ask people how they learned to make beads. Everyone said the craft had been learned somewhere else and all roads lead to Dabaa (or Darbaa). So it was that late one afternoon a small expedition packed in archaeologist Peter Shinnie's pickup slowly threaded a treacherous route, with a few halts to extricate the truck from the gully that ran down the cen-

ter of the road. Upon arriving we were greeted and told the industry was started by Osei Kwame, who had died in 1978. We persuaded two elders to tell the story of how he started making beads. After protracted negotiations over gifts and the ritual palm wine libation (we hadn't brought the schnapps they preferred) they related the tale.

One fine night in 1937 Osei Kwame had a dream. The next morning he went to the river and fashioned round, flat clay discs into which he poked holes for molds. The next day he gathered cassava stems, and placed them in the center of each hollow in the mold to burn out and leave a perforation in the bead. The third day he went to Kumasi, the Asante capital, and bought European beads, carefully choosing his colors. These he crushed, pouring the powder into the molds around the cassava sticks in six layers. He then fired the molds for only 15 or 20 minutes; longer times are needed now.

Dreams are the supposed genesis of many activities in Ghana and this one was not to be taken at face value. Beadmaking had been reported in the Asante region as early as 1814. In the year of Osei Kwame's dream Wild [1937] described their production in Asante, illustrated with molds already in the British Museum and noting that the craftsman had been taught by others. But we mustn't be too hard on Osei Kwame's biographers. Though not the originator, he was a master and a gifted teacher. Every beadmaker I visited in Asante ultimately traced their lineage to him; he had done much to spread the industry in the region.

**I**n Krobo territory, there was no comparable story of the craft's origin. Some writers [Huber 1963:68; Kalous 1979b:15-7] have suggested that beadmaking is not very old among the Krobo, while others [Lamb 1976] disagree, citing their level of sophistication. The Krobo beadmakers I interviewed traced their knowledge from their ancestors.\* Dominick Ogbordjor of Sikaben told me his great-grandfather made beads; he has since taught his grown daughter. There is some evidence for the work having been done on Krobo Mountain before the British forced the people off the commanding height in 1892 [Lamb 1976:38].

Both the Asante and Krobo make powder-glass beads much as was described in Osei Kwame's dream. Glass is pulverized from broken bottles in a metal mortar with a heavy pestle. White bottles yield a white color, beer bottles give green, Guinness stout bottles are used for brown, while sulfur is added for yellow and washing blue for blue. Other colors are made either by crushing imported beads or by purchasing pre-ground European glass; both alternatives are expensive.

Flat clay molds are punched with a small wooden tool which makes both a hole for the bead and a depression at the bottom of the hole for a short piece of cassava stick, which will burn out and leave a perforation in the bead. It takes about five minutes for an experienced worker to make a mold and about twenty minutes to harden it in the fire.

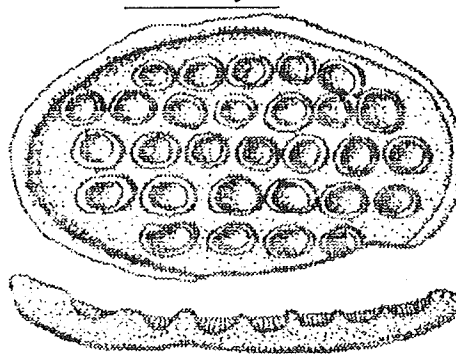
The powdered glass is then poured into the molds (Plate 2D). Decorations are formed in different ways (Plate 4A). Simply layering glass into a vertical hole results in a zoned bead. For stripes along the side, a hole is filled with one glass color, then cavities are poked along the side with a stick and other colors carefully poured in. The Krobo remove molds filled this way from the furnace before the glass is completely set and give the beads a turn, which results in the twisted stripes on Adjagba beads. Many other combinations are also possible, and in both regions much experimentation is going on today.

**B**eads can also be made in longitudinal layers. In the 1930s at Goaso in Asante, glass was poured in the groove of a long horizontal mold. Colors were built up, a long cassava stick placed along the center, and more colors carefully poured on top. After firing, a tube was formed. It was scored with a knife and the resulting beads ground smooth [Sinclair 1937]. What may have imitated these was apparently an invention of Osei Kwame. He used a common round mold with longitudinal holes and small grooves at both ends for the cassava stick.‡

Once filled, a couple dozen molds are set on a shelf in small furnaces built of stones and car springs covered with mud. A wood fire is lit underneath to burn 45 minutes to an hour until the beads have set. The molds are then removed and the beads shaken out into water to clean. Larger beads are often ground to a polish or beveled on the ends. Children are assigned to string the beads on strips of raffia palm leaf.

Older beads are valued by Ghanaians. Among the Asante they include the longitudinal layered tubes described above. Zonally layered beads, usually of blue and white and often rather thin are called *awaypa* (*pa* means "good") and worn at weddings. Thick short cylinders, usually gray with red and blackstripes, were popular on the waist bands that played a part in romance, as discussed in the next section (Plate 4A). Among the Krobo, Adjagba beads are highly prized, particularly when large and old (Plate 3D). Some of the most valued beads in Ghana are the ancient powder-glass beads discussed in the next subsection.

**H**ow old is powder-glass beadmaking? Archaeological evidence from Tegdaoust, Mauritania, indicates that such beads were being made there in the tenth to twelfth centuries. Tegdaoust is assumed to have been the medieval city called Aoudaghost (variously spelled), which was an important trading center in the old Ghana Kingdom [Robert 1970]. The finds there include not only beads, but also flat clay molds used to make them [Vanacker 1984:46-51]. (Figure 2) This is the earliest confirmation of this industry recorded so far.



**Figure 6: Powder-glass bead mold from Tegdaoust without holes for sticks to burn away for perforations. After Vanacker 1984:48.**

Within Ghana, excavations show that beads made this way can be dated to at least 1700.§ European records, albeit sketchy, also date to this time.\*\* The first description was by John Barbot [1732:231], "The third sort of false gold, grown pretty common among the Blacks, is a composition which they make of a certain powder of coral [glass beads] which they cast. . . ." He said it was so well made it could not be told from gold except by breaking it with a hammer; it is unlikely they were such excellent imitations as that.

## Beads of Kings: The Bodom and Akosu

**N**o bead in Ghana is more highly valued than the Bodom, which can cost up to several hundred dollars each. Bodom are powder-glass beads, which strike some as strange, because such beads are usually inexpensive. Bodoms are old and technically different from beads made in Ghana today. They are large, an inch (2.5 mm) or so in diameter, often with a yellow background and multi-colored designs (Plate 3D). A distinguishing feature is that their cores are dark black or brown. At least some have flakes of gold in the core.†

Bodom are a bead of kings, reserved for the elite in Asante society. They reflect dignity and wealth and are usually worn by chiefs or other men of rank. The Adanse, who claim to be the original Asante, have many stories about them [Daaku 1969].\* They say they are sometimes found in the ground, which is possible if the beads had been lost or buried. They are also said to reproduce. Placing one in a pot, sometimes with other things, ensures one to six new Bodoms or other beads in a year or so (I have not tried this experimentally).

The Adanse say that Bodoms came from the north. This is echoed by the Asante informants of Asokore-Koona [Meyerowitz 1951:50, n. 2], who said they were from north of Jenné in the interior Niger delta.‡

**H**ow old are Bodoms? Although sometimes found in the ground, none have been scientifically excavated.§ Assuming that the story of reproducing has always been attached to Bodoms, Bowdich included them in his mishmash of bead lore in 1814. That they are of some age is certain, but we cannot yet even give an estimate.

What could be their origin? The dark cores are a clue to how they were made. Rather than being poured into molds, a core of powdered glass bound with something like sugar or gum arabic was formed, then covered with powdered yellow glass and decorations, often in a non-powdered form. When the bead was fired the organic material in the core blackened. Saliva will also bind glass, but is difficult to use for large beads and does not leave a dark core [Liu 1984:56].

Beads are not made this way in Ghana, but they are in Mauritania. The small, colorful "Kiffa Beads" do not resemble Bodoms except technically, but this similarity may be critical. Unfortunately, no one has traced the history of Kiffa beads very far, though they are said to be ancient [Mauny 1949b; Gabus 1976, 1982; Oppen and Oppen 1989a, b]. The beads and molds found at tenth to twelfth century Tegdaoust, Mauritania show the technique was employed there. The molds are unlike those used in Ghana, lacking depressions for a stick to burn out for a perforation [Vanacker 1984:pl. III]. They might have been used like molds for Kiffa beads to heat the glass, which is afterwards pierced [Gabus 1982:122; Oppen and Oppen 1989a].

**E**ven though the evidence is scanty, we can form a tentative hypothesis about Bodom origins. Oral traditions are often accurate, and the conviction of a northern origin is strong among the Asante. A powder-glass beadmaking technique a thousand years ago at Tegdaoust, north of the inland Niger delta, is pertinent, especially if they were made on cores. Kiffa beads, technically similar to Bodoms, are made in southeastern Mauritania, where Tegdaoust is located. Ghanaians may have once made beads this way, but if so, they have forgotten. Could it be that Bodoms were made in this area, controlled by the ancient Kingdom of Ghana and later of Mali? Modern Ghana received considerable cultural input from the Malian Kingdom [Wilkes 1961]. This hypothesis takes into account their reported northern origin, the lack of the technique in Ghana, and a related technique surviving in Mauritania, as well as explaining their rarity.

There are other old valued powder-glass beads, including the Akosu (Plate 3D). It is similar to Bodoms, but with different designs and without the dark core, perhaps having been bonded with saliva or something else. They serve the same purpose as Bodoms among the Ewe, as beads which mark royalty or prestige [Kumekpor 1970-71:103]. No one makes them today in Ghana. Again, we do not know their age or origin, but it may be similar to that of Bodoms.

## HOW BEADS ARE USED IN GHANA

**B**eads are interwoven into the lives of all Ghanaians. They are worn daily by women, while men wear them principally on ceremonial occasions. Often one can instantly recognize a person's ethnic group by the beads they wear. For example, Krobo women are fond of Krobo powder-glass beads, while the Mossi women of the north wear few glass beads, favoring necklaces of thin discs of vulcanized rubber (Vulcanite beads) or plastic.

The following information is gathered largely from published works. Many points made by others have been confirmed by my own observations, and I have added a few new items.†

A survey by Quarm [1989] at the University of Ghana revealed that on at least some occasions people of both genders and all ages wear beads. Only three types are worn by everyone: a black seed\* used in rituals, imported glass beads and powder-glass beads. More expensive stone, ivory and coral beads tend to be worn only by older men and women. Cheap plastic beads are only donned by young girls.

Young girls are also the only ones to wear bamboo beads. Although a few tourist-oriented shops carry them, they are rarely for sale. The reason they are widely worn but not sold is that young men make them for their girlfriends as presents. Many youths know how to cut thin bamboo into tubes, incise them with designs, and darken them with fire, leaving some naturally light for contrast.

Beads are worn for decoration, of course, but have many other functions besides. They mark one's ethnic or religion affiliation. They serve as status symbols, as with Bodom and Akosu. They are cherished and become heirlooms, passing down from mother to daughter. They are also commonly part of a ruler's inheritance, known as his "stool regalia." (Low, backless stools, are personal items among Ghanaians, with certain stools reserved for royalty; skins take their place in north Ghana.)

Beads can be magical, used as charms or for other purposes. An Asante accused of a crime is supposed to swallow a Bodom (perhaps it needs to be ground up first) and will choke on it if guilty. Some Adanse priests use beads to see into the future.

Perhaps the most unusual bead use is an Ewe tradition [Quarm 1989:40]. When the Ewe moved into Ghana from their homeland in Togo they had to fight other people to pass on their way. As they ran out of

bullets for their rifles, the warriors appealed to their wives and children for beads. The donated beads were loaded into the firearms, and the Ewe were victorious in their fights. As far as I know this is the only record of beads used as ammunition!

**T**he most important bead function in Ghana is to mark the stages of one's life. Beads worn at childbirth prevent miscarriages. When a baby is eight days old and assumed to survive, small white beads are tied on; the mother also wears them. Beads strengthen children and cure madness in them. In some communities children wear beads according to their order of birth. For example, the Aowin and Nzima have particular beads worn by the third, fifth, seventh, ninth and tenth child, twins and the two children born after twins (talk about family planning).

An impressive use for beads is when a girl reaches the age of puberty and undergoes the Dipo ceremony. This rite used to last a year, but now only goes on for a week or a day, depending upon the community. It is especially important among the Krobo and Ga. During the celebrations, the girl wears nothing other than a great mass of beads (a loincloth has been added in recent times). The Krobo take special care to choose fine Adjagba and imported carnelians. If a family is not wealthy enough to have many beads, they rent them from one that has beads but no girls of the appropriate age. After the Dipo, the girl is "out-doored," going to another village or a city to look for a husband. Her scanty clothes emphasize her physical charms, while the quality of her beads announces the wealth of her family.

Beads are required as gifts from a prospective groom to the family of the intended among some people, including the Asante. Eye beads symbolize the boy's attraction for the girl and are given in hopes that her family will agree to the match and admonish the girl to work hard and be a good helpmate.

One use of beads rarely noted is their role in sexual attraction. Worn under a skirt or dress and around the legs, they produce a pleasing feminine shape. Though the custom is now dying out, it was common for a wife or a husband to shake and rattle the woman's waistbeads to indicate a desire for lovemaking and raise the same passion in their mate. Playing with these beads was once an important feature of love

making. Men can take oaths on their wife's beads, and a wife who dares describe them to another man has effectively committed adultery.

This may be widespread in sub-Saharan Africa. Beads are used this way in Senegal and Mali [M.J. Oppen 1992]. They were similarly employed in what is now part of Chad two centuries ago. How common it is (or was) is yet to be learned, but the evidence suggests it is prevalent.

When a man becomes a king or priest, beads are part of the ceremony. They are part of the royal stool regalia among most ethnic groups. Priests of different cults wear beads to distinguish them.

Another critical life stage is a safe return from a long journey, an illness or an accident. The Ewe have a special ceremony in which valuable beads (usually glass, but gold is acceptable in a pinch) are tied to the wrist of the person who has escaped danger. They become part of his or her personal property.

The last stage of life is death. Corpses are bedecked with beads, though they are no longer commonly buried with them. Mourners wear beads to match their dress: black, brown or red. An expression among the Akim for mourning the dead is *ye ko we abo*, "we are going to chew Abo"; Abo are the reddish bauxite beads made in Krobo country [C.T. Shaw 1945]. For Asante kings it is proper to present a Bodom at his deathbed.

One can hardly escape beads if one is a Ghanaian. They are far more than pretty trinkets or attractive ornaments. Their use is intricately linked to the lives of the people and inseparable from them. Nor are the valued ones European lamp-wound, millefiori or chevrons so favored by non-African collectors. Beads are treasured because they have long pedigrees and are often products of Ghanaian or other Africans' genius, either directly or through altering.

## SUMMARY

There are few countries in the world in which beads are so essentially important as Ghana.

They are part of Ghanaian life in many complex ways and serve a wide variety of functions, far beyond simple ornamentation. They are not regarded as "women's trifles" or mere baubles. The greatest kings of the land wear highly valued and scarce ones. The youngest maiden wears them, too, whether expensive heirloom beads for the Dipo ceremony or bamboo ones made by her sweetheart.

Ghanaians are great traders, and the bead trade is an important element of commerce. Bead traders are in a class of their own. They not only buy and sell beads, but rework and alter them to suit their cus-

omers. Ghana also has many beadmakers. Although their work is usually only part-time as an adjunct to farming duties, that does not diminish their joy of creation nor the economic value of their labor.

The bead trade has ancient roots in the country. Beads made as far away as Egypt, the Levant and India reached the land centuries ago. In the period of European trade and colonization they were an important part of the interaction between Africans and Europeans. But all the while, the most important ones were made by the West Africans themselves or significantly altered by them to suit their aesthetic tastes. Truly, there are few places on Earth where beads are more loved.

## NOTES

[References to Legon are to the Department of Archaeology, University of Ghana, Legon.]

**INTRODUCTION TO GHANA:** Statistics are from *Britannica* [1988:604 ff.]. For historical/archaeological outlines see Posnansky [1971] and Anquandah [1982].

**INTRODUCTION TO GLASS BEADMAKING:** For European beads see Francis [1988]. For beads in the Islamic world see Francis [1989, 1990a].

**ISLAMIC TRADE:** † The stratified eye beads and zoned tubes from Fustat are in the Islamic Museum, Cairo [Francis 1989]. Both are common on the antiquity markets in Mali, and have been excavated from Kumbi Salah, Mali [Thomassey and Mauny 1951:11.26; 1956:14.14-17] and Tegdaoust, Mauritania [Vanacker 1984:pl. II A]. A black stratified eye bead (now in Legon) was uncovered by Posnansky at Begho, the only place in Ghana named in early Islamic texts [Posnansky 1971:115-8]. A blue eye bead is shown worn by a Ga priestess in Quarm [1989:84].

\* **Mosaic eyes** [Vanacker 1984:pl. II B, D] and what is apparently a torus-folded bead [Ibid.:pl. I, D] were found at Tegdaoust. In Ghana, a mosaic bead excavated from Dawu [T. Shaw 1961:pl. XVI B 23] is in the National Museum in Accra. Bowdich [1966:268] appears to describe these or agate-glass beads. A double layered segmented bead from Begho is at Legon.

‡ **For Indo-Pacific beads** see Francis [1990b; 1991a]. Several were found at Begho. They may be at Kumbi Salah [Thomassey and Mauny 1951:11.10, 22] and three of the five glass beads found at Jenné-jeno [McIntosh and McIntosh 1980:164, pl. XI], though the descriptions and plates do not make this certain. They are very common in Malian markets, said to come from Jenné.

**AGGREY BEADS:** † All writers until Bowdich (ca. 1814) describe Aggreys as blue except for Brun's dichroic beads and DeMarees [Purchas 1905:334], who says they are black, blue or green, which may be a description of dichroism.

\* **Sources of Aggreys** were mouths of the Niger according to Pacheco Pereira [Kimble 1937:120], Bothelho in 1508 [Blake 1942:I 98], Brun in 1614 [Jones 1983:69] and Dapper [1686:298 ff.]. Ogilby [1670: 473] and Barbot [1732:236] said Benin (eastern Nigeria). DeMarees in 1602 [Purchas 1905:352] and Isert [1793:167] said they came from Ardra or Fida, inland from the Slave Coast, possibly way-stations. Beyond the Niger only Brun [Jones 1983:68] said Cameroon and the Portuguese pilot [Blake 1942:I 153] said Manicongo (Angola).

‡ **The word *cori*** was used by Pacheco Pereira [Kimble 1937:120, 128] and Bothelho in 1508 [Blake 1942:I 153]; *Accori/Akori* by Brun in 1614 [Jones 1983:69], Ogilby [1670:473] and Dapper [1686:298 ff.]. Bosman [1705: 199] said, "by the Europeans called Agrie, and the Negroes Accorri." Barbot [1732:236] said, "by the Europeans called Agrie, and by the Blacks Acorri." Perhaps the /g/ sound was easier on European tongues than the /k/.

§ **Aggrey Materials: Coral** -- Brun [Jones 1983:69], Ogilby [1670:473], Dapper [1686:298 ff.] and Bosman [1705:119] used "coral," but all were Dutch or working for them. Barbot [1732:236, 348] said both coral and stone. **Stone** -- The Portuguese pilot [Blake 1942:I 153], Eden in 1555 [Blake 1942:II 343], DeMarees [Purchas 1905:354] and sometimes Barbot [1732:348] and Isert [1793:156] called Aggreys stone; Davison [1970] suggested the dichroic cordierite, then rejected it on several grounds. **Shell** -- Kimble [1937:128] translated, "blue shells with red stripes which they call 'coris'" from Pacheco Pereira, which misled Jeffreys [1961:107] and Davison, Giauque and Clark [1971:646], though Fage [1962:344, n. 5] caught the error. The Portuguese "bead" (contas) and "shell" (concha), are easily confused, especially in manuscript; the Portuguese

is in Mauny [1956:138]. **Others** -- Wiener [1922:237-48] said there never was a single Aggrey material, then discussed coral and agates as though they were Aggreys. Gautier [Bovill 1968:26-7] equated them to the carbuncles of the Garamantes. Kalous [1968] suggested Ifé glass, then [1979a] opted for tektites. Van Land-erwijk [1971] suggested glassy iron slag, which Kalous [1979a] criticized. The idea is intriguing, but "slag," from fuel ash interacting with furnace clay melts at about 1400 degrees C., too high to form into beads [Killick 1990]; drilling is possible, but such beads are unknown in the area.

†† Ifé was recognized early when one of the Lander brothers [Lander and Lander 1832:I 180; Hallett 1965:88-9] bought "a very curious and singular kind of stone" from "Iffy" at Katunga, evidently glass from a crucible. There are several reports on Ifé glassworking [Frobenius 1913:308-9; Willett 1960:242; 1967:24-5, 106-7; Davison, Giauque and Clark 1971; Davison 1972:243-304; Garlake 1977:89-90]. Sutton [1982:309] said there was still no evidence of glassmaking, as opposed to glassworking.

\*\* The height of folly is Price [1883], a typical bead analyses of the day. He equated Aggreys to many beads he did not understand. His own "Aggri bead" he thought came to England on the neck of an African slave of a Roman legionnaire. Cardinall [1925] perhaps first pointed out the improbability of a Phoenician origin.

‡‡ The name strongly suggests a connection. Meyerowitz [1951:pl. 97] says she was told as much.

**EUROPEAN TRADE:** † Alaquegas -- Kimble [1937:81, n. 6, ff., 92] translated "blood-stone" because they could staunch blood. Mauny [1956:64-5] correctly used carnelian. See Francis [1992a].

\* DeMarees' observations are discussed in detail in Francis [1986]. For a later translation see Van Dantzig and Jones [1987].

‡ Early European contact assemblages I have examined are the Artisan's quarter at Begho, Ladoku (the Dangme capital), Ayawoso (the Ga capital) and Elmina, all at Legon.

§ Trade statistics were computed from Reynolds [1974:101, 137, 183]. Population figures for 1931 came from Cana [1942:485] and for 1871 from McNally [1876:103]; an annual growth rate of 4.1% was extrapolated backwards, leaving a 1834 population of some 33,000 for the Gold Coast Colonies. This has shortcomings in assuming the population figures are correct and a steady growth rate, but is the best that can be done with the material available. In Francis [1990c:6-7] a misplaced decimal exaggerated the metric weight of the beads.

†† The cards were acquired by Thurstan Shaw for the Achimota College Museum [Lamb and York 1972:112] and later transferred to Legon. Lamb and York say they were acquired in the 1930s. Quarm [1989:51 n.] said J.F. Sick & Co. ceased business in Ghana in 1936, but the dated cards indicate later use, perhaps down to 1941. There were originally at least 193 cards, indicated by Achimota College accession numbers.

\*\* Prosser beads are named after Richard and Thomas Prosser, who patented a machine to make buttons in 1840 and 1841. Improvements, and perhaps the first beads, were made by Jean Felix Bapterosses of France in the mid 1860s. The beads have been made at least in France, Germany, Holland and Czechoslovakia; those in the Sick collection are on Czech cards [Sprague 1983; Francis 1988:7; Oppen and Oppen 1990:58-62].

‡‡ The dates of the Blue Books [Gold Coast Colony] used for later bead trade statistics were 1885, 1901, 1906, 1912, 1916-1921, 1925, 1931 and 1936.

**POWDER-GLASS BEADS:** The term was coined by Lamb [1976] and has been widely accepted by scholars. As for collectors' names, the beads have nothing to do with sand, are not cast and are not made especially for or by priests.

† Seven Asante villages were identified by the Technology Consultancy Centre [1975] of Kumasi; I verified five (Dabaa, Kapro, Esaso, Adankwame and Ohwim) and added four (Asamang, Ahwia or Ehwia, Tantokro and Abrade, the latter no longer making beads).

\* The Krobo towns/villages visited were Odumanse, Aboabo, Sikaben, Koforidua and Agomenya (the last two are markets).

‡ A mold for longitudinal beads was shown me by Ntin Kwabea, one of the informants on Osei Kwame. A photo of Osei Kwame in the Museum at Legon shows him making these beads.

§ Archaeological finds in Ghana include Adansi Ahinsan 1680-1750 [Calvocoressi 1969:6]; Twifo Heming 1690-1710 [Bellis 1972:85]; and Dawu, dated 1400-1700 by T. Shaw [1961], but 1600-1700 by Ouzzane [1962]. They are at Elmina, terminal date 1873 [DeCorse 1989] and Daboya [Shinnie and Kense 1989:199, bead 333; a surface find]. Unpublished examples at Legon include Woduku ca. 1600-1800 and Dixcove, no date.

\*\* Historical data include Barbot's description and Bowdich [1966:268] sneering, "The natives pretend that imitations are made in the country, which they call boiled beads, alleging that they are broken aggrey beads ground into powder and boiled together, and that they know them because they are heavier; but this I find to be mere conjecture among themselves, unsupported by any thing [*sic*] like observation or discovery." A typical passage, mixing up Koli and powder-glass beads and not believing that the natives could do anything of interest.

**BODOM:** † The definition is mostly Lamb's [1976]. Kalous [1979b] ridiculed the idea that such valued beads could be powder-glass; the acrimonious debate between them was not all published. My experience confirmed by J.E.J.M. van Landerwijk and Ghanaians indicate that Lamb was right. I cannot agree with Liu [1991], who suggests a European origin; none of his characteristics rule out an African origin. In addition to Bodom dark cores, both the Bodom and Akosu in the Center's collection have a few tiny flecks which have been confirmed to be of gold; the broken Bodom has them in the core. This may also be diagnostic..

\* Adanse: Lamb [1976:37] suggested that Daaku ask questions about beads. Informants in the 16 villages all ranked Bodom high in status, most saying they reflected the wealth and dignity of a chief or indicated wealth.. Twelve said they came from the north and ten that they were from the ground (some affirmed both). The two people who found Bodom are in Daaku [1969:266, 315].

‡ Meyerowitz's [1951:50, 206, pls. 95-7] discussion of beads often seems misinformed. All beads on the plates appear to be Venetian, except perhaps the Gyanie, which are more likely translucent than opaque blue.

§ Excavated Bodom: Of New Buie beads, Lamb [1976:34] said, "beads of this general type going back to perhaps as early as the sixteenth century" were found. None are in York [1973], nor in the National Museum at Accra, though collections have been mixed up. Perhaps Lamb meant simply powder-glass beads.

**USES OF BEADS:** † My sources have been Quarm [1989] on the Asante and Akim of the center, the Aowin and Nzima of the southwest and the Ga, Krobo and Ewe of the southeast. Sackey [1985] reported on the Fante and is strong on the Dipo ceremony. Kumekpor [1970-71] summarized use among the Ewe. Cole [1975] provided a summary for Ghana and compared use in Kenya. Information on the Adanse priests is in Daaku [1969:325]. My contributions are the use of Vulcanic beads in the north, the bamboo beads and elaboration of the romantic use of beads.

\* The black seed has not been identified botanically.

‡ The romantic uses of beads in Wadai (Chad) were discussed by El-Tunisi [El-Tounsy 1851:334-5], where he was resident in 1811-12. See also Francis [1992b].

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**Abbreviations:** *GJS* = Ghana Journal of Sociology *NA* = Notes Africaines *JAH* = Journal of African History *WAJA* = West African Journal of Archaeology *JRAI* = Journal of the Royal Anthropological Institute

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## Captions (Plate 3 and 4)

### Plate 3 (Inside Back Cover)

**3A** (Upper Left): A hired worker at Teshie House, Accra, grinds beads strung on a wire against a large grinding stone to smooth them and give them the same diameter.

**3B** (Upper Right): Elizabeth Bruce of Teshie House demonstrates the cooking of beads. The pot was used when the house did this work. A charcoal fire was lit under the pot, containing beads and organic matter.

**3C** (Lower Left): Altered beads from the African trade. Row 1: Beads ground to bevel the ends. Row 2: A yellow heart ground into a hexagonal bicone, two beads with decorations ground off, and two broken and ground millefiori beads. Row 3: Drawn Czech bead used to make Koli beads, small Koli bead, a drawn striped bead heated in a different way. Rows 4-6: Koli and striped beads altered by heating. Longest bead 4.5 cm.

**3D** (Lower Right): Upper left an Akosu; upper right a large Adjagba; bottom a Bodom. Akosu 3.3 cm long.

### Plate 4 (Back Cover)

**4A** (Top): Powder-glass beads from Ghana. (Mold 7.6 cm. long.)

Row 1: Five beads made in a horizontal mold as was done in the 1930s at Goaso. Two beads from Dabaa, the first one made in a different style of horizontal mold.

Row 2: Older Asante beads. The first four are Awarypa beads. The next four are striped beads favored on women's waist strands. The last four are of more unusual designs, with horizontal layers which have been made to resemble combing and other hot-glass decorations.

Row 3: Asante beads from Ohwim, 1990.

Row 4: Asante beads 1 - 7 from Asamang; 8 - 10 from Abrade, 1990.

Row 5: Asante beads 1 - 5 from Pokro; 6 - 8 from Dabaa, 1990.

Row 6: Krobo beads. Beads 1 - 3 and the three rows to the right from Aboabo, 1990. Four beads in fourth place from left from Sikaben, 1990. Bead with spot, older style from market. Mold fragment from Sikaben. The red bead to the top left of the mold melted into the depression for the cassava stick; it is from Ohwim. To the bottom left of the mold is a typical length of cassava stick for the perforation.

Strand 1: Dabaa, 1990. Strand 2: This strand has European trade beads and a dozen unusual powder-glass beads decorated with small European beads, including chevrons. The effect resembles millefiories.

**4B** (Bottom) European trade beads (Elbow bead, row 5, no. 2, is 4.3 cm long.)

Row 1: Lamp-wound beads typical of late eighteenth and early nineteenth century Venice. Note the chevron at the end and the lamp-wound imitation to its left.

Row 2: Lamp-wound beads typical of early nineteenth century Venice. The first is an imitation Bodom, the second an imitation Akosu. The fourth and fifth are white hearts. The bead on the end is heavy in lead; a strand of these was found in the 1873 fire at Elmina.

Row 3: Beads typical of early twentieth century Venice. Note the brighter and more garish colors, especially the selenium reds and cadmium sulfide yellows compared to the earlier beads.

Row 4: Venetian millefiori beads made before World War I by the bundled cane method.

Row 5: Venetian millefiori beads with designs made by simply layering or molding. The second bead is known as an "elbow" (compare plate 2C). The third one is flattened.

Row 6: Czech beads, mostly molded, from the nineteenth century. The first bead is a Vaseline bead; note the conical hole. The next beads imitate shell, granite and powder-glass beads made on a horizontal mold. The three blue beads were drawn as hexagonal tubes and further faceted. The two pendants are molded.

Row 7: Czech beads of types that appear on the J.F. Sick & Co. cards from the 1930s. The first, third, fifth, and ninth through twelfth are interlocking beads; only the third was not made by the Prosser technique. The bead on the end is a Vulcanite bead; to its left is a plastic disc resembling it.

