SASKATCHEWAN CRAFT COUNCIL

JEWELLERY

CRITERIA

In the promotion of excellence in craft, the SCC expects that all jewellery will incorporate a very high degree of creativity and design as well as excellent craftsmanship. All ornamentation should be appropriate to, and not interfere with, the ordinary function of the article.

DEFINITION

This category includes jewellery in all media. When the majority of the piece is made in a medium other than metal (ie: clay, wood, etc.) standards within that criteria apply as well.

This category will also include any article made from metal where the majority of the piece is made of metal (i.e.: other materials are subordinate). The metals most frequently used are gold, silver, copper, brass, nickel, silver and sometimes bronze.

Also included are the lapidary skills (the cutting and finishing of precious or semi-precious stones, shell, ivory, bone, jet, amber, coral and all forms of plastics and acrylics). These stones are usually used in combination with metalwork, although a stone can be carved to create a container or sculpture (jade or ivory carvings), an inlaid marble floor, etc.

TECHNIQUES

Welding & Soldering

The fusing together of pieces of metal or wires to create three-dimensional items or textural reliefs. Filigree designs, made up of delicate wires, threads, and beads, are one specialization of this technique and can be used either as surface ornament or be constructed entirely of the wires, etc. Soldering is often used in combination with other techniques (ie: attaching a back fastening to a cast brooch design).

Forging (or Raising)

The transforming of a flat piece of metal or wires into curved shapes. By hammering the surface with a hammer against an anvil or curved surface, the metal is gradually bent into the desired shape and then finished. Chalices, bowls, etc. are often made this way. Because of the elasticity of forged metals, forging techniques can be used in jewellery (i.e. a single circular necklace or bracelet can be pulled apart to open and it will return to its original shape).

Chasing

The creation of a design on a flat surface using a hammer and a variety of punches to incise the design. Engraving is a specialized form of this technique. Another variation is diamond-milling – a machine which creates such bright, sharp-cut textures that no other polishing is necessary. This process can be used provided it is an integral part of the design.

Embossing (Repousse)

A relief design is created by making depressions into the back side of a sheet of metal and then adding finishing touches to the front (chasing in textural details).

Casting

Molten metal is poured into a mold which is then cooled, removed and finished. There are a variety of casting techniques. Depending on the technique, the molds can be reused and this allows a particular design to be reproduced a number of times. Articles made from molds are acceptable when the mould is the design and product of the craftsperson or when the cast parts are subordinate to the overall design. Gems or stones can be included very effectively in cast items. Pieces can be cast either with the stone in place, or the stone can be removed after the article has been moulded and then be replaced in the finished setting. The setting, in either case, should hold the stone securely.

Enameling

Enameling is the technique of fusing coloured glass to metal. It gives a glazed surface that can be transparent, translucent, or opaque. Appropriate metals are gold, silver, copper, bronze, aluminum and nickel. There are a number of enameling methods and a wide range of colour possibilities. In jewellery and smaller pieces, there should be no unnatural warpage of the metal and the enamels should be properly fused to the base material.

BASIC LAPIDARY TECHNIQUES

Sawing

The sawing of the raw stone into its final form or to remove large amounts of excess stone prior to final grinding and polishing. Stones are often cut to standard sizes so that they will fit commercially available mountings. The shaping of the stone should enhance its beauty (i.e. the creation of a “tiger’s eye” is determined by the cutting of the stone, thin slab cuts of agate emphasize its transparent, banded quality). Saw marks or similar scratches should never be visible on the final stone.

Grinding & Polishing

Once the general shape has been determined, the stone or gem is ground and polished to its final lustre. The finishing can be done by hand, by using a tumbler, or by faceting the stone.

a) Tumbling

This is an automatic rather than a hand technique – a drum containing stones and various grits, polishes the stones by rubbing them against each other. A basic characteristic of all tumbled stones is the lack of any sharp corners – every edge is rounded. The tumbled stones (called “baroques”) can be intriguing in shape and can attain a very high polish. Tumbling is a legitimate process when it furthers a creative end result. However, the very irregular nature of the stones does make them generally incompatible with most mass-produced purchased findings.

b) Faceting

Faceting is the cutting of a precious or semi-precious stone to bring out its refractive highlights – a diamond, for example. It is a mechanical process with all the angles pre-determined for maximum effect. It is also possible to cut arbitrary facets or asymmetrical patterns to create uniquely shaped stones for particular settings.

Carving

A variety of objects, vessels and containers can be made of jade, agate, jasper, rock crystal or alabaster. Scrimshaw is the engraving of a linear design into ivory or shell which is then filled with a darkener. Adequate surface preparation is essential to producing a clear, crisp etching. Excess colorant is buffed off leaving color only in the etched lines.

Cameos, usually done using conch shell or agate, are reliefs created by carving away any excess of a contrasting top layer to reveal the background. Both hand and power tools (drills, chisels, grinders, etc.) are used in combination with sawing techniques.

Inlay

This is the embedding of one material into another. Materials can be the same, as stone into stone, or different, as stone into metal or metal into stone. Care should be taken that the corners of an inlay are flat to the surface and not prone to chipping or catching (i.e. a thin, fine linear band of gold embedded in a stone set into a ring).

Any of these processes may be used individually or combined.

METALS/LAPIDARY

Quite often, two areas complement each other, most particularly in jewellery. Whether the chief focus of the craftsperson is the metalwork or the stone, the excellence of the design depends on how well the parts are integrated into an effective whole.

As well as functional and form considerations, the play of light is an important feature. The highlights should enhance the design. If a stone is used, has it been cut to enhance its optical qualities (the iridescence of an opal)? Does the setting further enhance the stone's refractive and reflective characteristics? The setting should be secure, or, if a collar is used it should be close fitting. Although jewellery is usually shiny, a variety of other textures can be created using any of the basic techniques – texture can be added directly to the mould for cast articles; forging can leave a pattern of hammered shapes to reflect the light and enhance the form; wires and other materials can be soldered or chased; designs incised directly onto the surface of the metal.

Finishing is of particular importance due to the shiny nature of the metal. There should be no evidence of file or other marks (unless a conscious design element), excess solder should be removed, and edges should be clean and smooth.

All the basic concepts of design should be considered. The metal should be more than a mere mount for the stone; and both the stone and the metal should fuse to create a single statement, in that all aspects of the item are parts of a "greater" whole.

OTHER MATERIALS

Fimo

These pieces are made from polymer plastic that must be hardened in an oven. Fimo jewellery should be the design of the craftsperson. Any foreign material (i.e. wire, beads) should be securely attached. Colors should be vibrant and true (fimo can scorch during hardening). The finished piece can be varnished or unvarnished. If varnished, it should be free of lint or any other foreign matter and the reverse of the pieces should be varnished also. Surface embellishments should not rub off on contact.

Acrylics

These pieces can be worked with in a solid or liquid form. In liquid form it can be cast in molds or dies like bronze but as applies to jewellery, it is usually used to embed some form of design or construction. These can be 2 dimensional or 3 dimensional. A polymer and a catalyst is mixed and poured to set to a solid state. A good pour is well mixed and sets consistently. It is also clear and has no bubbles.

In solid form it works mostly like wood, rather than glass as it is often compared to. It varies in quality according to industry grades and according to different formulas used in the equation of the polymers used in its manufacture. Its general properties are: it is a soft material, malleable at low temperature, susceptible to scratches, reflects light and color well.

In jewellery design it can be used in a sculptural or bas relief method with itself but it is also conducive to attachments in that it can be drilled and will hold certain glues.

Edges can be finished to a rough or polished state. Polished edges should not contain left over sand paper marks. In acrylic jewellery only, if the edges are polished by flamer, there should be no bubbling.

Joints in clear acrylic are unforgiving compared to wood in that all edges show. Unevenness cannot be filled. Line bending by heat is used to avoid this problem when possible.

Solvent cements are used to cement acrylic to acrylic. It is applied along edges with a hypodermic needle and works by capillary cementing. Epoxy, contact cement, superglue can be used to bond other materials to acrylic. Glue guns (and) bondfast does not hold. The surface is non-porous and should be roughed up before application of glues.

In solid form, acrylic paint will adhere to acrylic. In liquid form, color may be added while it is in a liquid state.

GENERAL

Jewellery should be designed in relation to the human body and should move with it. The piece should be strong enough so that it does not bend or break easily, but not so heavy that it is clumsy or uncomfortable to wear. If stones or gems are incorporated into the design, the settings should hold the stone securely. There should be no sharp edges or protrusions that would catch clothing or the skin of the wearer. Functional parts must be durable and operate smoothly.

Many jewelers use machine-made findings. A "finding" is the name given to the functional parts used in jewellery and metalwork (i.e. cuff link connections, safety chains and their pins, hinges for boxes or bracelets, patterned wires, etc.). The complexity of handmaking some of the fittings makes purchasing the more practical solution. This is acceptable only if the findings do not conflict with the design as a whole. There should be no "compromise" – the back of the piece and its detailing is as important as the rest of the object. If the finding is purchased it must be of a very high quality. Handcrafted findings are preferred. All findings should be tested to ensure they are securely fastened. Adhesives are not permitted except for: pearls, inlays for stones, affixing metals that are incompatible with solder, or half-drilled beads. Gluing findings to enamels is acceptable.

STANDARDS (in addition to those above)

1. Designs should be original, with form and function reflecting the character of the materials and techniques employed.
2. The weight of the piece should be considered.
3. Construction of a matching earring set should be the same size, weight, shape and features (unless otherwise intended).
4. Lead based solders should not be used for jewellery or other items worn on the body.
5. If more than one technique is used, they should compliment each other.
6. Adhesives are not permitted on metal jewellery except for affixing pearls, inlays for stones, and metals that are incompatible with solder.
7. Fire scale should be removed from metals where it occurs.
8. Commercially manufactured stamping or ornamentation (not of the craftsperson's own design) are not permitted.
9. If used, a carat and sterling marks must always be accompanied by a registered maker's stamp.
10. The colors of enamels should be clear and crisp, showing the distinct qualities of each, unless the craftsperson deliberately intends otherwise. Opaque enamels should not be discoloured due to contamination or improper cleaning of metal; transparent enamels should be clear and brilliant; opalescent enamels should have a milky, opalescent appearance.
11. Gluing findings to enamels is acceptable.
12. If foil is used beneath a transparent enamel, it should lie flat, not crawl up the edges of wires and enhance the color of the chosen transparent.
13. Wire designs in enamel jewellery should have clean sweeping lines, not unplanned kink's and squiggles; joins should come together evenly and neatly.

14. Ends of wires should be filed neatly; all tool marks removed. Wire should be adhered properly; no gaps.
15. If stoning is used in the final finish of the enamel piece, it should be stoned level and the full width of the wires; wires should not sink into the enamel.
16. Enamels should be properly fused to the surface with no cracks; and should not be too thick or thin nor have bubbles or pits or have any unnatural warpage.
17. Enamel pieces should not be over-fired or under-fired and they should be counter enameled.
18. Soft soldering may be used where practical, using suitable cements in conjunction with transparent enamels.
19. Where soldering is not practical, cement is permitted.
20. Hardness of stones should be considered in relation to usage.
21. In scrimshaw, the surface must be scratch free prior to etching; lines/etchings should be clear and crisp; ink should only be visible in the etched lines.
22. All findings should be tested to ensure they are securely fastened.
23. Findings should be of good quality and subordinate to the overall design.
24. Findings should be neatly attached with a strong durable adhesive when the majority of the piece is a medium other than metal (i.e. fimo).
25. Embellishments must be firmly attached.
26. Fimo colors should be vibrant and true (i.e. no scorching); the finish on front and back should be consistent (ie: both varnished or both unvarnished).
27. Acrylic edges should not be chipped, scratches or crazed.
28. Materials should be adequately labeled, particularly those of an organic nature.

REFERENCE

Health Canada Advisory: January 8th, 2001

Health Canada Advises Canadians about Potential Lead Exposure from Inexpensive Jewellery and Candles with Lead Core Wicks