

Analysis of the Clayoquot Beads

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Introduction

On Friday, September 27 Ron Burchett of the Tonquin Foundation delivered 147 beads (Whole beads N=137, Split beads N=10) to Melissa Darby MA RPA of Lower Columbia Research & Archaeology. An amendment to the archaeology permit for the Templar Channel, Clayoquot Sound investigations (21100-20/04A036 & 25000-47/TEMPL) allowed the bead assemblage to be transported out of Province for ten days, in order that they may be analyzed.

Methods

I used the comparative bead type collections from several historic sites in the Northwest, including Fort Vancouver and its associated tower, Kanaka Village, as the basis for this research. The Fort Vancouver collections are curated at Fort Vancouver National Historic Site, Vancouver, Washington, and comprise one of the largest collections of historic artifacts from the nineteenth century in the Northwest. The Fort Vancouver research library contains reference material relating to the recovery of beads and other artifacts from various archaeological sites in the Northwest and beyond.

The beads in the Clayoquot collection were analyzed for size, color, shape, diaphaneity and manufacturing type. Comparison to Fort Vancouver varieties followed. The bead classification system is designed by Ross (1990) and is based on the classification system developed for archaeologists by Kenneth and Martha Kidd (1970), as modified and expanded by Karlis Karklins (1982, 1985).

The Clayoquot anchor beads correspond to bead variety W1b-stp/tl/ops/1-2, also known as Fort Vancouver variety FOVA 2002.

Description

Bead variety FOVA 2002 are simple monochrome beads manufactured using the wire-wound process. These beads were made one at a time by wrapping part of a molten rod of glass around a wire or mandrel, and as the molten rod was pulled away, the remaining molten glass on the wire was heated and spun until it assumed the desired shape.

In general FOVA 2002 variety beads are composed of spherical, sky-blue beads that range from transparent to translucent, but are mostly opaque. In the historic record, they are referred to as Canton Beads No. 1st 2nd, 3rd and 4th sizes. According to Ross this variety is the most common at the early 19th-century sites in the Pacific Northwest.

Methodology

Each bead was color valued using the Munsell Book of Color Vol. 2 located at the archaeology laboratory at Fort Vancouver National Reserve, Vancouver, Washington. The Munsell color for this assemblage ranges from 2.5B to 7.5B 6/6. Some of the color has been altered from being in association with the rusty anchor, giving a greenish cast to some of the surfaces of beads, though the center of the split beads generally have the 7.5B 5/8-6/6 chroma value.

Many of the beads exhibit unusual horseshoe shaped pockmarks filled with rust-colored matrix. The origin of these pockmarks is unknown, and beads in the comparative collection at Fort Vancouver were examined and this type of damage was not found.

The beads are not well-finished and do not exhibit evidence of heat treatment or fluoride treatment to create luster. Several of the beads were encrusted with rust concretions. In some cases, this was gently removed in order to measure and observe the bead. Many of the beads have bubble flaws on the surface or manufacturing flaws where part of the hemisphere is missing. Several of the beads are not symmetrical on a bi-lateral axis being poorly shaped during the manufacturing process. Some of the beads exhibit swirls of opaque and translucent glass, indicating that the molten glass was not completely homogenous. Most of the beads are opaque, though eight of the beads are translucent.

The small protrusions or nibs around one or both mandrel holes have not been ground off. These nibs of glass are by-products of the winding process. A total of 63 beads (N=63), including one of the split beads, exhibited this nib. Two beads exhibit this nib adjacent to both mandrel holes. One bead (Specimen 53) has a nib that projects almost 1mm out from the main body of the bead. This nib is fragile, and if it had been worn in a necklace string it would have broken off during wear. This suggests that these beads were new when deposited.

This nib is present on 64 of the 137 whole beads, or 47% of the whole beads. This suggests that this assemblage may have been deposited earlier than 1830 when these superfluous nibs were generally removed through a heat treating process that finished the bead (Kaehler 2002:76).

The average size of this assemblage corresponds to the “2nd Size” or second to largest of Canton bead described by Ross (1990:48). The average width of the Clayoquot FOVA 2002 beads is 5.07mm. The average diameter is 6.68mm (see Figure 1).

Discussion

There has been much discussion of the FOVA 2002 bead in the literature as a chronological indicator in archaeological sites. This bead variety is known to have come from several sources. According to Ross, it is the most common bead found in early nineteenth century sites in the Pacific Northwest (1976). Lewis and Clark noted blue beads as being in the region when they arrived (1804). These beads were imported to the region by various sources, including the Pacific Fur Company, the Northwest Fur Company as well as the Hudson’s Bay Company (Ross 1976:747). Chance and Chance list this bead as “very early Hudson’s Bay Company,” (1975:45).

In his book about the Maritime trade on the Northwest Coast, James Gibson writes the following about trade beads:

At first-in the last half of the 1780s-the Indians demanded principally iron, copper and colored glass beads, although beads, like all trinkets, were accepted mainly as introductory and conciliatory gifts. The use of beads as trade goods seems to have been limited to Cook Inlet and Prince William Sound where they were popularized by the Russians and where five blue beads obtained one Sea-otter pelt in 1786 (Gibson 1992:217).

Captain Cook arrived in 1789 and by then he found that beads had become more popular. When he entered Prince William Sound in May of 1778 he found a Native with a cap that was ornamented with sky blue glass beads about the size of a large pea.

As Kaehler writes in her thesis, glass beads became more frequently accepted as a trade item rather than an introductory gift along the coast, and by the early 1800 they reached the status of a prestige or wealth item.

Lewis and Clark explored the area of the Lower Columbia in 1805-1806. They found that the most desired colors of beads were blue and white, and not necessarily beads that were “expensive or well-made (Kaehler 2002:44)

The natives are extravagantly fond of the most common cheap blue and whited beads of moderate size, or such that from 50-70 will weigh on e pennyweight. The blue is usually preferred to the white. These beads constitute the principle circulating medium with all the Indian tribes on this river; for these beads they will dispose of any article they posses. The beads are strung on strands of a fathom in length and in that manner sold by the breadth or yard (Moulton 1990 [6] 492n).

A pennyweight is 1.55 grams, which corresponds to small blue bead weighing about .02 grams. This preference for small blue beads seems to have continued to 1812, when Alexander Henry of the North West Company remarked that the smallest Canton beads were ‘the only bead now in fashion among them [people of the lower Columbia] The 1st and 2nd size they will not take,” (Coues1897: 719).

In Ross’s hypothesized size ranges the 1st and 2nd sizes are the smallest beads. Kaehler (2002) suggests that the historic sizes of these blue beads run counter to Ross’s size ranges, with the 1st size being the largest, and the 4th size being the smallest. If Kaehler is correct, then the Clayoquot assemblage would be within the range of historic size 3. If Ross is correct, the Clayoquot assemblage would be within the range of historic size 2. Size 2 was one of the preferred sizes.

The FOVA 2002 beads have been found in early contexts. Sites that date to before 1855 in the Portland basin include Cathlapotle Site (45CL1) and the Meier Site (35CO5) which may have been last occupied circa 1800. At the Meier site in particular the mean size range of the six 2002 beads recovered are 7.56 mm (diameter) and 5.84 mm (length). The size compares more closely with the beads from Clayoquot than those from Cathlapotle. (Note: The three Clayoquot beads have a mean diameter of 6.68 mm and a mean length of 5.01 mm). At Bullard Beach on the southern Oregon coast (Philpott Site

35CS1) three size ranges of this bead variety were recorded. These include Ross's 2nd size range.

Conclusions

FOVA 2002 beads are a common early bead found in several size ranges in many early historic archaeology sites. They may have been traded into the area as early as 1790 and as late as 1845. The presence of the nib or protrusion of glass adjacent to the perforation is more commonly found in sites that pre-date 1830. They may have been strung or in a container before they were deposited. The presence of the long 1mm nib on bead specimen 53 suggests that they were new and had not yet been worn in necklaces or as other ornaments.

The Clayoquot anchor beads are a significant and early collection. This assemblage is important because it represents the largest collection of bead variety FOVA 2002 found in one context at an archaeological site in the Northwest (N =137 specimens). This assemblage may have been from the same manufacturing run and packaged together as a particular size. This collection is important because it gives archaeologists parameters in size, diaphaneity, and color ranges that may occur within a single variety and size. This information can be applied to bead collections from archaeological sites throughout the Northwest.

This analysis offers no proof that the beads are from the Tonquin. If these beads are from the wreck of the Tonquin, and more beads and artifacts are found, the significance of this event on archaeology in the Northwest will be profound, expanding exponentially our understanding of the material culture during this time in the fur trade era.

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