CHAPTER 7: AN OVERVIEW OF THE ARTIFACT ASSEMBLAGE

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Introduction

The Castle Hill artifact assemblage is comprised of approximately 300,000 pieces, including both durable and organic materials (Appendices 4.1 and 7.1). A portion of this material relates to post-1867 disturbance, including modern intrusive materials. The vast majority of the collection, however, relates to Russian activities on the site between 1804 and 1867. Of particular interest is that portion of the collection which relates to *in situ* workshop deposits dating primarily from the 1820s-30s period (Strata II and III). Excluding materials from disturbed levels (Stratum I), the artifacts from ten one-meter-square excavation units in this area were selected for complete classification and functional analysis. Spatially, these ten units (of 172 total) comprise an approximate seven percent sample of the total excavated area. From the remaining 93% of the site, only artifacts from select diagnostic groups (*i.e.*, those judged to hold the most interpretive value) were set aside for detailed classification. For the overwhelming majority of the collection, artifacts were simply assigned to a basic raw material category during cataloging (*i.e.*, iron, glass, ceramics, etc.). The justification and necessity for this sampling strategy is explained in Chapter 5. Consequently, some artifact classes (*e.g.*, fauna, textiles, etc.) were quantified and described only for a ten-unit sample while other class descriptions (*e.g.*, tobacco pipes, beads, buttons, etc.) were derived from the entire site assemblage. The level of analysis for each of these artifact classes also varied, as the perceived interpretative value of the artifact class was weighed against remaining time and funding.

Functional Classification

Quantitative data from the ten-unit sample allowed for limited functional analysis of the collection. Functional groupings are generally regarded more meaningful than simple typological groupings in that they allow for the interpretation of behavioral patterns. Of particular interest to historical archaeologists are the functional classification schemes of Stanley South (1977) and Roderick Sprague (1980). South's scheme, which has been widely used, was devised to discern behavioral patterning on colonial sites in the Carolinas. His categories include: kitchen artifact group, architectural group, furniture group, arms group, clothing group, personal group, tobacco pipe group, and activities group. Sprague's system is somewhat more complex, expanding on some of South's original categories, and may be more adaptable to the range of sites found in the western United States. The Castle Hill sample was classified according to the simpler South scheme. The data presented in Figure 7.1 and Table 7.1 appear to reflect a unique pattern, that does not easily fit within any of the patterns described by South for the eastern frontier.

<u>Kitchen Group:</u>

This group, comprised of 1,444 items, makes up approximately 50% of the overall sample. In this regard, the Castle Hill assemblage is somewhat similar to South's (1977) 18th century Carolina pattern, which includes 63% from the kitchen group. These

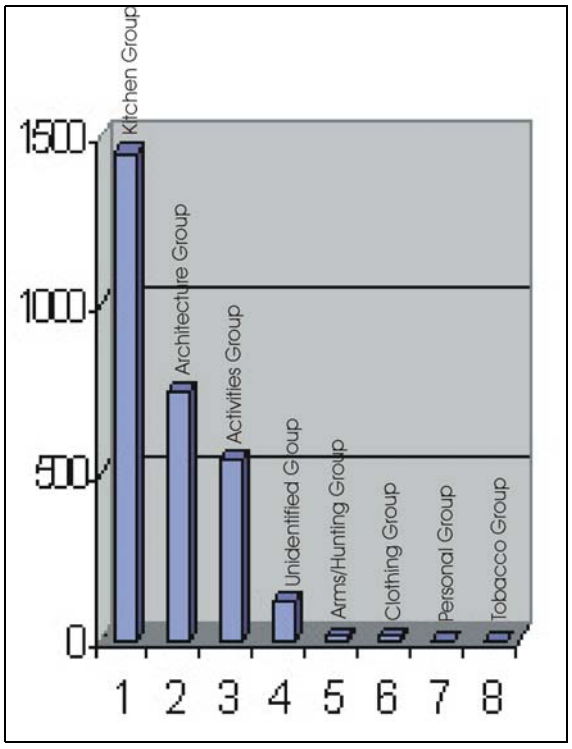

Figure 7.1. Graphic depiction of major functional groups at Castle Hill, based on a 7 percent (by area) subsample.

types of percentage data are useful for intra-site comparisons, but do not necessarily reflect the actual percentage of specific group activities at the site. For example, there is archival and archaeological evidence that the Castle Hill artisans were living and cooking at their work location (Wrangell 1832, in Arndt 2001:96; Teben'kov 1846, in Arndt 2001:243). The data do not imply that 63% of the activities in the workshop area were kitchen-related. Rather, the large percentage of kitchen group artifacts are partially a function of sampling, as the bulk of the group is attributable to friable (albeit durable) ceramic sherds (n = 784) and glass fragments (n = 654). The few remaining items include two iron kettle fragments, 3 knives, and a salt spoon.

Architecture Group:

This group, which contains the second largest number of specimens and represents 26% of the total sample, includes pane glass (n = 336), iron and copper nails (n = 314), plaster molding (n = 1), construction hardware (n = 5), roofing (n = 77), and furniture hardware (n = 3). As reflected in Figure 7.2, highly friable pane glass makes up the bulk of the material. Not reflected in the architecture group sample are the many thousands of axe-cut wood chips that were a hallmark of the workshop area sediments. During the 1820s, many of Sitka's older, dilapidated buildings were replaced (Khlebnikov 1994:138-139). With the ongoing construction of new buildings, the repair of old buildings, and the activities of the craftsmen, it is not surprising that a large number of artifacts are attributable to the architecture group.

Table 7.1. Functional Typology: Castle Hill 10-unit subsample.

FUNCTIONAL GROUP	ARTIFACT CLASS	FREQUENCY
Kitchen Group	Ceramic Tableware (food serving)	772
	Ceramic Storage (ceramic bottle, crock, jar)	12
	Domestic Glass (wine, case, glass tableware)	654
	Iron Kettle	2
	Knife	3
	Copper tool, salt-spoon	1
Architecture Group	Pane Glass	336
	Iron/copper nails (all types)	314
	Plaster molding	1
	Construction Hardware	
	Iron hardware, hinge	1
	Iron hardware, pin"	1
	Iron hardware, eyebolt	2
	Iron hardware, L-bracket	1
	Roofing/Cames	
	Iron, sheet/flat	74
	Lead sheet	3
	Furniture Hardware	
	Copper hardware, hinge"	1
	Ornament, indeterminate"	1
	Copper hardware, finial"	1
Arms/Hunting Group		
Euroamerican		
	Lead shot	2
	Iron grapeshot	1
	Gunflint	4
	Flint Debitage	1
Native Alaskan		
	Wooden Composite dart shaft	1
	Lithic, ground slate proj. point	1
	Lithic, debitage	1
	Obsidian nodule	1
	Bola weight	1
Clothing Group		
Button		4
Bead		7
Personal Group		
Currency, 1748 kopec		1
Mirror		2
Ring		2
Tobacco Group		
Pipe		4
Activities Group		
Construction/Woodworking		
	Iron tool, axe	1

(Table 7.1, continued)

Lithic, ground stone adze	1
Bulk Storage	
Iron strap, barrel hoop	102
Coppersmithing	
Copper spill	41
Crucible	3
Copper, sheet/cut	268
Copper, bar stock	1
"copper, casting"	2
"Copper, kettle lug blank"	1
Ironsmithing	
Iron, bar stock (mongered scrap)	6
Iron spill	2
Iron tool, botton swage	1
Metalworking, general	
Slag/cinder	72
Lead spill	31
Games/Amusements	
Ivory birds	2
Writing	
Lithic, ground slate tablet	4
Unidentified/Other	
Unidentified	1
Lead, indeterminate	4
Copper, indeterminate	2
Iron hardware, indeterminate	3
Iron tool, indeterminate	1
Copper hardware, washer	3
Iron, curved	95
Iron, scrap (indeterminate)	2
Iron, indeterminate	11

Activities Group:

The third most abundant artifact category (n = 538) in the ten-unit sample is made up of items attributable to activities such as woodworking (n = 2), bulk storage (n = 102), coppersmithing (n = 314), ironsmithing (n = 7), general metalworking (n = 103), games and amusements (n = 2), and writing (n = 4) (Figure 7.3). The most abundant category is comprised of materials related to coppersmithing. This includes copper spill or slag, crucible fragments, bar stock, castings, sheet copper scraps, and a kettle lug "blank." It is likely that most of items assigned to general metalworking were also related to the copper industry. The 102 items assigned to bulk storage consist mostly of sheet iron strips believed to be fragments of barrel hoops. One of the activities performed by craftsmen, and reported for the 1830 period, was the repair of barrels:

> Coopers have the permanent occupation of repairing barrels for the ships and making new barrels, and tanks and other ship equipment. Barrels are used extensively to ship grain to the colonies. Therefore the main task of the coopers is to repair old ones which become damaged in shipping. New barrels are rarely made [Khlebnikov 1994:141].

Ironworking residues are less common than those of copperworking, but the industry is clearly evidenced by the presence of a bottom swage (anvil accoutrement), bar stock, and iron-based slag. Writing, perhaps tallying by the craftsmen, is evidenced by the presence of slate tablet fragments. Games and amusements are indicated by the presence of two ivory birds (of 8 found in the total assemblage) in the sample (Figure 7.4). These type birds, once common among Natives of the arctic regions of Siberia and North America, are believed to have been used for gaming (Hughes 1984a:249; Hughes 1984b:268; Nelson 1899:342). The Castle Hill specimens are probably attributable to the Alaska Native or Creole craftsmen and artisans that used the workshop area. The specimens in question appear to have been related to Building 1, which has been interpreted as a possible living quarters.

Unidentified Group:

This group, which makes up around 4% of the sample, is comprised almost entirely of metal artifacts and residues that could not be confidently assigned to other functional groups. These include nondescript lead and copper scraps, iron washers, and highly corroded iron scraps of various shapes.

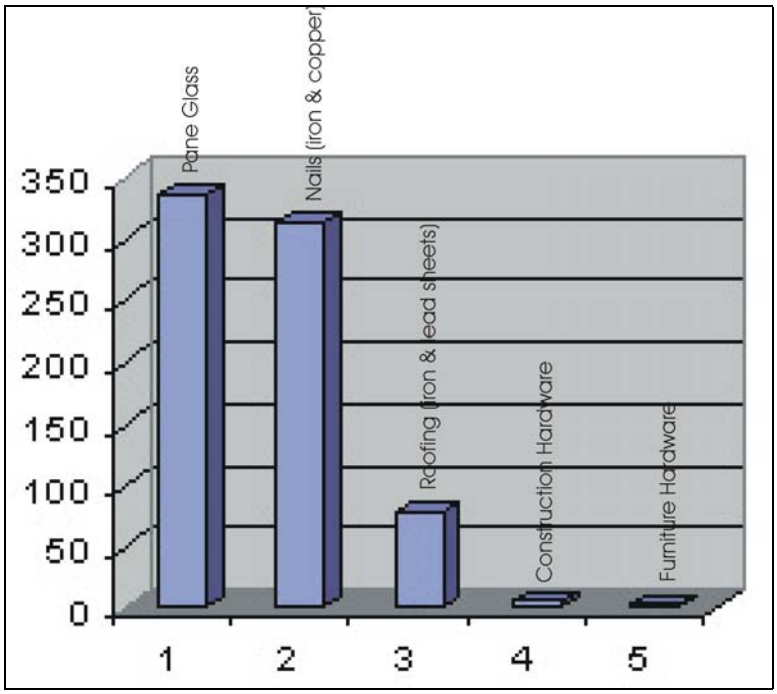

Figure 7.2. Frequency composition of architecture group artifacts from the Castle Hill "workshop area."

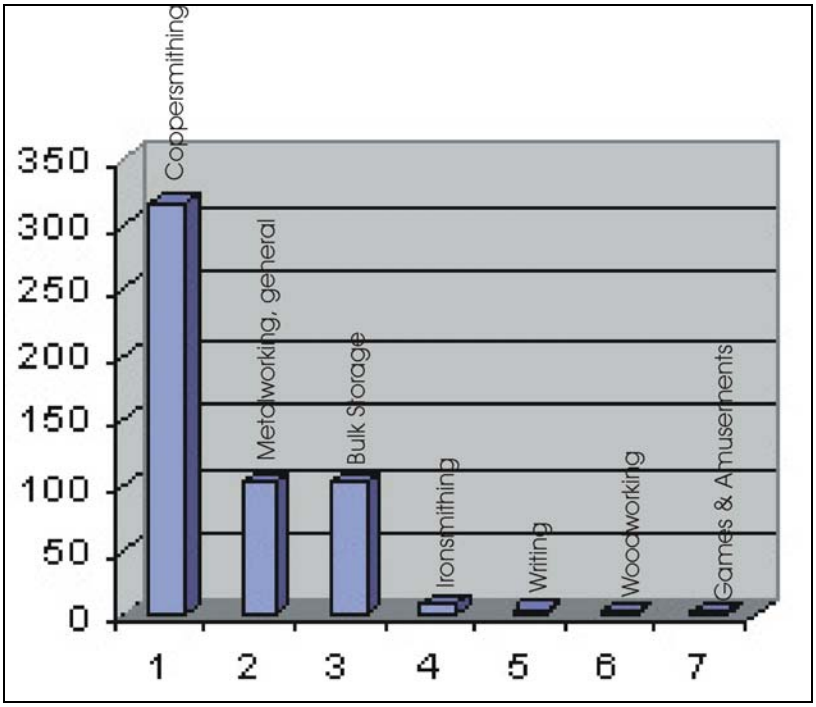

Figure 7.3. Frequency composition of activities group artifacts from the Castle Hill "workshop area."

Figure 7.4. Ivory birds (gaming pieces) from the Castle Hill workshop area, Building 1.

Arms/Hunting Group:

The Arms/Hunting group, which makes up less than 1% of the sample, includes both Euro-American and Native Alaskan materials. These are comprised of lead shot (n = 2), iron grapeshot or canister shot (n = 1), gunflints (n = 4), gunflint debitage (n = 1), a wooden composite dart shaft (n = 1), a ground slate projectile point (n = 1), lithic debitage (n = 1), an obsidian nodule (n = 1), and a bola weight (n = 1). Some of these materials are believed to have been associated with the Alaska Natives and Creoles who worked in the employment of the Russian-American Company. The range of Native materials from the assemblage as a whole, in addition to Euro-American items, reflect the material cultures of the Aleutians, Western and Northwestern Alaska, Southeast Alaska, and possibly the Kodiak Archipelago.

Clothing Group:

This group, comprised of beads (n = 7) and buttons (n = 4), makes up less than 1% of the sample. Because the site is not considered a primary distribution center for trade beads, it is likely that both the beads and buttons in the sample were associated with clothing worn by the workers. A more complete discussion of the beads and buttons, along with shoes and textiles, has been undertaken by Margan Grover in Chapter 9.

Personal Group:

The sampled personal group consists of a Russian coin, two mirror fragments, and two copper rings. The rings are believed to have been made by the coppersmiths on-site, possibly for trade. Outside the sample units, a substantial number of these were recovered, along with other locally made sheet copper items and residue. The coin from the sample is a 1748 *denga* (1/2 kopek), minted in copper. Outside the sample units, two other coins, with markings and dates identical to the one above, were recovered. In the field, these coins appeared to have been associated with the base of the Building 3 floor deposit. Coins from the site, in general, were in poor condition due to acid soils. Those described above were the only examples of Russian coins with legible dates. The few Russian coins recovered from the workshop area were all of small denomination, consisting primarily of copper *denga* (1/2 kopek) and copper *polushka* (1/4 kopek) pieces (Figure 7.5).

Figure 7.5. Examples of Russian coins from the workshop area. The three on the left are *denga* (1/2 kopek pieces); the one on the right is a *polushka* (1/4 kopek piece).

Tobacco Group:

The tobacco group in the ten-unit sample consists of 4 clay pipe fragments, presumed to have been associated with smoking activities of the shop workers. A more complete discussion of the Castle Hill pipes by Renee Petruzelli is presented in Chapter 10.

Assemblage Overview

Of the approximately 300,000 artifacts recovered at Castle Hill, several selected classes were totally analyzed and described (*i.e.*, tobacco pipes, beads, buttons, marked ceramics, arms and munitions, and lead seals). Other artifact classes underwent partial analysis, based on large representative samples (*i.e.*, textiles, fauna, and unmarked ceramics). Discussions of other classes (such as nails and fasteners, iron implements and residues, flat glass, and domestic container glass), due to the size of these categories, could not be accomplished within the scope of this study. Nevertheless, some particularly diagnostic items warrant mention. For example, kitchen group items from the general inventory include a large quantity of domestic container glass. This includes bottle glass and glass tableware (decanters, tumblers, stemware, etc.). Of particular note are three glass bottle seals with the date "1815" and the name of the Russian factory/town of manufacture (Figure 7.6). The tableware includes a quantity of leaded and hand-etched glass that may reflect discard by the elite class (*i.e.*, company management)(Figure 7.7).

Some items exhibit evidence of re-use, possibly by the shop workers after discard by the RAC managers or other elite. Examples include a flaked decanter stopper (not the one pictured) and drilled/mended ceramics. Also included within the kitchen group classification are samovar parts. These include items identified as spigot handles, an ash door, and decorative trim (Figure 7.8). A number of eating utensils (forks, knives, spoons) were also recovered.

Figure 7.6. Russian glass bottle seal, dated 1815 (drawing on right by Margan Grover).

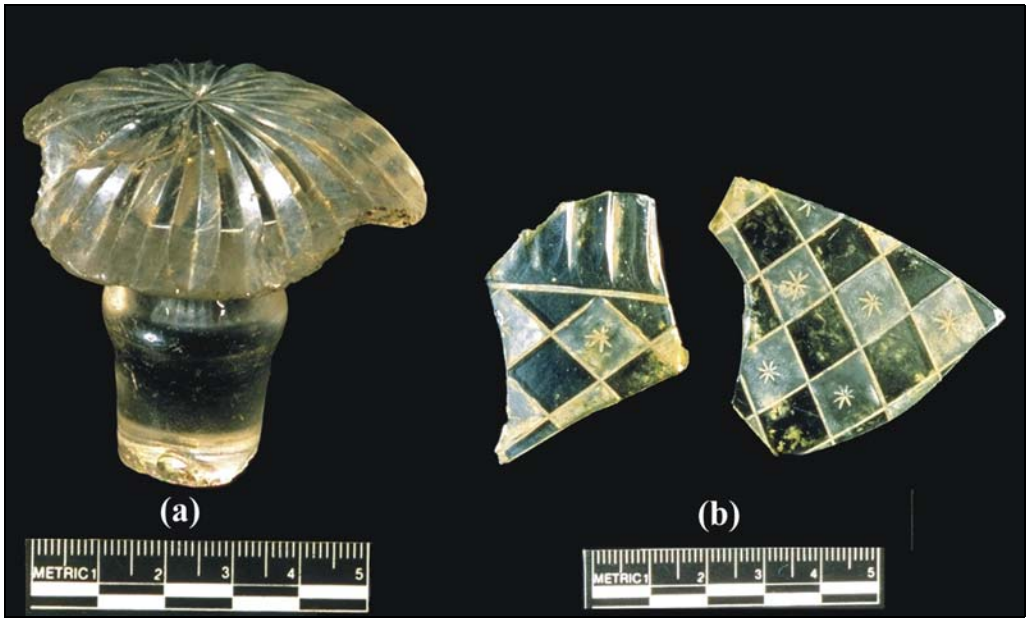

Figure 7.7. (a) A mushroom-shaped decanter stopper, stylistically circa 1800; (b) sherds of hand-etched leaded glass.

Figure 7.8. (a) Spigot handles from small samovars; (b) decorative trim from a samovar.

The assemblage includes a large, diverse collection of personal items (Figure 7.9). Some of these are described in the context functional categories, such as personal adornment. For example, a number of chandelier crystals from the workshop area undoubtedly originated from the Chief Manager's residence on top of the hill (Figure 7.9, a-f). Their context suggests re-use by the workers, probably as pendants or clothing adornment.

Other personal items included Russian naval uniform accoutrements, such as a figured belt ornament (Figure 7.9, g) and two rare hat cockades (refer Chapter 9). Some of these items are rare even in Russia, and until now unreported from Russian-American sites (John Middleton, personal communication). Examples of jewelry (Figure 7.9, h-k) were also recovered. Oblong colored glass jewels (Figure 7.9, h) have been observed (by McMahan) as settings in early 19th century earrings.

Childrens' toys and luxury items include porcelain doll appendages, a carved wooden musket (Figure 7.10), miniature cannons from model ships (Figure 7.11), and watch parts (Figure 7.12). The Castle Hill assemblage includes a wide range of preserved organic artifacts from the workshop area and associated trash deposit. The textiles and shoes are reported in Chapter 9. Other categories include cordage, matting, basketry, leather goods, botanical materials, human and animal hair, and assorted wooden artifacts. Two complete spruce root baskets were recovered. The better preserved of the two, presently at the Alaska State Museum, is similar to tightly woven stone cooking baskets from 19th century Tlingit context. The other example (Figure 7.13) is typical of 19th century Tlingit berry baskets. Numerous fragments of both spruce root basketry and woven grass basketry were recovered. A collapsed woven grass basket contained a large mass of salmonberry seeds (both the grass and seeds were identified microscopically). Numerous examples of cordage and rope, mostly in poor condition, were also recovered. Most of these have not undergone specific fiber identification through microscopic examination, but appear to include cedar bark, spruce root, and bast fiber (*i.e.*, hemp, sisal, etc.) examples (Figure 7.14). Both animal and human hairs were common inclusions of the soil matrix (Figure 7.15). A preliminary examination of some categories suggest that systematic microscopic examination, which is beyond the scope of this study, may reveal quantitative patterns not reflected in the macroscopic database. For example, isotope analyses of the human hairs may contribute to our understanding of diet and disease.

Durable Native Alaskan artifacts from the workshop area include two obsidian projectile points, ivory carvings such as those pictured above, sections of arrow shafts, and slate projectile point fragments (Figure 7.16). The Native artifacts from Castle Hill, with the exception of a small piece of sharpened bone from the prehistoric midden, were all from historic Russian period context. They are believed to represent the range of ethnic groups which comprised the work force (from the Aleutians, western Alaska, and possibly Kodiak), along with local trade relationships (Sitka Tlingit). More specific studies are needed, such as source analysis for the obsidian and stylistic studies of the woven materials (basketry, matting, and cordage).

Figure 7.9. (a-f) Chandelier crystals; (g) Russian naval officer's belt accoutrement in the form of a lions head (J. Middleton, personal communication); (h) glass jewels, similar to specimens observed in early 19th century Russian earrings; (i-j) shaped and polished agate mounts, setting indicated by edge preparation; (k) copper heart-shaped earring.

Figure 7.10. A carved miniature musket from the workshop area.

**Figure 7.11. Miniature cannons from model ships;
the top specimen is copper alloy; the bottom is of lead alloy.**

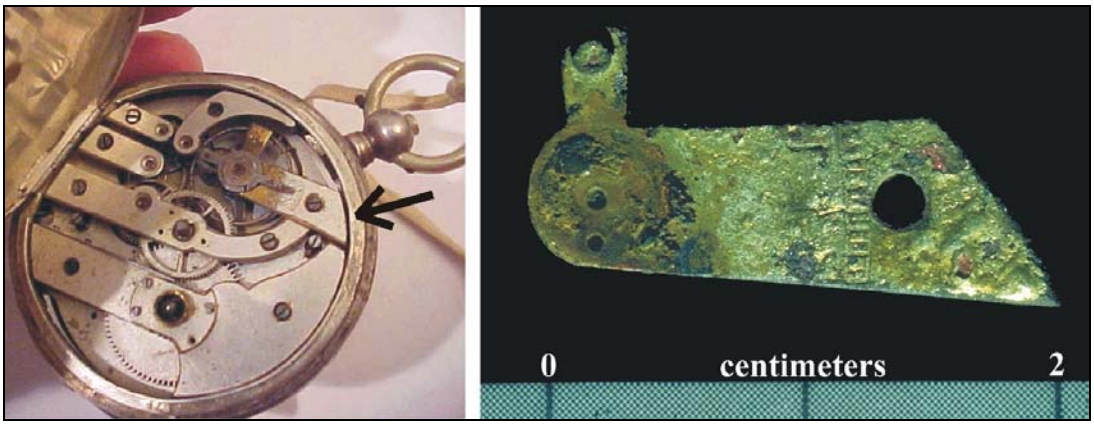

Figure 7.12. This balance "cock" (R) from a pocketwatch is identical to an example (L) in a 19th century "Tobias" watch in a Russian silver case (R). Khlebnikov (1994:140) mentioned that some of the metalworkers in Sitka repaired instruments.

Figure 7.13. A collapsed spruce root "berry basket," *in situ* in Building 2.

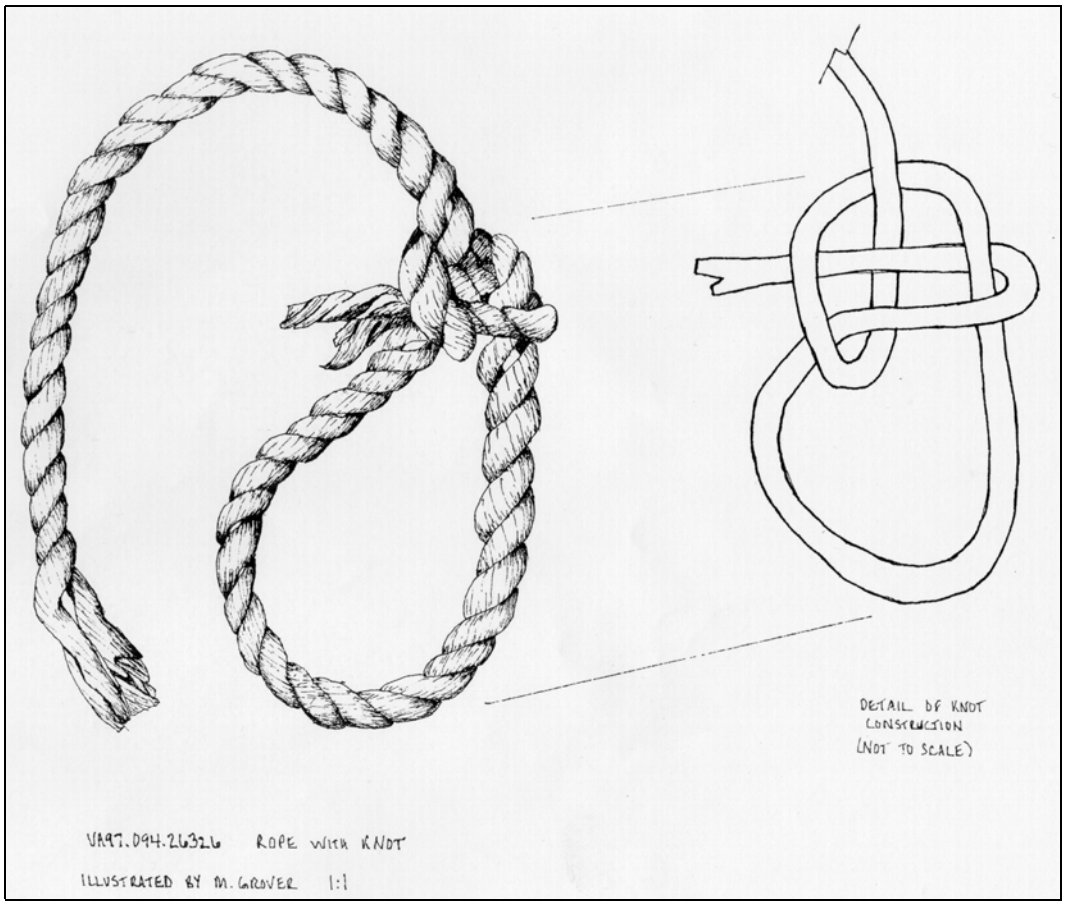

Figure 7.14. A section of rope (conserved with silicone oil) from the workshop area. (Illustration by Margan Grover)

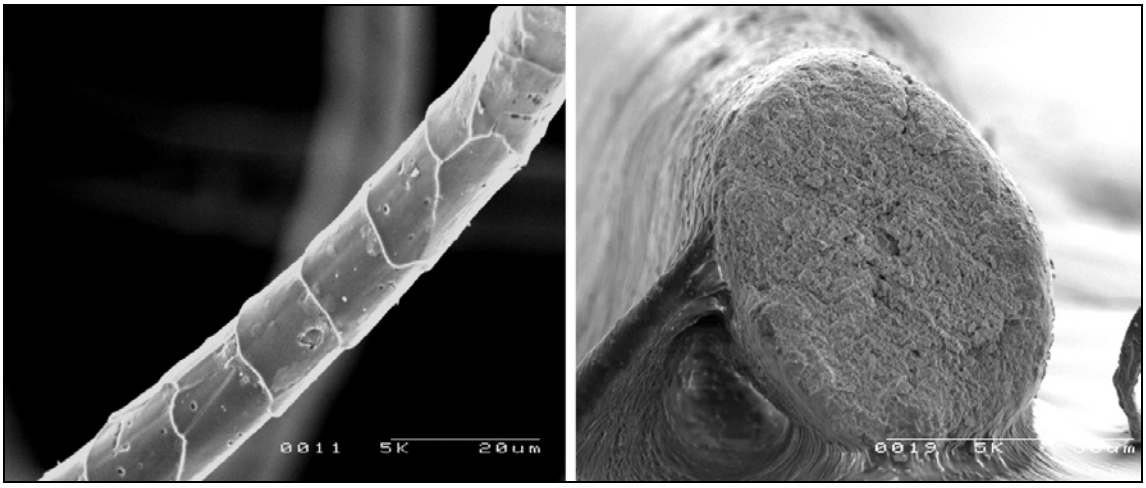

Figure 7.15. SEM micrographs: (a) goat wool fiber from the raven's tail robe fragment; (b) cross-section of a "trimmed" human hair, perhaps from grooming in one of the nearby bathhouses. Statistically, ovoid cross-sections are a Caucasian characteristic.

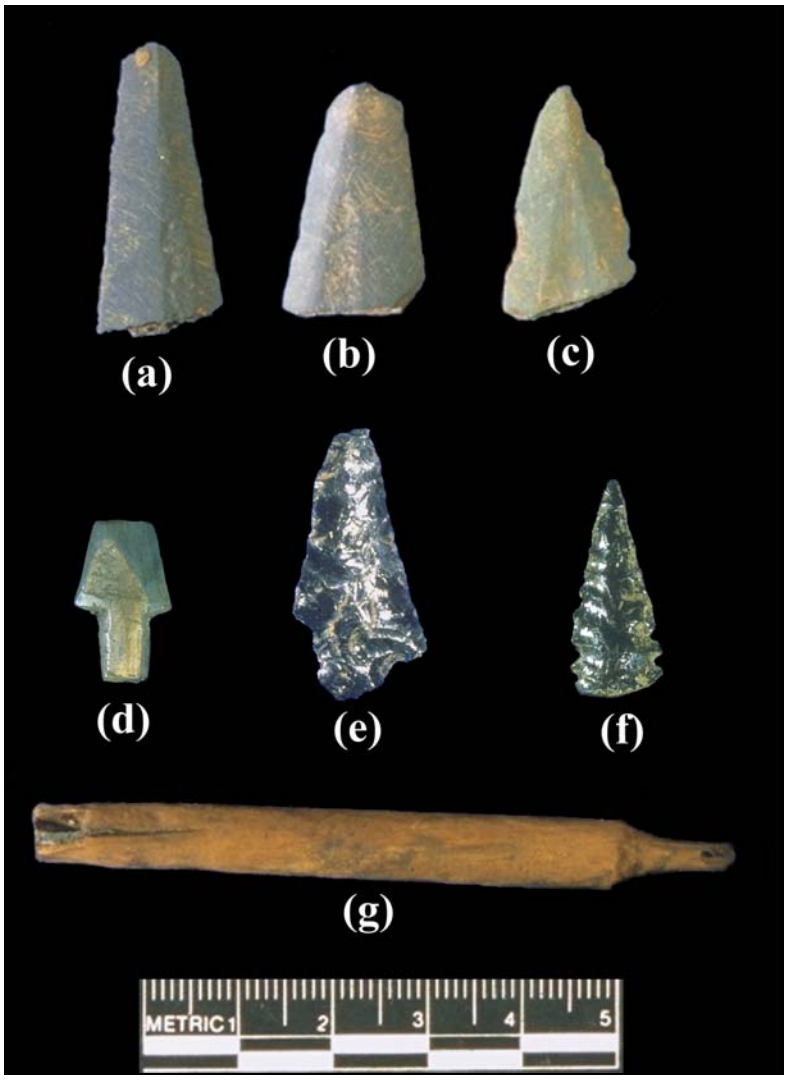

Figure 7.16. Native Alaskan artifacts: (a-d) slate projectile points; (e-f) obsidian projectile points; (g) wooden arrow foreshaft.

The cursory artifact descriptions in this chapter, and the more intensive analyses which follow, are viewed as a prelude to scholarly research which will focus on the collection in years to come. The 300,000 artifacts from Castle Hill are already providing insights on architecture, trade, industry, food preference, and consumer choice.

The Castle Hill Artifacts: Trade Relations on the Frontier

During the early 19th century, the Sitka settlement was the largest and most cosmopolitan port in the North Pacific. Shortly after its founding in 1804, the settlement became a stopover for traders who also visited Europe, Asia, the Sandwich Islands (Hawaii), and settlements along the west coast of North America. Collections from Russian-American archaeological sites have typically been interpreted in the context of archival records for supply, location, and social organization. For example, prior to 1799,

supplies for the Russian settlements were shipped directly from Okhotsk after a long, arduous overland haul. During the early years, the Sitka settlement is reported to have received very infrequent and sporadic supply shipments from Russia. This shortage would have been more profound if foreign ships had not began to frequent Sitka in 1805.

Between 1799 and 1839, the Russian colonies increasingly traded with American vessels, shipped cattle and grain from California, and acquired food and durable goods from Russia via the port of Kronstadt (Gibson 1976; Crowell 1997:26). Following an 1839 trade agreement with the Hudson's Bay Company, the Russian settlements received large quantities of British goods via the Columbia River region. After 1849, the settlements purchased goods directly from suppliers in England, Germany, and Russia (ibid).

The Castle Hill artifact assemblage has caused us to reconsider some of the preconceived ideas regarding trade relations and life in early 19th century Sitka (refer to the *Forward* by John Middleton). The archaeological record suggests that the material culture of working class employees of the RAC in Sitka was much more abundant and diverse than previously considered. This is illustrated by the recovery of childrens' toys and luxury items. The collection includes a broad spectrum of ceramics, including English earthenware, Chinese porcelain, and European delft, along with Russian earthenware and porcelain (as described by Thompson in Chapter 8).

The collection also has much more of a Russian flavor than indicated from other early Russian-American assemblages. Researchers have stressed the dependence of the colonies on goods obtained from British and American traders during the early 19th century, believing the quantity of Russian goods to be diminished due to poor supply routes. While the importance of British and American items are not dismissed, there are many distinctly Russian items in the Castle Hill collection. These include bottle seals, uniform accoutrements, Russian coins, and religious items. Surprisingly, a large percentage of the Castle Hill ceramics were of Russian manufacture, including examples from many well-known factories. Thompson (Chapter 8) found that Russian ceramics comprised 20.6% of the sampled ceramic assemblage. Of 272 manufacturer's marks identified in the collection, he found that 39% were Russian.

The Castle Hill archaeological data document Sitka's multi-national and multi-ethnic trade relations. For example, the assemblage includes coconuts and husk fibers that may have originated from the Sandwich Islands. Coir, the stiff coarse fiber from the coconut, is still used to produce rope, mats, and nets. Bamboo has also been identified in the collection. The collection includes six British manufactured "Phoenix" buttons that may have derived from trade with the Columbia River region (refer Grover, Chapter 9). They bear the military logo of King Christophe of Haiti, who committed suicide during an 1820 coup. These buttons entered the Pacific Coast fur trade, probably through a trade deal with the manufacturer, and are now found at archaeological sites from the 1820s-1830s period. The Phoenix buttons from Castle Hill are the only known examples from Alaska. The site also produced hazelnuts (tentatively identified) that may have derived from trade along the west coast of the United States, mid-19th century U.S. coins, tobacco pipes from England and the Ottoman Empire (refer Petruzelli, Chapter 10), French gun parts, and a broad array of other European items.

Of particular interest are three Japanese coins (Kan-ei Tsuho) which date to the Edo Period (1638-1868)(Figure 7.17). All three are from undisturbed Russian deposits.

They include two partial coins from the trash deposit, and a complete coin from along the west wall of Building 1. The edge of one of the coins is perforated. Similar coins with small perforations (attributed to 'Chinese' origin) have been found at other Alaskan sites, where they are believed to have been sewn onto garments used by the Tlingit as body armor. The route through which the coins came to Sitka is unclear. An interesting possibility is that they were brought by Jirokichi, a Japanese sailor who was found adrift (*hyoryu*) and taken to Sitka with his comrades in 1842 (Plummer 1991). His story (*hyoryu monogatari*) and drawings provide details of life in Sitka in 1842-43. The Castle Hill coins are believed to predate Jirokichi's visit. Additionally, several ceramic sherds are of Asian, possibly Japanese, origin (Prof. Kazuyoshi Ohtsuka, personal communication). Most recently, Hideo Akanuma (2001) from the Prefecture Museum of Anthropology in Osaka determined an iron spike from the Castle Hill collection to be of probable Japanese origin based on electron probe microanalysis (EPMA) and a statistical comparison with specimens from Sakhalin and Hokkaido Islands.

Figure 7.17. Japanese coins (*Kan-ei Tsuho*) from the workshop area, Edo Period (1638-1868).

The RAC tried unsuccessfully for more than 50 years to establish trade with Japan. In 1806-1807, and again in 1811, RAC ships raided settlements on Sakhalin Island, after which they were forbidden by the Japanese government to approach the coast of Japan (Tikhmenev 1978:72, 101-105, 299). It wasn't until the mid-1850s that Russia and Japan negotiated a trade treaty (Tikhmenev 1978:343). Despite the forbidden trade with Japan during the 18th and early 19th centuries, the Russians probably obtained a few Japanese items through the company settlement on Urup Island in the Kuriles, from unsanctioned trade with the Ainu, or from the Dutch who legally traded with Japan.

Another Edo Period coin (*Kan-ei Tsuho)* was recently discovered at a site on Unimak Island in the Aleutian chain (Brian W. Hoffman, personal communication). This coin was discovered in a Native house that was attacked and burned by the Russians in the early 1760s. Bits of iron were also recovered from the house, and may provide insights if analyzed. Early historic trade relations around the Pacific Rim remain poorly understood, but the ability of Western researchers to recognize Asian materials and *vice versa* is improving with advancements in technology.