

Ghana's Glass Beadmaking Arts in Transcultural Dialogues

Suzanne Gott

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Ghanaian powder-glass beads first captured my attention in 1990, when closely examining a strand of Asante waist beads purchased in Kumasi's Central Market. Looking at the complex designs of different colored glasses, I was struck with the realization that each bead had been skillfully and painstakingly crafted. This seemingly humble and largely unexamined art merited closer study and greater understanding (Fig. 1). I worked with Christa Clarke, Senior Curator for the Arts of Global Africa at the Newark Museum, to develop the 2008–2010 exhibition “Glass Beads of Ghana” at the Newark Museum to introduce the general public to this largely overlooked art (Fig. 2). The following study provides a more in-depth examination of Ghanaian glass beadmaking history and contemporary practice.

Ghana's glass beadmaking arts are arts of engagement with the wider world, from their seventeenth-century beginnings to contemporary practices. The Ghanaian glass beadmaking tradition is one of several regional glass beadmaking traditions in West Africa, and all of these traditions evolved over many centuries in the context of long-distance trade. Transcontinental trade over the Sahara from the eighth century CE and ocean-going trade from the 1480s transferred finished beads as well as raw materials for glass bead production and introduced knowledge of various methods of working beads and glass. Interregional trade provided networks for sharing local and transcontinental beadmaking technologies.

Bead artists in the coastal and southern regions of modern Ghana created their own distinctive mold-form powder-glass beadmaking processes from widely shared knowledge of drawn powder-glass bead technologies of West Africa's interregional and trans-Saharan trade centers, in much the same way that the distinctive Ewe and Asante kente traditions developed with the

spread of West African strip-weaving technologies.

With the beginnings of European maritime trade in the late fifteenth century, an increasing volume of glass beads and glass goods were shipped to trade centers along present-day Ghana's Gold Coast,¹ stimulating the growth of local beadworking and powder-glass beadmaking industries. The flourishing coastal trade achieved a more direct engagement between European merchants and trading communities than had been possible with the trans-Saharan trade, and enhanced European abilities to ascertain and respond to local West African consumer preferences. This interactive trade environment also facilitated the impact of the demands of Gold Coast consumers on European product design and production, a two-way dynamic similar to the trade in African-print textiles (Nielsen 1979; Steiner 1985).

In the Gold Coast bead trade, such interactions went beyond a simple paradigm of African consumers and European producers and led to the development of an ongoing transcultural dialogue between Gold Coast and European bead artists that was mutually influential on West African and European bead design. The dialogic nature of this artisanal relationship becomes especially clear in examining practices of cross-cultural imitation, in which Gold Coast artists developed local powder-glass versions of European trade bead designs, and European beadmakers developed their own facsimiles of popular West African bead forms.

In late twentieth and early twenty-first century Ghana, new forms of engagement with the wider world are driving profound changes in Ghanaian glass bead production and marketing. Innovations in the form of new “translucent” and painted glass beads and beadmaking techniques, which have largely replaced long-standing mold-formed powder-glass design processes, have been spurred on by contemporary beadmakers' creativity and initiative in cultivating new local and international markets.



The popularity of these new bead forms, along with determined efforts to maintain Ghana's unique bead heritage, are ensuring the continuing vitality of Ghana's glass beadmaking arts.

When examining or describing Ghanaian glass beadmaking in the context of late twentieth and early twenty-first century processes of transcontinental interaction, it may be wise not to use the familiar and over-applied terms "global" or "globalization." African engagement with the wider world via satellite television, the Internet, and transnational movement is a well-recognized feature of contemporary African experience and artistic expression, which has often been characterized in terms of "globalization." Yet globalization's value as an analytical concept, as Cooper has observed, is problematic: first, for the insupportable implication of "a single system of connection ... [penetrating] the entire globe"; and second, the ahistorical position that wide-ranging interconnectedness is unprecedented (2001:189). Instead, Cooper has called for alternative conceptions and approaches of a more modest scope, which "look towards traditions of transcontinental mobilization with considerable time-depth," attending to both "the variety and specificity of cross-territorial connecting mechanisms in past and present" (2001:191, 212). An examination of the case of Ghanaian glass beadmaking, past and present, within changing contexts of transcontinental engagement and dialogue provides an opportunity to articulate and develop this new approach.

LONG-DISTANCE TRADE AND NEW CONTEXTS OF MEANING

Beads, by their nature as small, easily portable objects of potentially high value, constitute an art form ideally suited for long-distance commerce,² and the development of West African glass beadmaking has been deeply enmeshed in the dynamics of trade and cross-cultural interaction (Fig. 3).

Glass beads were frequently mentioned in early Arabic accounts of the trans-Saharan trade, as in a thirteenth-century geographical encyclopedia describing traders' wares of "salt, bundles of pine wood, blue glass beads, bracelets of red copper, bangles and signet rings of copper, and nothing else" (Levtzion and Hopkins 1981:167–69). By as early as the eighth to ninth cen-

1 Powder-glass women's waist beads, Asante, Ghana, late-nineteenth to mid-twentieth century. Author's collection.

2 Installation from the Newark Museum exhibition "Glass Beads of Ghana," 2008–2010, developed by guest curator Suzanne Gott and Christa Clarke, Senior Curator, Arts of Global Africa, Newark Museum. Installation design: Tracy Long. PHOTO: RICHARD GOODBODY





3 Map of Ghana with historic sites and contemporary beadmaking regions.

PHOTO: COURTESY OF THE NEWARK MUSEUM

4 Gold Coast men dressed for battle wearing protective strands of beads and gold at their ankles and calves.

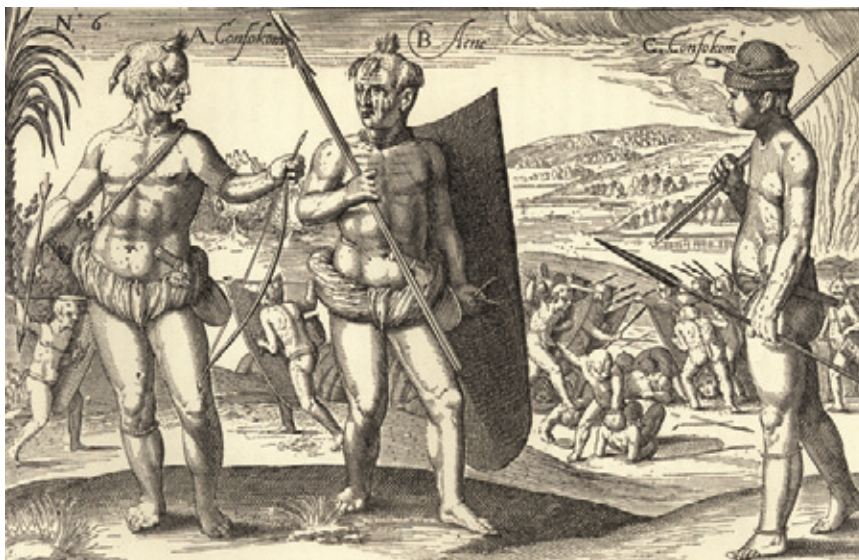
PHOTO: BESCHRYVINGHE ENDE HISTORISCHE VERHAEL VAN HET GOUT KONINKRIJCK VAN GUNEA (1912: PL. 6, FACING P. 90).

turies, glass beads from the Islamic world and Asia had become popular commodities in the trans-Saharan trade, as revealed by excavations at such entrepôts as Tegdaoust, Kumbi Saleh, and Gao (McIntosh 2008:361; Insoll and Shaw 1997:15). The demand for glass trade beads only increased following the eleventh- and twelfth-century intensification of trans-Saharan commerce.

Venice, which would become the primary source of glass beads for the African trade, began producing beads for export in the eleventh century (Newton and Davison 1989:65). By the early thirteenth century, Venice had emerged as the leading European beadmaker, with trade representatives for the trans-Saharan trade stationed in principal ports of the Maghreb (Bovill 1995:105). Venetian bead production reached its maturity in the fifteenth century, coinciding with the beginnings of European maritime trade with West Africa.³

Portuguese development of the ocean-going caravel in the late fifteenth century opened Africa's Atlantic coast to long-distance maritime trade (Parry 1966:22–23). An early European strategy for gaining entry into the lucrative Guinea Coast trade was assuming the role of middlemen in established coastal trading networks. Through such transport activities Europeans became aware of the *akori*, or *cori*, and beads the Portuguese called *conte de terra* (“earth,” “ground,” or “native” beads)—West African beads of great value and mysterious origins (Bosman 1967:118–19; De Marees 1987:53, n.9). By the late fifteenth century, Portuguese ships were bringing “*coris* and sundry types of beads” from the Bight of Benin to their trading fortress of Castelo de São Jorge da Mina (with its nearby African settlement, later known as “Elmina”) for the Gold Coast market.

Trade records and ship manifests attest to the substantial quantities of European glass beads transported via the long-dis-



tance overseas trade (Jones 1985, 1995; Alpern 1995; Law 1997). Beads, like cloth, were an important trade good, so European merchants expended considerable energy trying to determine which beads would sell and fetch the highest prices. For “even more than with cloth,” Marion Johnson observed, “the demand for beads in any one locality was restricted to a few types, and these were subject to the vicissitudes of fashion” (1976:17). A list of proposed merchandise sent to the Netherlands in 1653 by Dutch West India Company agents at Elmina, then center of the Dutch Guinea Coast trade, requested 19,900 pounds of “Venetian goods,” including lemon- and straw-yellow beads; white, red, dark blue, blue lavender, and violet beads; striped “crystal” beads; black and blue-violet beads with white stripes; and white and blue-striped beads (Jones 1995:9–10, 178–80).⁴

European efforts to succeed in the competitive West African market were aided by traders’ accounts detailing local customs, including the religious dimensions of local adornment practices. The deeper spiritual significance of beads among peoples of the lower Guinea Coast provided new contexts of meaning that fueled local desires for trade beads, transforming European beads from inexpensive trade commodities into highly valued objects of power and protection.

In Pieter de Marees’s 1602 account of Gold Coast peoples, based on observations made during a Dutch trading voyage to the lower Guinea Coast, he described how beads figured prominently in ritual practices of local priests and priestesses (1987:66), as well as providing an important means of personal protection (Fig. 4). Infants were adorned with protective amulets of beads and gold (1987:25), while Gold Coast men, he found, generally wore:

... a string of polished Venetian Beads mixed with golden beads and other gold ornaments around their knees, in nearly the same way as young ladies in our Lands wear their Rosaries around their hands ... [for battle] They take their Rosaries, with which they make their *Fetisso*, and hang them around their bodies: they think that if they wear them, their *Fetissos* will protect them and that they will not be slain (1987:34, 89).

Women would “hang around their Belts many little straw-wisps on which they string beans and Venetian beads, regarding these



also as their *Fetissos* or *Sainctos*" (1987:39). The wearer's treatment of such adornment attested to local beliefs in its spiritual nature, since before an individual would eat or drink, De Marees observed, they would "first give [their *fetissos*] something to eat and drink" (1987:34).

Historical as well as more contemporary accounts of customary beliefs in southern Ghana reveal that certain highly valued "genuine" or "precious" beads, like local gold in nugget form, have not been regarded as products of human hands. As gifts from deities of fertility and abundance residing, according to different religious mythologies, in the earth, heavens, or sacred waters, such "precious" beads and locally mined gold have been viewed as both living and life-giving forces.⁵

According to Akan oral traditions, the origins of two of Ghana's major historical powers are traced to the sacred stools of precious beads or gold that descended from the heavens, containing the spiritual essence of their peoples. For the Asante, the very "soul" (*sunsum*) of their nation resides in Sika Dwa Kofi, the Golden Stool "born on a Friday" (Kyerematen 1969:2–5). For the Denkyira, whose political power preceded that of Asante, the most sacrosanct of royal regalia was Abankamdwa, the Stool of Precious Beads, which had the capacity to "call down a whirlwind" when moved without the performance of the required



(clockwise from left)

5 The Adanse royal orator's staff Ahwenee Nana ("Great Ancestral Bead"), with a finial carved by Osei Bonsu (c. 1927) depicting the Adanse ruler as a "grandchild of beads," enstooled upon a platform, supported by the great bead ancestress of Adanse's ruling *Ekoo*na matriline. Adanse Fomena, Ghana. November 1976.

PHOTO: DORAN H. ROSS

6 Women's waist beads for sale in Kumasi's Central Market, Ghana, 1990.

7 "Edaa," a longtime bead trader, demonstrating the polishing and shaping of glass beads using a mixture of water and sand. Labadi, Greater Accra, Ghana, 1999.

customary rites (Darkwah 1999:63–64; Kyerematen 1964:18, 21).

The regalia of Adanse, the Akan state located at the mythic center of Akan creation, includes a royal orator's staff called Ahwenee Nana, "Great Ancestral Bead" (Ross 1982:62; Darkwah 1999:62). The staff finial depicts the Adanse ruler as a "grandchild of beads," enstooled upon a platform supported by the great bead ancestress of Adanse's ruling *Ekoo*na matriline (Fig. 5). The ancestral bead is represented by a long powder-glass encased iron rod, suspended from a carved head. The powder-glass is embellished with characteristic bead designs of trailed glass.⁶

Abɔdɔm (sg. *bɔdɔm*) is the Akan name for the most precious, reproductively powerful beads, with the *Ekoo*na clan's bead ancestress an especially powerful *bɔdɔm* bead. During a 1999 interview, the late Nana Akua Pokuaa, an *Ekoo*na clan elder and retired queen



(clockwise from top left)

8 Mrs. Comfort Amanor inserting cassava-leaf stalks into the clay mold's bead cavities in order to form holes during the powder-glass firing process, Odumase Krobo, Ghana, 1999.

9 Nomoda Ebenezer ("Cedi") Djaba of Cedi Beads Industry, demonstrating the vertical-mold powder-glass technique for producing a *bɔdɔm* bead, Odumase Krobo, Ghana, 1999.

10 Kwadjo Gomerdo of Cedi Beads Industry firing beads in a kiln constructed of termite-mound clay, Odumase Krobo, Ghana, 1999.



mother of Amoman, greeted a fellow clan member as a "child of the Bɔdɔmmɔwua Bead." The praise name Bɔdɔmmɔwua, an honorific version of *bɔdɔm* enhanced by the addition of *wua*, or *wuu* ("copious" or "abundant"), emphasized the miraculous reproductive powers of this matriclan's bead ancestress (Christaller 1933:578).⁷ The enlistment of beads' generative powers in the promotion of human fertility is a long-standing custom throughout southern Ghana, being worn as women's "waist beads" (bead strands resting on the hips) usually comprising beads known to be of local or foreign manufacture (Fig. 6).⁸

Kopytoff's influential essay "The Cultural Biography of Things" (1996) proposed a more processual understanding of commoditization based in the recognition that objects' meanings may change, moving into or out of a commodity state, when adopted into new cultural contexts.⁹ Beads, Trivellato observes, are among the "favourite commodities selected to bear material and symbolic

values ... [having] been repeatedly placed at the centre of social rituals and ceremonies, granted magical and apotropaic properties or considered as emblems of power and status" (1998:64).

The new contexts of meaning and value for trade beads among Gold Coast peoples, combined with the abundance and variety of glass beads imported through the maritime trade, stimulated the growth and development of Ghana's own distinctive "powder-glass" beadmaking tradition.

EARLY WEST AFRICAN GLASS BEADMaking

Ghana's glass beadmaking arts, like West Africa's other regional glass beadmaking traditions, developed within an innovative creative milieu stimulated by the region's active engagement in interregional and transcontinental commerce and consumption. Long-distance trade stimulated new developments in West African beadmaking by serving as a source of new glass bead forms



11 Horizontal-mold powder-glass beads produced by a Krobo beadmaker, late 1990s. Collection of the Newark Museum, gift of Suzanne Gott, 2008, 2008.54.67.



12 Women's waist beads with nineteenth-century powder-glass facsimiles of medieval Middle Eastern eye beads (lower right). Collection of the Newark Museum, Purchase 2007, 2007.66.70-72.

as well as providing raw materials in the form of glass beads and scrap from the Islamic world, Europe, India, and Asia.

Trade centers, which attracted skilled artisans, served as sites for the transmission and development of new glass beadmaking technologies. For example, a glass bead from Jenné-Jeno, dating from 300 to 800 CE, perhaps produced by reworking an imported drawn-glass bead, may in fact be an early example of West African powder-glass beadmaking achieved by rolling out a heated, viscous glass mixture (Brill 1995:255). Excavations of artisans' quarters at Tegdaoust discovered ninth- to twelfth-century evidence of drawn-glass bead production for local consumption as well as southern trade (Vanacker 1979).¹⁰

At Igbo-Ukwu, of the more than 165,000 glass, carnelian, and quartz beads recovered from the eighth- to early eleventh-century ritual complex—the site's only imported goods—the majority are glass beads believed to originate in the Islamic world (Shaw 1970:237–39, 280; Insoll and Shaw 1997:12; Davison 1972:311). The discovery of certain blue-cylinder glass beads exhibiting “dichroic” characteristics (the dark blue color appearing green or greenish-yellow when held up to the light) also prompted speculation that these beads may have been manufactured locally from melted or pulverized imported glass beads or glass scrap (Shaw 1970:229).

The most renowned center of early West African glass beadmaking was Ile-Ife. As a commercial power linking trans-

Saharan and coastal trade networks, it functioned as center for both the production and export of drawn-glass beads from the eleventh to early fifteenth centuries (Ogundiran 2005:150). The preponderance of beads recovered from Ile-Ife are tubular and circular beads of dark blue and dichroic blue-green glass known as *segi* in Nigeria (Eluyemi 1987:203–13). Analysis of blue glass beads discovered at the trans-Saharan entrepôts of Tegdaoust, Kumbi Saleh, and Gao has shown these beads to be identical in composition to beads found at Ile-Ife (Davison, Giauque, and Clark 1971), suggesting that Ile-Ife beads may have been exported northward as well as taken southward to coastal trade centers (Horton 1979:107; Eluyemi 1987:219). Yet the discovery of similar glass beads and beadmaking residue at trans-Saharan trade centers also suggests the possibility of a more widely dispersed West African beadmaking technology.

Analyses made in the 1970s of Ile-Ife glass beads and glass residue-encrusted crucible fragments from the ninth to twelfth centuries concluded that the glass was of Islamic and European origins (Davison, Giauque, and Clark 1971:647, 655), supporting theories that Ile-Ife's bead industry was based on the use of imported glass and glass beads for its raw material (Willet 1977:17–22). More recently, however, theories of local glass manufacture (Onwuejeogwu and Onwuejeogwu 1977; Horton 1979:107–8; Eluyemi 1987:213), or “early primary glass production,” have gained support through new techniques of chemical analysis applied to Ile-Ife glass beads and beadmaking materials. An unusually high-lime, high-alumina glass composition unique to West Africa has been found for the dark blue drawn-glass beads and some of the dichroic blue-green glass fragments



13 Mosaic-bead sample card for the West African trade (dated 1920), from the J.F. Sick and Company Sample Card Collection of the Tropenmuseum, Amsterdam, courtesy of the Tropenmuseum.
PHOTO: IRENE DE GROOT

from Ile-Ife, matching results of an earlier unpublished analysis of Ile-Ife beads and certain beads from Igbo-Ukwu (Lankton, Ige, and Rehren 2006; Davison 1972). This new evidence indicates bead artists at both sites used locally produced glass as well as imported glass in a manner similar to beadmaking processes documented for twentieth-century West Africa's only remaining glass producers, members of the Fulbe *masagá* glass artists' guild in the Nupe city of Bida (Robertshaw et al. 2009:93–94).

THE DEVELOPMENT OF GHANA'S GLASS BEADMaking ARTS

The history of Ghanaian glass beadmaking has involved two distinct “powder-glass” processes based on the use of pulverized imported glass beads and glass scrap: the drawn-glass technique of entrepôts in the north and within the Sudanic caravan belt, largely fallen out of use; and the mold-form technique favored in coastal trading settlements, which remains a vital, continually evolving art.

In the northwestern Brong-Ahafo region, evidence of local glass beadmaking was discovered at the archaeological site of Begho, a trading town on the northern border of the Akan forest that grew into a cosmopolitan commercial and artistic center linking the Akan goldfields with Mande cities of the middle and upper Niger valleys. In Begho's artisans' quarter, glass beads and beadmaking residue dating from the seventeenth to early eighteenth century were discovered, consisting of glass-encrusted crucibles and roughly made blue glass beads thought to be of local manufacture. Glass beadmaking residue in the form of solid-end “wasters” from cane beads suggests Begho's bead artists used drawn-glass techniques similar to techniques employed in Ile-Ife and the trans-Saharan entrepôt of Tegdaoust (Posnansky 1973:158; Davison, Giauque, and Clark 1971:648–50; Eluyemi 1987:214–16).

After the beginning of the coastal region's long-distance overseas trade in the late fifteenth century, European merchant ships were able to bring a substantially greater quantity of glass beads, bottles, and other glass objects than had been possible in the overland trans-Saharan trade. As Johnson (1978) and Kriger (2006:5) observed for the African textile trade, imported con-

sumption goods do not necessarily supplant indigenous artisanal production, and this influx of European trade beads stimulated rather than undermined local bead production. The flourishing maritime trade provided Gold Coast beadmakers with new bead forms and glass beadmaking materials that fueled the development of a thriving local beadmaking industry, especially in the coastal and southern regions.

ALTERING AND REWORKING IMPORTED GLASS BEADS IN THE SOUTH

Ghana's glass beadmaking arts encompass a variety of processes including the modification of pre-existing beads. Overseas trade not only brought ready-to-wear beads, but pipe-beads that were sold directly to coastal industries specializing in reworking and polishing imported bead materials. Clues as to the nature of early coastal bead modification processes are provided by European traders' accounts and archaeological excavations. De Marees, in 1602, documented a well-established coastal industry for the reworking and polishing of Venetian beads. In describing this thriving local beadworking industry, he wrote:

... they take a great quantity of Venetian Beads of all sorts of colours, but prefer one colour to another. They break them into four or five little pieces, polish them on a stone in the way children polish cherry-stones, string them on Tree-bark in bunches of ten, and trade extensively in this commodity (1987:53).

De Marees identified several coastal trading centers, including Ahanta, Wassa, Komenda, and Kormantin, where European beads were purchased for local modification, polishing, and trade (1987:80, 84, 177).

Grooved sandstone blocks believed to have served as “bead abraders” used in the modification and “polishing” of imported glass beads and/or locally produced beads of stone, shell, or glass were discovered at Elmina, Ankobra, Sekondi, and Winneba (DeCorse 1989:47–48). Among the more than 40,000 beads recovered during excavations at Elmina, many European beads showed

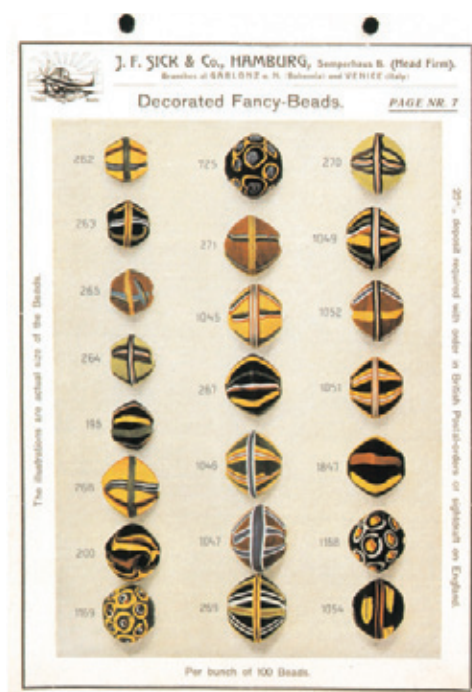


evidence of modification, particularly the polishing, or grinding, of bead ends, including drawn pipe-beads broken into shorter lengths and polished (DeCorse 2001:136–37), such as De Marees had described in his 1602 account. Bead polishing and shaping remained an important profession for coastal women until the early twentieth century (Robertson 1984:104–105), which still provided some women with additional income in the 1990s (Fig. 7).

MOLD-FORMED POWDER-GLASS BEADMAKING

The maritime trade brought substantial quantities of scrap glass that Gold Coast beadmakers used to fabricate local powder-glass beads, as well as colored beads that could be pulverized for coloring agents. Seventeenth-century trade records of one Venetian glassmaking firm document the production not only of *rosette* (“beads”), but *cannucce di vetro* (“canes, or rods, of glass”) for Portugal’s West African trade, which could be used to embellish locally produced beads (Zecchin 1984).¹¹ Glass goods recovered from a British or Dutch merchantman shipwrecked off the coast near Elmina sometime between 1830–50 consisted of numerous glass bottles and monochrome seed beads only suitable for use as coloring agents in the local powder-glass bead industry (Hopwood 2009). The use of pulverized seed beads as coloring agents, which yielded a richer color, continued until the 1970s.

It is difficult to determine when the coastal bead industry began the actual manufacture of glass beads. Jean Barbot’s observations from two voyages to the West African coast in 1678–79 and 1681–82 may provide the earliest account of coastal beadmaking. In the original 1688 French edition, Barbot describes Elmina bead artisans who “also recast crystal and glass, taking considerable pains.” Although Barbot drew freely on earlier published accounts, including Dapper’s 1668 description of the coastal bead indus-



(clockwise from top left)

14 Striped powder-glass *zagba* (also, *adzagba* or *adjagba*) beads produced by a master Krobo beadmaker, late 1990s. Collection of the Newark Museum, gift of Suzanne Gott, 2008, 2008.54.116.

15 A masterful combination of powder-glass striping and layering techniques by a Krobo beadmaker, late 1990s. Collection of the Newark Museum, gift of Suzanne Gott, 2008, 2008.54.115.

16 J.F. Sick and Company catalogue page of bicone fancy-beads for the West African trade (dated 1919–1926), from the J.F. Sick and Company Sample Card Collection of the Tropenmuseum, Amsterdam, courtesy of the Tropenmuseum. PHOTO: IRENE DE GROOT



17 Krobo bicone powder-glass facsimile of a Venetian lampwork fancy-bead design (see Fig. 16, bottom right), late 1980s. Collection of the Newark Museum, gift of Suzanne Gott, 2008, 2008.54.59.



18 Krobo "Ananse" powder-glass bicone design in the black, yellow, green, and red colors of the Republic of Ghana's national flag, late 1990s. Collection of the Newark Museum, gift of Suzanne Gott, 2008, 2008.54.117.

try (Jones 1986:220–21), Barbot's use of the new term "recast" is believed to offer the first written documentation of coastal bead manufacture, and the first written indication of the development of new mold-form techniques for the production of powder-glass beads (Hair, Jones, and Law 1992:389, n. 36).

In general, archaeological evidence indicates the drawn-glass method was the preferred technique in Ghana's northern trade center at Begho, as at Ile-Ife and the trans-Saharan entrepôt of Tegdaoust, while mold-formed powder-glass beadmaking processes are associated with Ghana's southern and coastal regions. Yet one must not draw too strong a geographical distinction between the two beadmaking technologies. At New Buiepe, a seventeenth-century archaeological site northeast of Begho, archaeologists found evidence of local artisans using clay molds to produce beads of powdered glass—the favored technique of the period's coastal beadmakers (Lamb 1978). Nevertheless, the greater volume of the coastal glass bead trade resulted in a concentration of bead artists and more active development of mold-form techniques in Ghana's coastal and southern regions.

In archaeological excavations at the coastal trading town of Elmina, a substantial number of "clearly non-European" glass beads, composed of glass chips or finely crushed, "powdered" glass, were recovered from eighteenth-century contexts, providing evidence of an active local beadmaking industry (DeCorse 1989:47–49). The composite "glass-chip" beads were produced by mold-firing fragments, or chips, of both imported and West African glass—a continuing practice by contemporary beadmakers who create composite beads from salvaged imported bead fragments.

Powder-glass beads, created by the fusion of pulverized or pow-

dered glass, appear to have been produced by processes quite similar to the mold-form techniques of present-day Ghanaian beadmakers. These beads, in "a wide range of decorative effects" including inlays of imported bead chips and trailed glass (see Fig. 21 for an eighteenth- to nineteenth-century example), display a mastery of beadmaking processes and decorative techniques that indicate that mold-formed powder-glass beadmaking had become a well-developed art in coastal settlements by the late seventeenth or early eighteenth century (DeCorse 1989:48–49). The majority of powder-glass beads were originally a light gold color, perhaps reflecting gold's special value among Gold Coast peoples.

The earliest ethnographic account of Ghanaian powder-glass beadmaking, by Gold Coast British Inspector of Mines R.P. Wild (1937), describes a 1934 visit to a beadmaking "factory" at Dunkwa, in Ghana's southwestern Denkyira region, operated by Nzima artisans who had journeyed inland to produce and sell beads at this Denkyira market town. The beadmaking processes Wild described are very similar to those of contemporary Ghanaian bead artists (Figs. 8–10): the Nzima beadmakers used flat, one to one-and-a-half inch thick molds "made from a good local clay ... [possibly containing] a high percentage of kaolin,"¹² with circular vertical-axis bead cavities in a variety of diameters and depths "as required to suit different sized beads" (1937:96). Centered in the bottom of each bead cavity was a much smaller hole in which the midribs or leaf-stalks of cassava "about the length of a safety-match" were inserted, having been moistened and smeared with clay in order to carbonize during the firing process, leaving a small tubular hole in the center of each bead. Glass powder, obtained by pulverizing different colored glass bottles and European glass beads, was poured into the mold cavities in layers according to the color and thickness desired. The filled molds were then placed



on a charcoal fire and “covered all round with charcoal,” or in “beehive” bread-making ovens. These firing methods (producing temperatures from 600 to 800 degrees Celsius) created “sintered” beads with a rough granular appearance, which were smoothed by polishing the barrel and ends on flat stones.¹³

In 1937, G.E. Sinclair of the Gold Coast Administrative Service documented an alternative, horizontal-mold powder-glass bead-making technique at the Asante village of Goaso, eighty-six miles west of Kumasi (Sinclair 1939). Instead of vertical-axis molds, this Asante beadmaker used a grooved, horizontal-axis clay mold to produce straight or slightly curved powder-glass “canes” that could be broken into smaller bead lengths. This beadmaking technique, which was “common in this part of Ashanti,” produced rough, yet “almost completely fused” beads (often with stripes along the cane’s length), which would be smoothed on a grooved stone prior to stringing. By the 1970s, horizontal-mold beadmaking had become relatively rare; however, special beads continue to be produced by Krobo beadmakers using horizontal-mold techniques (Fig. 11).¹⁴

AFRICAN BEAD DESIGN AND TRANSCULTURAL DIALOGUES OF IMITATION AND INSPIRATION

The Gold Coast maritime trade, which spurred the growth of coastal beadworking and powder-glass beadmaking industries, also fostered an interactive environment of trade and consumption that stimulated both European and Gold Coast production of facsimiles of prestigious local and imported beads.

European glass beadmakers’ earliest copying efforts were directed toward creating their own versions of the West African *akori*, the enigmatic dichroic bead worth its weight in gold in local markets, now believed to be products of southern Nigeria’s early glass beadmaking industry (Kahlous 1966; Horton 1979; Eluyemi 1987).¹⁵ As early as 1504, Portuguese navigator Duarte Pacheco Pereira described the inferiority of European copies

when compared to the West African *akori*: the imitations melted when subjected to the local test of placing questionable beads in the fire (Mauny 1958:210). In 1603, Emanuele Ximenes, a Portuguese businessman living in Antwerp, wrote to Italian glass expert Antonio Neri for help in developing convincing imitations of this unusual dichroic African “mineral,” which was the color of lapis yet appeared yellow when held to the light, because Dutch beadmakers’ attempts were unsuccessful.¹⁶

By the nineteenth century, Ile-Ife production and export of *kori* beads had greatly reduced, and the Gold Coast terms *agri*, *aggri*, *aggry*, or *aggrey* referred to a very different type of precious bead. Descriptions of the Gold Coast *aggrey* suggest that these valuable antique beads were the intricately designed mosaic beads of ancient Middle Eastern, Roman, or Islamic origin brought into the region over centuries of trans-Saharan trade.¹⁷

French trader Marie-Joseph Bonnat, an Asante captive from 1869 to 1874, described “a kind of mosaic of ancient manufacture” that Asante traders obtained from Salaga, which could also be obtained “by digging in the earth known at the coast by the name of ‘agri beads’” (1994:290–91). These ancient mosaic beads, which surfaced from long-forgotten burial sites or underground hiding places, became invested with new status as spiritually empowered “ground” beads of a value that encouraged imitation by both Gold Coast and European beadmakers.

Thomas E. Bowdich, during his 1817 diplomatic mission to the Asante capital of Kumasi, saw costly *aggry* beads of a “perfection ... superior to art,” which he attributed to Roman or Phoenician manufacture: “some resemble mosaic work, the surfaces of others are covered with flowers and regular patterns, so very minute ... that nothing but the finest touch of the pencil could equal

19 Asante facsimile of a Venetian lampwork design combining three powder-glass design techniques: striping, layering, and the joining of separately fired bead halves, late 1990s. Collection of the Newark Museum, gift of Suzanne Gott, 2008, 2008.54.50.

20 Detail of a sample card (dated 1930) displaying bead #15826, a Venetian drawn-glass bead similar in appearance to the colors and striped design of Gold Coast powder-glass designs, from the J.F. Sick and Company Sample Card Collection of the Tropenmuseum, Amsterdam, courtesy of the Tropenmuseum. PHOTO: IRENE DE GROOT





21 Strand of akoso beads displaying some of Ghana's earliest dated mold-form powder-glass bead designs, eighteenth to nineteenth century. Collection of the Newark Museum, gift of Suzanne Gott, 2008, 2008.54.127.

PHOTO: RICHARD GOODBODY

them" (1966:268). Local beadmakers, he was told, made powder-glass versions of these precious ancient beads:

The natives pretend that imitations are made in the country, which they call boiled beads, alleging that they are broken aggry beads ground into powder, and boiled together, and that they know them because they are heavier (Bowdich 1966:268).

Without firsthand observation of such beadmaking activity, Bowdich remained skeptical; however, subsequent knowledge of Ghanaian powder-glass beads and beadmaking history supports the veracity of these early nineteenth-century accounts of local powder-glass imitations of medieval Middle Eastern beads (Fig. 12).

Venetian beadmakers, following their mid-nineteenth-cen-

tury rediscovery of ancient "*murrine*" mosaic glass techniques, began producing their own versions of ancient Middle Eastern, Roman, and Islamic beads. By the late nineteenth century, these distinctively patterned Venetian mosaic, or *millefiori* ("thousand flowers"), beads were being created for an active West African market, similar to European manufacturers' production of wax-print textiles for the African trade (Fig. 13).

According to an 1898 account by British colonial physician Richard Austin Freeman, some European beadmakers unsuccessfully attempted to produce convincing imitations of the valuable ancient *aggri*:

An enterprising Birmingham firm, I was told, once obtained a number of Aggri beads and manufactured a quantity of imitations which were so excellent that European experts were quite unable to distinguish them from the original models. These fictitious Aggri beads were introduced on to the Gold Coast, but the fraud was instantly detected by the natives (1967:400).



22 Detail of a sample card (dated 1910–13) displaying beads #407–10, Venetian lampwork versions of an akoso powder-glass bead design dating to the eighteenth century, from the J.F. Sick and Company Sample Card Collection of the Tropenmuseum, Amsterdam, courtesy of the Tropenmuseum.

PHOTO: IRENE DE GROOT

23 Detail of a sample card (dated 1929) displaying bead #15255, a Venetian lampwork version of a weathered Gold Coast akoso bead powder-glass design, from the J.F. Sick and Company Sample Card Collection of the Tropenmuseum, Amsterdam, courtesy of the Tropenmuseum.

PHOTO: IRENE DE GROOT



DYNAMICS OF IMITATION AND ARTISTIC INNOVATION

As Rabine (2002) and Prestholdt (2008) have shown, consumer goods and their circulation are well suited to revealing African engagement in transcultural routes of interrelation. The reciprocal nature of transcultural processes of trade and consumption are especially evident in Gold Coast and European beadmakers' ongoing dialogue of cross-cultural imitation and inspiration.

The archaeologist Alastair Lamb, who admired and researched Ghanaian powder-glass beadmaking (1976, 1978), observed that many powder-glass bead designs "are clear imitations of European types" (1976:39). In turn, European beadmakers sought out and copied popular West African bead designs, "but often these African designs were themselves copies of European originals." The question of who was copying whom in such cases, Lamb notes, often cannot be definitively answered (1978:26). One conclusion that can be drawn from this evidence, however, is the ongoing, dialogic nature of Gold Coast and European bead design. In this relationship of cross-cultural copying, Gold Coast artists developed powder-glass techniques to replicate European drawn-glass and lampwork beadmaking designs, while European beadmakers produced designs simulating powder-glass techniques.

(below)

24 "Translucent" or "transparent" beads produced from crushed, rather than powdered glass, TK Beads Industry, Amrahia, Ghana, 2007.

(right)

25 Mrs. Janet Teye attaching translucent-glass pendants to metal candle holders designed and produced by her husband, Dan Doku Teye, Odumase Krobo, Ghana, 1999.



The creation of powder-glass versions of European beads required the development of ingenious, painstaking processes quite different from European drawn-glass or lampwork bead-making techniques.¹⁸ For mold-form powder-glass versions of lampwork Venetian "eye" beads, the beadmaker inserts precast powder-glass "eyes" on the walls of each bead chamber while filling the chamber with glass powder.

Powder-glass beads inspired by striped European drawn-glass beads are produced using vertical-axis molds. After filling the bead chambers with glass powder, a needle-like tool is used to make channels in the powder along the bead-chamber walls, which are then filled with contrasting colored glass powder. A curved stripe design can be produced by the subsequent twisting of each cooling, fired bead (Fig. 14). Stripes can also be combined with contrasting layers of colored powder to create more intricate designs, demonstrating the sophisticated versatility of the seemingly simple mold-form powder-glass process (Fig. 15).

Venetian lampwork bicone beads (Fig. 16), popular in the Gold Coast trade since at least the mid-nineteenth century, have their powder-glass counterparts. Mold-formed powder-glass versions of this popular lampwork bead must be formed in two conical halves which are fired and then joined together for a final firing. Some powder-glass bicones produced in the



26 Painted glass beads drying in preparation for the second firing to fix the painted ceramic-powder designs, TK Beads Industry, Amrahia, Ghana, 2007.

27 Florence Asare, Director of TK Beads Industry, with a display of translucent-glass beads in the factory showroom, Amrahia, Ghana, 2013.

1990s replicate long-established Venetian lampwork designs (Fig. 17); however, other powder-glass bicones display a new, distinctively Ghanaian design element, a web-like “Ananse” design (named after the spider-trickster of Akan folktales). This Ghanaian bicone design is produced using alternating layers of colored glass, which are then pierced with vertical stripes. One expertly made Ananse example was produced using glass powder in the colors of the Republic of Ghana’s national flag (Fig. 18). A combination of powder-glass design techniques—stripes, layering, and the joining of separately fired bead halves—was used for one particularly complex powder-glass version of a Venetian lampwork design (Fig. 19).

In turn, European beadmakers produced facsimiles of certain powder-glass bead designs.¹⁹ An examination of the Tropenmuseum’s Sample Card Collection (dated 1910–58) of J.F. Sick and Company, the primary bead distributor for the West African trade, indicates an effort to produce Venetian lampwork versions of certain powder-glass beads (Van Brakel 2007). One sample card (dated 1930) displays a large, yellowish-gold, tubular bead with red and green stripes, which is similar in appearance to the colors and design of Gold Coast powder-glass beads (Fig. 20, bead 15826).

Yellowish-tan *akoso* beads are among the earliest examples of Ghanaian powder-glass beadmaking (Fig. 21). One characteristic *akoso* design, found among the powder-glass beads recovered from eighteenth-century contexts at Elmina, features an inset glass-bead chip encircled by a glass-cane trail. One J.F. Sick and Company sample card (dated 1910–13) contains four Venetian lampwork versions of this heirloom *akoso* design (Fig. 22, beads 407–10). Another sample card (dated to 1929) displays a lampwork version of another *akoso* style, featuring a crossed, trailed-cane design in characteristic blue and brown colored glass (Fig. 23, bead 15255). The lighter ivory color of this Venetian *akoso* is similar to the weathered coloring of antique *akoso* powder-glass beads, suggesting that this bead could have served as a more convincing imitation of antique *akoso*.

Sordinas, in researching Krobo beadmaking from 1959 to 1960, found that local bead artists were very concerned about European copying of powder-glass bead designs. Beadmakers reported that European competitors sent agents into local markets to learn which locally produced bead designs were in fashion. These agents

sent samples of popular local beads to European bead manufacturers, who were able to mass-produce large quantities of these popular styles at a lower cost. This competitive atmosphere spurred local beadmakers to develop new bead styles in an effort to thwart foreign bead companies’ efforts to capture the powder-glass bead market by “dumping” cheap European bead imitations of popular local bead designs (1965:316).

NEW BEAD FORMS AND BEADMAKING TECHNIQUES

During the twentieth century, powder-glass beadmaking became centered in Ghana’s Krobo and Asante regions, with Krobo bead artists eventually becoming the primary producers and innovators in powder-glass beadmaking (Sordinas 1965; Lamb 1976; Kalous 1979; Johnson 1979:80, 82; Francis, Jr. 1990, 1993; Haigh 1991). Ghanaian beadmakers continued to practice and refine their centuries-old mold-form powder-glass design techniques until the late 1990s, producing “designed” beads that demonstrate the sophisticated artistry achieved through mastery of this seemingly simple beadmaking technology (see Figs. 11, 14–15, 17–19). In recent decades, however, profound changes have taken place in bead production and consumption, with new glass beadmaking forms and techniques largely replacing long-established powder-glass design processes. These innovations are the result of bead artists’ creativity and commitment to maintaining the vitality of their unique glass beadmaking profession.

Since the beginning of the twenty-first century, “designed” powder-glass beads—in which designs are created by painstakingly inserting different colored glass powders within the body of the bead prior to firing—have become increasingly rare. In the mid-1980s, a new, “translucent” or “transparent” bead form was developed (Fig. 24) using fragments of broken glass to create beads retaining the translucence of glass, rather than the opaque beads produced from finely powdered glass (Wilson 2003; Sutherland-Addy, Aidoo, and Torda Dagadu 2011). The firing temperatures



for translucent beads are higher—800 to 1000 degrees Celsius, for 30–45 minutes—in order to melt the glass fragments. For these more molten beads, a metal pick is used to form the bead hole and shape the bead toward the end of the firing process.

The artistry of translucent glass-bead design finds expression in a myriad of luminous colors. To produce translucent beads, artists must use glass in the desired colors, such as blue, green, brown, or clear bottle-glass. More unusual colors such as gold or pink require the use of glassware in these colors. New translucent designs are also produced by combining different colored glass fragments. A few bead artists with contacts in Europe and North America have also begun importing art glass to obtain rich new colors.

The creation of inventive new bead shapes is another distinctive feature of translucent bead design. In addition, bead forms have been developed to embellish other locally crafted items,

such as translucent-glass pendants created for candle-holders designed and produced by Daniel Doku Teye (Fig. 25). In terms of design, translucent-glass beads have a contemporary look especially appealing to international export markets. A necklace by translucent-bead innovator Nomoda Ebenezer (“Cedi”) Djaba, for example, was featured in *The Global Africa Project* exhibition and catalogue (Sims, King-Hammond, and D’Alton 2010:145).

Ghanaian consumers, however, have not embraced the new translucent beads to the same degree as have the export or tourist markets. By 2013, translucent beads were primarily being used as spacers or design elements in local bead jewelry featuring “painted” beads, Ghana’s newest and most popular glass bead form. Painted bead designs are inspired by nineteenth and early-twentieth century European trade beads, which have become increasingly rare and costly in Ghanaian markets, having been bought by traders for the lucrative “African trade bead” market of Europe and North America. The intricate designs of Venetian mosaic, or *millefiori*, beads have been especially influential, yet painted beads also display great freedom of creativity as bead-makers develop imaginative new designs (cover). A major force in the development of the new painted beads has been bead artist Florence Asare, who with husband Ernest Asare operates TK Beads Industry, located in Amrahia, north of Accra. The production of painted glass beads has opened up new roles for women in Ghanaian glass beadmaking. Women, traditionally the traders in beadmaking families, have become leaders in painted-bead design (Wilson 2003; Gilvin 2006; Sutherland-Addy, Aidoo, and Torda Dagadu 2011).

Painted beads are created by painting designs on either plain powder-glass or translucent-glass beads, using a mixture of glass powder, powdered ceramic dye, and water. After the painted surfaces have dried (Fig. 26), each bead is placed back in the mold and fired for an additional 20 to 30 minutes at low temperatures of 300 to 600 degrees Celsius. Since their development in the late 1990s, painted beads have come to dominate Ghana’s local bead market as well as gained prominence in the tourist and export trades. Ghana’s long-established “designed” powder-glass bead-

28 Contemporary facsimiles of heirloom powder-glass beads (left: royal necklace of *akoso* and *bɔɔm* beads; right: *bɔɔm* beads) made by master bead-maker Cedi Djaba, Cedi Beads Industry, Odumase Krobo, Ghana, 1999. Collection of the Newark Museum, gift of Suzanne Gott, 2008, 2008.54.119-1 and 2008.54.118.
PHOTO: RICHARD GOODBODY

29 Cedi Djaba demonstrating beadmaking techniques to a group of visitors, Cedi Beads Industry, Odumase Krobo, Ghana, 2013.





30 Cedi Djaba creating a bead with imported glass canes and lampwork beadmaking techniques, Cedi Beads Industry, Odumase Krobo, Ghana. 2013.

31 Detail of necklace of lampwork beads in *bɔdɔm* and *akoso* designs by Cedi Djaba, Cedi Beads Industry, Odumase Krobo, Ghana, 2007. Collection of the Newark Museum, purchase 2007 Franklin Conklin, Jr. Bequest Fund, 2007.66.1A-H.

PHOTO: RICHARD GOODBODY

making tradition has largely been eclipsed by the development of the popular new painted beads, with most mold-formed designs now replaced by painted facsimiles. Painted bead designs can be produced more quickly and economically than “designed” powder-glass beads, which require extensive training for mastering the more labor-intensive powder-glass design techniques.

NEW DIRECTIONS IN GHANA'S GLASS BEADMAKING PROFESSION

Contemporary bead artists have been working to strengthen and expand Ghana's glass beadmaking industry. Their efforts are supported by professional associations, such as the Ghana Beads Manufacturers Association and the Krobo Bead Society, and cooperative enterprises, such as the Ashanti Region's Asuafua-Asamang Co-op Beads Manufacturing and Marketing Society.

Beadmakers also work with NGOs. The most prominent is the Ghanaian organization Aid to Artisans Ghana (ATAG), established in 1989 to assist artists in Ghana's craft industries with product development, business management, and the cultivation of new local and international markets. Field coordinators assigned to the Eastern and Ashanti Regions work closely with local Krobo and Asante bead artists. ATAG also partners with the US-based NGO Aid to Artisans in bringing product and design consultants to Ghana and facilitating sales in US markets.

Ghanaian beadmaking gained UNESCO support as “traditional craftsmanship” under the initiatives for safeguarding intangible cultural heritage. The 2005 UNESCO project “Improved Traditional Bead Production and Marketing in West Africa” funded a workshop on the Venetian island of Murano for seven bead producers from Ghana and Mali “to improve . . . bead production technology and marketing strategies... [and] establish an international network and to exchange knowledge.”²⁰

In 2009, with funding from the European Commission's Cultural Initiative Support Programme, a Ghana International Beads Festival was held at Odumase Krobo to promote the local bead industry. The 2009 Beads Festival theme, “Tourism and Handicrafts, Keys to Economic Growth,” highlighted the poten-



tial of Ghana's growing tourist industry for offering new marketing opportunities, including bead factories as destinations for cultural tourism.

Ghanaian beadmaking has also served as a stimulus for local development initiatives. The community development project Skills Training and Entrepreneurship for Women, sponsored by Everlove Tetteh, Queenmother Nana Ohemaa Esi Nisin VIII, provides vocational training for rural teenage mothers through an intensive handicraft program using local beads. The Ghana Bead Society (GBS), established in 1995 to promote the appreciation and preservation of Ghana's bead heritage and beadmaking arts, is now partnering with Ghana's National Vocational Training Institute (NVTI) and with the bead and bead jewelry business Sun Trade Limited, established in 1996 by GBS founding member Kati Torda, to propose a two-year national certificate program to train Ghanaian youth in various beadmaking techniques and in the crafting of bead jewelry. The curriculum, to be developed by professional curriculum development consul-



32 Chevron beads made by Nomoda Ebenezer ("Cedi") Djaba, Cedi Beads Industry, Odumase Krobo, Ghana, 2013.

33 Painted facsimilies of early twentieth-century Venetian bicone beads (cf. Fig. 16), TK Beads, Amrahia, Ghana, 2013. Author's collection.

tants with the participation of NVTI, the Ghana Bead Society, and Sun Trade Limited, will include textbooks and other teaching materials, and provide instruction in the history and cultural significance of beads.

THE NEW GENERATION OF BEAD ARTISTS

Ghana's new generation of glass bead artists are reinvigorating their profession with product innovations and explorations of new marketing strategies. Two of the most prominent contemporary bead producers are TK Beads Industry and Cedi Beads Industry.

TK Beads Industry was established in Odumase Krobo in 1989 by Florence Asare, reviving a family glass beadmaking tradition that had ended with her father's generation. A leading member of the new generation of women bead producers entering the traditionally male beadmaking profession, Florence Asare, as previously noted, has been an important innovator in the development of painted glass beads, Ghana's newest and most popular bead form.²¹

Now jointly operated by Florence Asare (Director) and her husband Ernest Asare (Manager), TK Beads has relocated its bead factory and showroom to Amrahia, on Accra's northern outskirts. TK Beads Industry (Fig. 27), which is especially well known for its painted and translucent-glass beads, continues to develop new beads and bead designs (see Figs. 24, 26, and cover). In 2010, Florence Asare also traveled to India, with NGO support, for a training program to enhance Ghanaian glass beadmaking with production techniques developed by India's glass bead artists.

While TK Beads Industry continues to sell their beads in Ghana, the majority of the company's production is now geared toward the international export market. They have distributors in the



United States, Europe, and other parts of Africa, and a commercial website. Florence and Ernest Asare also market their beads at trade fairs in South Africa, the United States, the Netherlands, and other international venues. Another business strategy has been the expansion of their factory grounds and showroom in Amrahia to accommodate national and international tour groups and to host beadmaking workshops and training programs.

Ghana's most internationally renowned glass bead artist is Nomoda Ebenezer ("Cedi") Djaba,²² Managing Director of Cedi Beads Industry, located in Odumase Krobo. Descended from a long line of Krobo bead producers, he excelled from an early age in powder-glass beadmaking techniques and in developing new bead designs that attracted new customers at local bead markets.

Cedi Djaba has a highly developed mastery of classic powder-glass beadmaking techniques, creating beautifully crafted examples of *bɔdɔm* beads, the most challenging powder-glass bead form.²³ His replicas of heirloom powder-glass *akoso* and *bɔdɔm* beads are produced on commission for traditional rulers' bead regalia (Fig. 28; see also Fig. 9). In the mid-1980s, he was a key innovator in developing the new translucent or transparent bead form. As previously noted, one of Cedi Djaba's translucent-glass bead necklaces was selected for inclusion in The Global Africa Project exhibition and catalogue (Sims, King-Hammond, and D'Alton 2010:145).

Cedi Beads Industry produces five Ghanaian glass bead forms: beads of recycled antique-bead fragments; *bɔdɔm* beads; designed



34 Kati Torda, a Ghanaian jewelry designer of Hungarian descent, combines translucent-glass beads with gold-plated bronze Asante beads. Sun Trade Limited., Accra, Ghana, 2007. Hair by Charlotte Mensah. Model: Mamy Barauti. Courtesy of Kati Torda.
PHOTO: ERIC DON ARTHUR

powder-glass beads; transparent- or translucent-glass beads; and painted powder-glass and translucent-glass beads. In 1999, Cedi Beads Industry moved to a new location in Odumase Krobo with expanded factory grounds for a showroom and dedicated educational space, where Cedi Djaba presents beadmaking demonstrations and hands-on workshops to Ghanaian and international visitors and tour groups (Fig. 29).

As a contemporary Ghanaian bead artist, Cedi Djaba is unique in mastering the art of lampwork glass beadmaking. In 1997, following lectures to the Boston Bead Society, he remained in Boston for an additional two months learning the lampwork processes made famous by Venetian beadmakers and adopted by contemporary international bead artists. Back in Ghana, with technical assistance from the Netherlands Management Cooperation Programme, he developed a lampwork beadmaking studio with technology suitable to a West African setting. In his Odumase Krobo studio, Cedi Djaba creates finely crafted lampwork glass beads which include designs inspired by heirloom powder-glass *akoso* and *bɔdɔm* beads (Fig. 30). One such necklace, an elegant embodiment of contemporary transcultural Ghanaian beadmaking, is now in the collection of the Newark Museum (Fig. 31). In 2007, in a collaborative project with Nevada glass bead artist Art Seymour, he also began producing contemporary chevron beads in his Odumase Krobo studio (Fig. 32). Cedi Djaba's lampwork

akoso and *bɔdɔm* beads have taken the centuries of transcultural dialogue between Ghanaian powder-glass beadmaking and European bead production to a new level in which this longstanding dialogic relationship is expressed within the creations of this contemporary bead artist.

Cedi Djaba has also been a major force in promoting the development and appreciation of Ghanaian glass beadmaking, both in Ghana and abroad, acquiring an international reputation that represents a new direction in Ghanaian beadmaking. He has been invited to present demonstrations and workshops on Ghanaian glass beadmaking at such prestigious institutions as: the Penland School of Crafts, North Carolina (2006); the Corning Museum of Glass, in conjunction with the 39th annual Glass Art Society conference (2009); and the annual Santa Fe International Folk Art Market, a nonprofit folk art organization in partnership with the Museum of International Folk Art (2009–13).

CHANGING MODES OF BEAD PRODUCTION

Within Ghana, beads remain an integral part of customary practice and cultural identity;²⁴ however, the past decade has seen a significant shift in the types of beads produced and worn in customary contexts and Ghanaian fashion.

Since their development in the late 1990s, painted beads—copied or inspired by European trade beads and Ghanaian powder-glass bead designs—have been increasingly embraced by Ghanaian consumers. Painted beads constitute the overwhelming majority of beads produced for local wholesale and retail markets, largely ending beadmakers' long history of producing powder-glass beads with mold-formed designs.²⁵

The ascendancy of painted beads within contemporary Ghanaian beadmaking is the result of several factors. In comparison with designed powder-glass beads, painted beads have the advantage of being produced more quickly and economically without requiring extensive training in mastering “designed” powder-glass techniques. For most Ghanaian consumers, the distinction between painted and designed beads is not significant enough to merit paying more for the more labor-intensive designed powder-glass beads. Painted beads, however, have a more significant appeal as the bead form best suited to meet local needs for affordable versions of heirloom trade beads, which have become increasingly rare and costly in recent decades (Fig. 33, cf. Fig. 16).

The dramatic reduction in Ghanaian heirloom beads is the result of two combined aspects of late twentieth-century transnational engagement: the neocolonial World Bank and International Monetary Fund structural adjustment programs imposed upon many African nations, including Ghana, beginning in the 1980s; and Western transcultural collecting. Since the 1980s, Ghana's troubled economy forced many women to sell their bead collections to bead traders for sale on the lucrative international bead market as the “African trade beads” much sought after by Euro-American collectors since the late 1960s.²⁶ In other instances, women's heirloom bead collections have been lost because of beads' long history of spiritual associations. In fact, there are accounts of overly zealous Christian family members, believing heirloom beads to contain witchcraft, destroying women's bead collections by breaking the beads or throwing them into the fire.²⁷

Painted design techniques—capable of producing very colorful, complex designs inspired by Venetian “fancy,” and mosaic, or *millefiori*, beads—are especially well suited to recreating the look of the European trade beads whose design history, similar to that of African-print textiles, was shaped by the tastes and fashions of African consumers. As a creative response to challenges of late-twentieth century transcultural engagements, painted beads provide a sustainable, locally produced bead form capable of satisfying the needs of customary practice as bead regalia for traditional rulers and Krobo nobility displays, as well as funerary presentations of waist beads honoring a deceased Asante woman.²⁸

Both painted and translucent glass beads are being crafted into fashionable ways of expressing cultural pride and heritage, as in the creations of Kati Torda, a Ghanaian jewelry designer of Hungarian descent and a founding member of the Ghana Bead Society (Fig. 34). During her thirty-four years in Ghana, Kati Torda has become a leading figure in Ghanaian and African bead jewelry design. At her bead and bead jewelry business Sun Trade Limited, which she established in 1996, Kati Torda creates cus-

tom designs for individual clients, including two of Ghana's First Ladies. She also teaches classes and workshops in bead-jewelry techniques and design. In 2013, she was invited to be a co-presenter with Cedi Djaba at the Harare International Festival of the Arts, where they presented workshops and demonstrations on contemporary Ghanaian beadmaking and bead jewelry design and a seminar on the role of beads in Ghanaian societies.

Kati Torda's bead jewelry designs—featured in a variety of Ghanaian and African fashion venues including the Miss Malaika, Miss Ghana, and Face of Africa pageants, the fashion shows and promotional ads of the Ghana-based textile companies Ghana Textile Printing (GTP) and Woodin, and international fashion magazines such as *New African Woman* and *Oh Yes! Magazine*—demonstrate the inseparability of Ghana's beadmaking arts and contemporary African fashion.

SUZANNE GOTT is an art historian in the Department of Critical Studies at the University of British Columbia, Okanagan. Her research and publications focus on women's visual culture in Ghana, with a particular interest in fashion and performance. Suzanne.Gott@ubc.ca

Notes

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- 1 In the early centuries of European maritime trade, the region known as the Gold Coast extended from Assine in the Ivory Coast to modern Ghana's Volta River.
- 2 Graeber (1996) explores the particular value of beads as objects of exchange and adornment for visible, socially recognized displays of wealth and power.
- 3 For Mediterranean, Islamic, and Venetian trade beads of this period, see Panini (2008) and Dubin (2009).
- 4 The European glass beads produced for the African trade—first via trans-Saharan routes and then by the coastal trade—were largely of Venetian manufacture. In the early thirteenth century, Venice had emerged as the leading European beadmaker. It was only later, during the eighteenth century, that beads for the African trade

were being produced in many parts of western Europe, frequently by expatriate Venetian beadmakes (Francis, Jr. 1988:12, 23, 44). Despite concerted competition, including seventeenth-century Dutch imitations of Venetian glass beads, Venice retained its supremacy until finally eclipsed by the ascendancy of Bohemian bead production in the latter half of the nineteenth century (Van der Sleen 1963; Francis, Jr. 1988:40).

5 For historical and contemporary studies of customary beliefs in beads of supernatural origins and powers within Ghana, Togo, and Nigeria, see Bowdich (1966:266–68); Freeman (1967:403–405); Huber (1963); Kumekpor (1970–71:108); Agyeman-Duah (1976); Sarpong (1977); Euba (1981–82); Sackey (1985:185–87); Nourisson (1992); Gott (2002, 2007). See Gott (2013) concerning the supernatural dimensions of native gold in Akan beliefs and practices, its spiritual affinities with precious beads, and the affective impact of non-visibility or concealment in intensifying the supernatural powers of gold and beads.

6 Ross observes that the staff finial, dating to 1927 when Adanse was still subject to Asante rule, “was carved to argue for independence on the basis of historical primacy,” with four carved heads representing Denkyira, Asante, Asen, and Akyem—rival Akan states whose origins lie in modern Adanse's forest regions—placed at the feet of the enstooled Adansehene (1982:62). Ross also notes the similarity between the Adanse staff's powder-glass encased iron rod and two glass-encased iron staffs on display in the Prempeh II Jubilee Museum on the grounds of the Ashanti Region's Centre for National Culture in Kumasi (personal communication, July 2013). According to the museum staff, the staffs were presented to young girls to indicate their status as future wives of the Asantehene, the supreme Asante ruler (interview, July 2013).

7 Interview with Nana Akua Pokuaa, July 1999, Kumasi, Ghana. Translation by Dr. Kofi Agyekum, Professor of Linguistics, University of Ghana, Legon, August 1999. The Amakom stool history recorded by Agyeman-Duah (1976) also traces the ruling Asenee clan's origins to a bead ancestress known by the praise-name Berewua, “copious” or “abundant” (*aberewa*, ‘old woman or mother’). During her research on Asante funerals, De Witte learned that *Ekoon* (or *Ekuona*) clan members, also known as *Ahwenee Nana mma*

(“children” of the Great Ancestral Bead), wear precious beads for official clan gatherings, including funerals of important clan members, where clan sympathizers will be seated beneath a funerary banner inscribed “with the words ‘*Ekuona abusua kuo, ahwenee mma*,’ Ekuona clan association, children of the beads” (2001:57).

8 See the following studies that address the significance of women's waist beads in southern Ghanaian cultures: Ewe (Kumekpor 1970–71); Adangbe-Ewe (Van Landewijk 1977); Fante (Sackey 1985); Asante (Sarpong 1977; Gott 2007); and Krobo (Steegstra 2005).

9 See Prestholdt for an examination of the “cultural logics of consumer demand” that informed nineteenth-century east African trade relationships (2008:8).

10 Although unable to obtain this source, Vanacker's findings are presented in McIntosh (1984); McIntosh and McIntosh (1988); and Insoll and Shaw (1997).

11 Saitowitz cites records from 1932 to 1955 from the Società Veneziana Conterie reporting the shipment of glass beadmaking rods, or “canes,” to African countries (1993:38).

12 Present-day beadmakes use termite-mound clay—a special clay bound with termite-ant saliva that withstands high firing temperatures—for bead molds as well as their earthen kilns. Beadmakes usually coat bead molds with kaolin slip to act as a separating agent for the fired glass beads.

13 Powder-glass beads' firing temperature of 600–800 degrees Celsius for 20–35 minutes is sufficient to fuse the glass powder, yet not make it molten and spoil the carefully fashioned powder-glass designs.

14 See Liu (1974a, 1984) for well-illustrated discussions of Ghanaian vertical- and horizontal-mold powder-glass beadmaking processes.

15 Questions as to the nature and origin of the *akori* have been the focus of considerable debate among twentieth-century scholars. For various perspectives in this debate, see Cardinall (1924–25); Mauny (1958); Jefeys (1961); Fage (1962); Kahlous (1966, 1968, 1979); Van Landewijk (1970–71); Willett (1977); and Sackey (1985).

16 “7 Marzo 1603, da Emanuele Ximenes di Anversa ad Antonio Neri,” *Fondo Magliabechiano* XVI, 116, Biblioteca Nazionale, Florence. In 1959–60, Sordinas documented Ghanaian coastal women's long-standing craft of altering imported European beads in a “cooking” reduction-atmosphere process to produce more afford-

able local versions of costly antique *koli* beads, a practice that continued until the 1980s (1964:75–76).

17 A group of ancient mosaic glass beads recovered from archaeological excavations at the trans-Saharan trade center of Jenné-Jeno have been attributed to either Ptolemaic and Roman sources dating from 300 BCE to 200 CE, or Arabic sources dating from 300 to 600 CE (Picard and Picard 1991:23, beads 82–92, 94).

18 For a description of the European drawn-glass and lampwork techniques, see Sprague (1985:87–89, 93–94).

19 Manufactured facsimiles of locally crafted shell, tooth, coral, and stone beads from Asia, Africa, and the Americas are examined by Liu (1974b).

20 See the UNESCO project “Improved Traditional Bead Production and Marketing in West Africa, Ghana - Mali,” www.unesco.org/culture/ich/?pg=00114. Accessed March 4, 2013.

21 See a 2002 interview with Frances Martey (Asare) by Tanja Galetti in Wilson (2003:91–102) and the TK Beads Industry website, www.tkbeads1.weebly.com. Accessed February 22, 2013.

22 See a 2002 interview by Barbara Henderson in Wilson (2003:103–109); and also Gilvin (2003).

23 See Liu, Ahn, and Giberson (2001) for a discussion of possible historical *bɔdɔm* beadmaking techniques, including a methodology proposed by Giberson and Liu that was informed by observing the contemporary *bɔdɔm* beadmaking techniques of Krobo master bead artist Cedi Djaba.

24 Various studies have focused on the roles of beads in specific Ghanaian cultures: Ewe (Kumekpor 1970–71); Adangbe-Ewe (Van Landewijk 1977); Dangme (Quarcoopome 1991); Krobo (Steegestra 2005); Fante (Sackey 1985); and Asante (Gott 2007). Two recent publications take a broader perspective on Ghana's bead culture that includes bead producers, traders, customary practices, and cultural and national identities: Wilson (2003); Sutherland-Addy, Aidoo, and Torda Dagadu (2011).

25 The artistry achieved in designed powder-glass beadmaking during the final two decades of the twentieth century, along with painted and translucent beads from the late 1990s, is best represented in the collection of the Newark Museum. The Museum collection also includes examples of Ghanaian powder-glass vertical and horizontal mold-form beads from the nineteenth and early twentieth centuries.

26 See Straight (2002) concerning the loss of Sam-buru heirloom marriage beads to Western collectors. In North America, African bead traders sell at major bead expos such as the Tucson Bead Show and travel on a circuit around the country selling to bead retailers.

27 Interview with Mrs. Joanna Dofie, Kumasi, Ghana, July 2007. See Gott (2007:90–91) concerning associations between women's waist beads and witchcraft.

28 See Gott (2007) concerning waist beads' significance of in Ghanaian women's life-cycle events, including women's funerary rites.

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