

Care of Inuit Carvings - Canadian Conservation Institute (CCI) Notes 6/9

Introduction

For centuries, Inuit have been carving utilitarian stone cook pots and oil lamps and decorating their tools of wood, stone, bone, and ivory with artistic designs. In the late 19th and early 20th centuries, they began creating sculpture as a source of income. These early commercial carvings were sold or traded to European and American whalers, who began frequenting the arctic regions at that time. The early works were, usually, small carvings from walrus ivory, representing local animals and Inuit themselves, going about everyday life. Seals, caribou, polar bears, birds, and other animals important to Inuit's survival were often represented. As well, they carved small ivory genre scenes of hunting from kayaks, driving dog teams, or flensing seals. Appropriately, these small items are usually referred to as "trade sculptures."

Inuit carving as we know it today dates from the late 1940s and early 1950s, thanks to the enthusiasm of a young artist from Ontario, James Huston, and the Canadian Handicraft Guild's "Eskimo Project." The Project was designed to encourage the development of handicrafts as an additional source of income in Inuit communities. With the cooperation of The Hudson's Bay Company and some financial support from the Canadian government, the Project encouraged the development of a number of art-related handicrafts in several Arctic communities. The small stone and ivory carvings initially produced proved to be extremely popular when offered for sale in Montreal in the early 1950s. Stone and bone were more frequently carved, as these materials were more readily available than walrus ivory. Through the 1950s and 1960s, Inuit carving became recognized internationally as a major and important art form.

Currently, there are carvers in many Inuit communities across the Arctic. They carve in distinctive, forward-looking styles and combine traditional stone, bone, and ivory materials with a wide range of modern materials as well as precious metals.

The Materials

Stone

Carving is carried out in most Arctic communities and many different kinds of stone are used. Soapstone, also called "steatite", is composed of the soft mineral talc, which is one of the softest minerals known. Contrary to popular belief, most Inuit carvings are not in soapstone but in harder stone such as chrysotile, olivine, chlorite, serpentine, or peridotite (Swinton 1987). Even granite and quartz are used occasionally. Finding a continuing source of good carving stone has been a long-standing problem for many Arctic communities. The problem has become accentuated in the last decade or so. In

some cases, communities have turned to imported stone. Some carvers have even begun using marble, often coloured black with shoe polish.

Bone

Whale bone, caribou bone, and antler are frequently used for carving by Inuit. Caribou bone and antler are generally used for smaller carvings, while whale bone is most frequently used for mid-size and larger carvings. Bone consists primarily of inorganic materials that provide strength and rigidity. Bone also has a soft organic component, which provides the capacity for growth and repair during the animal's lifetime (consult CCI Note 6/1 [Care of Ivory, Bone, Horn, and Antler](#)). This organic component has usually deteriorated long before the bone was carved. Bone has a spongy central portion where the marrow resides. In whale bone carvings in particular, this area can be very large (Figure 1).



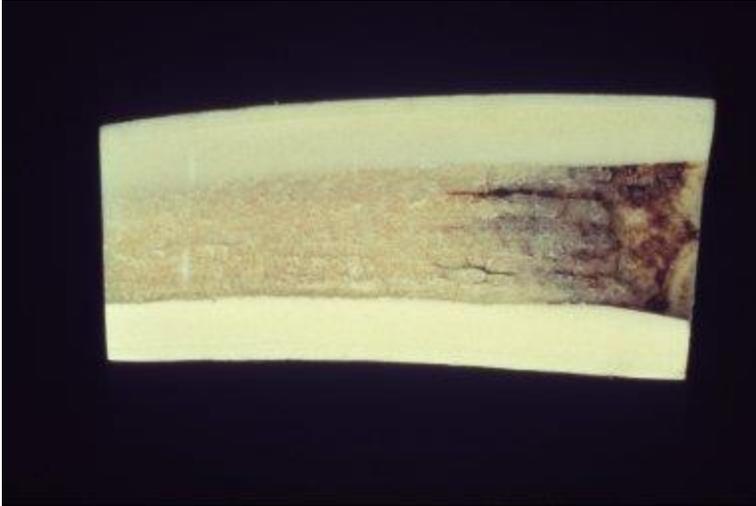
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Figure 1. Whale bone showing spongy interior.

Ivory

Walrus ivory is by far the most common type of ivory carved by Inuit. One can also encounter narwhale tusk or whale tooth from Greenland.

All ivory is essentially tooth material. Walrus ivory is characterized by an outer layer of creamy dentine and an inner layer of secondary dentine, which has a crystalline appearance. If you look carefully, you can usually make out both the secondary and regular dentine layers in most Inuit walrus ivory carvings (Figure 2).



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Figure 2. Walrus ivory: longitudinal section showing inner secondary dentine surrounded by outer layer of dentine.

Narwhale tusks — the fabled “unicorn” horn — are unmistakable due to their length (up to 2.5 m) and their characteristic twist. Sperm whale tooth is much smaller, up to about 15 cm, and usually is slightly curved (consult CCI Note 6/1 [Care of Ivory, Bone, Horn and Antler](#)).

Baleen

Baleen is a stiff but flexible material that hangs from the upper jaws of many kinds of whales. Baleen acts as a filter or strainer for krill and other kinds of zooplankton that whales feed on. In the 19th and early 20th centuries in western societies, baleen was used as buggy whips and stays for women’s corsets, among other things. While often referred to as “whale bone,” baleen is actually made of keratin, which is the same material as hair or fingernails. It is usually black but can be grey or even a whitish yellow. Baleen is not commonly found in Inuit carvings but is sometimes split into thin strips and woven into small baskets, particularly in Alaska. Small pieces are sometimes seen on jewellery such as pins, rings, and earrings and thin strips are often used as lashings on archaeological material (Figure 3). Occasionally an entire baleen plate (which can range up to 4.5 m long by 40 cm wide) can be carved along its edge to reveal a scene in silhouette.



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Figure 3. Head of a fishing spear made of bone and walrus ivory.
All the pieces are held together with baleen lashing.

Care, Handling, and Display of Inuit Sculpture

Stone

While stone seems like a tough and resilient material, Inuit carvings can be damaged if not handled, stored, and displayed correctly. As noted above, Inuit stone carvings can range from very soft materials (e.g. steatite) to very hard (granite), and everything in between. Even with the harder stone it is fairly easy to leave whitish marks where sculptures have made contact with each other or with hard surfaces of one sort or another (Figure 4). Carvings often reveal whitish scrapes and scratches from rings, watches, and belt buckles, so it is advisable to remove these where possible when handling stone carvings.

Minor scratches and abrasions can often be hidden by the addition of a small amount of pigmented wax. [Consult a qualified conservator](#) or the [Canadian Conservation Institute](#) for further details and advice on this matter.



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Figure 4. Soapstone carving of a walrus showing heavy scratches.

Stones from certain regions have iron pyrite inclusions. These inclusions have a rusty appearance and are found in seams in some types of stone used for carving (Figure 5). Iron pyrite inclusions can be problematic because they can begin to corrode in humid environments, causing splitting and staining. The corrosion products expand and can cause adjacent stone to split and spall. Sometimes, carvers will fill these areas of loss with epoxy resin adhesive, which can be seen on close inspection (Figure 6).



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Figure 5. Iron pyrite inclusions are seen as rusty lines in the stone.



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Figure 6. Fill material (probably epoxy resin) was used to fill an area of loss in the stone.

Some stone is quite porous and can be stained from the application of price tags or similar labels (Figure 7). Likewise, oils from hands can darken lighter areas of stone if they are handled or touched regularly.



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Figure 7. Disfiguring stain from tape residue.

Try to handle stone carvings as little as possible. When handling is necessary, it is advisable to wear gloves. Nitrile gloves are the best for this as they do not have the potential allergy issues of latex. White cotton gloves should not be used as they can

make it difficult to get a good grip on smooth stone surfaces. When nitrile gloves are not available, wash hands before handling.

A light dusting with a soft cotton rag and soft brush for hard-to-reach areas is often all that is necessary to keep stone carvings clean. Dusting should always be done by brushing toward the nozzle of a vacuum cleaner. The nozzle should be covered by a mesh of screen or gauze held in place by an elastic band to prevent any small piece of the carving from being sucked up, should it be accidentally dislodged. For stone sculptures that have been waxed, a gentle buffing with a soft cotton cloth will help restore the original sheen.

While early Inuit stone carvings in the 1950s and 1960s were typically squat, low, and stable, many are now designed with flair and flamboyance. Often carvings are balanced precariously on a paw, a flipper, or one foot, which makes them top heavy and easily tipped over. It is important to carefully assess the distribution of the item's weight and point of balance. It may be worth having a mount built to support the piece if it is particularly unstable. Contact the [Canadian Association of Professional Conservators](#) or call your local museum for advice.

Sculptures should be displayed with care. They should not be located near traffic areas where they can be bumped accidentally or can vibrate and slowly "walk" across a shelf to the edge. Consideration should also be given to selecting a location where, if the carvings should fall, they will not fall onto a hard floor or other adjacent objects. If young children are visiting, it would be wise to put the carvings in a safe location out of their reach.

Bone and ivory

Bone is quite resilient but it can still be broken if dropped onto a hard surface or chipped or dented if hit against the edge of a shelf. Particularly problematic are whale bone carvings made entirely of the spongy portion of the bone (Figure 8). These are exceptionally fragile; small bits break off every time the piece is handled. Objects like this should have a permanent mount so that they can be handled by the mount when it is necessary to move them. Seek advice about fabricating a mount from a qualified conservator.

Smooth hard bone and antler carvings can be cleaned as mentioned above for stone.



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Figure 8. A carving made completely from the spongy area of whale bone is almost impossible to handle without damage.

Occasionally, a whale bone carving may still have some of the original oil in it. This is characterized by a very dark colouration of the marrow area and a somewhat putrid smell; in extreme cases, the oil can actually leak onto the surrounding surfaces. These problems are not easily dealt with and should be referred to a qualified conservator.

As for stone carvings, whale bone carvings should be displayed carefully. Precautions are necessary to prevent them being knocked over and subsequently damaged. Another major concern with bone, especially whale bone, is the buildup of dust and dirt in the very three-dimensional “spongy areas” of the bone. Well-meaning but careless cleaning of the dust from these areas can lead to damage of the item. The more porous areas at the centre of the bone or antler can be cleaned by carefully using a small, soft watercolour brush. Dusting should always be done by brushing toward the covered nozzle of a vacuum cleaner, as described above. Do not use a soft cotton cloth, which can catch on the bone’s irregular surface and cause damage.

Ideally these kinds of carvings should be displayed in a closed display case (for further information, consult CCI Note 6/1 [Care of Ivory, Bone, Horn, and Antler](#)).

Ivory carvings are inherently fragile and can be easily broken through physical impact. Handle them as little as possible and make sure they are stable and secure when on display.

Like wood, bone and ivory swell and shrink as they absorb and release moisture. As a result, they can warp and even crack if exposed to rapid and frequent changes in relative humidity (Figure 9). This is a particular concern for ivory, especially if the ivory is thin.



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Figure 9. This walrus ivory seal carving has split from rapid and dramatic changes in relative humidity.

Try to maintain a steady relative humidity and temperature and, most important, prevent exposure to extreme conditions or rapid fluctuations. This is most easily done by displaying ivory in a closed display case and storing it well-wrapped in tissue paper or cotton cloth and in a container (like Tupperware). These provide barriers that slow down air and humidity exchanges with the surrounding environment. Also, protect ivory from any source of heat or rapid temperature change. Keep ivory away from direct sunlight, hot light sources, ventilation or heating ducts, fireplaces, the top of appliances (such as computers, radios, and television sets), exterior walls, and windows.

If the object is in good physical condition, normal surface dirt and grime can be removed safely. A light dusting with a soft brush is often all that is necessary to keep the object clean. Dusting should always be done by brushing toward the covered nozzle of a vacuum cleaner as described above.

Dusting alone is sometimes not enough to clean bone and ivory. If additional cleaning is necessary, ivory and non-porous bone can be washed with a solution of water and anionic detergent such as Ivory Snow or WA Paste (5 mL anionic detergent per litre of clean water). Using cotton swabs (e.g. Q-tips), apply the detergent solution sparingly, just dampening the surface. Blot the swab on a clean towel to remove excess water before touching the surface of the object. Clean only a few square centimetres at a time. The surface should remain damp for no more than a few seconds, and then be dried immediately with another cotton swab or soft tissue. Clean the area a second time in the same manner, this time using only water to remove any detergent film or residue that may yellow or cause harm upon aging. Avoid applying water to cracked or porous surfaces: the liquid tends to wick into cracks and interstices, which may cause further cracking or warping.

Never soak a piece of ivory. With age, ivory tends to develop a yellowish patina. This patina is natural and there is no reason to try and remove it. Attempts to whiten ivory by scrubbing with soap and water or soaking in bleach solutions can lead to irreversible

damage to the surface (for further information, consult CCI Note 6/1 [Care of Ivory, Bone, Horn, and Antler](#)).

Baleen

Baleen is generally quite tough. Large plates, however, can tend to split along their long axis if mishandled, bent, or folded. Baleen that has been excavated from archaeological sites sometimes shows delamination of its layers, producing lighter-coloured areas and lifting and flaking of the surface.

Being made of keratin, baleen can be attractive to insects such as carpet beetles and clothes moths, which eat other types of keratin such as hair, wool, and feathers. It is rare to find damaged baleen. Nevertheless, handle and support it properly if on display; if in storage, check baleen periodically for insect attack (consult CCI Notes 3/1 [Preventing Infestations: Control Strategies and Detection Methods](#) and 3/2 [Detecting Infestations: Facility Inspection Procedure and Checklist](#)).

Other Associated Materials

Inuit carvings are often assembled from a number of pieces and therefore have other materials associated with them, such as sinew, rawhide thongs, ivory tools, and wooden mounting pegs (Figure 10). On earlier carvings, from the 1950s and 1960s, plastic from old phonograph records and other sources was sometimes used to make inserts such as eyes. Baleen, coloured wax, shoe polish, pink rubber erasers, and even soap have also been used as inlay material (Blodgett 1977).

More recently, sterling silver is being used in conjunction with some carvings. With time and improper handling, silver can tarnish, becoming discoloured and even blackened. CCI Note 9/7 [Silver – Care and Tarnish Removal](#) provides advice on how to care for and clean silver.

The associated materials can sometimes be more fragile than the main material of the carving. It is important to take them into account, especially when handling sculptures or doing any sort of surface cleaning.



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Figure 10. Stone carving showing a fragile skin thong.

Repairing Damaged Carvings

It is best to consult a conservator before attempting to repair a damaged carving. Gluing broken portions can be more problematic than often realized. For example, some pieces can be “locked out” if not assembled in the right order. Many commercial adhesives may become yellow with age, creating unsightly glue lines, while others may lose their strength and fail — especially if used in load-bearing areas. Furthermore, some kinds of fill materials can discolour with time, as well as create further damage if they aren’t flexible and therefore constrict the adjacent material’s ability to expand and contract as required. This is a particular concern with ivory objects.

[The Canadian Conservation Institute](#) can provide a wide range of advice related to the cleaning, display, or storage of carvings.

Many Inuit carvings are small and highly desirable. Consider taking precautions to protect them against theft by displaying them in locked display cases or well out of reach of the general public.

The Artist’s Intent

It is important to know that under copyright legislation, an artist must be consulted if his or her piece is to be altered or presented in a way that is different from the artist’s intent. As a rule, the least amount of modification is the best method of preservation. The conservation practices provided here focus on maintaining as much of the original material, and artist’s intent, as possible.

Bibliography

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Copies are also available in French.

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