Textiles, Buttons, and Beads:
An Analysis of Castle Hill Clothing

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INTRODUCTION

Analysis of the textiles, buttons and beads from Castle Hill presents a unique opportunity to study the clothing habits of the people who occupied the buildings at the base of the hill. A comparison to the available company records shows some inconsistency with the archaeological materials. Shipping manifests indicate that a wide variety of textiles were shipped to the Russian colonies in America. Preliminary analysis from Castle Hill shows that craftsmen and other workers at the site had clear preferences for plain and twilled woolen fabrics. Plain and twilled weaves constituted more than 80% of fragments analyzed. Larger garments were often made from these weave types, explaining in part their dominance at the site. Basic fiber analysis also showed that 80% of the specimens were wool or animal fibers. Wool is more durable and warmer, making it perfectly suited for use in a damp environment.

The unusually low quantity of both beads and buttons also indicates a preference for basic and more easily maintained clothing. Fashion and culture dictated that traditional Russian costume was decorated with embroidery, and beads generally were viewed as items used in trade. Buttons recovered from the site also tend to be of a type found mainly on uniform jackets and shirts and the Prosser style white glass molded button found commonly on ready-made shirts, vests and pants.

Ready-made clothing was popular in the early 19th century. A well-established world trade network and the rise of industry made these cheap and easily accessible goods for the common person. Due to the high cost of living and the low wages of Russian American Company workers, a supply of affordable goods was indispensable.

Several thousand textile fragments and over four hundred beads and buttons were recovered during the 1997 and 1998 field seasons. More than 152 one-meter square units were excavated. Only thirty units were chosen to be included in the preliminary textile analysis. Units that contain major structural features, such as walls, were not included. Only levels, which contained no modern material, were quantified. All beads and buttons, however, were analyzed. Below is a plan map of the excavations on the natural bench area showing units included in the textile analysis.
BACKGROUND

The wardrobe of the Russian American craftsmen would likely have been typical of other Europeans of their time. This would have included a long coat made of wool in navy blue, green or brown, with a woven belt around the waist. Linen or woolen pants were tucked into boots. Shirts were colorless and unusually long, sometimes reaching as far as the knees. A woolen or fur cap would top off the ensemble (Middleton: 1996; Pronin: 1975). Layering of clothing would likely have been standard as many workers complained of the poor quality of clothing supplied to them and the damp coolness of Sitka. Materials and weaves were often combined by lining woolen coats with linen.

This clothing consisted of many weaves. Russian American Company shipping manifests indicate a wide variety of textiles. This includes cotton Bengal, sailcloth and calico, and woolens such as broadcloth, all plain weave. Nankeen made from wool, and cotton ticking and frieze are common twills. More exotic items such as silk kerchiefs and satin ribbons were also supplied to the colonies. Of these goods listed in the historical record, less variety exists at the site. The plain and twill weaves are present, although difficult to directly assign to one of the fabric types above. The lack of satin and silk may be the result of the delicate nature of the threads when exposed to extreme dampness.

The cost of clothing in the colonies was of concern to all Company employees. David Rickman (1990) showed that the annual salary of the promyshlenniks’ could not support the practice of having clothing tailored locally, and particularly that after 1848, ready made clothing was brought from Hamburg (Rickman: 1990). Collections from this site offer the first glimpse into ready-made clothing before that time.

Clothing was of a poor quality, and became worn through within months of its purchase (Rickman: 1990). More durable fabrics and weaves were highly sought after, as seen by the high ratios of woolen broadcloth and twills.

The supply of buttons and beads would be of less concern to Russian workers. Ready-made clothing included fasteners, and the cost of replacement is much lower. In the early nineteenth century buttons were more commonly found on jackets, vests and uniforms. Russian American Company workers were not required to wear uniforms, nor were they supplied. Beads were commonly regarded as trade items, and used little as decoration on Russian workers’ clothing, although common on women’s shoes, purses and accessories of the time.

Considering the average pay of a company worker, and the expenses required to provide basic goods, fashion and decoration were likely disregarded for function and durability. The relatively low quantity of beads and buttons recovered at the site support these conclusions.

Although the industrial revolution was well under way by the 1820’s, the weaving of textiles by hand as a cottage type industry continued in the villages throughout Russia well into the twentieth century (Pronin: 1975). Regarding the Russian American colonies, Khlebnikov stated that “the California sheep has a heavy pelt. Missionaries make blankets for the Indians from it, but we do not use it at all. Up to 50 puds of wool is collected each year. On the basis of the California experience, Schmidt [an administrator
for the RAC] wanted to make blankets, but there were no persons who could spin it into yarn, and there was no master to build a spinning wheel.” This is the only mention of such an industry in the colonies. Hand woven clothing found at Castle Hill therefore likely immigrated to the Russian American holdings with their owners (Federova: 1973). This specimen is a belt or sash, woven in the traditional Russian style.

**METHODS**

**Textiles**

Textile fragments were carefully washed in water to remove excess dirt, then dried. A database was created to record weave, area of the fragments in square inches, fiber type and distinguishing characteristics.

Weave types included plain weave, various twills, felted, and various knits. Characteristics that were noted included any dye remnants, surface felting, wear, mending and the presence of stitching and/or buttonholes.

Determining the fiber type presented a particular problem. Most textile fibers were very degraded, making identification with a light microscope difficult. Basic properties were used to make a distinction between plant and animal fibers. It was the presence of felting which primarily determined fiber type for many of the specimens.

A total of 597 textile specimens were analyzed. Quantification of the weave types (pie chart on the left) showed that 65% of fragments were of a plain weave. Twills made up 19%. Felted and knit specimens were 7% and 5% respectively. 4% of the specimens were too deteriorated to identify. Although the number of plain weave fragments was high, comparison by total area shows a closer relationship with twilled specimens. When weave types were calculated by area in square inches (pie chart on the right), plain weave accounted for only 48%. Twills came in a close second at 38%. Knits made up 7%, felted specimens were 6%, and only 1% was indeterminate.
Knitted and felted garments were typically hats, gloves, stockings or socks and blankets. This sock is the only complete ready-made clothing specimen recovered at the site. It is knit in the stocking knit style, and made by machine. The heel of this item would have been finished by hand. Several other garment fragments were also recovered, including the breast area of a uniform jacket, several collars, mitten/glove fragments and shoe inserts.

Fabrics made of plain and twill weaves were commonly used in shirts, jackets and pants. Statistically, these larger garments would appear in larger percentages in the archaeological record. The difference observed in percents of weaves may be attributable to this.

Beads

All beads and buttons were recorded by material and manufacturing type, size, and distinguishing characteristics. Following the guidelines for bead typology presented by Kidd and Kidd and Karklins, a database was created for the beads which included color, glass clarity and common names. Basic categories used for quantification were wound, molded, faceted, polychrome, cornelaine de aleppo, drawn, bone, and unidentified.

Two hundred and three beads were recovered at the site. Their dispersal is shown in the chart below. Wound beads comprised 39% of all types recovered. A distinction was made amongst the drawn beads, which totaled 41% of the collection. This was done to illustrate the abundance of small, tubular white beads (Ia5) in the collection. Alone, these beads include 21% of the total sample. No other type achieves such status.
<table>
<thead>
<tr>
<th>Bead type</th>
<th>Quantity (total=203)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wound</td>
<td>80</td>
<td>39%</td>
</tr>
<tr>
<td>Molded</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>Polychrome</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>Cornelaine de aleppo</td>
<td>18</td>
<td>9%</td>
</tr>
<tr>
<td>Unidentified</td>
<td>4</td>
<td>2%</td>
</tr>
<tr>
<td>Drawn</td>
<td>42</td>
<td>21%</td>
</tr>
<tr>
<td>Drawn (Ia5)</td>
<td>40</td>
<td>20%</td>
</tr>
<tr>
<td>bone</td>
<td>1</td>
<td>&gt;1%</td>
</tr>
<tr>
<td>Faceted</td>
<td>14</td>
<td>7%</td>
</tr>
</tbody>
</table>

**Buttons**

Manufacturing type, material, size and distinguishing characteristics were recorded for all buttons. Several basic material categories were created. White glass, copper or brass, white metal, leather, plastic, antler or bone, wood, rubber, black glass, and all other glass.

A total of 210 buttons were recovered in the excavations. Copper and brass buttons comprise a majority of the collection (43%) This material class includes a wide variety of button types and styles. There is a large quantity of white glass, Prosser style, four hole, molded buttons (26%). These buttons dominate the collection, and are clearly the preferred button class at the site.

No beads or buttons were found in direct association with textile specimens. Therefore, only classification by manufacturing material was made.

<table>
<thead>
<tr>
<th>Button material</th>
<th>Quantity (total=210)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White glass</td>
<td>32</td>
</tr>
<tr>
<td>Copper/brass</td>
<td>61</td>
</tr>
<tr>
<td>Black glass</td>
<td>3</td>
</tr>
<tr>
<td>Antler/bone</td>
<td>5</td>
</tr>
<tr>
<td>Wood</td>
<td>4</td>
</tr>
<tr>
<td>Plastic</td>
<td>8</td>
</tr>
<tr>
<td>White metal</td>
<td>6</td>
</tr>
<tr>
<td>Leather</td>
<td>2</td>
</tr>
<tr>
<td>Polychrome glass</td>
<td>4</td>
</tr>
<tr>
<td>Clear glass</td>
<td>4</td>
</tr>
<tr>
<td>Rubber</td>
<td>1</td>
</tr>
<tr>
<td>Green glass</td>
<td>1</td>
</tr>
</tbody>
</table>

**The Raven’s Tail Robe Fragment**

One textile fragment found at the site that is without doubt of local origin was the Raven’s Tail Robe fragment, which points to the great skill of Tlingit weavers.

These robes are believed to have gone out of use by the 1820’s, and replaced in popularity by the widely appreciated Chilkat Blanket. The patterns and weaving techniques used were similar to that used in basketry. Traditionally, the valued robes
were woven from mountain goat wool. The Castle Hill fragment is black geometric patterns, the “one within another” and the tattoo patterns, with a zigzag and bars edge treatment, all on a white background. Sea otter was used as a backing and “collar” on some known examples. An as yet unidentified fur was found attached to the upper edge near the edge treatment of this specimen. Although splashes of blue and yellow were commonly utilized to highlight designs, none was observed on this specimen (Samuel: 1987).

The Castle Hill fragment is currently at the Alaska State Museum in Juneau. It’s unveiling in the winter of 1998-1999 was attended by hundreds of traditional artists. Cheryl Samuel, author and teacher of Tlingit weaving, examined the fragment. Her findings indicated that this fragment may be earlier than other known specimens (Personal communication, Henrikson 1999).

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