

The MARGARETOLOGIST

The Venetian Bead Story, Part 2: The Beads

Quick reference chart to Venetian glass beads

The Beads

- 1480 - 7-layered Chevrons - 1610
- 1520 - Nueva Cádiz - 1610
- 1550 - Gooseberry - 1900
- 1560 - Early Blues - 1750
- A speo method becomes very popular*
- 1570 - Flush Eyes - 1635
- 1575 Drawn with 3 sets of multiple stripes - 1620
- 4 sets of stripes = 17th c.; wound with stripes = 19th c.*
- 1600 - 4/5-layered chevrons, green, a speo, striped, flattened
- 1600 - Green Hearts - 1836
- 1600 - Blue-white-blue and White-clear-white - 1690
- 1600 - "Old whites" clear over white - 1890
- 17th century dominated by drawn monochromes*
- Seed beads, including charlottes, important trade items*
- 1725 - Squiggle design - 1899+
- Lampworking grows in importance*
- 1750 - Barleycorns - 1840
- 1820 - Goldstone decoration - present
- 1830 - Wound white/ yellow hearts - 1870?
- 1839 - White hearts - present
- 1840 - Microbeads - 1900
- Differences in trading patterns:*
- America - spiral designs, spots*
- Africa - "eyes," yellow bases*
- West Africa, Borneo - imitations*
- 1860 - "New glass," combing - 1900
- 1860 - Maccas, 2/3-cuts, irising/lustering
- 1900 - Bundled millefiories - 1920
- 1920 - Molded millefiories - present
- 1920 - "Bumpy yellows" - 1940
- 1930 - Swirled glass - 1940
- 1930 - Tight spirals- 1940
- Many lamp types until WW II*
- 1992 - End of seed bead making

Venetian History

- 7th c Torcello glass
- 1296 first recorded glass beads
- d. 1460 Barovier; cristallo, latticino
- 1486- Margaretari and Paternostri founded
- 1480 "Newly discovered"
- 1510 Glass beads "born"
- 1528 Supialume founded

- 1576-1614 Antonio Neri

- 1647 Supialume on par with other two guilds
- 1677 Miotti, aventurine
- 1685 De Auro gold ruby
- 1718 Venice loses much of her empire
- 1797 loses rest of empire
- 1820s-1860s seed bead finishing mechanized

- 1843 - Bussolin patents gas lamp for lamp-winding
- 1845-65 Battista mosaics

- 1860s Jablonec at zenith
- 1860s Molds introduced
- 1910s WW I
- 1917 Conterie founded
- 1920s drawing (seed beads) mechanized

- 1945 lost WW II
- 1992 Conterie closed

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Through the Eye of a Needle

This is the second part of "The Venetian Bead Story," concentrating on the beads made by the Venetian glass industry over the last 500 years.

It was instructive doing these two issues. Several scholars have expanded our understanding of the history of Venetian glass beadmaking, but even more new data is available about the beads themselves, and this issue highlights that new information.

To understand fully the Venetian beads in this issue, you should have a good grounding in the history of Venetian glass beadmaking. I urge you to read over the last issue before proceeding with this one. In particular, there are specialized terms that should be mastered to develop a full appreciation of these beads. Since they were discussed in the last issue (11:2), they are not redefined here.

A feature not in my earlier books is the distribution pattern of these beads. For the first few centuries, there was little difference in where beads were traded, but in the 19th century, trade patterns became crucial.

Finally, a word about St. Catherines, which is often cited here without reference to publications. Santa Catalina de Guale was the northernmost Spanish mission along the Atlantic coast, on St. Catherines Island, Georgia, a barrier island about the size (and shape) of Manhattan. From 1587 to 1680, an active Franciscan mission operated there, bringing the message of a new religion to the Guales. For over two decades, David Hurst Thomas of the American Museum of Natural History has been excavating the site. I have been working with the beads, and a book on them (co-authored with Lori Pendleton) is scheduled within a year. A complete report will follow, but the beads are incorporated here for the 17th century.

- BEAD EXPO 2000 will be held in late March in Santa Fe, NM.
- If you would like to help illustrate my upcoming books, please contact me.
- Want to take a Bead Tour? Where? When? We will tailor tours for you and small groups. Contact me.

Don't forget to visit us at www.thebeadsite.com – go to Galleries to see the graphics related to issue 12(1) of the Margaretologist.

CALENDAR

- ⇒ 16 Jan. – 10 May '99 Research, consulting, lecturing Sri Lanka and India.
- ⇒ 26 June – 26 July Bead Society of Great Britain (Lecture, Workshop); South Asian Archaeology conference, Leiden; research in France and Germany.
- ⇒ March 2000 – BEAD EXPO, Santa Fe

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The Margret Carey "Gotcha" Award goes to the person who spots the most errors per issue. One point for a typo, two for an error of fact. The award has been extended to The Bead Site. Guess who won for 10(2):

(page/column/paragraph/line)

- 4/2/2/3 lightning, not lightening
- 12/2/1/3 almandine, not almadine
- 13/1/6/3 add period at end.
- 13/1/7/2 Rasmussen not Ramussen
- 13/1/11/2 Glass: Chinese, not Glass Chinese

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The Venetian Bead Story 2

The history of Venice, her glass industry and her glass bead industry was presented in the last issue. This issue concentrates on the beads themselves.

Venice was the leading glass beadmaker of Europe for five centuries and an understanding of modern beads begins with her products. We can assign dates for most of her important bead types, at least tentatively. The data for a chronology comes from several sources each with its own limitations. These sources are:

1. **Historical references to bead-making or the trade.** To rely on statements about the origin of beads we must consider their credibility. When Abbot Zanetti, for example, talks about changes he witnessed we can believe him, but others may or may not be so well informed.

2. **Bead sample cards** have the advantage of presenting the beads for study. Unfortunately, few are dated. Some were made by or for dealers and have beads from different sources. Others have beads to show what could be made if a demand for their revival arose. The Center's own large collection (though few are Venetian) and our research of other collections has proven invaluable.

3. **Archaeological evidence** is helpful, especially from American sites and increasingly elsewhere. Again, caution is necessary. A bead from a dated locale may have been used then, but at other times as well. Heirlooms may be lost long after production stopped. Small objects such as beads migrate upwards or downwards in soil, throwing off dates. Surface finds are often misleading, sometimes wildly so. A bead from a single site is far less secure than many from several sites.

The evidence here is divided into centuries, an arbitrary but useful distinction. A bead is discussed in detail when first met and its range of dates noted. If it continues unaltered, no more notice of it will be taken. Plain, monochrome beads are the most common at all times and these are rarely distinguished here. Also keep in mind that during the 17th century, Holland was a major beadmaker and her output was similar to that of Venice.

To help the narrative flow, details of references are set in slightly smaller type and offset from the text, in the manner of this paragraph. Numbers in the Kidd Classification system (Kidd and Kidd 1970) are set in square brackets []. Other writer's type numbers follow a # sign.

THE SIXTEENTH CENTURY (1500s): START WITH THE BEST BEADS.

Although the first Venetian beads were furnace-wound, few, if any, were traded abroad. By the time Columbus met "Indians" and Vasco de Gama met real Indians, Venetian beadmakers were building an early industrial system to turn out large quantities of beads to meet the growing demand of the widened world Europe was discovering. The earliest of these beads, at least in the American trade, were *Paternostri* products (see the last issue) and many were quite complex.

The priority of drawn trade beads over wound ones is seen in the Seneca sequence of New York, where wound beads hardly appear until 1687-1710 (Wray 1983:45) and along the Susquehanna River at the end of the 1690-1750 period (Kent 1983: 81). The same pattern is in West Africa (Francis 1993:8). In East Africa at Kilwa, Tanzania, wound beads were "extremely rare" until the 18th century (Chittick 1974:480), and earlier ones there may not have been European.

The most famous Venetian bead is the chevron (*rosetta* in Italian) [IIIIm], whose production started around 1480. The earliest chevrons were the most complex, with seven layers of glass (usually from the inside out: bottle-green, white, blue, white, red, white, blue) and faceted ends to reveal the corrugated pattern. The molded "stars" of chevrons have nine to 18 points, with 12 most common. Their terminal date has recently been adjusted forward, as several have been found at Jamestown from 1607-10 (Francis 1996).

Often accompanying chevrons is the Nueva Cádiz bead, named for the site where it was discovered on Cubagua Island, Venezuela. They have three layers, usually a thick dark blue core, a thin white layer and a blue exterior. They are square in section. Some are twisted [IIIc']; non-twisted ones are called "Plain" [IIIc]. There is a smaller, shorter variety with a dark blue exterior, never twisted. A few other colors, including 17th century red varieties are also known.¹

There has been debate about their origin, but I believe Venice is most likely, considering their distribution. The terminal date was once taken to be about 1575, but they are found into the 17th century. Old chevrons and Nueva Cádiz beads are often found together and they were once thought to be markers of Spanish exploration, but this can no longer be assumed.

Seven-layered chevrons are widespread. For Spanish contact sites see Smith and Good (1982) and Smith (1983); for Mexico, Francis (1987). For other sites in the U.S. see the papers in Hayes (1986). They are found in Ghana (Francis 1993:8) and elsewhere in Africa and Indonesia (Adhyatman and Ariffin 1993:93-4). [See also below.]

The initial paper on Nueva Cádiz beads is Fairbanks (1968), based on John Goggin's

unpublished manuscript. For Spanish sites, see Smith and Good (1982) and Smith (1983). For eastern North America see Wray (1983) and Kenyon and Kenyon (1983). [See also below.]

The notion that Nueva Cádiz beads were Spanish was Goggin's (n.d.:7-9), who argued that Spain rarely imported goods, but a study of imports to America in 1534-86 shows otherwise (Torre Revello 1943). Their presence where the Spanish had no contact [see below] also argues against it. The Spanish bead industry revealed at St. Catherines GA excludes Nueva Cádiz beads.

Chevrons and Nueva Cádiz beads often show up together in the Americas (see references above) and the Philippines (Francis 1989a:15). However, they are also known where the Spanish had no contact: Egypt (Francis 1995:10), Jamestown (Francis 1996) and Madagascar (Thierry 1961:117-8; Vernier and Millot 1971:157, figs. 160-2). Venice monopolized Euro-Egyptian trade and Spain was the enemy at Jamestown. In Madagascar the beads were in a Muslim cemetery and probably came via Egypt, or the Portuguese could have brought them.

An early terminal date for Nueva Cádiz was argued by Fairbanks (1967), Deagan (1987:163) and Smith *et al.* (1994:41), but their appearance at Jamestown (Francis 1996) and Ontario sites (Kenyon and Kenyon 1983) rules that out.

In mid-century, another fancy bead appeared that grew very important in world trade. The "gooseberry bead" [IIb18] was not named by collectors, but is recorded as early as 1704 (Barbot 1746:404). It resembles the fruit, and the histories of the bead and the fruit eerily parallel each other (Francis 1994). It was the premiere bead in the Slave Trade (*ibid.*).

Gooseberries are made from two renowned Venetian glasses: clear *cristallo* and milky white *lattimo*. Angelo Barovier (1405-60) invented these glasses, and it is possible (but not confirmed) that his heirs made the beads. The body is clear and the

¹ These must not be confused with similar 19th century beads. Early ones have diameters (corner-to-corner) of ca. 7 mm, the later ones of 13+ mm.

lines are *enclosed within* the body,² not laid on the surface. Later examples used lead glass. The *crystallo* was clarified with manganese that solarizes and turns violet, leading some to classify them as another variety. The number of lines varies from eight to 18, with 12, 14 and 15 most common. There are both round and ellipsoidal ones. They continued until the early 20th century.

For a full discussion of gooseberries, see Francis (1994). In America, they are in the Northeast in the 16th century, but thereafter in the South and along the lower Mississippi (Brain 1979:106, 124). They are at Aya-waso, Ghana, with a terminal date of 1680 (pers. comm. Bredwa-Mensah Yaw 1990) and Kilwa, Tanzania, in the 16th and 17th centuries (Chittick 1974:401). The last recorded date is on a Conterie card of 1909 (Harter 1981:12; Harter and Opper 1992: 10). Smith (1983:150) suggested that ellipsoidal ones were early and round ones popular after 1650. However, round ones are known at several early 16th century sites.

A distinctive bead is called by American archaeologists "flush eye" [IVg]. It is rounded or elongated, finished *a speo* and decorated with three or four mosaic chips. They had a short life span in the last quarter of the 16th and first quarter of the 17th centuries.

"Flush Eyes" are found in the Seneca sequence 1570-1635 (Wray 1983: 42), Susquehanna sites 1575-1600 (Kent 1983:81), 17th century St. Catherines GA and Ladoku, Ghana, with no precise date.

At many American sites, the most common bead is a light blue monochrome finished *a speo*, with striations along its surface [IIa40]. At least five different names have been attached to this bead, but they are usually called "Early blues" in the northeast and "Ichtucknee blue" in the

southeast. There is also a black variety. They are found in Africa, but don't seem to have made it into Asia. They date from 1560 to 1750. Fifteenth century ones are darker than 16th century ones and had less calcium, and they tend to disintegrate.

Seneca 1560-1710 (Wray 1983:42-3); Virginia 1683-1720 (Miller *et al.* 1983:137); Ontario (Kenyon and Kenyon 1982:60); Southeast (Smith 1983:150); 18th century Guebert site (Good 1972:117). It is by far the most common bead at 17th century St. Catherines and found at Ladoku, Ghana with no precise date. The chemical study is by Hancock, Chafe and Kenyon (1994).

THE SEVENTEENTH CENTURY (1600S): THE PATERNOSTRI STILL IN CHARGE

Many bead types from the last century continued into the 17th, but there was a tendency to be less fancy. This is particularly noticeable with chevrons. They have fewer layers (often four or five) and ends ground round or finished *a speo*. New color combinations were introduced, green often replacing blue. Some have four layers of clear, red and white with red, blue and/or green stripes on the white, the whole covered with clear glass (some are Dutch products). A flattened white striped chevron finished *a speo* appears.

Striped with clear outer layer: West Africa 1640-1700 (Lamb and York 1972:111); Ayawaso, Ghana, terminal date 1690; Seneca 1590-1615 (Wray 1983:43); Oneida (Pratt 1960:8-9); Ft. Orange (Huey 1985: 96) Burr's Hill 17th Century (Gibson 1980:126). Green chevrons: Susquehanna 1575-1600, 1690-1759 (Kent 1983:81); Ft. Jesus, East Africa early 17th-19th centuries (Kirkman 1974:145); St. Catherines GA 17th century. Flattened: 1610-35 (Wray 1983: 44). Five layers: 1595-1635 (Wray 1983: 43). Four layers: Cameron site 1570-1595 (Bennett 1983:52); Virginia 1638-60 (Miller

² A well-respected researcher, looking at weathered specimens mistook the lines for enclosed bubbles. Several other writers blindly accepted this, though he has since corrected his error.

et al. 1983:135) Burr's Hill 17th century (Gibson 1980:126).

Multiple layers of glass were popular. The red bead favored in the northeast (sometimes with a clear coat and sometimes striped) was replaced with a green (or other color) core under the red [IIIa1-5]. Blue-white-blue was popular [IVa19]. White beads were actually either white-clear-white or clear over white (I call them "old whites"). St. Catherines has seed beads with green or blue between two clear layers.

Brain's compilation of green hearts is from 1600 to 1836 (1979:106); in Africa they are as late as 1870 (Schofield 1945:20). Blue-white-blues: Susquehanna 1575-1630 (Kent 19683:60); Spanish sites 1565-1630 (Smith 1983:155); Ft. Orange 1585-1624 (Huey 1983:102-4); Ayawaso, Ghana, terminal date 1690. White-clear-white: New York 1595-1635 (Bennett 1983:52); Virginia 1660-80 (Miller *et al.* 1983:133). Clear over white: Seneca 1590-1635; Brain's gives 1600-1890 (1979:105-6), but they are rare after 1870. Common in East Africa to 1830; archaeologists call them "crackled white" because the white often develops cracks (David Killick 1989, pers. comm.).

Longitudinal stripes were widespread. Common combinations were a dark reddish-brown base with three sets of three thin white stripes ("rootbeer bead") [IIb 74] and a blue base with three sets of white/red/white stripes [IIbb27]. A white base with three groups of three thin, often spiraled lines [IIb'2] appears, but is more popular in the next century.

These patterns evolved in time. They began with three sets of stripes on a drawn bead, turning to four sets of stripes on a drawn bead and then lamp-wound beads with varying number of stripes.

Rootbeer bead: Seneca 1590-1615 (Wray 1983:42); same with white and blue stripes Oneida 1595-1614 (Pratt 1960:7). Blue with three stripes: Susquehanna 1575-1600 (Kent 1983:80); Ft. Orange 1624-76 (Huey 1983:

88); four stripes 1600-1840 Dawu, Ghana (Shaw 1961:72); these were also cut thin and reheated in West Africa. Blue on white: Ontario early 17th century (Kenyon and Kenyon 1983:66), but Brain lists them from 1699-1833 (1979:105).

Finally, the 17th century saw the introduction of seed beads in large numbers in the American trade. They had been in production a century or so before they came to be popular as trade items. Most were monochromes, though multiple layers were also common. Charlottes (faced against a wheel) also appeared.

Early seed beads in New York (Pratt 1961:6; Bennett 1983:53), but in Seneca territory rare before 1710 (Wray 1983:47). Rare in Peru or Belize before the 17th century (Smith *et al.* 1994:39). They were common in the early Alaska trade 1740-1800 (Francis 1989b; 1994:287). In the Great Plains, they may have been introduced in 1843 (Wildschut and Ewers 1959:49) or 1840 (Hail 1983:51). Charlottes are in a burial at Tipu, Belize (Smith *et al.* 1994:pl. IVA) dated 1540-1630, probably post 1575. They are also at 17th century St. Catherines.

THE EIGHTEENTH CENTURY (1700S): CHANGES COME

A significant change occurred in the 18th century, though it began slowly. Wound beads replaced large drawn ones. Drawn beads remained numerically dominant, but most new bead types were wound.

A good example of this is the mid-century (1731-64) "Tunica Treasure" of the Trudeau site in Louisiana. It consists of artifacts dug up by an amateur, then studied by Jeffrey Brain (1979). We are fortunate to have Brain's work on this material, but unhappily can never place it in proper context to learn how the Tunica used the beads and other goods.

Of 181,200 beads, 97.5% were drawn. No less than 61% were "old whites" or similar whites. With opaque turquoise

blue, they make up 77.9% of the beads. However, while plain drawn beads still predominated numerically, there were 52 varieties of drawn beads, and already 49 of wound ones.

This is the case in most parts of America, but not universally so. Deagan (1987:178) counted beads from three 18th century southeastern Spanish contact sites, where 80.6% were wound beads.

This is also the time when distinguishable wound Dutch beads appear. At least it is widely believed that mulberry and twisted cubes are Dutch. Some others may be as well, for example large oblates, ellipsoids and "pigeon eggs." Black beads with white waves that meet at their apices may also be Dutch.

The drawn beads are not much different from those in the last century: monochromes, old whites, green hearts and beads with three often twisted stripes. One new drawn type, at least in Spanish areas, are bugle seed beads (Watt and Merony 1937:55; Deagan 1979:179-80).

Most wound beads are also plain. Shades of blue and white were popular. Large round, barrel and ellipsoidal (pigeon egg) beads were in demand.

Of the plain wound beads the most popular were "barleycorns." The name is not from its shape. Its outline is similar to the grain, but it lacks the characteristic long side groove. Rather, its name derives from an old unit of measurement: three barleycorns made an inch (2.54 cm). Their average length is ca. 8 mm, so three usually do make an inch. Barleycorns are usually white or black; an appealing green-blue shade is rarer. The white ones at least are of lead glass. They range from about 1700 to 1836 and are the most common wound beads on many sites.

Barleycorns are the most common wound bead at Trudeau (Brain 1979:109 #WID1), Guebert (Good 1972:111 #39 and Ft. Union (DeVore 1992:35 #T4VA). The Ft. Union

Trading Post operated between 1829 and 1867, so the beads may have lasted a little later than 1836. On the other hand, white and colored barleycorns are on American Fur Co. trading lists in 1834 and 1836, but not in 1837 nor 1840 (nor in a list for 1835) (Spector 1976:19). Lead was detected by Davison and Harris (1974:210 #101). A white example donated to the Center by Marvin Smith has a specific gravity of 3.12, also indicating lead.

Decorated wound beads were rare in the 18th century. Some have simple stripes. A single light blue ellipsoid with a spiraling yellow and another spiraling multi-colored twisted cane (color not reported) from Tampa, FL is recorded from this time (Piper and Piper 1982:218).

The first distinctive lamp-wound decoration (though still rare) is the "squiggle," made by combing through a series of small circles. Several combinations of colors and bead shapes (round, ellipsoidal, drop-shaped) appear in the 18th century. The design was used into the 20th century.

"Squiggle" was coined by Kelly and Johnson (1979; see also Francis 1980). The earliest report (1725, if that is correct) is from the Tallapoosa Valley (Burke 1963). There are three different types at Trudeau (Brain 1979 #WIIIB1, 2, 3), dated 1731-64. There are two types at Guevavi AZ, pre-1773. In the Wichita sites one is dated "post-1780" (Harris and Harris 1967 #124). One is on an 1899 Venetian sample card (Francis 1980).

THE NINETEENTH CENTURY (1800s): CHANGE COMES

The 19th century was significant for our story. Science was blossoming and new glasses and beadmaking techniques were introduced (see the last issue). Venice got its first real competition from Bohemia. Our sources of information also begin to shift from an almost exclusive emphasis on archaeological data to adding a new form of evidence: sample cards.

Perhaps the oldest sample cards are those of the Levin Company, London, founded in 1830, which gave some cards to the British Museum in 1863 (Karklins 1982). The Slade book, in the same museum, was accessioned in 1896, but acquired earlier from a dealer in India (ibid; Francis 1984; Slade 1896:163). The Dan Frost Cards are from the Stephan A. Frost & Son Co. of New York, trading from 1848 to 1904 (Johnson 1977; Liu 1983). The J.F. Sick & Company cards at the University of Ghana, Legon [Sick-L] are mostly from the 1930s (Francis 1993:8-9). These sets belonged to dealers on four continents and include beads from various places.

Cards in the Glass Museum in Murano represent output by Venetian producers. There are at least nine sets of these and in some cases, the beads can be matched with those from other makers. The Bead Museum (AZ) has a book of sample cards of the Giacomuzzi brothers, to be dated between 1852 and 1870 (Francis 1988b). A card by Weberbeck in the Jablonec Glass and Jewelry Museum dates between 1871 and 1898. Two cards by Frances Greil in the Peabody Museum, Harvard date to ca. 1870-1898. The J.F. Sick & Co. cards in the Royal Tropical Museum in Amsterdam [Sick-A], which are all Venetian, are from 1910 to 1940. Allan's Boston Bead Store catalogue (Allen n.d.; Liu 1975) dates between 1920 and 1930 (Francis 1988c).

Bead styles did not change immediately with the turn of the century. American Fur Company trading lists between 1834 and 1840 listed only monochromes (including barleycorns) except for two entries of unspecified "Fancy" and one of "Blue & White" beads (Spector 1976:19).

Two glass types that had been manufactured in Europe for a long time finally made their way into Venetian beads. The first recorded bead with a goldstone (aventurine) decoration is between 1820 and 1836, though the glass was invented 150 years before (see the last issue).

Gold ruby glass had been around just as long, but few beads were made from it and the earliest ones may not be Venetian. The Venetians introduced it in spectacular style in the form of white hearts from about 1830. At first there were wound and drawn ones with ivory cores and wound ones with yellow cores. Yellow cores disappear, though I have no firm date. Around 1860, the ivory white turns to a pure white (as with white beads). By the 1890s, selenium was tried in place of gold; both seem to be used today. Drawn white hearts are also made in Bohemia and France and wound ones in India.

The earliest bead with goldstone I know is in Harris and Harris (1967 #163). It becomes common on post-1860 sample cards.

An early ruby glass bead is one of the squiggles from Guevavi AZ (Robinson 1976:164). Deagan (1979:179) mentions a few other red beads without being specific. There are two multifaceted gold red beads from 17th century St. Catherines.³

Three wound and 17 drawn white hearts were at Guebert, along with 100 green hearts (Good 1972:123). Though basically a 17th century site, it was still occupied (by one old man) in 1833 (ibid.:62). White hearts post-date 1820 in the Wichita sites (Harris and Harris 1967:153) and at Ft. Laramie 1834-75 (Murray 1964:31). They are said to have come into the African trade about 1830 (Schofield 1945:19). Wound white hearts are on the Giacomuzzi cards 1852-70. The dates for ivory and white cores and selenium are in Sprague (1985:94).

I earlier assumed that there was a sharp change in styles from the early to the late 19th century (e.g. Francis 1988a: 26-8). That assessment needs modification. Many beads classified as "early" were not only made before the changes of the

³ I would swear that these were Czech. However, they were found in an apparently impeccable context. Is the Czech industry older than 1715 or did the Venetians (or someone) make *molded* ruby glass beads before them? Something is strange.

1860s (see the last issue), but also long thereafter. I now stress the differences in beads produced for different markets.

In the trade with Native Americans, beads from 1830 to 1870 are mostly monochromes and white (or yellow) hearts, with a liberal sprinkling of Czech beads and some German blown ones. Fancy types include those with a line (or two jointly twisted colors) spiraling up them. Spots were popular, often in conjunction with waves. The squiggle persisted. "Maccas," black drawn hexagonal tubes, were invented in 1860.

Seed beads were refined, though many innovations were Bohemian. Very tiny "microbeads" are found from ca. 1840 to the end of the century. Two-cuts, Ceylon pearls, irised, lustered and lined beads debuted in the late 19th century.

For accounts of these beads see papers on Ft. Laramie 1849-69 (Murray 1964), Wichita sites 1820-50 (Harris and Harris 1967), Washoe Co., NV 1820-90 (Witthoft 1972), Old Sacramento 1849-1900 (Motz and Schultz 1980), Ft. Vancouver 1829-60 (Ross 1990) and Ft. Union 1829-65 (De Vore 1992). Maccas and seed beads are in *Margaretologist* 10(2), the Seed Bead Issue. Microbead dates were derived from Harris and Harris and an 1899 Conterie card in the Scarpa collection, Venice.

The beads traded to Africa were quite different. While some of those above went to Africa (especially the universal black round bead with white spots – with or without blue or pink on the spots), the most important types were distinctive. The dominate color is a dull yellow or ochre made as bicones, tubes and short bicones, often decorated with multistripes and eye-like designs. Green, brick red and black were also popular colors. The yellow was no doubt a substitute for gold and a standout against dark skin. This is the group that I previously called "early 19th century." However, they are very

much present (with an occasional green heart) in the Sick-A collection, of 1910-40. J.F. Sick & Co. traded with Africa.

The Levin, Greil and older cards in the Murano Museum have these beads. For West Africa, ca. 1750-1850 see Lamb and York (1972:110-2); for East Africa ca. 1857-95 see Karklins (1992). An important collection from an apparent bead dealer's house at El Mina, Ghana is at U. Ghana, Legon. The village was torched by the British in 1873 and the beads are a "snapshot" of what was being traded then (see DeCorse 1989; Francis 1993:8). In addition to the Sick-A cards, a Conterie card at U. Florida, Gainesville has similar beads. Its colophon is 1948 and I earlier cited it as an example of using old stock (1988a:8), but now think differently.

Other parts of the world favored other beads. In Indonesia, especially among the bead lovers of Borneo, some beads are very similar to those in the African trade, while others are not. The picture is complicated not only by the presence of many Chinese beads but also because modern dealers in Southeast Asia import beads from Africa. In Iran, about the only Venetian beads are of the late 19th century.

While it has been recognized that Bohemia made many beads to imitate valued beads in various places, the role of Venice in this business had gone unappreciated. While they did not do it as often, they also imitated other beads, including the West African *Bodom* and *Akuso* and the *Luket Sekala* and *Kelem Bela* of Borneo

Venetian beads in Indonesia: Adhyatman and Arafin (1996:93-107) and Francis (1992: pl. 3). Beads in Iran are my observations of three years living there. *Bodom* and *Akusu*: Francis (1993:12; pl. 4B for imitations). Borneo beads: Munan-Oettli (1988). The imitation *Luket Sekala* is documented early in this century (Furness 1902:118); Michael Heidi collected only one string of these in all his years in West Africa. The imitation *Kelem Bela* is on a Greil card.

To this repertoire, new types of beads were added in the 1860s. They resulted

from the changes in the industry and were spearheaded by the leaders of those changes, as discussed in the last issue. The glass was purer, shinier and more brilliant. Black and other dark colors were common. Designs included rosettes and other flower motifs and raised colored dots. Combing, perhaps because of the success of the squiggle, was very popular, leading to what collectors call feathers and ogees, arabesques and wedding-cakes. Goldstone decoration was widely used. The varieties are almost endless. In addition to Iran, these beads were favored by women in Europe, America, Egypt and other places. Some made it into West Africa, but they are relatively scarce there.

These beads are found on the Slade, Giacomuzzi, later Murano Museum and the Dan Frost cards (Liu 1983).

THE TWENTIETH CENTURY (1900s): SLOW DECLINE

The 20th century was not kind to Venetian beadmaking due to factors discussed in the last issue. The weakness resulted in debased styles and a loss of the vibrancy of the 19th century. Only one new bead was a real success.

The success was the millefiori.⁴ No one knows when the first modern ones were made, but it was probably in the late 19th century, perhaps by small-scale bead-makers. The vast majority are 20th century products. Those made before WW I had mosaics constructed by bundled canes that resolve into tiny dots under a lens. Later canes were nearly all molded.

Technically, Venice could have made millefiories as soon as the *Supialume*

⁴ Many are more properly called mosaic beads. They are also known as Goulimine beads, after the town in Morocco where American dealers bought them in the '60s and '70s before they discovered they were coming from West Africa.

appeared; cane molding is essentially the same as chevrons or the decorations of Flush Eye beads, paperweights, and so on. Perhaps they didn't because of the domination of large manufacturers.

The only excavated millefiori is from Dawu, Ghana, late 19th to early 20th century (Shaw 1961:73). They are not on the Levin, Slade or early Murano Museum cards. Their absence from Giacomuzzi and Greil cards could simply mean that they did not make them. They are on the Dan Frost, Sick-A and Sick-L cards and in Allen's catalogue. For later examples see Harris (1984).

The distinction between millefiori decorations were presented in my review (Francis 1991) of Picard and Picard (1991). They later reported that bundled canes were made by cottage industries and molded ones by the larger factories (Picard and Picard 1993).

The other beads weren't much to brag about. The complex lamp beads are virtually gone: no more floral sprays, squiggles or other fancies that marked the late 19th century. The lamp beads that were made were done with less skill and are not as attractive. Eye beads, combed feather designs, spiral lines and some of the types for the African trade continued at least until WW II. After that, even the millefiori lost much of its charm, made with only a few mosaic chips.

There were a few new types. One was round with raised dots in several color combinations, the most common being the "bumpy yellow." Another was covered with a spiraled thread of twisted red, white and blue. A third was made from swirled glass forming both the base and decorations in several color schemes, most conspicuously red and yellow.

The data are from the Dan Frost, Sick-A and Sick-L cards, Allen catalogue, Harris (1984) two Conterie cards in the Scarpa collection dated 1925 and beads in the Center's collection with known dates of purchase.

The decline in the quality and vibrancy of Venetian beads is understandable given

the history of Italy and Venetian bead-making. Indeed, the spectrum of Venetian beads mirrors that history. The 16th century was one of great excitement as an emerging industry served Europe discovering the rest of the globe. Much of the enthusiasm was gone by the 17th century, as gifting changed to trading and beads became a commodity. The 18th century saw the rise of the *Suppialume* and decline of the *Paternostri*. The late 19th century was a rebirth spurred by science and competition. War, depression and decolonization marked the 20th century. At the cusp of the 21st century, Italy is again rich and powerful, but no one can pay the wages to make fine beads again.

I have often called attention to how beads reflect the world in which they are wrought. Here is yet another example from the pages of the history of one of the world's outstanding beadmakers.

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