



Global Beads Inc.

BEADS • CLOTHING • JEWELRY

How Beads Are Made

GBI Knowledge Center





Introduction

There are a number different ways of making beads from glass. The three principle methods are described in this chapter. Beads can be made

1. by winding molten glass to form a bead (Wound); or
2. by drawing molten glass to form a long thin tube, which can then be cut into many beads, (Drawn); or
3. by placing glass in moulds and heating in a kiln until it fuses together (Fused).

There are two variations on these techniques: first, with mould pressed beads, the molten glass is forced into a mould to give beads a certain shape, and to speed up the process of producing beads; second, mosaic beads are made by fusing slices of drawn canes to a wound or drawn glass body. One can also blow molten glass to make beads, but such beads are fragile, and rarely survive for archaeologists to find, so this method is not dealt with here.

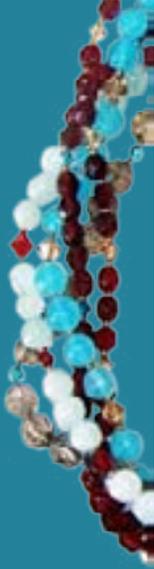
The method of making beads in Ghana is described here in the most detail, as this method is only to be found in Ghana and Mauritania: in all other places beads are made by working with molten glass. Contemporary methods of making beads are described, with illustrations, and two historical accounts of bead making are reprinted for comparison.

The method of making beads is also used as the primary criterion for classifying beads, both by others (Beck 1928, Kidd and Kidd 1970, Karaklins 1985) and in the classification developed for the beads in the Museum of Archaeology.

Wound Beads

Wound beads are produced by winding a hot and molten rod of glass or strand drawn from molten glass around a metal wire called a mandrel. The bead maker sits in front of the heat source, typically a flame, heating the glass and winding the bead.

Therefore these beads are also referred to as lamp wound beads. While still soft, the beads might be decorated with any of a myriad of inlays or appliques, and the variety of decorations is infinite (see Figures 2 and 26).



The most elaborately decorated wound beads are known as fancy beads. Sometimes wound beads may be pressed with metal paddles or tongs to produce a uniform shape. In West Africa we most often see squared or flattened wound beads. The surface of wound beads usually exhibits swirl marks that encircle the axis, an imaginary line passing through the centre of the perforation (see the top two beads in Figure 26). Bubbles in the glass are either round or elongated and oriented like the swirl marks.

Unlike drawn beads, wound beads are made individually, and often not in a factory setting, but rather by piecework in people's houses. This was often women's work, and as with other "cottage" industries the pay was by completed bead. The amount of work to make these beads is considerable, and such fancy wound beads are not made in commercial quantities any more. Yet, in the past, many thousands were made, and the majority of European beads in the museum collection are wound beads. Further information on wound beads can be found in Karkfins (1985:96), Jargstoff (1995) and Trivellato (1998). Beautiful pictures showing the amazing variety of wound beads can be seen in Picard and Picard (1987).

Drawn Beads

In the manufacture of drawn beads, many identical beads can be made at once. While the process is complex, and cannot be done alone, it is a way of mass producing beads that was perfected by the artisans centuries before mechanisation. In those days, a large hollow globe of molten glass was created, and then drawn out into a long thin tube up to 300 metres long.

One person manipulated the hollow globe, while the other took one end of the globe and moved away drawing out a tube of glass as one might draw out a thread of toffee. The globe may have been

1. composed of several different colored layers for layered beads;
2. adorned with rods or lumps of colored glass to form stripes;
3. marvered to create a specific shape, as for chevrons;
4. twisted during the drawing out process to produce spirals.

The tube was laid down to cool, and then broken into manageable sections, sorted according to their diameter and subsequently cut into bead lengths. The beads were either left unaltered with sharp edges (known as gaggle beads) or their broken ends were rounded.



Rounding was accomplished by a process known as tumbling: the beads were placed in a n or drum with other materials and heated as the mixture was stirred or tated. The heat and agitation rounded the broken ends while the various materials kept the beads from sticking together and prevented their perforations from collapsing. The resultant beads ranged from being unaltered tube fragments to almost perfect spheroids, depending the length of time they were tumbled (Karklins 1985:88).

Drawn beads have certain characteristics due to their method of manufacture. Bubbles in the glass and striations on the surface, if present, oriented parallel to the axis. The perforation is parallel sided and usually s a smooth surface. The decoration on a drawn bead runs parallel to the section in which bead was drawn: a drawn bead cannot have bands or knots unless they were applied after the bead was initially made. The stripes uniform throughout the bead, and the lines of very even thickness. This contrasts with the fines in wound or powder glass beads.

There are different classifications of drawn beads depending on the number and shape of the different layers of glass. Perhaps the most precious drawn bead is the chevron bead, known as powa in Krobo. This is a multi layered, drawn bead in which many of the layers e star shaped, and the typical colors are white, red and blue. Another drawn bead is the koli bead, and the parallel lines can often be seen koli beads because they are reheated, and in that process the air bubbles the glass burst (see bead glossary). Further information about chevron beads can be found in Picard and Picard (1986 and 1993).

Mould-Pressed Beads

Two basic methods were used to produce the majority of mould pressed beads. In the first, the end of a glass rod was heated over an oil Flame until it melted. A piece was then pinched from it and pressed in a tong like two piece mould. As the glass was compressed, any excess was forced out at the seam while a pin pierced the glass to form the hole.

In the second method, two pieces of viscid glass, one in either half of a two piece mould were pressed together to fuse them. This permitted the production of beads with complex color pattern that would have been destroyed or distorted in the previous method.



The moveable pin that formed the perforation usually extended from one half of the mould to the other, in the case of round and oblate beads, and across the open face of the mould for flattened and elongated specimens (from Karklins 1985:100).

Consequently, the beads in the former category have mould seams around their equators, whereas the latter have seams along their sides and ends (see Figure 28 second row). The seams cannot always be seen clearly, as they were ground down. They may also have seams in colored patterns, such as the beads in the third row of Figure 10, and the middle bead in the fourth row. Most of the mould pressed beads come from Bohemia, and Jargstoff (1993) concentrates on Bohemian bead makers.

Fused Cane or Mosaic Beads

Are produced very quickly, and many Glass canes are sliced, and these slices are heated and fused to a centre core, usually a black drawn cylinder. Sometimes the entire surface is covered with cane slices, and sometimes the cane slices are mixed with stripes or bands of viscid wound glass. When the entire surface is covered with chevron cane slices the bead is known as a millefiore bead. The advantage of this method is that it allows highly patterned beads to be identical beads to be produced by lamp-workers. The lamp workers are in effect being provided with pre fabricated bead parts (the cane slices and core) and assembling them.

Although the technique is as ancient as glass making, it was revived in Venice in the latter part of the nineteenth century, as labor became more expensive. All of the mosaic beads in the collection come from Venice, and all from the late nineteenth century onwards. Not one mosaic bead was found in the Elmina excavation, so it is unlikely that there were mosaic beads in Ghana before 1876. Picard and Picard (1991) is devoted to Millefiore beads. Coles and Budwig (1993:15) have a lovely illustration of the method, and Allen (1991) discusses the method in some detail.

Fused Beads - Modern Methods

The following types of bead manufacture are specific to West Africa, and especially to Ghana. Fused powder beads are also made in Mauritania (the famous Kiffa Beads), but their range of colors and shapes is much more limited.



This method of manufacture is typified by very little being done with the bead when it is hot: the bead is passively shaped by the mould and the perforation is formed when the bead is still hot, but the colors and designs are made either before or after firing.

Fused Powder Beads

Glass is powdered by a pestle, often at great risk to the pounder. The powder may be mixed with ceramic dyes, and is then poured into moulds using a guide, to make patterns as one would find in sand paintings (Figure 32, step 4). A cassava stalk is used to make the hole, and this burns during firing. The bead is shaped by turning when just out of the oven, and the perforation checked. Lastly, the bead is polished by hand with sand and water on a grinding stone.

Some styles of old powder beads are very hard to distinguish from wound or drawn counterparts, especially well made striped beads. Powder bead stripes are often indented more deeply into the body of the bead at one end than the other, because of the method of pouring the different colored powder to make the stripe. With both wound and powder beads the stripe may not be perfectly straight, and it might not be present for the entire length of the bead, whereas with drawn beads the stripes are perfect and repeated exactly for the whole bead.

Fused Fragment Beads

Glass fragments are arranged in moulds and heated in the wood fired oven, until the fragments are fused together. The perforation is made with a mandrel when the bead comes out of the oven, and the shape of the bead modified by turning the bead in the mould. The beads are typically translucent.

Fused Beads - Historical Methods

From inquiries made it was gathered that the manufacturers of these beads were people from Apollonia, the district which borders the sea in the west of the Gold Coast, and who had come inland in order to make and trade these beads at Dunkwa in the Denkera country. No amount of questioning would induce these Apollonians to disclose the source of their technique; their replies being evasive as is usual with natives, especially in this case, where they appeared apprehensive that their 'patent' might be infringed and a 'rival firm' set up.



However, it may be that they were the originators of this method, as numerous inquiries either in the Gold Coast, Ashanti or England have so far failed to trace the origin any further back. On the other hand, there is a possibility that the process was introduced from the neighboring Ivory Coast, as the western boundary of Apollonia forms the frontier line between the Gold Coast and the Ivory Coast.

The moulds (see fig.36) are made from a good, local clay, which possibly contains a high percentage of kaolin. They have no definite shape, but are made roughly by hand into flat slabs from 1 inch to 1 1/2 inches in thickness.

Holes, more or less circular, at irregular intervals, are formed in the clay; the diameters and depths are varied as required to suit different sized beads. In the centre of each hole is a much smaller hole going right down through the mould to its other side, and into these smaller holes the midribs or leaf-stalks of cassava (*Manibot spp.*), about the length of a safety match. The cassava is first made wet and smeared with clay, the effect of which is to cause the cassava to carbonise and not burn away when firing whicks place. In the illustration the moulds, circular holes, and the charred cassava stick can easily be seen.

The next part of the process consists of powdering various coloured tylasses, which is accomplished by grinding on the common stone slab used for grinding corn. Different coloured bottles and European glass beads are obtained and ground down fairly finely to about a 60 mesh.

The powdered glass is then poured into the holes around the cassava in layers, which are arranged according to the color and thickness desired. The moulds which the writer procured would permit of beads from half an inch to one inch in length being produced.

When the filling of the holes with powdered glass is completed, the moulds are put on a charcoal fire and covered all round with charcoal, and the hole is then banked up with firewood. The writer, when visiting the tactor, formed the opinion that the process of firing was also conducted in the one of the beehive ovens used for bread making.



The cassava sticks carbonise when the firing takes place, thus leaving a small tubular hole in the centre of the bead. From the nature of the operation and from the known qualities of glass when subjected to heat the writer concludes that there was not complete fusion of the glass, but the heat was sufficient to produce a 'Tritting' or to reduce the glass to a state of being pasty on the edges of the particles; thus causing the grains to adhere. This opinion is borne out by the fact that the fired bead has a granular appearance. The crude beads have then to be polished and for this purpose they are rubbed on a flat stone for a long time, both the barrel and the ends undergoing treatment.

The resultant bead has a streaky appearance which simulates the highly prized 'Aggrey' beads of the Gold Coast, and therefore a keen demand soon resulted.

The manufacturers did not employ either borax or salt, nor were any chemicals used in order to obtain effects; they depended entirely on colored glass. Needless to say, colored bottles, for the time being, were in great demand in the neighbourhood, green, yellow and brown being the colors usually preferred. Specimens of the moulds and the beads have been deposited at the British Museum, the Pitt Rivers Museum, Oxford, and University Museum of Archaeology and Ethnography, Cambridge.

History of Trade Beads

Ghana has a long tradition of bead culture dating back over the last 4000 years. Some Ghanaian ethnic groups, past and present have a record of both bead production and use. For example, the Akyem Abompe area, in the hills of the Kwahu Plateau, is noted for its bauxite bead production and use. In this chapter, I will discuss the main types of beads found in Ghana, and explain what the archaeological record can tell us about these beads.

Stone and Shell Beads

The very earliest archaeological evidence of bead production comes from stone beads found in the excavation of two rock shelters in the Kwahu escarpment, that were used in the period of the Late Stone Age hunter-gatherers, around 3000 2000B.C. (Anquandah 1982:29). The earliest well-authenticated evidence of production and use of beads in Ghana, however, is found in early agricultural village settlements dated from 2000 500B.C.



Archaeological digs have revealed numerous beads made from such materials as quartz, porphyry, shells and bone (Stahl, 1993:267; Anquandah 1982:72). Recent research at Boyase hill, near Kumasi, revealed an early agricultural village settlement extending over eleven hectares. Test excavations conducted alongside granite boulders with multiple, broad, artificial hollows and grooves revealed rough outs, or unfinished stone beads, as well as finished beads associated with pottery. Also found were rough outs of stone axes and/or hoes, suggesting that the granite boulders were workshop sites for production of stone industries, including bracelets, beads, and milling equipment (Anquandah 1993a). Similarly, artifacts excavated from another early agricultural settlement site at Daboya in the Gonja traditional area dated by radio carbon method to around 2000B.C. included seven white quartz beads (Shinnie and Kense 1989: 179–180; fig.79) and abundant evidence of locally manufactured stone and shell beads covering the period 2000B.C. A.D. 1800.

Bauxite Bead

Most common stone beads found in Ghana today are bauxite beads. The British archaeologist, Thurstan Shaw, collected ethnographic and archeological data on the production, trade and use of beads in Ghana.

Shaw became Curator of the Achimota College Museum of Anthropology in 1937. In the 1940s, he carried out field studies into the production of bauxite beads in Ghana. He surveyed a number of villages in the Akyem–Abompe area noted for traditional bauxite mining and production of bauxite beads (Shaw 1945).

In 1942, Shaw excavated a large midden 8.3 metres in height at Adukrom, in the Akuapem hills, and uncovered a large corpus of beads made of stone, shell and glass. The excavation also produced over 500,000 indigenous pottery sherds, some terracotta figurines, moulds and crucibles for brass casting, various artifacts of brass/copper and iron, ivory combs and bracelets, cowry shells, spindle whorls, and smoking pipes. The site's age was estimated to be between the sixteenth and seventeenth centuries, on the basis of the distribution of smoking pipes.

Shaw noted that locally manufactured shell beads and local stone beads including bauxite beads, quartz cylinders, schist discs, and hornblende granite beads were found distributed throughout the deposit.



On the other hand, polychrome striped beads and Venetian mosaic long cylinder ‘eye’ beads were confined to the middle levels, and Venetian chevron barrel beads and perforated cowry shell beads were confined to the upper levels (Shaw 1961). As the levels are time related, this provides evidence for the continual attraction of natural material beads, including bauxite.

In 1993 Bredwa Mensah undertook a survey of traditional bauxite mining and bauxite bead manufacture in the Akyem Abompe area, to build on Shaw’s work (Bredwa Mensah 1996a). Shaw had recorded oral traditions in the 1940s at Akyem Abompe demonstrating that the bauxite bead industry ‘was already flourishing a century ago. The oldest people now living declare that the oldest people who were engaged in the industry in their youth found large digging pits already excavated and this suggests a greater antiquity than a hundred years’ (Shaw 1945). Bredwa Mensah recorded a large number of hand dug shafts used to dig bauxite which is also evidence of centuries of bauxite mining.

From the ethno-archaeological standpoint perhaps the most interesting aspect of Bredwa Mensah’s survey relates to data on typology and functions of beads and market distribution. Present day Akyem Abompe manufacturers produce a variety of bauxite beads which are purchased for use by women not only for general body ornamentation and beautification, but also to facilitate participation in special functions such as rites and celebrations related to child naming, attainment of puberty, marriage, funerals, and local festivals. Akyem Abompe bead products are marketed not only within Ghana, (particularly in the Central, Eastern, Asante and Volta Regions), but also as far afield as Togo, Cote d’Ivoire, Burkina Faso. In addition, the Akyem Abompe industry has engendered minor to significant off shoot domestic industries elsewhere in Ghana. Dealers and bead manufacturers in Accra and the Krobo traditional area, for ample, purchase half finished or pre formed beads at a cheaper rate from yem Abompe manufacturers, and then send these beads to their own dustrial annexes’ for the final stages of grinding and polishing (Bredwa–ensah 1996a).

Bauxite beads have been found in urban sites near Shai Hills, at Yawaso, the Great Accra Capital Site, and in the Fante traditional area range in date from the fourteenth to the seventeenth centuries.



A fourteenth to fifteenth century Shal Hills site excavated in 1978 revealed reddish brown pottery with elegant, modeled animal and human shrine attachments, associated with indigenous bauxite beads, and bauxite ds were also found at the fourteenth to fifteenth century level in the excavation of the old La site at Ladoku.

Brass Beads

Brass beads come from one of three sources; either from the Middle East or the trans Saharan trade route or from other West African countries; or m Europe via the ocean and the coast; or from Ghana itself. As one ht predict, inland archaeological sites such as Daboya, Banda and ,ho have the greatest number of glass beads from ‘ the trans Saharan de, whereas the coastal sites such as Elmina, Shai and the Danish settlements in the Akuapem foothills, contain more glass beads from the european trade. The earliest evidence of local glass bead production es from the northern trading city of Begho, but there is also evidence local bead production from Elmina and the Danish sites. A description these sites and their significance follows:

Daboya: excavations at Daboya in the northern part of Ghana produced a collection of 63 imported glass beads, the majority of which e from contexts with radio carbon dates between A.D.700 1800. Sixty per cent of these glass beads came from contexts that also produced signgn painted ‘Silima Ware’, as well as local pottery forms imitating stern Sudanic polymorphic ceramics commonly found in medieval centres including Djenne, Gao, and Timbuktu, suggesting links to trans Saharan trade network. The beads include older, multi faceted, multi colored, and single colored, spherical, barrel shaped, and gated forms made by the cane technique. Also found were more cylindrical, unafaceted, short beads.

Trade Beads of Ghana

Beads are culturally, historically and archaeologically important in Ghana. Beads can be made of many materials, but stone and glass beads are particularly immune to destruction and thus survive very well in the archaeological record. The bead collection of the museum is made up primarily of glass beads. These glass beads come from three main sources: glass beads traded over the Sahara, from Egypt and other middle Eastern and Islamic sources; glass beads traded over the sea, from Europe, particularly Venice in Italy, Bohemia, and Holland; and glass beads made in West Africa, mostly in Ghana.



The popularity of glass and stone beads as a trading item may also be attributed to their imperviousness to temperature, humidity and insect predation. Beads have been used and traded all over the world, for many hundreds of years. As Sleen so elegantly says, 'The bowdrill is nearly as old as civilisation and ornamental stones like agate could be pierced and strung before the pyramids were built' (Sleen 1967:17). In Cambay, India, people have been making carnelian stone beads for the last 7,000 years (Sleen 1967:18). West Africans were thus not alone in their love of beads, but Ghanaian ethnic groups differed from others in two important ways. First, beads here were valued in their own right, and not merely for the patterns they could create en masse. In contrast to bead use by the North American Indians, the southern Africans and even the Yoruba (Dubin 1987: 266ff, 133ff, 138ff), Ghanaian ethnic groups did not use many small beads to create patterns.

Beads in Ghana were and still are prized for their individuality, and beads have specific names and meanings. Second, there has been a flourishing, local, glass bead making industry for many years. The origins of this industry are debated, because it is unclear what the source of glass was prior to the large quantities of glass beads that were imported through the European trade. It is clear, however, that certain types of imported beads were in demand because they could be re used as components in local glass bead making, rather than for immediate use. The Bohemian, small, single colour beads were particularly important raw materials for local beadmakers.

Ghanaian bead makers do not work with molten glass, but work with powdered or fragmented glass, which they place in moulds and then heat in a kiln. Almost everywhere else in the world glass beads are made by blowing, or winding, or drawing out, or mould pressing hot red molten glass. The only other place they work with glass powder is in Mffa, Mauritania, and here the colours and shapes are very constrained, and the industry is nowhere near as vital as it is in Ghana. There have been changes in the bead making industry in Ghana, however. The two main centres for glass bead making today are in the Krobo and the Ashanti traditional areas. –But in the 1930s, one British anthropologist reported on glass bead making near the Côte d'Ivoire border (Chapter 7); a second anthropologist reported on the techniques used in glass bead making in the Ashanti traditional area and they differ from those used today. In this book we concentrate on bead making in the Krobo area, but we hope to expand our coverage in the next edition to include the Ashanti bead makers.



The first question, then, is, what do people do with beads in Ghana? In an attempt to answer this question we interviewed two sorts of bead wearers: Krobo queen mothers and Krobo traditional priests. Why this emphasis on the Krobo traditional area? We chose to concentrate on the Krobo traditional area partly because of the number of bead producers in Krobo, and partly because the Dipo custom of the Krobo is one of the most well known bead wearing occasions of any ethnic group in Ghana. Many other ethnic groups have similar customs, and many other ethnic groups wear beads, and have their own names and meanings for the beads, and we hope to cover these in subsequent editions.

The second question is, how did the beads get to Ghana? To address this question we interviewed bead traders and importers. Traders travel all over West Africa buying and selling beads, old and new, and are the modern day equivalents of the trans Saharan traders of former times. Bead importers and wholesalers on the other hand deal primarily in European beads. They lived and worked in the cities, awaiting shipments from Europe. This business flourished in colonial times, but suffered after independence.

The third question is, how are beads made in Ghana? We interviewed some of the Krobo bead makers, including the acting queen mother of the Osu Panya division of the Manya Krobo, who are the first bead makers in the Krobo traditional area.

West African trade in glass beads falls into distinct historical categories, with Islamic bead production and trade, after A.D.800 The Islamic faith originated in Arabia in the seventh century and spread to Africa, Asia, south east Europe and China. The Islamic promotes a strong sense of brotherhood and so craftsmen were able so move freely through Islam's many countries: local crafts from many tries were imbued with Islamic motifs. Glassmaking centres were lished in Egypt, Syria and the Levant (Lebanon). Between A.D. 900 and ao. Cairo became an important centre for bead makers who imported and traded coral, pearls, cowry shells and African ivory.

Glass beads appeared in West Africa from the eighth century onwards, so Arab merchants crossed the Sahara with beads from Cairo and India. The Arabs dominated long distance trade in the region, trading glass beads, salt and copper ornaments for gold, ivory and slaves.



The lucrative monopoly the Arabs had on the West African trade ended with the arrival of the European trading ships on the coast of West Africa in the late 1400s. The Portuguese were the first to arrive, followed by the Danes, Dutch, French, Belgians and Germans. Explorers, discoverers and settlers brought glass beads with them, first as presents and as items for barter. Beads were used as payment for gold, ivory, slaves, and salt. The beads traded were nearly all Venetian beads, including chevrons, and most are indistinguishable from the ones found in African archaeological sites dating from the same period. The early Venetian beads were soon copied by other Europeans, notably the Dutch and the Eastern European artisans.

The importance of the bead trade to Europeans in the early centuries lay not in the numbers of beads traded per se, but in the equality of the exchange which made the bead trade so profitable (Trivellato 1998: 65-71). And this was true throughout the inhabited world: *In an emblematic act when conquering Mexico City in 1519, Cortez is told to have offered Montezuma a necklace made of small Venetian glass beads “A present in return for the red shell necklace with eighteen golden scarabs he had received from the Aztec king”. (Gasparetto 1958:185 quoted in Trivellato 1998:65).

The inequality of exchange was well understood; in a French commercial guide published in the 1720s, the author lists thirty-seven types of glass beads favored by the Senegalese, and most useful in the slave trade, and goes on to inform readers that in Angola, they could exchange 3,000 French pounds of seed beads for 612 male slaves, provided they selected the beads carefully (Trivellato 1998:65,70).

The quantity of beads sold into West Africa between the sixteenth and eighteenth centuries remained low partly because the use of imported beads in West Africa was controlled by the chiefs through sumptuary laws and other means (Uargstoff 1995:104f~). Sumptuary laws dictated what sorts of beads and what sorts of cloth people could wear, according to rank. For example, in the old kingdom of Benin (now in Nigeria), color beads were highly prized and controlled. The number of coral beads worn by an official indicated his rank, and those who wore such beads without the proper rank conferred privilege would be executed. Seventeenth-century records tell of the ‘coral feast’ where the Oba, or king, would ride through old Benin and personally confer upon his officials the ‘honour of beads’. (Uargstoff 1995:109)



But by the nineteenth century, many of the use restrictions vanished, the colonial governments wrested power from the chiefs and emphasis commerce, seeking markets for their goods. The production of beads became more industrialized, producing more variety for less cost and East and West Africa were flooded with Venetian, Bohemian, and Dutch glass beads. Dealers from all over Europe were involved.

Between 1827 and 1841 the Gold Coast (present day southern Ghana) imported phenomenal average of 74,952 pounds (34 metric tons) of glass beads P year. Exactly what happened to most of these beads is unclear. The bead trade was also substantial in money terms. For example, in 1846 the value of glass beads represented 15.7 per cent of all the imports to the Gold Coast (Francis 1993:8).

Most, if not all, of the glass beads made in Ghana today are produced either by the Asante people, in villages just south and west of Kumasi, or by the Krobo people, in villages in the Akuapem hills and in the coastal Plains east of Accra.

The heart of a bead factory is a kiln, that is built from clay, earth and sometimes old car parts for rigidity, and looks similar to a clay pizza or bread oven. Glass pieces are placed in moulds and put into the kiln, which have sufficient heat to fuse or sinter the glass in the mould, but not to melt it completely. The size of a factory is denoted by the number of kilns and by the number of master craftsmen. The kilns are outside under shade structures of varying sophistication. The factory then, is not a building, but a series of work areas under shade trees and structures.

Beads in Ghana are produced by recycling glass. Not all the glass used is old and broken: many small, single colored beads from Bohemia in the Czech Republic are bought by bead makers in Ghana to use as raw material in making new beads, for colors unavailable through other means. Nowadays ceramic dyes are available, and these are mixed with clear powdered glass to produce a wider range of colored beads, though these are not translucent.

While some bead factories are quite large, with a number of kilns and a lot of workers, (for example Florence Martey, who employs ten people), others have only a single kiln. In the past, most bead manufacturing took place in the foothill villages, but some of these producers have moved to the towns at the bottom of the foothills.



This is probably owing to the better roads in towns, and proximity to Accra, providing easier transport for their goods, a good market at Agomanya, and better access for traders who wish to come and buy. But there are many producers still in Upper Nanya.

Francis (1993) suggested there were as many as eleven Asante villages making beads, with the village of Dabaa acknowledged as the earliest bead-making village. Asante beads, while made by similar methods, look distinct from Krobo beads.

After production the beads are polished and threaded and sold either in strings or in pairs of bracelets. There are two main bead markets for the Krobo bead sellers: the Thursday market in Koforidua, and the Wednesday and Saturday market in Agomanya. In the early part of the twentieth century the market at Asesewa was also very large, and described as one of the largest markets in West Africa (Field 1943), but with the introduction of vehicles, and the lack of roads in Upper Nanya, it has lost its prominence. In the market in Agomanya, there are approximately sixty stalls of bead sellers, and the new buyer is frequently at a loss as to whom to buy from, since many sell similar if not identical beads. The similarities come because some of the bigger bead factories sell their beads to others to sell, and so a number of stalls may be selling beads from the same manufacturer, but bead makers also use the market to get ideas from their competitors. For example, Florence Martey comments, 'Sometimes when I design a new bead, I take it to the market and sell it for a good price. Then somebody will see it and make the same bead. On the next market day he will sell it for a reduced price. I wish something could be done to stop this. Some bead makers will not display a new bead in the market, but will show it only to known buyers, so that the design will not be copied so readily. Frequent buyers establish relationships with one or two sellers, and if those sellers do not have what they want, the sellers help them find it.'

The busiest time of year for the bead producers and sellers is the celebration of the Dipo custom, though all festivals increase the demand for beads, as do large funerals. The stories of these bead producers suggest it is possible to make a good living from bead production, but it is not easy work.



The term “Trade Beads” typically applies to beads made predominately in Venice and Bohemia and other European countries from the late 1400s through to the early 1900s and traded in Africa and the Americas. Many of these beads have been attributed to being made in Germany, France and the Netherlands as well.

The heyday of this “trade” period was from the mid 1800s through the early 1900s when millions of these beads were produced and traded in Africa. The Venetians dominated this market and produced the majority of the beads sold during this time. The J.F. Sick and Co, based in Germany and Holland was one of the largest bead brokers/importers during this period. Moses Lewin Levin was a bead importer/exporter who operated out of London from 1830 to 1913. You can see 4 of the Levin trade bead sample cards from 1865 in *The History of Beads* (Dubin)

The popularity of these beads was revived in the late 1960s when they began to be exported from Africa into the United States and Europe. The term “Trade Beads” became very popular during this time period and is still used for the same bead reference today. The millefiori beads were also called “Love Beads” and used in necklaces with peace symbols during the Hippy days.

As the popularity and availability of these old beads grew they started getting “named”. We started hearing terms like “Russian Blues”, “Dutch Donuts”, “King Beads”. Although some of these folklore names are totally meaningless...ie....”Lewis and Clarke” beads, they do describe a specific type of bead.

And today these beads are more popular and collectable than ever. Thousands of these beads are in private collections around the world. The African Traders are having to go deeper and deeper into Africa to find more of these beads and many styles which were readily available just 5 years ago are no longer seen today.

To learn more about “trade beads” please read, *The History of Beads* (Dubin), *Collectable Beads*(Liu), *Ornaments From the Past: Bead Studies After Beck* (Bead Study Trust), *The Bead Is Constant* (Wilson), *Arizona Highways* (July1971), *Africa Adorned* (Fisher) and the John and Ruth Picard series of books; Volume III - *Fancy Beads from the West African Trade*, Volume IV - *White Hearts, Feather and Eye Beads from the West African Trade*, VolumeV - *Russian Blues, Faceted and Fancy Beads from the West African Trade*, Volume VI - *Millefiori Beads from the West African Trade* and Volume VII - *Chevron and Nueva Cadiz Beads*