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Signed: Jeryl Lowe

Date: Sept 1, 2019
THE HISTORY OF THE COWICHAN SWEATER

This in-depth study is submitted by Jeryl Lowe as a partial requirement for the Master Spinner Certificate at Olds College, Olds, Alberta, Canada

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INTRODUCTION

Cowichan sweaters are not only symbols of Canada (one need only look at the Winter Olympics held in Vancouver in 2010 for proof) but are closely related to West Coast living. They have been given as gifts to world leaders and heads of state for almost 100 years. Even kings and queens have worn them.

The genuine Cowichan sweater has not changed over the last century and remains more than just a warm, beautiful outer garment. Because the sweaters are knitted by women with very limited income, they require inexpensive fibre and old-fashioned preparation techniques. The following pages will explain how this is accomplished.
FOR SALE
AUTHENTIC
COWICHAN
SWEATERS
(DON'T BE FooLED BY
HBC KNOck-OFFS)

THE COWICHAN KNITTERS STRIKE BACK:

Used by permission of the Campbell River Mirror
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SUMMARY

This in-depth study is meant to explain the history of the iconic Cowichan sweaters, as well as offer samples of fibre preparation and knitting examples. The main focus, however, will be how the fiber was spun to ready it for the knitting process.

Watercolor illustrations by Susan Strawn

Meikle (1987)
MATERIALS AND METHODS

The wool used in my spinning samples and that of the knitting designs came from my own Cheviot wether, Banquo. His wool is white. Because I no longer have coloured sheep, I visited the farm Banquo came from and with the owner’s permission, gathered wool from trees and fences that was the other colours I used in my samples. It was a long process and not very productive. I realize how much time the Cowichan women from long ago spent just gathering the wool.

Dewey, my very elderly Angora goat provided the goat fibre for my goat samples and Sitka, a Samoyed dog with whom I am not acquainted, provided me with his fur for my dog samples. His “wool” was commercially carded and labeled accordingly.

Usually I wash my wool in the laundry tub with wool wash I buy commercially. But for this in-depth study, I boiled water over a gas flame using the pot we scald the
chickens in. It took quite a while and I felt I had to keep supervising it. When I felt that the wool was clean, I took it out of the boiling water with sticks and dried it on a fence surrounding the berry patch.

I have a drum carder that I used to card the wool before I spun it. I teased the wool by hand, and pulling out the little bits of vegetation and seeds.

All of the yarn samples were spun Z on my Louet S51 spinning wheel. The example spun on a spindle was done on my Navajo spindle. How I wish I had a Salish spindle and could have used it to spin my spindle example.

For the knitted samples I used a very old Mary Maxim pattern a friend bought many years ago, and I also made the pattern of a bear footprint from a sweater I saw hanging in the cloakroom of the Royston (BC) Hall. The symbolic patterns are an eagle and the bear footprint, the geometric pattern is a plus sign.
HOW IT BEGAN

The Cowichan Indians of the Coast Salish Nation, in the Duncan area of Vancouver Island, British Columbia, have been weaving items of clothing for centuries. These excellent weavers produced blankets, leggings, burden straps and other items necessary for everyday life with stylized designs of the natural beauty around them.

Mountain goat wool, which was collected from branches where wild herds roamed the local mountains, was the main source of fibre. These fibres were not abundant, and were often supplemented with fibres from various plant sources (Gibson-Roberts, 1989). People speak of an island off the coast of Vancouver Island where a pack of white dogs lived. They were very well tended, and these fluffy dogs produced lovely wool that was used for many years, often mixed with the goat hair and other fibres.

Spinning was done with a spindle and whorl. According to Barnett (1983), these whorls were beautifully decorated with personal spirit powers. Only a few of these whorls remain and can be seen in museums.

The arrival of the Europeans created a big change in the way natives produced textiles. Blankets from the Hudson Bay Trading Company were now readily available. There was no longer a need to wait for fibre to be processed and blankets to be woven. A new one could be traded for a
small amount of dried fish. Within a few decades, hand weaving was a lost art to all the Coast Salish tribes.

In the 1850’s sheep were introduced to Vancouver Island coming with the Europeans settling the area. This offered a steady source of wool. Shortly thereafter, when Anglican sisters came to start a residential school, knitting began. The local women were taught how to knit mittens and socks. Records indicate that some of these items were displayed at the Chicago World’s Fair in 1893, according to Meikle (1987).

Throughout the province, settlers from European countries other than the British Isles, were teaching other tribes of native women to knit different items. Skills were shared and examples of knitted garments were available for study. Once socks and mitts had been mastered, the Cowichan women turned their attention to sweaters and knee length underwear. Because the style of the time in European knitting was to knit in the round, that is how the native women were taught to knit their garments. They found the lack of seams to be quicker, easier and more comfortable for the wearer. It seems the first sweaters knit were of one colour and had turtleneck collars. Because many settlers to the British Columbia coast were fishermen from the British Isles who knit their own sweaters, these
first attempts by the Salish women were in the Gansey style. That is to say, a seamless pullover using a raised stitch.

Olsen (2010) credits Jeremina Colvin with teaching the local native women to knit. She was a Shetland Island settler who arrived at Cowichan Station in 1885. She had a flock of sheep whose wool she hand-spun and dyed. It is thought she began to teach Fair Isle knitting to the native women, probably adding different local patterns as she was exposed to them.

There is a second theory, according to Gibson-Roberts (1989). It is believed that, around 1900, the Salish acquired a sweater in trade from a European sailor. This sweater was copied by several of the Indian knitters working together. The product of their labours became the prototype of the seamless, one coloured sweater said to predate the Fair Isle sweaters we have come to know today. Unfortunately, none of these sweaters is known to have survived. The sweaters in museum collections, dating back to 1924, are structurally related to the British Gansey as they were worked in the round with the shoulders bound off together, the sleeves picked up at the armhole and worked down – but without the underarm gusset found in the Gansey.

It seems this British Fair Isle type of knitting was the beginning of the Cowichan sweater, usually knit in two colours. In contrast to the fine, British sweaters made with
thin strands of two-ply, Cowichan sweaters are knit with bulky, one-ply, handspun natural coloured yarns. Even today they are always knit by hand.

The native women soon realized they had a huge asset in knitting and quickly their high quality product became famous. All over the Northwest and Coastal areas of North America these fine sweaters were sold and traded. This created a bridge from the traditional economy of the past with the wage economy that was beginning.
HOW THE WOOL WAS PREPARED

Gibson-Roberts reports that (1989) in Coast Salish communities, mountain goat and dog fibre were used in textiles until the Europeans arrived in the mid 19th century. Ever since, it has been the Down breed of sheep (Dorset, Hampshire and Suffolk) that thrive in the wet rain forest climate of Vancouver Island. These breeds offer short, lofty fleeces which can be processed into wool that boasts warmth and lightness relative to overall bulk. Sheep wool is highly durable and even water-proof.

Of course, wool preparation has changed over the years, but greasy fleece requires many steps. Originally these basic steps were followed: the fleece was washed, dried, hand teased, hand carded, drawn out and loosely spun by hand to make a roving, then spun with a spindle and whorl. Today many of these steps are done by machines, and many women buy their wool already processed from a commercial mill. In fact, for many years there was a mill (Modeste’s on the Koksilah Reserve in Duncan) run by these same tribal women (Meikle 1987).

Wool was washed in the summer months in pots of boiling water heated over a wood fire. It was then spread out on the ground, or put over clothes lines or fence wire to dry in the sun. The wool that had been stained by urine or
sweat was left out in the sun long after it was dry to bleach out the yellow colouring.

By hand teasing the wool, pulling the fibers apart, the wool separates, allowing debris and vegetation to fall through. The wool was then carded using hand carders. Wool was placed on one carder and carded by the other carder. This produces a loose batt that is rolled lengthwise into a rolag.

Since the 1930’s drum carders have been in use in the homes of most knitters because these machines are quicker and not so labour-intense. A drum carder is a bit bigger than a sewing machine and sits on a table. A handle rotates a large cylinder, and moving in the opposite direction is a smaller cylinder called a licker. Teased wool is fed through a
trough to be combed by the two rollers with wire-toothed cloth. The wool is removed from the larger roll when a doffer stick is placed between the teeth of the card cloth and lifted off the drum. This batt is about 12” by 16” and usually rolled up for easy storage.

Most knitters now use wool that has been commercially prepared, leaving only the spinning and knitting to be done. This saves time, but is more expensive and the choice of fleece is given up along with being able to choose a fleece that is superior. Using commercially prepared fleece has altered the look of the modern day Cowichan sweater. Many women continued to buy fleece, wash and hand tease it. When this is done to their satisfaction, the wool is sent to the mill to be carded. However, once the Modeste mill left Duncan, the price of having this done shot up and waiting for the return of the wool was lengthy. Now the majority of knitters buy already processed fleece (Olsen, 2010).
SPINNING

No matter what the raw materials or resulting yarn, the spinning process consists of three parts: arrange the fibres, draw out the fibres, and twist the fibres. A spinner can produce a wide selection of yarns using one fibre by adjusting the variation technique. For example, wool can be spun thick or thin depending on how much fibre is released between the fingers of the spinner. The fibre can be spun thin and tight with lots of twist, or thick and soft with a small amount of twist.

There are three different ways most Cowichan women spin their wool; using a Salish spindle and whorl, using a converted sewing machine, or using a homemade spinning wheel.

Coast Salish spinners used a large hand-tossed spindle found only on the Northwest coast. The length of the spindle ranged between 36” and 48” with a whorl that usually measured 7-8 inches in diameter. Pricilla Gibson-Roberts (1989) goes on to say that the whorl was located one-half to two-thirds down the spindle.

Both hands were required to rotate this unique spindle, and an external means of providing tension for elongation was provided through the use of a tension ring. This ring was suspended overhead, thereby allowing for a long stretch
between ring and spindle tip. The roving was passed through the ring and attached to the spindle after first having a short section tightly twisted between the palms.

The yarn created in this twisting was attached to the shaft of the spindle at the upper face of the whorl. The spinner sat on the floor, holding the spindle at an oblique angle with the butt of the spindle in the palm of the hand and the shaft supported with the other hand just below the whorl. The twist was inserted by a tossing motion of the hand supporting the shaft. Tossing to the left resulted in a Z-spun yarn while tossing to the right made an S-spun yarn.

When sufficient twist was inserted into that portion between the spindle tip and tension ring, the yarn was wound onto the spindle by raising the shaft to a vertical position while rotating the spindle. Thus, more roving was drawn through the tension ring and the process repeated. (Gibson-Roberts, 1989.)

The sign in the Museum of Anthropology at the University of British Columbia says many Coast Salish whorls
have sophisticated and powerful carved designs; human, animal and geometric. As the whorl turned, the designs would blur together, mesmerizing the spinner. This trance was considered vital as it gave the spinner the ability to create textiles imbued with special powers.

Margaret Meikle (1987) explains that knitters now prefer to use spinning machines. Once the missionaries introduced the Cowichans to European spinning wheels in the 1890’s, knitters got the men of the tribe to make spinning wheels to accommodate the thicker yarns they wanted to produce. There are two types of wheels designed by the Cowichans: each has a foot treadle and pulley, a flyer assembly with a large-sized orifice, a big bobbin and flyer, and large, widely spaced guide hooks.

The first type of wheel had the flyer assembly mounted horizontally on the table of a treadle sewing machine and was rotated by using the foot pedal. The spinner used one hand to draw out wool to her side and the other hand guided the twisted wool into the orifice. The second wheel was completely homemade. It also used a foot treadle but the spinner faced the spindle orifice instead of the side of the flyer and fed the roving in directly. Many manufacturers have produced spinning wheel models for bulky yarn called Indian Head spinners. They are large and sturdy and have
very big bobbins. Today most of the spinning machines have been motorized (Meikle 1987).

There was great care in picking out a fleece, having the scouring water hot enough, and carding the fleece properly. But the spinning was quick. One reason was to keep the yarn lofty and full of air, another was the need to get to a point where the knitting could begin.

The yarn used in Salish sweaters is a woolen yarn, meaning that it is spun from carded fibres (as opposed to a worsted yarn, spun from combed fibres.) The early yarns were big, heavyweight yarns, heavier than a four-ply worsted weight but worked to a similar gauge as the four-ply yarn. These yarns were firmly twisted singles yarns, spun both S and Z according to individual preference, and knit to a gauge of 4 to 5 stitches to the inch. The angle of twist typically measured about 30 to 35 degrees while their thickness ranged from 6 to 8 wraps per inch. In the 1960’s, a much bulkier yarn became popular, knit to a gauge of 2.5 to 3 stitches to the inch with the yarns spun at a 20 to 25 degree
angle of twist and a thickness of 4 to 5 wraps per inch. The latter yarn is a bit more lofty and softer than the former yarn, yet still of durable high quality. Today’s yarns all appear to be spun Z (Gibson-Roberts, 1989.)
KNITTING

Once the wool had been prepared, knitting could be started. In the early days, needles were made out of wood, deer bone, bamboo and whale bone. Some women even used wooden dowels before they could afford to buy knitting needles. But now most knitters use inexpensive plastic or metal needles easily purchased in stores. Needle size is important. A sweater will not be wind-proof if too large a needle is used. Nor will the finished garment wear as well. Most knitters use 4-7mm (6-7 US) needles for their garments.

Examining the construction of a Cowichan sweater unravels some of the mysteries surrounding its origin. The oldest Cowichan sweaters still in existence show considerable variation in construction and design detail, which suggests that the sweater had no single origin. They appear to be the synthesis of many influences, likely the outcome of years of copying by trial and error. Some of the early sweaters had distinctly capped sleeves, while others had what would become one of the sweater’s key identifiable features, the dropped inset sleeve.

One of the trademarks of the early sweaters, like their successors, was the use of undyed raw wool. Yet elders report that knitters continued the practice of dying wool up until the early twentieth century and liked to mix coloured
yarn with the subtle natural shades, which meant some of the early sweaters were much more brightly coloured than what would come later. In spite of the variations, a number of common and distinct features emerged early in the sweater’s history and remained identifiably “Cowichan” (Olsen 2010).

In the method used in the last 20 – 40 years, a knitter casts on stitches in the usual way, but divided evenly on at least eight double-pointed needles. The number of needles can vary as to the size and weight of the sweater and the knitter’s personal preference. Pullovers are knit in the round and cardigans are worked back and forth in one piece.

Margaret Meikle (1987), explains how a modern-day Cowichan sweater is put together. A band of ribbing is knit first, so the sweater fits snug against the hips, then more stitches are added worked in stocking stitch, to form the body. Sometimes even pockets are knitted in.

Just before reaching the armholes, a few extra

Figure 28. Partially knit sweater by Eva Williams. Cowichan Station, 1985, MOA 1147/1.

Meikle (1987)
stitches may be added for roominess under the arms. At the armholes the knitting is divided into an equal number of stitches for the back and for the front, with five stitches from the front and five stitches from the back put onto a safety pin. The knitter then divides the front in two by putting four stitches from the middle on another safety pin to hold for the base of the collar. The back is worked straight up from the armholes and the fronts are worked to the same height with some shaping at the neck edge by decreasing. The remaining stitches are left for the collar. Collars are as individual as the knitter; some use basket stitch, stocking stitch, garter stitch or ribbing. Most are one colour, but some are striped. However, the instructions always call for a shawl collar.

The sleeves are knit by picking up the front half of the armhole stitches on the safety pin, the stitches around the sleeve front and sleeve back and then adding the back half of the held stitches. Sleeves are knit in the round, on multiple needles. Shaping the sleeve depends on the designs with decreases at the elbow area and the cuff, casting off at the wrist.

Design effects are used in two ways. The easiest is to
change the colour of the ribbing, cuffs and collars. The other is to include a design on the larger areas of knitting that often have Fair Isle patterns incorporated into them, carrying the unused colour of wool along the back.
DESIGNS

Two types of designs are used, symbolic and geometrical. If the pattern used is geometrical, the Fair Isle pattern is usually added to the middle of the sweater in a band. This is repeated on the sleeves. If the design used is symbolic, a large pattern is centered on the back and a smaller one on the front of a pullover, or two smaller designs on a cardigan, one on each side.

Geometrical designs are usually placed on bands above and below the symbolic design. This is often repeated on the sleeves.

Knitters would collect the designs and many were passed down through family and friends. Although any design can be used to embellish a Cowichan sweater, most popular designs are aboriginal and were taken from basket or weaving patterns. Even though many designs exist, experienced knitters can often be identified by the knitting style and design of a particular sweater (Meikle 1987).
In the early days there were no black sheep in Canada. Now there are sheep with fleeces in colours from white to grey to brown. There is only one breed of black sheep, Black Welch Mountain, and they remained in Britain until the middle of the last century. Only two or three colours are used to make Cowichan sweaters now, and they are the colours as they occur naturally on the sheep. But in the past some of the wool was dyed with natural plant based dyes. Olsen (2010) lets us know that Oregon grape berries were used to obtain a yellow colour and balsam bark was used for brown. Putting the two dyes together would produce a very dark brown colour. Using colours that were dyed, gave the knitter a bit of a change from the undyed standard.
CONCLUSION

Except for a small window of time during the 2010 Winter Olympics held in Vancouver, the demand for Cowichan sweaters has declined over the years. However, the demand for wool and knitting patterns has increased in yarn shops around the province of BC. The shop owners I spoke to said they are buying what used to be called Buffalo Yarn, now called Country Roving and made exclusively by Briggs and Little. However this “yarn” has not been spun and is roving.

The real shame here is that young people are not continuing on with the tradition of knitting Cowichan sweaters. Maybe there is just a lack of interest.
GLOSSARY

Batt  a rectangular sheet of wool taken off a hand or drum carder.

Coast Salish  a group of aboriginal Indian tribes living in the southern coastal area of British Columbia and the Puget Sound area of Washington State.

Cowichan tribe of aboriginal Indian living in the Duncan area of British Columbia.

Flyer assembly  apparatus of a spinning wheel where the wool is pulled in and spun onto a bobbin.

Hand carders  a pair of paddles having many short, closely spaced wire teeth attached. Used to align fibres.

Koksilah tribe of aboriginal Indian living in the Duncan area of British Columbia.

Rolag  fibres that have been hand carded and then rolled into a tubelike shape ready for spinning.

Roving  a long narrow strip of fibre, either combed or carded, with just a little twist added to hold it together.

S  a term for yarn that has been spun counter clock-wise.

Wether castrated male sheep.

Z  a term for wool that has been spun clock-wise.
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Hochberg, Bette (1980) *Handspindles* Santa Cruz, CA Self Published


Meikle, Margaret (1987) *Cowichan Indian Knitting* Vancouver, BC UBC Museum of Anthropology


APPENDIX

MAGAZINES


EXHIBITS

Cowichan Cultural Centre, Duncan, British Columbia, Knitting Exhibit. Viewed 08/17/09

Museum of Anthropology at the University of British Columbia. Vancouver, British Columbia. Weaving and Knitting Exhibit. Viewed 11/12/09

Royal Canadian Museum. Victoria, British Columbia. Weaving Exhibit. Viewed 07/06/10
FIBRE SAMPLES
SHEEP BORDER CHEVIOT "Banquo"

Washed raw fleece

Hand teased
FIBRE SAMPLES
SHEEP BORDER CHEVIOT "Banquo"

Hand carded

Drum carded
FIBRE SAMPLES
SHEEP BORDER CHEVIOT "Banquo"
YARN

Hand carded

Spun on spinning wheel in Z long draw
4 wpi 6 tpi angle of twist 27
4wpi 5 tpi angle of twist 21

Drum carded

Spun on spinning wheel in Z short draw
2.5 tpi 3.5 wpi angle of twist 21
4 tpi 3.5 wpi angle of twist 26
DOG HAIR FIBRE SAMPLES
SAMOYED

COMMERCIALLLY PREPARED

HAND TEASED

HAND CARDED

DRUM CARDED
DOG HAIR FIBRE SAMPLES
SAMOYED
YARN

Spun on a Navajo Spindle
Long draw in Z
4 tpi  4 wpi  degree of angle 45

Spun on a spinning wheel
Long draw in Z
6 tpi  5.5 wpi  degree of angle 39
FIBRE SAMPLES
YARN

4 wpi 4 tpi angle of twist 45
goat, sheep, dog 1/3 each
Spun on spinning wheel in Z long draw

4 wpi 5 tpi angle of twist 21
sheep, dog ½ each

4 wpi 4 tpi angle of twist 39
goat, sheep, dog 1/3 each

3 tpi 4 wpi angle of twist 20
sheep, dog ½ each
Spun on Navajo spindle in Z long draw
Example of a geometric design
Long draw Z
4 tpi  4 wpi
Angle of twist  27
Example of a symbolic design

Long draw Z
5 tpi 4 wpf
Angle of twist 21