

## History of Twining

“In the time before time, there came a need to build a nest, to gather a harvest, to blanket a body. Fibers, gathered from the plants and the animals, were twisted together and then drawn through each other. Weaving began.” (The Breath of our Grandmothers by Cheryl Samuel)

### WHAT

Twining is an ancient technique that was used by all cultures around the world. Twining was always done on primitive looms and is often referred to as off-loom weaving. Twining does not lend itself to mechanization. It is still a completely hand-controlled technique.

### WHY

By experimenting with primitive looms we modern day weavers not only gain a better understanding of old weaving techniques but also acquire an appreciation of the accomplishment of textile artisans of the past.

### HISTORY

Twining was used for making basketry long before becoming a textile technique.

It was used by primitive peoples for building simple shelters. Walls were formed by twining horizontal courses of vines or willows onto perpendicular limbs or poles and then coated with mud, usually mixed with leaves and grasses; the process known as wattle-and-daub construction.

Educated guesses from finds and digs place the use of twining as far back as several thousand year BC. Incredible as it seems, bits and pieces and parts of costumes have been found in a state of preservation allowing study and analysis. Almost everywhere clues have tuned up that indicate early knowledge and use of twining. The Bronze Age craftsmen in Jutland, other northern Europeans, and early craftsmen elsewhere appear to have employed this technique in some way. Major areas where this technique is known to have been used extensively are Peru, North America, New Zealand (Maoris), northeast India (Naga tribesmen), Denmark.

### PROCESS

We will be discussing WEFT twining. There is also a warp twining. Think finger weaving.

A heading or base cord is bound temporarily to a frame or uprights. Warps are hung from that base cord.

Loom types:

1. Free-warp looms

The most primitive of all textile processes is making fabric on a free-warp loom. No heddle device and no frame is needed, only two upright supports.

a. Ojibway Native Americans - Algonquian tribe living near the Great Lakes made circular bags on a bag loom. They are woven from the top down and are still made today.

b. A box frame loom is also a bag loom. It is twined in an upside down position on the loom.

2. Warp-weighted looms.

a. Tribes of the North Pacific Coast still make twinned blankets on vertical warp weighted looms.

b. South America - Peruvians used warp-weighted or free-warp loom. Textiles been have found dating to 2500 BC and are among the earliest cotton fabrics in Americas.

c. Maoris and other South Pacific natives used warp-weighted looms for twined mats, bags and belts.

3. Fixed warp. Rag rugs, mohair cinches, spacing

Maori method: heading cord is 3 lengths of heavy cord. It is twisted and stretched between two uprights. Open the first twist and insert 2 warp yarns. Open 2nd and 3rd twists and insert a pair of warp yarns in each twist.

Pacific Island: Braid heading cord in 3 strand braid. Pull warps thru bottom of braid.

Regular twining: use a double weft, one strand passes under and the other over the warp, crossing between each warp so that the strand which was below one warp is above the next. The weft yarns can enclose 1, 2, 3 or 4 warp yarns but ordinarily they enclose pairs of warp yarns.

Twining in the classic manner on a free or weighted warp is done from the top down.

The twined rows are pushed up. On a conventional loom, weft twining is made from the bottom up, as in weaving.

## VERSITILITY

Weft twining is a versatile textile medium allowing for a variety of pattern expressions.

Weft yarn can be twisted, looped into pile, braided, crocheted or ornamented with beads, seeds or sequins. They can be twinned back and forth across a limited area in the warp giving a tapestry-like appearance.

Twining can make a very solid and compact textile or one that is lacy and quite open. It can have uncovered warp areas with warps crossed or straight. Since it is entirely controlled by you, it can be very easily adapted to the exact density or firmness you need.

Intricate and beautiful designs may be achieved with crude looms and no equipment other than the hands.

## COASTAL SALISH

The Salish tribes are located on Vancouver Island in BC and into Washington state. They made blankets, shawls and dresses using mountain goat hair, cedar bark and wool dog hair.

The Salish people's wool dogs were raised for the value of the wool. All wool dogs were kept separate from the other tribal dogs because to mix with the common dogs would weaken and shorten the hair. They were described as a small dog with long fine soft hair. The wool dogs would be sheared like sheep using a sharp knife, letting the hair grow back for the next shearing.

Once contact with non-natives was made the Salish people were able to trade for pre-made blankets and garments which they unraveled and then rewove in traditional Salish garments so there seemed no need to keep the wool dogs. They were allowed to mix with the village dogs and became extinct as a separate breed.

The mountain goat wool was gathered in the spring by picking the wool off the bushes that the goats rubbed against to rid themselves of their winter coat. If the goat had been hunted for food, the skin would have been soaked in water for several days to loosen the hair, then pulled off the skin.

After the wool was picked clean of grass, twigs, guard hairs, it was placed on a mat and pounded with a beater. White clay was mixed with the wool to whiten, to make clean and to remove some of the oil.

Cedar bark - from both the western red cedar and yellow cedar. They would harvest only a small cedar bark strip from the tree allowing it to seal and heal over. The yellow cedar made the finest yarn. It would be soaked for a week and then beat on a hard surface.

Spindle and thigh spun yarn. They used a spindle with a long shaft they rolled on the thigh. All the yarns were then plied into a two-ply yarn. This was used for the weft.

When making thigh spun yarn you lay two roving parallel across your upper thigh. The wool is spun down the leg, keeping each roving separate. At the knee you let the roving come together then reverse the spin by spinning back up the thigh. In spinning this way you spin then ply at the same time. Thigh spun yarn was used for the warp.

The natural color of the wool would be combined with dyed yarns. They used root from the Oregon grape and wolf lichen to produce yellow colors and inter alder bark to obtain red. These were the early colors used but after contact with the non-natives and easy

access to dyes and colored cloth. Colored cloth was cut into strips and used in weavings and rags were used. Urine was the most common mordant for setting dyes.

Looms - two round cross bars held in place by two uprights. Held by several wedges. Used a wrapping bar or just around. If a fringe was desired it was added after the weaving was removed from the loom.

Circular looms - used when making a skirt allowing the weaver to continue weaving and make a skirt with no seam. They used 3 poles tied close to the top making a tri-pod, similar to a teepee.

## CHILKAT BLANKETS

Made by multiple tribes of the North Pacific Coast (Tlingit, Haida, Tsimshian)

Typically required a year of hard work to make and traditionally only the wealthy could make or own a Chilkat blanket.

Men designed the pattern, made the loom and provided mountain goat hides for wool. Women gathered cedar bark, prepared the yarn and wove the blanket.

Patterns - highly stylized form of art often representing clan symbols and natural forms in an abstract geometric pattern.

Yarn-like the Salish they used cedar bark and mountain goat hair. The wool was spun on the thigh, and plied together. A strip of cedar bark was rolled with the wool to make the warp yarn. The traditional dyes were yellow from lichen, dark brown produced by boiling wool in urine and hemlock bark and a greenish-blue made by boiling wool in copper and urine. The warp was never dyed. By the 1890's, commercial dyes and yarns were often used.

Looms - they used a free hanging warp weighted with bags of stones. This gave tension to the warp. They twined small sections at a time and outlined each section. Extra fringe was added if desired when removed from the loom.

The Chilkat dance apron was one of the earliest products made. They also made ceremonial blankets, tunics, leggings and small pouches and purses. The blankets were used as ceremonial robes worn on special occasions. They are referred to as dancing blankets because they were worn while dancing.

The Chilkat blanket held a key position in the economy. It was widely known and highly valued. It was rivaled only by rare metals and guns. In the mid 1800s their value was about \$30 - a large sum at that time.

In 1907, the art of making the blanket was in danger of dying out. It was reported only 15 weavers remained. Taught by her mother in the late 1890s, master weaver Jennie Thlunaut was the last of the traditional weavers. In 1984 she conducted a two week workshop to pass on the art of blanket weaving. Throughout the 1990s and to the present a few serious weavers have continued the tradition.

## NAGAS OF NORTHEAST INDIA

The Naga tribes of Northeast India use twining as border designs for their chadars. The fabrics, woven on back-strap looms, are worn in various ways by both men and women. In the past, the finest chadars could be worn only by the headhunter or by the donor at a feast.

The twining is always used in the end borders of the chadar, sometimes being the first and last weaving of the piece. At other times it is positioned beyond the first few inches of weaving and before the last few inches of the piece. The color, amount, and design of the twining designate the clan or tribe of the wearer or the weaver. Designs are usually created by changing the sequences of color and direction of the twining.

Traditional blankets with borders of twining that show tribal affiliation are woven on backstop looms by the Naga weavers.

## MAORI OF NEW ZEALAND

Whatu - cloaks

Taniko - borders, bands

Whiri - braiding (neck edge of cloaks)

Raranga - plaiting (baskets, nets, etc.) Food baskets were made of untreated flax and were used only once and then discarded, for reasons of hygiene. Because Maori garments did not have pockets, many sizes and shapes of baskets took their place.

When the ancestors of modern Maori migrated to New Zealand from other Polynesian islands, they arrived in a land with a much cooler climate and were forced to develop a number of cultural innovations. Warm clothing was needed but the plant used to make tapa-cloth garments elsewhere did not thrive in their new homeland.

New Zealand flax was the main substitute and from it they produced a fine thread. There are two main varieties of flax and several sub-species, each with its own weaving properties and uses. Leaves are cut, stripped by hand to remove edges and midrib. An incision was made and the fibres were extracted. They were washed and beaten before rolling against the leg to produce warp and weft threads.

The yarns were traditionally dyed yellow (bark), red-brown and black.

Te whare pora

Traditionally a novice weaver was taught in a special building under strict conditions and with a great deal of ceremony. There were initiation ceremonies and special prayers to endow the student with a receptive mind and retentive memory. Initiated weavers became dedicated to the pursuit of complete knowledge of weaving including the

spiritual concepts. The practice was discouraged by 19th century missionaries and very few weavers today experience this initiation ceremony.

Weaving was mainly practiced by women, but not always.

Cook's 1769 expedition to New Zealand, "their cloth is white, and glossy as silk, worked by hands and wrought as even as if it had been done in a loom, and is worn chiefly by the men, though it is made by women, who also carry burdens and do all the drudgery."

### Whatu weaving

Two uprights with a cord running between.

Single-pair twining used to make tough practical garments such as rain capes.

Two-pair twining - very fine cloaks worn by people of rank. A fine cloak might take a weaver several years to complete so they were very treasured.

Also wove a skirt-like garment. Women wore an apron covering the front of the lower body.

### Taniko

Decorative weaving used for the borders or bands (armbands, headbands, belts).

Taaniko produces a relatively stiff fabric. Involves carrying behind the work threads not required for the pattern. As each color is needed, it is brought to the front. The decorations consist of triangles, diamonds, diagonal bars and stepped patterns. They were usually worked in black, red and white.

Decline in the Early 20th century - introduction of European clothing and new materials. Scarcity of certain materials (feathers), discouragement by the missionaries of the house of weaving traditions.

A number of dedicated women sustained the weaving arts and passed them on to younger female relatives. In the 1950s a Maori Women's Welfare League was established which promoted the weaving arts. Now it is known as the National Maori Weavers Collective of New Zealand.

In 1969 a national weaving school, Te Rito, was established and still trains students in the art and skills of traditional weaving.

Many new stands of flax for weaving have been established

In the 21st C Maori weavers maintain the use of traditional materials, dyes, patterns and techniques.

## References:

Weft Twining by Virginia Harvey and Harriet Tidball, Shuttle Craft Guild Monograph Twenty-Eight, 1969.

The Book of Looms by Eric Broudy, University Press of New England, 1979

The Chilkat Dancing Blanket by Cheryl Samuel, University of Oklahoma Press, 1990

Taaniko Weaving - A Māori Weaving Technique. YouTube video about 22 min. long. Good history, technique and samples.

<http://www.sheldonmuseum.org/vignettes/chilkat-blanket>. Good info on Chilkat weaving from the Sheldon Museum in Haines, Alaska.

[http://www.jamestowntribe.org/history/hist\\_weaving.htm](http://www.jamestowntribe.org/history/hist_weaving.htm). Good info on Salish weaving.

<http://www.burkemuseum.org>. The Burke is the Washington State Museum of Natural History and Culture. Website contains info on Chilkat and Salish weaving.

<http://www.teara.govt.nz/en>. Encyclopedia of New Zealand. Has complete info on all types of Maori weaving.



Coastal Salish garments and weaving on a loom





Chilkat blanket and dancing blanket





Naga ladies in traditional attires of Maram, Mao, Thangal, Zeliangrong and Paumai



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WEAVING THE TASED BORDER OF A CLOAK

Taaniko weaving  
Maori of New Zealand





Chilkat blanket weaving

