Craft Traditions in Iceland from the Settlement Period to the 21st Century

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TRACKS4CRAFTS

Introduction

A wide range of craft traditions in textiles, wood, and iron has been interwoven with the history of Icelandic production culture since the time of settlement. Icelandic society was built on subsistence farming, and everything had to be produced within the household; materials were woven and used to make clothing and household textiles. Textile crafts were closely connected to everyday life and it was essential to possess these skills. They were largely in the hands of women, and the knowledge was passed down from one generation to the next. Today, crafts are more closely associated with design and the arts. They are taught in schools, vocational colleges, and workshops, but no longer a necessity as they once were.

This overview draws on a range of sources to examine the following textile techniques: spinning, weaving, tablet weaving, quilting, felting, embroidery, knitting, and crochet.

Spinning in Iceland from the Settlement Period to Industrialization

Nearly all textile crafts are based on the spinning of yarn used in weaving, tablet weaving, quilting, embroidery, and knitting, to name a few. For this reason, the methods, tools, and equipment used in spinning yarn will be discussed first, before turning to the various craft techniques themselves.

The Icelanders brought sheep with them at the time of settlement. For more than 1,000 years, wool was the only textile fiber used in Iceland for all purposes. Other sheep products, such as meat and milk, were also fully utilized. It is safe to say that up until the turn of the 20th century, every Icelander came into contact with sheep farming and wool processing to some degree. At a time when the population of the country was around 50,000, in the early 1800s, it has been estimated that 11,000 people worked in wool processing for seven months of the year (Sheep Farming in Iceland, 2013:16). Many stages were involved, from shearing the sheep to weaving, sewing, or knitting garments from the wool.



Fig. 1

Wool processing was largely women's work: women washed the wool and selected the best fleece for textile use; they spun on spinning wheels and wove on warp-weighted looms. Men sheared the sheep and carded the wool, but as working conditions improved with the introduction of looms and hand-spinning machines, men also began to take on these tasks (Magnús Guðmundsson, 1988:293; Inga Lárusdóttir, 1943:168).

The sheep were generally shorn at the end of June / beginning of July, after which the wool was washed, rinsed in a stream, and spread out to dry for several days before being sorted according to quality (Ragnheiður Björk Þórsdóttir, 2029:78).

It was common for wool processing to begin immediately after the slaughter season (Fríður Ólafsdóttir, 1999:19). During the winter months, when people spent more time indoors, the yarn was then worked into finished products (Anna Sigurðardóttir, 1985: 294; Hrefna Róbertsdóttir, 2001:58).

These tasks were interwoven with everyday life. Wool processing was considered so important that the *Búalög*, historic Icelandic by-laws, specify in their description of women's daily work that she "... may have light when she wishes" (Búalög, 1966, Chapter 22:43). In addition to other duties, it was customary for farm laborers to make their own clothing from the second day of Christmas until Twelfth Night (Fríður Ólafsdóttir, 1999:19).

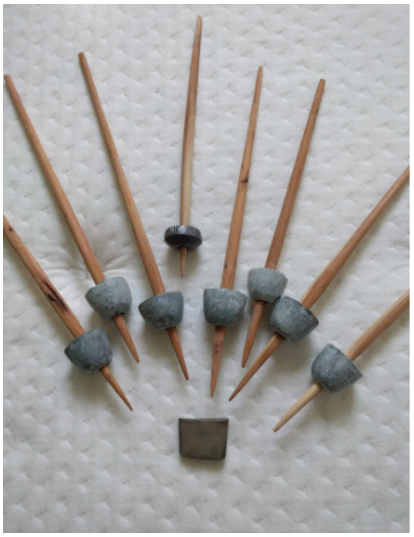


Fig. 2

In 1784, *landfógeti* Skúli Magnússon, the administrator representing the Danish King in Iceland, estimated that each household member required 5 kg of wool per year for clothing, meaning that a great deal of time had to be devoted to wool processing and weaving (Magnús Guðmundsson, 1988:19). The wool was processed either as it came from the sheep or "with the outer coat removed", depending on its intended use. Icelandic wool is characterized by its dual structure: *tog*, which is long, coarse, and water-repellent, and *þel*, which is short, soft, and insulating. *Tog* was therefore used for warp in weaving, tablet weaving, and sewing thread, while *þel* was used for anything that needed to be soft: underwear, for example, weft in weaving, or knitting.

For approximately 900 years, all yarn in Iceland was spun using a spindle or a "wool stone", and later the drop spindle. The spindle is an ancient tool, which settlement-period women brought with them to Iceland. It is found in archaeological remains throughout the world. The spindle consists of two parts, the whorl and the shaft, and it is worth drawing attention to the writings of Marianne Guckelsberger on settlement-period spinning, a subject about which there is still insufficient knowledge.



Fig. 3

The drop spindle arrived in Iceland at a very early stage. It is likely that both the spindle andthe drop spindle were in use during the first centuries of Icelandic settlement, although there are few sources on settlement-period spinning. The drop spindle is made up of three parts: the whorl, the shaft, and the hook. When spinning with a drop spindle, a small end of the roving is first twisted between the fingers and attached to the hook. The spindle is then set in motion with the right hand (for right-handed spinners) by

rubbing the shaft against the thigh, while the fibers are drawn out or drafted from the fleece or roving held in the left hand.

The thread is then wound onto the spindle shaft by turning it quickly in the hand. The yarn is once again looped around the hook, the shaft is rubbed against the thigh, and spinning. This is not a fast method, yet it is remarkable how much a skilled spinner could produce in a single day, especially considering that this method has been used worldwide for thousands of years. Drop spindle spinning is still practiced in many parts of the world today; the tool is practical and compact, and it allows full control over the spinning process from beginning to end (Ragnheiður Björk Þórsdóttir, 2019:80).

In the 18th century, the spinning wheel was introduced to Iceland, during the period of the *Innréttingarnar* reforms, which began in 1751[2]. The wheel brought technological advances that increased productivity and made spinning more even and faster than had previously been possible with the drop spindle. The spinning wheel especially facilitated the production of fine wool yarn (the inner layer of the wool, similar to merino wool) well suited for underwear and lighter garments, but it was also possible to spin strong warping yarn or blended yarn for weaving.

[2] Skúli Magnússon, the royal treasurer, founded *Innréttingarnar* in Reykjavík in 1751, an enterprise to start up factory production in Iceland, with financial support from the Danish king and capital of his own.

Wheel spinning spread rapidly throughout the country, and at this time, girls were given spinning wheels as gifts, while boys received looms. The drop spindle, however, continued to be used alongside the wheel, particularly in remote areas. The first spinning wheels to reach Iceland were Danish, though their exact appearance is not known. Before long, skilled Icelandic craftsmen began making spinning wheels themselves, like those found all over Iceland today (Ragnheiður Björk Þórsdóttir, 2019:47).

In the late 19th century, several spinning machines (e.g. the Spinning Jenny[3]) were brought to Iceland and proved useful to some extent for a few decades. During this period, spinning was primarily a domestic craft, but the technology laid the foundation for the standardization that later characterized factory production.

[3] https://en.wikipedia.org/wiki/Spinning_jenny

In recent years, wheel spinning has become very popular, both in Iceland and abroad, as has spinning with the drop spindle. The most likely explanation is an emphasis on sustainability in design and the arts, along with ideas of functionality and environmental considerations.



Fig. 4

Spinning Factories

The history of the Álafoss factory in Mosfellsbær began in 1896, when Björn Þorláksson, farmer at Varmá, imported machinery to process wool and used water power from the nearby Álafoss waterfall for that purpose. Álafoss later became a major industrial enterprise when the brothers Einar and Sigurjón Pétursson purchased it. They operated the spinning and weaving factory until their deaths.



Fig. 5

Álafoss operated continuously from 1896 to 1991, when the company Ístex took over the spinning mill, which is still in operation today. Ístex also runs a wool-washing facility in Blönduós. The beginnings of a cloth factory and the wool industry in Akureyri can be traced to the founding of Tóvélar Eyjafjarðar in 1897, which became the cloth factory Gefjun in 1907, when the factory was moved to Gleráreyrar in Akureyri. In 1930, the Federation of Icelandic Cooperative Societies (Samband íslenskra samvinnufélaga) purchased Gefjun, after which the company was known as the Gefjun Wool Factory. The factory operated from 1930 to 1987, but after 1980 business was increasingly unstable and operations ceased in 1987.



Fig. 6

An attempt was made to merge Álafoss and Gefjun under the name Folda in Akureyri; the company operated for a few years but ultimately went bankrupt in 1997. After the factories in Mosfellsbær and Akureyri were established, the need for home weaving decreased significantly, even though from the time of settlement until the twentieth century nearly all textiles for clothing and household use had been woven in private homes. At the same time, the import of textiles increased greatly, and it came to be considered unrefined to wear clothes made from home-woven

fabrics (Ragnheiður Björk Þórsdóttir, 2019:73).

Today, three small spinning mills (mini mills) are operated by Icelandic farmers in rural Iceland: Uppspuni[4] in the south of the country, Urður Ull[5] in the west, and Gilhagi Ull[6] in the east. However, Ístex still spins by far the largest share of Icelandic yarn that reaches the market, both domestically and abroad. Interest in Icelandic wool is growing rapidly, and it is very encouraging to see Icelandic farmers showing such strong interest in wool and spinning.

However, all machine-woven wool fabrics and other textiles are imported into the country, and there is no longer a single industrial weaving loom operating in Iceland. As a result, Icelanders are highly unsustainable when it comes to textile production, which must be considered a serious cause for concern.

[4] https://www.uppspuni.is/

[5] https://urdurull.is

[6] https://gilhagi.is/vinnslan/



Fig. 7

Weaving in Iceland

Weaving is one of the oldest crafts still practiced today. It did not originate in a single place but developed independently in various parts of the world. It is likely that people drew inspiration from nature by observing birds building nests, spiders spinning their webs, and various animals constructing shelters. The most primitive societies made simple weaving tools using tree branches and natural materials, utilizing the fabric for shelter or decoration depending on their needs. In ancient cultures, people created shelters and useful items by braiding, knotting, and weaving grass, branches, and fibers into walls, roofs, bedding, doors, baskets, and containers (Ragnheiður Björk Þórsdóttir, 2019:10).



Fig. 8

The loom known as the warp-weighted loom has generally been associated with northern regions because it was in use there longer than elsewhere. However, images from Ancient Egypt and on Greek pottery depict women weaving on warp-weighted looms, and loom weights have been found in excavations worldwide.

Recent research has shown that it was possible to weave complex patterns, double layers, and a generally much wider variety of woven fabrics on the warp-weighted loom than previously thought (Hoffman, 1964:86-187; Larson, 2001:136).

Icelanders brought the warp-weighted loom with them during the Settlement Era, and all woven goods were made on such looms for many centuries. In earlier centuries, Icelanders exported homespun cloth or rough woven fabrics. From the Settlement until the 13th or 14th century, these were the main export goods and, consequently, a source of foreign currency for Icelanders. The fabrics were woven in the warp-weighted loom in large quantities, and the “röggvarfeldur” - which translates as “shaggy pile woven garment”- was used in various ways: as a protective garment, as a blanket, and even as footwear in battle. It is believed that only men wore this outer coat (Ragnheiður Björk Þórsdóttir, 2019:21, 30-31).



Fig. 9

For a long time, no one really knew how *röggvarfeldir* were woven; all the craft knowledge had been lost.

However, *Grágás* - the medieval law code of the Icelandic commonwealth - describes what a legally acceptable *röggvarfeldur* had to be like: its size, density, and other characteristics. In 1962, an article by Elsa E. Guðjónsson titled "*Forn röggvarvefnaður*" ("Ancient Röggvar Weaving"[7].) was published in the yearbook of the Icelandic Archaeological Society, *Árbók Hins íslenzka fornleifafélags*.The article recounts that in 1959 Halldór Kristjánsson, a farmer at Heynes in the Akranes district, found a fragment of röggvar-woven textile while digging the foundation for a new residential house on the farm. Kristján Eldjárn, the national antiquarian at the time, dated the fragment and believed it to be from the period 900-1100. Röggvar weaving appears to have fallen out of use in Iceland around or after 1200[8] (Elsa E. Guðjónsson, 1962:15).

In the article, Elsa provides a very detailed account of the method used to weave a *röggvarfeldur*, including photographs of the old fragment from Heynes, explanatory drawings, and precise, clear text. According to the provisions in *Grágás*, *röggvarfeldir* were about 2 m in length and about 1 m in width, with 13 *röggvar* arranged across the width of the cloak at specified intervals (Grágás, 1992:27).

Through the writings of Elsa E. Guðjónsson and the provisions in *Grágás*, it has been possible to recreate the weaving of *röggvarfeldir* and this type of textile. In this regard, special thanks are due to Hildur Hákonardóttir for her contribution to teaching this method again. It was also very challenging to weave *vaðmál*, twill on the warp-weighted loom in such a way that it did not become uneven in width or develop flaring edges, and for this reason skilled female weavers received higher pay than other female workers, or at least better provisions. The *Búalög* state that it was a weaver's task to weave a cloth of twenty-two ells in length during a working week, and that she was to receive eight ells' worth of food per week (Ragnheiður Björk Þórsdóttir, 2019:35).

[7] The terms flos, flosweaving, or rýjavefnaður have most often been used for types of weaving that in English are called "pile weaving".

[8] Both *Grágás* and *Búalög* were written around 1260-1280, although the laws themselves are much older, and according to Hildur Hákonardóttir, shaggy cloaks (*röggvarfeldir*) were probably woven in Iceland until the 14th century.

As discussed, it is believed that in Iceland and the Nordic countries, weaving on the warp-weighted loom was almost exclusively done by women. When the horizontal loom came into use, men also began to weave, though not exclusively. Our ancestors wove on the warp-weighted loom until the nineteenth century, that is, for nearly 1,000 years. On it were woven shaggy cloaks or pile cloaks, as mentioned above, twill (*vaðmál*), plain weave (*einskefta*), monk´s belt (*salún*) Icelandic *glit*, cross-weaving, and more. No warp-weighted loom has survived intact, but loom weights have been found in archaeological excavations. In keeping with the importance of textiles in the social structure of earlier centuries, there are sources referring to weaving on the warp-weighted loom in poetry, law codes, and even maintenance contracts from the monastic period (Steinunn Kristjánsdóttir, 2017:150–159 and 283).



Fig. 10

In the loom, the warp was vertical and set up upright. It may therefore be concluded that the word *uppistaða* (Engl. *warp*) has survived in the language from the Age of Settlement and was transferred from the warp-weighted loom to the horizontal loom. *Uppistaða* is the term for the threads that were placed in the loom - and later in the horizontal loom - that form the foundation of the fabric when weaving. The warp thus stands upright in an upright loom or warp-weighted loom, as the name suggests, but lies horizontally in the horizontal loom. The weft then runs perpendicular to the warp (Ragnheiður Björk Þórsdóttir, 2019:21). Weaving on this old loom was considered both slow and difficult, and in the eighteenth century horizontal looms were introduced, offering many advantages. One could sit while weaving, and productivity increased significantly. Given that the warp is horizontal rather than vertical, and the sheds are formed with the feet, making weaving very fast. In the old loom, by contrast, the warp is stretched vertically and the sheds are drawn forward by hand, not unlike what is done on a vertical tapestry loom (Ragnheiður Björk Þórsdóttir, 2019:11). The warp-weighted loom is nevertheless extremely simple in construction, portable anywhere, and easy to assemble, although it is heavy. It is possible to remove the fabric and the warp from the loombefore the cloth is finished and

it for later use as needed. This is impossible on a horizontal loom because of the heddles and reed; there the threads can only be cut down, and if they are to be set up again later they must be rethreaded through the heddles and reed and tied on again. This is possible on the warp-weighted loom because the warp threads are sewn onto the beam with a special method (Ragnheiður Björk Þórsdóttir, 2019:35).

It is known that horizontal looms began to reach Iceland around and after 1711. Skúli Magnússon, district commissioner in Skagafjörður, had one loom made for himself and another that was obtained by Bjarni, the district commis-sioner at Þingeyrar. Skúli acquired another loom in 1744 and kept it at his home at Akrar in Skagafjörður, where a great deal of *vaðmál* was woven. Skúli and Bjarni were in all likelihood the first people in Iceland to make good use of these new looms (Ragnheiður Björk Þórsdóttir, 2019:47).

In 1751 Skúli Magnússon, then serving as Landfógeti (national treasurer), brought a cloth factory to the country as part of the so-called "New Enterprises" (*Innréttingar*), which operated in Reykjavík for half a century, until 1803. With the establishment of *Innréttingar*, the authorities intended to launch a comprehensive effort to change the occupational structure of Icelanders in the spirit of mercantilism.Leading figures in Icelandic society promoted changes in wool-processing practices, among other things through the importation of spinning wheels and looms (Áslaug Sverrisdóttir, 2004:5). These looms were Danish, and new ones were built throughout the country based on their design. Knowledge of spinning on the wheel and weaving on the loom spread to some extent through these apprentices, and the industrial institutions were therefore in effect Iceland's first technical school (Elsa E. Guðjónsson, 1994:24).

It took Icelanders about a century to become accustomed to this new loom, despite the fact that it allowed weaving to be done much faster - up to 10 ellis or just over five meters, per day. On the old loom it was possible to weave one and a half ellis on a

summer day, and this was considered a major advance once the loom had gained widespread use. Knowledge of weaving and of constructing looms gradually spread throughout the country, both through those who studied at industrial institutions in Reykjavík and those who traveled to Denmark for their education (Ragnheiður Björk Þórsdóttir, 2019:47).

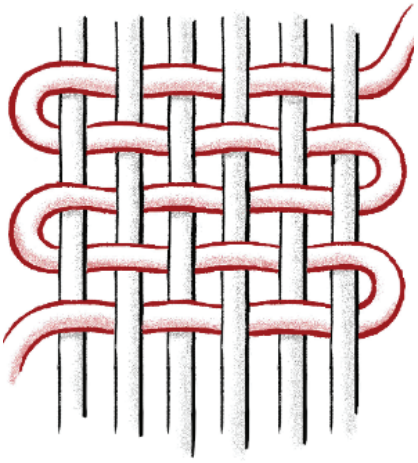


Fig. 11

By around 1830, the horizontal loom had completely replaced the old warp-weighted loom in both rural areas and towns across the country, and by about 1870 knowledge of the working methods of the warp-weighted loom was disappearing. One of the Icelanders' most important tools from the time of settlement through the 19th century seemed to have been forgotten and buried, with neither understanding nor interest in reviving or maintaining knowledge of this remarkable implement. Over the past 20 years, however, interest has reawakened, and several warp-weighted looms now exist and are in some use in Iceland. Hildur Hákonardóttir, Elizabeth Johnston, and Marta Klöve Juuhl wrote the book *The Warp-Weighted Loom: Kljásteinavefstaðurinn*, *Oppstadveven*, which was published in 2016 and is a comprehensive work on the history, distribution, and methods used throughout the Nordic world in earlier centuries. The book *The Warp-Weighted Loom* by Marta Hoffmann was published in 1964 and has long been out of print and is difficult to obtain today. The book by Hildur, Elizabeth, and Marta is therefore an invaluable contribution to preserving knowledge of weaving techniques associated with the warp-weighted loom.

Looms remained largely unchanged around the world for centuries. The first power-driven loom appeared in Britain around 1785, and the Jacquard loom - an important technological innovation - was invented in France in 1801. Today there are many types of looms: table looms, treadle looms, electric-powered, mechanized looms, and computer-controlled looms. Scandinavian looms are probably the most common in Iceland, including counterbalanced looms (Icelandic: *trissustólar*), countermarch looms, and tapestry looms. In Iceland, small looms known as *floslár* were also used.

These were used exclusively for very fine cross-weaving and floss weaving, which was slow work and required great precision (Ragnheiður Björk Þórsdóttir, 2019:11).

As has been noted, women in Iceland wove almost exclusively on the warp-weighted loom, whereas it appears that men wove exclusively on floor looms/horizontal looms. The reason for this change in the organization of labor is probably that looms were initially brought into the country as industrial tools, accompanied by trained foreign craftsmen. In most cases it was also men who were sent from farms to familiarize themselves with these new tools and learn how to use them. Women are first mentioned as weaving on Danish looms at the end of the eighteenth century, and as the nineteenth century progressed women increasingly began to weave on looms, especially when it came to artistic weaving or production for sale (Elsa E. Guðjónsson, 1994:25-26). With the establishment of home-economics schools at the end of the nineteenth century, it became more common for women to work at the loom, and in the twentieth century it was far more common for women than men to learn weaving.[9]

Looms are manufactured in many parts of the world, and they are as varied as they are numerous. As mentioned earlier, it was common for looms in Iceland to be made locally in rural areas, and some of these are still in use. Home-built looms were also used in home economic schools[10] alongside foreign looms that were imported into the country. Today, looms are no longermade in Iceland and must be ordered from abroad, from Sweden, Finland, Norway, or Canada, among others. The most common types of looms in Iceland are probably the Swedish Glimåkra looms and Öxabäck looms, which are relatively simple in construction, easy to assemble, and flexible as working tools. Modern looms are either so-called counterbalanced looms, jack looms - which are little known in Iceland - or countermarch looms. The looms are supplied with pulley systems, but it is possible to purchase a countermarch attachment for them (Ragnheiður Björk Þórsdóttir, 2019:55).

[9] In the book *Vefnaður* by Halldóra Bjarnadóttir (1966), there is extensive information about weavers in Iceland, both men and women, which is of great cultural-historical value.

[10] Most of the looms in the weaving studio of the former Women's School in Blönduós, now housing the Icelandic Textile Center, are believed to have been made around 1924 on farms in the surrounding area.

Weaving is created in such a way that one system of threads is bound or interlaced with another. The thread systems intersect at right angles and are called the warp and the weft. The patterns or bindings that are formed when weaving are called weave patterns or drafts. There are three basic binding systems: plain weaving, twill, and satin. Various variations are then derived from the basic bindings, such as self-patterned weaving and double weaving. These are classified according to the method used in the weaving process and in drawing the binding pattern (Ragnheiður Björk Þórsdóttir, 2019:11).

After weaving softwares for weave-structure design began to appear around 1990, there has been a major transformation and flourishing in the design of new weaving patterns, and it is clear that interest in weaving has increased greatly worldwide. These include programs such as WeavePoint, ProWeave, Arachne, WeaveMaker, and others. Most are easy to use and greatly speed up the entire process of designing weave patterns and calculating warp and weft requirements.

Common types of weaving that have been produced here in the past and present

The oldest, simplest, and most common pattern is called plain weave (*einskefta*). In this structure, the weft threads pass alternately over one warp thread and under the next. The Icelandic name comes from the fact that in the old warp-weighted loom, plain weave was woven with one heddle bars, whereas four-shaft twill (*vaðmál*) was woven with three heddle bars. Plain weave can be woven on two heddle bars and two treadles arranged horizontally on a loom, but today looms generally have no fewer than four heddle bars. Therefore, plain weave is threaded on four bars and woven with two treadles (Ragnheiður Björk Þórsdóttir, 2019:129).

Sigrún P. Blöndal states in her book that one of the most beautiful textiles ever woven in Iceland is wool fabric in plain weave,

which was used for clothing, dresses, and women's aprons. The fabric was woven from carefully separated, shaggy spring wool in natural sheep colors. Up to 20 threads per centimeter were used, with 60/10 or 65/10 reeds; three threads were placed in each dent and one in each heddle. All yarn was hand-spun on a spinning wheel and woven on a handloom. According to Sigrún, this method of weaving woolen fabric and spinning such fine yarn by hand has completely died out, although many fragments and garments made in this way can be found in museums across Iceland[11] (Sigrún P. Blöndal, 1948:71).

[11] At the Textile Museum in Blönduós, there is an apron woven in East Iceland in 1900 that belonged to Halldóra Bjarnadóttir. It is woven in plain weave, and the yarn is spun as finely as was possible; in total, there are 26 plied wool threads per centimeter in the apron.

Patterns derived from plain weave are called *brekán*: warp rib, weft rib, and basket weave. Plain weave has probably been one of the most common weave structures in Icelandic textiles, as it has been worldwide, both in the past and today.



Fig. 12

Twill weaving was common in Iceland, and woven fabric - *vaðmál* - was one of the main export goods in earlier centuries. Many fabrics, both in the past and today, are woven in twill structures. It is the most common type of weaving in the world, as there are countless variations of the structure. Twill is characterized by diagonal lines in the fabric, which are formed when the binding shifts by one thread with each weft pass. The diagonal may run from left to right or vice versa, but by convention the right side of the fabric is considered to be the side where the diagonals run from left and upward to the right. Twill binding is not as dense as plain weave and is therefore softer to the touch, making it well suited for clothing fabrics. This structure appears to have been the most commonly used for wool fabrics for clothing in Iceland, both historically and in more recent times (Ragnheiður Björk Þórsdóttir, 2019:142).



Fig. 13

Countless patterns are derived from twill by changing the direction and position of the diagonal lines within the twill structure. The main ones are: pointed twill or herringbone twill, curved twill or bird's eyetwill, broken twill, undulated twill, braided twill or Celtic braid, and irregular twill. Waffle weave is also derived from twill and in many ways resembles curved twill. Many

additional variations of twill exist, such as irregular pointed twill and block twill, which is used in compound bindings, for example in the so-called rosepath weaving (Ragnheiður Björk Þórsdóttir, 2019:143/145).

Ormeldúkur / satin is the third basic binding. In many languages the term *satin* is used for this type of weave, but in Iceland it was also called *formeldúkur*. Satin is more surface-beautiful than other weaves, as it is smooth and shiny because the binding points are distributed evenlyacross the entire weave pattern. Each thread therefore floats over many other threads.

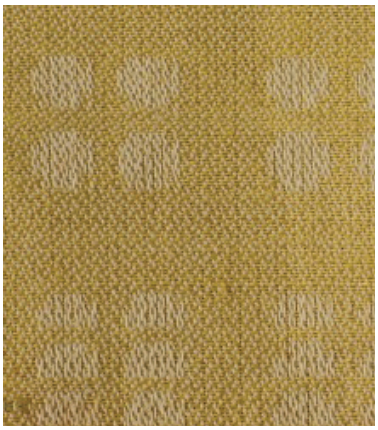


Fig. 14

Satin is usually recognized by the fact that the points of the bindings in the fabric do not touch one another and are regularly distributed according to a so-called step number, which is the number of threads by which the pattern shifts with each weft pass (Ragnheiður Björk Þórsdóttir, 2019:154). It is not possible to weave satin on fewer than five shafts - also common are seven, eight, nine, ten shafts, or more. Consequently, this type of weave was not produced to any significant extent in Iceland until the 20th century, with the establishment of the home economic schools and the Iceland College of Arts and Crafts (Myndlistar- og handíðaskóla Íslands).



Fig. 15

Satin may have either a warp-faced or a weft-faced surface on the right side, with the opposite appearance on the reverse, and is accordingly called warp satin or weft satin. The warp threads dominate in warp satin, while the weft threads dominate in weft satin. Satin is always threaded through the heddles using a straight line and treadled with a straight progression. It is primarily used as a basic binding for damask and figured weaving, and in the production of tablecloths, duvet covers, and upholstery, where it is often woven as block satin. Satin is the most complex of the primary bindings and has the greatest technical potential. It is, in fact, the foundational binding for nearly all patterned weaving on computerized looms, such as Jacquard looms, TC-1[12] and TC-2 computer looms, and other digital looms used in textile factories around the world.

[12] The TC computer loom was developed in Norway by Vibeke Vestby and manufactured by Tronrud Engineering, and today it is the most common and most advanced computer-controlled loom used in textile education and by textile artists around the world.

It is worth noting that the punched cards of the old Jacquard loom sparked the invention of computer technology inthe nineteenth and twentieth centuries, and that we today can therefore thank weaving for a number of technological advances. When the technological and craft history of humankind is examined, it becomes clear that developments in the textile industry have often initiated broader development and progress across all areas of society (Ragnheiður Björk Þórsdóttir, 2019:154-155).

Rosepath weaving[13] is and has been popular in Iceland and was widely woven in home economic schools during the 20th century. It is classified as patterned weaving on a plain base when the fabric is woven so that plain-weave and rosepath treadlings alternate, each with its own color in the weft. It can also be defined as a weft rib, woven with two or more colors, and one of the defining characteristics of rosepath weaving is the wide range of possibilities it offers in pattern design. Even though only three to four heddle shafts and four treadles are used, it is possible to weave an astonishing variety of patterns by changing the treadling and the colors of the pattern weft (Ragnheiður Björk Þórsdóttir, 2019:158).

[13] Rosepath weaving in Icelandic is sometimes also called *krókbragð*, and the Norwegian name for the weave structure is *krokbragd*. The Swedish term is *rosengång*.

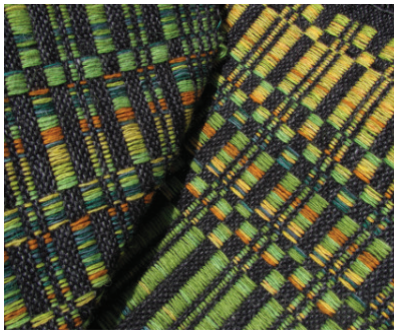


Fig. 16

Rosepath weaving can be woven on both countermarch, counterbalanced and Jack looms, and it is divided into raised and flat rosepath. Flat rosepath can be woven on three to eight shafts and treadles, and as the number of shafts and treadles increases, so do the possibilities for pattern design. In Sweden for example, several weaving books have been published that deal exclusively with rosepath weaving, demonstrating the diversity of the technique and its wide range of applications, from dish mats to rag rugs, as the possibilities are endless. (Ragnheiður Björk Þórsdóttir, 2019:158 and 161).

Four-shaft overshot weaves are woven according to small-scale profile drafts[14], in two-, three-, or four-block designs. The main types are Monk's belt (*salún*) and overshot (*hálfdregill*, *daladregill* and *Austurbotnsdregill* in Icelandic). The overshot weaves that have been produced in Iceland are Monk´s belt, which was

[14] Profile drafts are not a threading draft pattern; instead, a new threading draft must be developed for block patterns according to a specific system. Reference should be made to weaving books that discuss this.

woven both on the warp-weighted loom and later transferred to the floor loom after 1750; *hálfdregill* and *daladregill*, which were woven in home economic schools in Iceland in the 20th century. Monk's belt is the overshot pattern method that achieved the greatest distribution in Iceland during the 19th and 20th centuries after the horizontal loom was introduced. It was also widely woven on the old warp-weighted loom, although no textiles of that type have been preserved (Elsa E. Guðjónsson, 2004:281–282).



Fig. 17

Monk's belt weaving was mainly used to make various kinds of saddle blankets, woolen bedspreads, table runners, furniture covers, and cushion covers.

In the Icelandic Etymological Dictionary (*Íslensk orðsifjabók*), the origin of the word *salún* is traced back to Old French, where the word *chālun* referred to a fabric from the town of Châlons. The Nordic languages no longer use this term for this type of weaving, although Old Swedish had the word *salun* and Old Danish *sallun*, mean-ing a bedspread (Ásgeir Blöndal Magnússon, 1989:794). No other overshot patterns will be discussed here.

The final technique addressed is Icelandic *glit* (*tabby based grid pattern*), which appears to be the only weaving technique that is uniquely Icelandic. The author recalls hearing from an elderly weaving instructor, now deceased, that *glit* was invented in Iceland in order to use the pattern weft sparingly, as it lies almost exclusively on the right side of the fabric - something that is unusual. Sigrún P. Blöndal notes that Icelandic *glit* differs from *glit* woven elsewhere in the Nordic countries in that it is woven with the right side facing up. This tradition, she says, must be preserved (Sigrún P. Blöndal, 1948:171).

Icelandic *glit* is relatively quick to weave compared to other pattern-weaving techniques, and it appears to have been the most common form of patternweaving in Iceland in earlier centuries. *Glit* was woven on the old warp-weighted looms, and the method was later transferred to horizontal looms when they were introduced in Iceland. A considerable number of old *glit*-woven saddle

blankets and bedspreads, woven on looms, have been preserved and can now be found throughout the country in local museums and in the National Museum of Iceland.

The saddle blankets were used to cover the women's saddles that were used in Iceland until the mid-19th century; when those saddles fell out of use, the blankets disappeared along with them (Ragnheiður Björk Þórsdóttir, 2019:204).

There are several weaving drafts for Icelandic *glit*, and they are constructed according to how many threads are included in each unit. Sigríður Halldórsdóttir states in an article she wrote on Icelandic *glit* weaving in 1967 that everysixth thread is a *glit* thread in the saddle blankets preserved in the National Museum of Iceland. She believes that *glit* was woven in this way both on the old warp-weighted looms and on horizontal looms when they were introduced in Iceland (Sigríður Halldórsdóttir, 1969:7). In Icelandic home economicschools during the 20th century, students were generally taught Icelandic *glit*, although they were no longer weaving saddle blankets but rather bedspreads, table runners, cushion covers, wall hangings, or other items[15].

The method of weaving Icelandic *glit* is such that a pattern, worked out on graph paper, is woven on top of a plain-colored plain-weaveground. The pattern yarn is carried in butterfly loops (*skilhönkum*)[16], while the plain weave is woven with a shuttle. The process begins by weaving a firm border using the two plain-weave treadles before beginning the *glit* process, as it is called. When the *glit* treadle - often tied furthest to the right - is depressed, three to five adjacent threads are lowered, while the *glit* threads, every fourth, fifth, or sixth (or seventh) thread, rise up between them (Ragnheiður Björk Þórsdóttir, 2019:207).

In closing this discussion of weaving, it may be noted that in 1995 the TC-1 digital loom[17] was introduced to the market, followed in 2012 by the TC-2 loom. These innovations have caused a revolution in the field of hand weaving and textile art. This new technology in hand weaving is spreading rapidly around the world,

[15] One *glit* step corresponds to a single square in a checked (grid-lined) pattern.

[16] *Skilhönk* has also been called "*fluga*" in Icelandic.

[17] The abbreviation TC stands for *Thread Controller*, meaning that each thread in the loom is computer-controlled.

and it is worth noting that the Icelandic Textile Center was the first Icelandic institution to purchase the TC-2 and now possesses two such looms, which are rented out to artists and designers.



Fig. 18

Tablet Weaving

Tablet weaving is an ancient method for making bands that can be used as trim on clothing, belts, suspenders, instrument straps, riding tack, and more. Tablet-woven bands can be decorative and very strong, and in earlier times they were also used for girth straps, saddle straps, and other purposes. They were part of the high-quality equipment of Nordic peoples during the Viking Age and later, and were used to edge and decorate garments and tunics, or as belts and headbands. Such bands can still be seen today in the national costumes of various countries (Ragnheiður Björk Þórsdóttir, 2019:232).

Tablet weaving has been found in Egypt and is believed to be at least 2,900 years old, which means that the technique must be very ancient (Collingwood, 1982:12). Tablet weaving was brought to Iceland by the early settlers and has been practiced continuously up to the present day.

The oldest preserved tablet weaving in Iceland is believed to date from the 15th century or earlier. These are bands that entered the National Museum of Iceland in 1930. At that time, the bands were attached to an embroidered altar cloth that had come to Iceland from the National Museum of Denmark, where the cloth had been since 1819. The altar cloth, known as the *Höfðaklæðið*, originally belonged to Höfðakirkja in the Höfði district, a church that has long since been decommissioned. Two of the three bands on the cloth appear to have been sewn onto it later, along the upper edge, while the band along the lower edge seems to have been part of the cloth from the beginning. In 1959, the cloth was sent to Sweden for restoration, and the two upper bands were not reattached afterward, but the lower band remains in place (Sigríður Halldórsdóttir, 1985:23).

The technique of tablet weaving came close to being completely lost. However, this did not happen, largely thanks to women such as Margarethe Lehmann-Filhés, Sigríður Halldórsdóttir, Halldóra Bjarnadóttir, Elínborg Magnúsdóttir, and Áslaug Sverrisdóttir, who wrote about the technique and taught Icelanders how to weave tablet weaving again. Sigríður Halldórsdóttir and Áslaug Sverrisdóttir have written articles in the journal *Hugur og hönd* in which they discuss various forms of tablet weaving, and they have also taught how to weave it (Ragnheiður Björk Þórsdóttir, 2019:232).

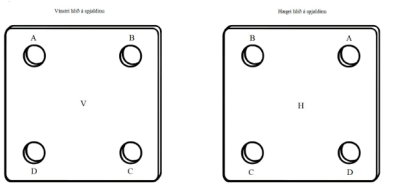


Fig. 19

Tablet weaving is easily recognized by its texture: a corded surface formed by the warp threads in each tablet twisting together. However, it can be confused with braided and twisted bands. As the name suggests, tablet weaving is woven using specially made tablets, which may be triangular, square, hexagonal, or octagonal, with holes at each corner. The warp threads are threaded through the holes at the corners, and the tablets are stacked on top of one another in the correct order. The tablets are held in the hand, and the weaver turns them a quarter turn or more, either toward or away from themselves. A shed forms between threads in holes that no longer align, and the weft is passed through the shed after each turn of the tablets.

Each square tablet (card) has four holes, marked with the letters A-D. Each hexagonal tablet has six holes, marked with the letters A-E at the corners, and it is helpful to use different colors on the corners. On the right side of a tablet, corner A is the upper right corner, and the letters then proceed counterclockwise around the tablet; it is important that all tablets are marked in the same way. On the left side of a tablet, corner A is the upper left corner, and the letters then proceed clockwise around the tablet (Ragnheiður Björk Þórsdóttir, 2019:235).

Three methods are best known in tablet weaving: simple, double, and Egyptian tablet weaving.

Simple tablet weaving is the lightest technique and is well suited for beginners. Four threads are needed for each tablet if square tablets are used, with one thread threaded through each hole, although some patterns use only three of the four holes. The process begins by threading the yarn through corner A of each tablet and then threading clockwise or counterclockwise through corners A, B, C, and D. The threading may be done from either the right side or the left side of the tablet; however, each individual tablet must be threaded entirely from the same side, otherwise it cannot be turned properly. The choice of which side to thread from depends on the pattern to be woven, although the process can also be simplified by threading all tablets from the same side and then dividing the tablet stack into right- and left-facing groups.

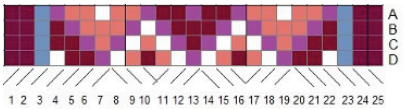


Fig. 20

In the pattern diagram (see Fig. 20), one can see how a pattern is created for tablet weaving using square tablets. The horizontal squares represent the number of tablets used, and the vertical squares represent the number of holes in each tablet. It is essential to use a strong, firmly twisted yarn for the first sample weaving, such as pearl cotton or plied linen, as this makes the initial process easier and faster. In Iceland, a plied, fine wool yarn was generally used for tablet weaving. When the tablets are turned, a shed is formed: two threads from the upper holes lie horizontally in the upper shed, and two threads from the lower holes of the tablets form the lower shed. The weft is passed through the shed, and the tablets are then turned a quarter turn, either toward or away from the weaver (Ragnheiður Björk Þórsdóttir, 2019:236-239).

Double tablet weaving[18] was very common in Iceland from the time of settlement up to the 20th century, and its most beautiful testimony is the Icelandic *leturbönd* or letter bands.

Weaving double tablet weave is fairly complex, and Icelandic women possessed considerable skill in this craft, as the letter bands preserved in museums attest. Sigríður Halldórsdóttir and Áslaug Sverrisdóttir are the women who have written most extensively about and defined double tablet weaving, especially the letter bands.

[18] See also a separate document in English on Icelandic double tablet weaving.

In 1970, Sigríður wrote the article T*ablet Weaving in Iceland* in *Hugur og hönd*, the annualmagazine published by the Icelandic Handcraft Association, providing a detailed description of the double Icelandic tablet weave:

"*The center, or double-woven part, is always two-colored, with the darker color very often black. At the edges, there are two, three, or four colors forming either long stripes or small pointed patterns in 3–7 tablets on each side. In the outermost tablets, often only one on each side, the darker color from the center is almost always used. The same color is also used as the weft. The threading is generally done into all tablets from the same side. Then it is woven according to a 'cross-stitch grid.' It appears most common that two tablets are in one square, although sometimes three are used, in addition to the edge tablets. The number of tablets can be determined by counting the ridges across the width of the band, though they are less distinct in double-woven bands than in single ones. Bands in the National Museum have been woven in 16-42 tablets, most often around 30 tablets.*"

or those wishing to try double tablet weaving, see the articles by Sigríður Halldórsdóttir (1970 and 1985) and Áslaug Sverrisdóttir (1999) in *Hugur og hönd*. It is also discussed in Chapter 6 of the book *Listin að vefa* by Ragnheiður Björk Þórsdóttir.[19]

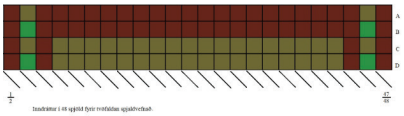


Fig. 21

In the threading diagram, figure 22, it is shown how the threads are inserted into the tablets in double tablet weaving. The threads can be threaded either one per two tablets using 48 tablets, or on 24 tablets as illustrated in the figure.

[19] See References

The third and final method in tablet weaving is Egyptian tablet weaving, a name likely derived from the fact that it produces triangular patterns or chevron-like designs that resemble a pyramid when woven. In Egyptian tablet weaving, two or more colors are used, and all tablets are threaded from the same side, similar to double tablet weaving. Once the warp has been prepared on a beam, threaded through the tablets, and the weaving secured, the weaving process begins. The weft color is chosen to be the same as that used in the first and last tablets.



Fig. 22

Tablet weaving is relatively rare in Iceland today, but it has been taught in courses offered by the Icelandic Crafts Association and at the University of Iceland in Hallormsstaður, to name a few examples. Abroad, there are large associations of tablet weavers that hold conferences every four years, where various techniques continue to thrive. The method is often associated with enthusiasts of historical handicrafts, interest in the Viking Age, and traditional costume making, and tablet-woven bands are interwoven with the costume history of most Nordic countries. Tablet weaving is an important part of Icelandic weaving tradition, demonstrating Iceland's connection to Nordic culture and ancient techniques. It may not be as essential today as it was before the Industrial Revolution and modern technological developments, but it is important to preserve craft heritage and pass this knowledge on to future generations.

Needle-binding

Needle-binding, or *nálbragð*, is an ancient textile technique and the oldest known method for making clothing with some elasticity in Iceland, such as mittens, socks, hats, and children's garments. The method was in use from the time of settlement up through the Middle Ages, before knitting became widespread. In recent decades, needle-binding has been revived both in Iceland and abroad, and it is in some ways connected to interest in the Viking Age and pre-Christian traditions.



Fig. 23

Needle-binding is done with a single large needle (often made of bone, horn, or wood). Short lengths of thread, rather than continuous yarn, are used. Each loop is secured to the next, which makes the fabric very strong. Unlike knitted fabric, if a piece is damaged, it does not unravel. According to *Íslensk orðabók*, the Icelandic Dictionary, from 2002, the technique is defined as:

"A type of stitching primarily made from wool (though also from large-animal tail hair) using a large needle and short lengths of thread (joined as needed as the work progresses), with loops made by hand and the thread drawn through them to form new loops, and so continued" (Mörður Árnason, 2002:1704).

The *Íslensk orðabók* (2002) also notes that items made this way are strong but not very elastic. Needle-binding is also known as „*vattarsaumur*" in Icelandic; the word *vöttur* additionally refers to so-called *sjóvettlinga* - coarse mittens used by fishermen - gloves, and *bandvettir* - mittens made using this technique.

Needle-binding has been used in textile production for at least 8,500 years. The oldest evidence of the method was found in a cave at Nahal Hemar in the Judean Desert in Israel (Barber, 1991; Bender, 1990; Cooper, 2009). Most medieval artifacts have been found in Scandinavia and Europe, but the oldest discovered in Europe - and the second oldest in the world - are 6,200 years old, from Tybrind Vig on the island of Funen in Denmark (Hald, 1980).

Kristján Eldjárn (1960) found that needle-binding was still practiced in Iceland in the mid-20th century. He discussed it in detail in an article entitled "*Að sauma síl og sía mjólk*" ("*To Sew a Sieve and Strain Milk*"), published in *Árbók Hins íslenzka fornleifafélags* in 1960 (Kristján Eldjárn, 1960).

Kristján later wrote about the Arnheiðarstaðir mitten in a book published in 2003 on the occasion of the 100th anniversary of the National Museum of Iceland (Kristján Eldjárn, 2003). With the introduction of knitting in the 16th and 17th centuries, the use of needle-binding declined rapidly and nearly disappeared. It differs from knitting and crochet in that it is worked with short lengths of yarn that are joined together as the work progresses, rather than using a continuous skein or ball (Áslaug Sverrisdóttir, 2004:198). This ensures that every single thread is used, even if short.

"There is scarcely a nation on earth that has not known this technique. Needle-binding is practiced, among others, by some indigenous peoples who have never learned to weave. The reach of the stitch is even broader than that of weaving, and that is saying a lot. The Arnheiðarstaðir mitten and the sieve of Soffía at Hof are Iceland's contribution to the world history of this craft, which has played such a significant role in humanity's struggle for survival prior to the age of machines." (Kristján Eldjárn, 2003:27)

In the 20th and 21st centuries, interest in needle-binding has grown as an ancient craft worth preserving and teaching. It is practiced by enthusiasts of historical handicrafts and the Viking Age, and an important part of Icelandic textile heri-tage, demonstrating the ingenuity and adaptability of people under challenging conditions.

Felting

Felting was undoubtedly practiced in Iceland from the time of settlement, and all evidence suggests that the settlers brought the knowledge with them, although there are few or no written records from the pre-Christian period. Some fragments of felted textiles have, however, been found in archaeological excavations in Iceland, dating from before the Christianization around the year 1000. According to the book *Íslenskir þjóðhættir* (Icelandic Folk Customs), first published in 1934, all knitted garments were felted, and woolen cloth was also felted: to strengthen it, increase durability, and make garments softer, warmer, and denser (Jónas Jónsson, 1961:110-114).

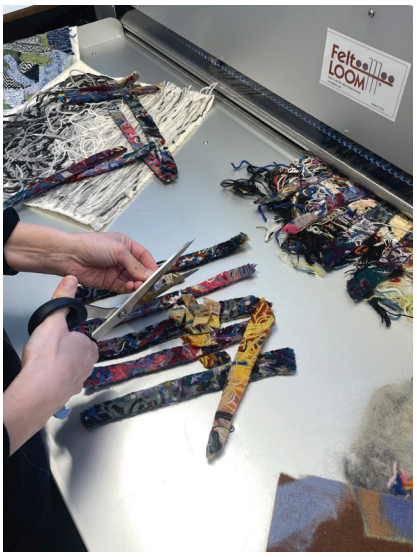


Fig. 24

Like many techniques used today, felting is believed to have originated in Asia. There, felting has been an important part of tradition and cultural history, for example in Siberia and Mongolia. Craftspeople and artists travel long distances to study felted Asian art for inspiration, whether the techniques are old or new. The oldest known felted piece was discovered in 1929 in the Altai Highlands of Siberia, in the Pazyryk burial site[20]. It is estimated to date from 600-200 BC. Between 1947 and 1949, four other graves were found with felted pieces beneath the human remains. The excellent preservation of these pieces was due to water accumulating in the graves centuries earlier, which then froze and remained frozen, keeping the items intact. When the ice melted, all sorts of objects were revealed that had previously been unknown. Among these were felted wall hangings, hair ornaments, and other decorative items in rugs, saddle blankets, bows, bridles, and saddles. Many garments were felted, including shirts, socks, and shoe coverings. Felted hats with ear flaps were worn on the head, and women wore leather garments decorated with colored felt mosaic pieces as well as leather and hide elements. The thickness of the felt varied depending on its purpose and quality. Much of the felting technique of the Altai people is still used today, some 2,500 years later (Sjöberg, 1996:6).

[20] https://en.wikipedia.org/wiki/Pazyryk_burials and https://voicesoncentralasia.org/the-treasures-of-pazyryk-kurgans-in-the-hermitage-museum/



Fig. 25

From Asia, felting spread to Greece and then to the Roman Empire, and from there north to European countries, reaching the Nordic region. Typically, archaeological finds in the Nordic

countries and Iceland include felted garments, hats, shoes, and other items. However, scholars in Iceland appear to have written little about or studied the felted artifacts discovered here.

Descriptions of felting in Iceland in earlier centuries are mainly found in the book *Íslenskir þjóðhættir*, which details several techniques. One method was hand felting, used for socks, mittens, and small items, and considered an easy technique. The knitted piece was first moistened and then rubbed between the hands; not with flat palms, but in semi-cupped hands, so that the center of the palm held the work, which was then pressed and moved as needed with the other hand.

Felting in a trough was used for larger items such as skirts, trousers, sweaters, and other clothing. The piece was placed in a trough, rolled up in a cylinder, and rolled repeatedly until sufficiently felted, or felted by hand in the trough itself. Felting on a door was used for woolen cloth (*vaðmál*); the door needed to be at a suitable height so that the felt could be rubbed with the palms against the door until ready. The "cheastfelting" *bringuþóf* method involved felting with the upper body, pressing the work against the door or stone with the chest and kneading it. This was considered a very difficult technique and no long-er mentioned after 1800.

In northern Iceland, it was common to felt using the feet, which was considered the easiest method for felting cloth; the wool was laid on a board and walked on until felted. In southern Iceland, barrel felting (*tunnuþóf*) was common for large cloths. The bottom of a barrel was removed, it was laid on its side and notched, and the wool placed in the center. Two men placed their feet in oppo-site ends of the barrel and pressed against each other while stepping to felt the cloth[21] (Jónas Jónasson, 1961:110–111).

Felting was not widely practiced in the latter half of the 19th century and the 20th century, as factories emerged that took over work previously done by households, where felting had been used to improve the durability and usability of clothing.

[21] More detailed information on felting in the 17th and 18th centuries can be found in the books *Íslenskir þjóðhættir* by Jónas Jónsson and *Fenntar slóðir* by Bergstein Kristjánsson. A drawing of barrel felting can also be found there.

In earlier centuries, people in Iceland felted out of necessity, but today felting is practiced as a hobby and as a method in textile design and textile art. The technique of felting was never truly forgotten, and in the latter half of the 20th century, it became popular worldwide. Today, it is considered part of the craft heritage to be passed on to future generations.

Modern tools for felting now exist for both wet and dry felting, which greatly increase efficiency compared to handwork. With growing emphasis on sustainability, textile reuse, and environmental protection, interest in felting has increased significantly. More and more designers and artists are using felting to create their works, making use of all available textiles, which can be recycled and repurposed with the help of felting benches or frames.[22]

[22] The Icelandic Textile Center has a needle felting machine, the so-called *feltloom*.

Knitting in Iceland

When searching for information on where and when people began knitting[23], there are very few sources. This skill appears to have spread around the world a few hundred years ago, so it is not a very old technique.

Working hair into cords or bands was known in most parts of the world. Like weaving, knitting seems to have its roots in the East. The oldest surviving knitted socks are from Egypt and are believed to date to the 12th century (Rutt, 1987:31; Kiewe, 1971:67, 81-82). Although there is little documentation, it is likely that knitting spread from North Africa to Spain, possibly via merchants or slaves (McGregor, 1983:13). Knitted cushions found in Spain are among the oldest knitted artifacts in Europe and support this hypothesis (Rutt, 1987:23). Spanish expansion to other countries may have then carried this knowledge to neighboring regions (Dawson, 1989:6). From there, knitting skills reached Northern Europe via people traveling between countries, for example along trade routes.

It has also been suggested that missionaries traveling the world may have contributed to its spread (Harlow, 1977:13).

There are few sources on knit- ting from the early period, and these are mostly found in illustrations and paintings from the Middle Ages, which will not be discussed here. In the beginning, only what is called “plain stitch”[24] or jersey stitch was knitted, by working in the round on several needles. This was well suited for knitting socks or mittens, and also for sleeves or a bodice. However, if the item being knitted was intended to be open, it was necessary to cut the piece that had been knitted in the round. The needles could be made from various materials, but in Europe it was most common for them to be made of metal, with blacksmiths cutting steel wire and smoothing the ends (Rutt, 1987:16). There are examples of up to ten needles being used, depending on the size of the item to be knitted. Knitting back and forth on two needles did not begin until later (Robinson, 1987:10 and 45-46). The earliest known examples of “purl stitch”[25] knitting dates from around 1562 (Rutt, 1987:24).

[23] Knitting: The creation of interlocking loops from yarn using knitting needles or a knitting machine (Íslensk orðabók, 2002:1144).

[24] Plain stitch: A plain stitch is formed by pulling yarn through the loop from back to front. Sometimes called jersey stitch or flat stitch.

[25] Purl stitch: formed by pulling yarn through the loop from front to back, the opposite of a plain stitch.

According to drawings and paintings, knitting appears to have begun taking root in Europe in the 14th and 15th centuries, and references are also found in poems and songs from 15th century Britain. It seems that in the 16th century, knowledge of the art of knitting spread to more distant parts of Europe, such as the islands around Britain and to Iceland (McGregor, 1981:11). Knitting was generally welcomed, as it made it much easier to produce small garments such as socks, mittens, hats, children's clothing, and more. It is generally believed that knitting was introduced to Iceland by German, English, or Dutch merchants in the early 16th century, and by French and Spanish sailors who fished off the coast of Iceland in the 16th and 17th centuries.



Fig. 26

Few objects are preserved in the National Museum of Iceland that can be linked to Icelanders' knitting in the 16th century, and not many items related to other textile techniques used before or alongside knitting in Iceland have been found either. Only a few examples exist, and they come from several archaeological excavations. Kristján Eldjárn writes in *Kuml og haugfé* (2000) that small remnants of cloth, home-spun fabric, and linen have been found in graves in Iceland. The main finds that can be connected to wool production from the early settlement of Iceland have been uncovered in excavations at Kirkjubæjarklaustur, Þjórsárdalur, Stóruborg, Viðey, Aðalstræti, and Suðurgata (Áslaug Sverrisdóttir, 2004b:69). Even though examples of knitted items have been found in only a few places, this does not mean that people did not knit throughout the country. The oldest preserved knitted item of Icelandic origin is knitted mittens. These were discovered during an excavation at Stóruborg in Austur-Eyjafjallahreppur in 1981 and likely date from the early 16th century.

During the excavation at Stóruborg, knitting needles were also found, which are considered the oldest preserved knitting needles in Iceland (Áslaug Sverrisdóttir, 2004b:98). These are three metal needles (Sarpur, Þjms.Stb. 1979-308, 370, 235). Two are intact, while one, made of copper, is broken. They are about 2.5-3 mm in thickness and approximately 20 cm in length. These are sock needles similar in design to those still used today.

Another example of needles found in Iceland comes from an archaeological excavation at Kirkjubæjarklaustur (Kristján Mímisson and Bjarni F. Einarsson, 2009:56). They appear to be comparable in length and thickness to the Stóruborg needles. The number of needles raises the possibility that they were used together to knit larger garments than socks or mittens, possibly for a sweater or some other wide garment. Considering the few needles found in Iceland and comparing them with early European needles, there is reason to believe that all knitting needles in Iceland were originally short and straight.

The knitted items preserved in Iceland that are intact enough to analyze - socks, mittens, children's socks, and sweaters - are all made with stockinette stitch, a technique creating a specific kind of texture, and knitted in the round using multiple needles. Other related artifacts include sock stretchers, used to shape socks to the correct size, and knitting boards - elongated wooden boxes with sliding wooden lids. These boards were used for band knitting and were often beautifully carved, marked with the owner's initials, and sometimes made as gifts for particular knitters (Elsa E. Guðjónsson, 1990b:6). The oldest known knitting patterns in Iceland are probably from 1750-1760 and originate from Skúli Magnússon, the local magistrate in Viðey. Other patterns from earlier times arefrom around 1760 and provide instructions for "form knitting" sweaters. Such sweaters were knitted and worn daily until around 1800 and later used as spare garments (Guðmundur L. Friðfinnsson, 1991:165). These sweaters and caps were knitted from very fine yarn, and considerable effort was required to complete each garment. In some cases, more than one woman worked on the same sweater, using multiple needles and knitting opposite each other (Elsa E. Guðjónsson, 1990b:5).

Áslaug Sverrisdóttir (2004b:198) notes that one could speak of a "technological revolution" in Iceland when knitting began to spread across the country. In the 17th and 18th centuries, knitted items - "*prjónles*"[26] - became a major part of Icelandic exports, especially in the latter half of the 18th century when its export value rivaled that of fish products. Knitting was so widespread

in Iceland that almost every child learned to knit, and household members and farm laborers were required to knit mittens and socks to help sustain the household economy. Socks and mittens were also exported in large quantities. Export reports from the early 17th century to the late 18th century show the volumes of socks and mittens shipped abroad and demonstrate the importance of knitting for increasing the income of Icelanders. Knitting was not just an export product; it was also used as a form of currency within the country. Knitted items could be used to pay, for example, taxes or goods from a merchant. The number of garments required depended on how well they were made (Inga Lárusdóttir, 1943:180).

The history of knitting in Iceland is not very old, and there are few sources or surviving artifacts. Its preservation is largely due to the fact that this knowledge still exists and the same techniques are used, for example, in knitting socks, as they were several hundred years ago. The skill and technique of Icelandic knitters can be seen in hand-knitted sweaters and caps. Very fine needles were used, and the yarn spun for these garments was so fine that only the most skilled spinners could produce it (Katrín Axelsdóttir, 2011:35).

The Icelandic lopapeysa, a woolen sweater, is not old, but it has become very popular among Icelanders and tourists visiting the country. Like many other folk traditions, the lopapeysa has no single inventor or historical starting point. Research (Elsa E. Guðjónsson, 1985; Soffía Valdimarsdóttir, 2009) indicates, however, that by the 1940s, the sweater had taken on the form now commonly referred to as the Icelandic lopapeysa: hand-knitted from lopi[27] (unspun wool) with a circular patterned yoke. Playfully, one could say it is as old as the Icelandic Republic. It is considered a notable cultural heritage in Iceland; in 2020, it was registered with Mast as a protected product designation, referring to its origin and certain standards, with the Handknitting Association of Iceland applying for the protection[28]. It is likely that the lopapeysa developed through the contributions of many people, who are rarely named in historical sources. A long-standing story suggests

[26] Prjónles: "prjónaður varningur" = knitted goods (Íslensk orðabók, 2002: 1144).



Fig. 27



Fig. 28

[27] The feminine noun "lopa" is used here as a synonym for "lopapeysa" (wool sweater). It does not have the same meaning as the masculine noun "lopi", which refers to unspun yarn made from carded wool.

[28] https://www.mast.is/is/um-mast/frettir/frettir/islensk-lopapeysa-er-nu-verndad-afurdarheiti

that Auður Sveinsdóttir, the wife of Nobel laureate Halldór Laxness, designed the sweater, but this is not supported by definitive evidence. Auður may, however, have helped shape the tradition somewhat, as did many other diligent knitters in Iceland (Soffía Valdimarsdóttir, 2009).

The main characteristics of the Icelandic lopapeysa are its material and technique; the wool and lopi knitting. The wool from Icelandic sheep is unique in that the weight ratio of coarse fibers (tog) to fine fibers (þel) is fairly even, but the majority of the fibers belong to the fine, lightweight þel, which contains a relatively large volume of air. It is also curlier than the wool of other sheep breeds. This gives the sweater increased insulating properties, both in terms of temperature regulation and water resistance (Magnús Guðmundsson, 1988). Lopi knitting is rare worldwide; it involves knitting with unspun wool. Previously, Icelanders, like other peoples, had knitted from spun yarn ever since knitting was introduced to Iceland in the 16th century by foreign sailors (Elsa E. Guðjónsson, 1985).

Changes in Icelandic settlement and work patterns around 1900 led women to begin knitting directly from unspun lopi. It became increasingly commonfor farmers to send wool to carding workshops that operated widely across the country. These workshops returned the wool either as spun yarn ready for knitting or as unspun, fairly uniform strips of wool, called lopi, which were then spun at home. At the same time, the labor force increasingly moved from rural areas to emerging towns along the coast. Fewer hands were available at home, and time-consuming spinning tasks could be delayed. The lopapeysa's distinctiveness therefore derives primarily from the wool itself, but it also appears, upon closer examination, to have strong roots in the culture of contemporary Icelanders. It connects to the past, to nature, land, and nation, while simultaneously being a living tradition reflected across many forms of art and culture, from film, literature, and visual arts to crafts and design[29].

[29] https://www.visindavefur.is/svar.php?id=62896#

The reasons for knitting's popularity and spread in Iceland in the past, and continuing today, are likely many. Knitting is portable; it can be done anywhere, and one can carry the needles with them. All that is needed are needles and yarn, a pattern (for some), and willpower. Today, knitting design is taught at universities around the world, and many professional knitting designers work in Iceland. Knitting is popular across all age groups and genders, though more so among women. Its popularity is likely also connected to sustainability and environmental consciousness; it is calming, improves coordination of mind and hand, and, according to recent research, increases endorphin production in the brain.

Braided and foot-woven bands in Iceland

Braided and foot-woven bands are a traditional Icelandic handicraft that has been practiced since the settlement of Iceland and is related to weaving, tablet weaving, and leatherwork. The bands served both practical and decorative purposes.

It is not known exactly when this method began to be used in Iceland, but it seems to have been common in the production of bands in later centuries. Foot weaving does not require tools or equipment. For the simplest type of weaving, there are two sheds (*skil*), which are used alternately, but when the warp is set up, the threads are crossed at the other end so that a second shed is formed. The other shed is created with loops that are wrapped around every other thread, or around the threads that are intended to form the other shed. The loops or heddles are gathered into a bundle and tied so that they can all be pulled up at once, forming the second shed (Áslaug Sverrisdóttir, 2004:202).

When weaving begins, the warp is stretched by holding it tightly at one end or fastening it to something fixed, while the foot is slipped into the shed at the other end and stretched sufficiently. In foot weaving, the warp covers the weft, and simple patterns can be woven, but more complex patterns can also be created by tying extra loops around specific warp threads, forming pattern sheds and weaving particular designs (Áslaug Sverrisdóttir, 2004:202). Foot weaving was widely used in the past to finish leather shoes.

The origins and history of embroidery

Embroidery - the art of decorating fabric with needle and thread - is believed to date back approximately 30,000 years and to have originated in prehistoric repairs of clothing and textiles. Its beginnings can be traced to practical hand-sewn repairs of animal hides and early textiles as far back as the Cro-Magnon period. The techniques used to cut, mend, and reinforce materials are thought to have driven the development of sewing methods, and over time, the decorative possibilities of stitching gradually evolved into artistic embroidery.

As a decorative art form, embroidery can originally be traced to ancient China and the Middle East. It appears in intricate silk embroideries found in Egypt, Persia, and Peru. The cradle of embroidery is most often associated with ancient China, where highly refined and complex silk embroidery developed during the Zhou and Han dynasties (with origins estimated around 1077-730 BC). These techniques and styles later spread along the Silk Road[30] to Central Asia, the Near East, the Roman Empire, and northward into Europe.Remains of ancient embroidery have been discovered worldwide. Although its origins are traced to ancient China, the oldest preserved embroidered textile or garment comes from ancient Egypt. Early examples include decorated fabrics from Egyptian tombs, such as that of Tutankhamun, as well as from Inca burial sites in Peru, South America. The Egyptians were highly skilled in embroidery and used appliqué decorations with leather and beads, among other techniques.

From the Middle Ages[31] through the Renaissance, embroidery was primarily a symbol of power and served as a marker of wealth, authority, status, and piety. It was used by the Church and the nobility in ecclesiastical vestments, luxury garments, and household textiles. During the Viking Age[32] In Scandinavia, embroidery developed in clothing and household textiles in what is now referred to as the Viking or Celtic style, which reached Iceland with early settlers. In a preserved garment from Sweden dating to the Migration Period (c. 300-700 AD), garment edges were reinforced with running stitch, backstitch, loop stitch, and whip stitch. It remains uncertain whether this embroidery was intended simply to strengthen seams or also to serve a decorative purpose.

[30] The Silk Road was a network of Asian trade routes that remained in use from the 2nd century BC until the mid-15th century. Stretching over 6,400 kilometers across land, it played a key role in facilitating economic, cultural, political, and religious exchange between East and West, extending as far as Europe.

[31] The Middle Ages began with the fall of the Western Roman Empire in 476 AD and ended around the beginning of the Early Renaissance, circa 1400.

[32] The Viking Age lasted from 793 - 1066.

In medieval England, a technique known as Opus Anglicanum developed, a fine embroidery created for ecclesiastical ceremonies or secular use on garments, altar frontals, and other textiles, often worked with gold and silver threads on rich velvet or linen grounds. English embroidery of this kind was highly sought after throughout Europe, especially from the late 12th to the mid-14th century, and was considered a luxury item frequently used as a diplomatic gift.

One of the oldest surviving complete embroidered works is the Bayeux Tapestry, an embroidered hanging approximately 70 meters long and 50 centimeters wide, stitched on linen using what is known as the Bayeux stitch. The tapestry is an epic work depicting the story of Harold Godwinson, Earl of England, and William the Bastard - later William the Conqueror of Normandy, and their confrontation culminating in the famous Battle of Hastings in 1066. It is believed to have been embroidered in southern England between 1066 and 1077 as a ceremonial hanging for the cathedral in Bayeux, France, which was consecrated on July 14, 1077. The tapestry is one of the most famous artworks of the Romanesque period (900-1200) and is preserved in a dedicated museum in the town of Bayeux, France.

Embroidery was long regarded primarily as domestic work performed by women and was often viewed as a pastime rather than recognized as a skilled profession requiring training and education. Women who lacked access to formal education or writing materials frequently used embroidery to document their lives through stitched narratives, thereby creating personal textile diaries, especially at times when literacy among women was uncommon. Embroidery also functioned as a status symbol. It was primarily daughters of wealthy families and noble households who were expected to learn needlework; they had the time and financial means to purchase expensive threads and fabrics made of silk, linen, cotton, and wool.

Embroidery was also common in conventsthroughout Europe, Scandinavia, and Iceland, where instruction and mentorship in embroidery took place and remarkable works of art were created.

Embroidery in Iceland

Icelandic women enjoyed embroidery in earlier centuries, and from the sagas of the settlement period, it is clear that it was considered appropriate for wealthier women to learn needlework. During the pagan era, chieftain estates were likely centers for needlework, and after the establishment of the bishoprics at Skálholt and Hólar in the 11th century, these sites, as well as nunneries, presumably served as cultural and craft centers. The few surviving sources indicate that in both Kirkjubæjarklaustur and Reynistaðarklaustur, nuns practiced embroidery and taught it to Icelandic girls (Elsa E. Guðjónsson, 2004:273).



Fig. 29

The National Museum of Iceland holds the largest and most diverse collection of Icelandic embroidered works from the Middle Ages, that is, before the Reformation in 1550, though these are exclusively ecclesiastical. Sources also describe secular embroidery in Iceland. From the post-Reformation period - the early 17th century - both church and secular needlework are documented. Most embroidery shows clear Icelandic characteristics in terms of patterns, materials, color choices, and embroidery techniques. The main preserved ecclesiastical items include altar cloths, altar covers, altar frontals, paten cloths, and corporal cases. Among secular items, there are bedcovers, bed curtains, saddlecloths, and chair covers (Elsa E. Guðjónsson, 2004:273).

Among notable Icelandic cultural artifacts preserved from earlier centuries are fifteen textiles with stem stitch embroidery. Thirteen are believed to date from the Middle Ages, and two from the 17th century[33]. Eight altar cloths are from the Diocese of Hólar and two from the Diocese of Skálholt. Nine of these embroidered works are preserved at the National Museum of Iceland, six are in foreign collections, and five ofthe ten stem-stitched altar cloths are in the National Museum (Elsa E. Guðjónsdóttir, 2004:275; Lilja Árnadóttir, 2023:23).

Following the Reformation in 1550, the nunneries disappeared, and with them the needlework practiced there. The bishoprics remained centers of embroidery art until the late 18th century. Many larger embroidered textiles from the 17th and 18th

[33] In general, the Middle Ages in Iceland are said to have lasted until the Reformation around 1550.

centuries are linked to the wives, daughters, and female relatives of bishops, priests, and magistrates, who had the time and resources for such work. These women also taught needlework in their homes (Elsa E. Guðjónsson, 2004:274).

Icelandic embroidery was mostly done with plant-dyed Icelandic wool yarn, yarn in the natural sheep colours, and to a lesser extent with foreign silk, linen, and metal threads throughout the Middle Ages and into the 20th century. The materials used were home-woven Icelandic wool fabrics and imported linen. Icelandic wool fabrics were woven in tightly beaten plain weave, broadcloth, or twill, though in the 19th century foreign woolen cloth became more common. Icelandic embroidery patterns are characterized primarily by circular and polygonal compartments, i.e., grid-like flat patterns. This type of pattern was also widespread in Northern Europe at the time through the 19th century and can be traced back to Ancient Persia and the Byzantine period. Icelandic needleworkers likely knew foreign patterns from printed pattern books in the 16th and 17th centuries, though none of these have survived in Iceland. A significant pattern treasure survives in ten Icelandic pattern books from the 17th, 18th, and 19th centuries, eight of which are in the National Museum of Iceland, and some of these patterns may originate in Iceland (Elsa E. Guðjónsson, 2004:274).

The embroidery techniques practiced in Iceland in the Middle Ages included Bayeux stitch (*refilsaumur*), chain stitch[34], and skew stitch, while toward the end of the Middle Ages the old cross stitch and eyelet stitch appeared in the records, remaining prominent in the 17th and 18th centuries. In the 18th and 19th centuries, techniques such as Icelandic goldwork, seam stitches, warp loops, chain stitch, pearl stitch, couching, and drawn thread work became common. The most notable Icelandic embroidery works are undoubtedly those in Bayeux stitch[35] (Elsa E. Guðjónsson, 2004:275), including altar cloths from Stafafell in Lón, Reykjahlíð in the Mývatn area, Grenjaðarstaðir in Aðaldalur, and Draflastaðir in Fnjóskadalur.

[34] Embroidered glit closely resembles Icelandic glit, and it is often difficult to distinguish between them, but the weaving technique is probably older than the embroidery.

[35] The earliest sources for the word refilsaumur date from 1550, but the words refill or reflar appear much earlier in manuscripts, the oldest dating from the 13th century.

The Bayeux stitch is classified as a laid stitch and is executed following freehand drawn patterns. In a laid stitch, long parallel threads are sewn onto the fabric according to the pattern and then secured with various overlay stitches. The embroidery thread thus mostly lies on the surface, saving significant amounts of thread compared with other types of embroidery. This technique likely originates from the East; the oldest examples are found in Coptic needlework[36], and it spread to Northwestern Europe during the Viking Age and reached Iceland in Roman times (Lilja Árnadóttir, 2023:39). On Icelandic Bayeux-stitched textiles, the main outlines of the pattern were generally stitched first, then the area filled in with Bayeux stitch. The outlines were usually done with warp loops, couching, and floral stitch[37]. Bayeux stitch was not used in Iceland from the late 17th century until it was revived in the 20th century (Elsa E. Guðjónsson, 2004:276).

[36] The Copts were the Christian Egyptians.

[37] Explanations and drawings of these embroidery variations can be found, among other places, in Elsa E. Guðjónsson's books Icelandic Embroidery and With the Work of the Hands.

Skew stitch and the old chain stitch were embroidery types used in bed coverings, altar cloths, and altar frontals, first mentioned in sources from 1675. These techniques resemble brocade, and chain-stitched saddlecloths were made widely until 1880, after which foreign tapestry stitches were adopted to imitate brocade after 1900. The old cross stitch and eyelet stitch are also characteristic of Icelandic medieval embroidery, mainly used in bed covers and chair covers, and both were worked according to gridpatterns. By the mid-19th century, the old cross stitch was largely replaced by the regular cross stitch (Elsa E. Guðjónsson, 2004:276-278).

Floral stitch appeared in the 17th century; the so-called Icelandic goldwork (i. *baldýring*) in the 18th century, and surface satin stitch (i. *skattering*) in the 19th century, primarily associated with the designs of the painter Sigurður Guðmundsson on the Icelandic national costume. It is essentially a variation of flat stitch. All these types of embroidery are connected with the national costume tradition of Icelandic women. Floral stitch and surface satin stitch were worked using multicolored wool yarn or silk threads on garments. The Icelandic goldwork was often stitched with gold or silver threads and appears in women's festive costumes, as

well as in caps and christening gowns, where it was applied on black velvet (Elsa E. Guðjónsdóttir, 2004:278-279).

Today, all these embroidery techniques are well known in Iceland, and there is great interest in embroidery and the making of 19th- and 20th-century national costumes, a tradition largely maintained, taught, and promoted by the Icelandic Home Craft Association. In recent decades, "free embroidery" has also gained ground in Iceland as well as abroad. In this approach, several types of stitches are often used within the same piece, and the handling of thread and the size of the stitches is far more flexible than previously allowed.

Embroidery has been part of Icelandic craft tradition from the earliest times, though it was historically smaller in scale than weaving or knitting. It served both practical and decorative purposes and reflects social conditions, religious influence, and Iceland's connections with Europe. Over the past twenty years, the popularity and reach of embroidery in Iceland and internationally have grown significantly, and it has once again become a medium for artistic expression and design.

Since 2011, two major embroidery projects have been underway in Iceland: the creation of the Vatnsdælurefill[38] and the Njálurefill[39], both considered significant achievements. These works draw on the techniques and design of the famous Bayeux Tapestry[40], which, like these two Icelandic tapestries, tells a story; in this case derived from the Icelandic sagas and the Landnámabók. The stitching is done in the Old Icelandic Bayeux stitch, a form of embroidery that had almost entirely disappeared elsewhere in the world, except in Iceland.

In addition, the National Museum of Iceland and the National Gallery of Iceland have held major retrospective exhibitions of both historical and contemporary Icelandic embroidery. These include *Með verkum handanna*, held in the Bogasal of the National Museum from 2023-2024, and Spor og þræðir, shown at Kjarvalsstaðir in 2022.



Fig. 30

[38] https://www.hunabyggd.is/is/mannlif/menning-og-sofn/vatnsdaela-a-refli

[39] https://njalurefill.is

[40] The Bayeux Tapestry was embroidered in England in the 11th century and tells of the interactions between Earl Harold Godwinson and William the Bastard, and their confrontation at the Battle of Hastings. The tapestry is embroidered in Old Norse "refilsaumur" (tapestry stitch) and is 70 meters long.



Fig. 31

Crochet in Iceland

Crochet is relatively new in the Icelandic context compared with weaving and knitting, yet it has nevertheless become an important part of the country's craft and cultural tradition. Crochet arrived in Iceland in the 19th century, likely through foreign craft books, women's schools/home economic schools, and increased contact with Denmark and other European nations. It was mainly practiced by women and taught as part of domestic arts to create lace and edgings on clothing, tablecloths, bedspreads, headwear, and decorative items, as crochet is better suited for embellishment than for clothing construction.

19th - 20th century:
Crochet became common in households. Crochet lace, often made from cotton thread, was especially popular. Craft publications and patterns contributed to its spread.

20th century - changes:
With industrialization, everyday use declined. Crochet continued as a leisure craft and artistic form. Contemporary designers began using crochet in clothing and art objects.

Today:
Crochet is practiced both as traditional craft and creative design. It is common in courses, craft associations, and textile art. Traditional patterns are often reinterpreted in modern forms.

Tapestry weaving, origin and history in Iceland

Tapestry weaving was not practiced in Iceland in earlier centuries. The Warp-weighted looms and the floor looms had to be used to weave cloth for clothing, bedspreads, and household blankets, and tapestry looms did not arrive in Iceland until the 20th century. The technique of tapestry likely did not reach Iceland due to the country's isolation, but also because there was neither the manpower nor the buildings to accommodate large and heavy gobelin or tapestry works. The artistic weaving produced in Iceland consisted mainly of plain cross weave, pile weave, Icelandic glit, and salún weave, but tapestry weaving began in the 20th century. Pioneers of tapestry weaving in 20th-century Iceland include Júlíana Sveinsdóttir (1889-1966), Vigdís Kristjánsdóttir (1904-1981), and Ásgerður Búadóttir (1920-2014). The artistic weaving tradition in the 20th century began unusually with the painter Júlíana Sveinsdóttir, who spent most of her life working in Denmark. Although she never considered herself a textile artist, the works she wove and sold to fund her studies in Copenhagen are today considered the first generation of textile art in Iceland.

Tapestry weaving can perhaps best be described as the weft being like the painter's brush and the warp like the canvas on which the work is "painted". The weaving process resembles a heartbeat; the motion of weaving mirrors life itself, and the colors are like music with their own rhythm. Everything must have its time; each thread and color is in its place, and the weaving becomes a meditative practice where time and place are forgotten. The warp can be seen as the material given to a person in life, while the weft reflects how that gift is expressed and played with.

Tapestry is an ancient art, though its exact age and origin are unknown. It has existed worldwide alongside utilitarian weaving, both for decoration and ritual use. Few ancient examples survive because they were made from perishable materials, though enough remain to show that tapestry existed long before modern times. Fragments of tapestries over 3,500 years old have been found in Egyptian tombs, and the technique likely spread to Europe during the Middle Ages.

Weaving methods vary: warp-faced or weft-faced, upright or horizontal[41], depending on the culture. Tapestry techniques differ from ordinary weaving but are closest to methods like plain weave, pile weave, or Icelandic glit (Ragnheiður Björk Þórsdóttir, 2019:246-247).

[41] When referring to a vertical weave, it means that the pattern is woven as it is hung up. The weave is viewed right side up while it is being woven, not from the side.

In the Middle Ages, tapestry in Europe developed into largescale mural artworks that covered entire walls, serving both decoration and insulation, and were produced in large workshops. From the mid-14th to mid-17th centuries, tapestry flourished in France, the Netherlands, and Italy, at times becoming one of Europe's most expensive commodities. These works covered cold castle and cathedral walls and subdivided large rooms. Designs were drawn and woven in renowned workshops, such as Angers, Paris, Aubusson, and Arras. Initially, weavers themselves drew, dyed, and wove the tapestries, but as works became larger, more expensive, and in demand, specialization increased, though production still occurred in the same workshops. These tapestries, like paintings of the time, told stories. The technique used was gobelin weaving, usually weft-faced and horizontal (Ragnheiður Björk Þórsdóttir, 2019:249).

Famous medieval gobelin works include the Apocalypse Tapestry in Angers, *Lady with the Unicorn* in the Cluny Museum in Paris, and *Hunt of the Unicorn*, now in the Metropolitan Museum in New York (Ragnheiður Björk Þórsdóttir, 2019:249).

By the mid-17th century, the Aubusson workshop in France employed painters with little or no weaving knowledge to paint designs for the weavers to reproduce. This led to a decline in gobelin quality and prestige, although Baroque style dominated Europe at the time. Medieval tapestries had relatively few colors and simple shading, but these new works contained 400-700 shades, making them almost indistinguishable from paintings, and the same design was repeatedly reproduced. The traditional artistic tapestry almost died out due to this development (Ragnheiður Björk Þórsdóttir, 2019:254).

In the Nordic countries and elsewhere, tapestries continued to be woven, though smaller than the medieval ones. The technique never disappeared entirely and persisted with variations across cultures. In the East, the Americas, and Africa, tapestry weaving continued, even after industrialization rendered it largely unnecessary in the West (Ragnheiður Björk Þórsdóttir, 2019:255).

William Morris[42] (1834 - 1896), a British textile designer, architect, poet, and publisher, worked in the 19th century with the Pre-Raphaelite Brotherhood and helped establish the Arts and Crafts Movement in Britain. This movement, influential worldwide, sought to preserve traditional craftsmanship and artistic creation against industrialization. Morris, with colleagues, revived gobelin weaving and personally wove works designed by him and the painter Edward Burne-Jones. The movement's spread across Europe and the U.S. preserved old techniques, keeping tapestry alive into the 20th century (Ragnheiður Björk Þórsdóttir, 2019:258).

[42] William Morris was a great admirer of Iceland; he visited the country, spoke Icelandic, and translated several Icelandic sagas into English, including the *Völsunga saga*.

Morris and the Arts and Crafts Movement aimed to maintain traditional gobelin methods - weaving according to designs intended specifically for tapestry - and greatly influenced 20th-century textile art. Another major influence on modern textile design was the Bauhaus school in Germany (1919 - 1933), which integrated industrial production with art and contributed to modernism in Europe and the U.S. Bauhaus introduced new approaches to textile art and design, producing wall hangings in geometric and abstract styles, where the design was created by weavers themselves rather than painters, including artists like Gunta Stölzl and Anni Albers. After the school's closure in 1933, Albers moved to the U.S. and taught at Black Mountain College, applying Bauhaus-inspired creative teaching methods. Both Morris and Albers profoundly influenced 20th-century textile art and tapestry, in visual, technical, and theoretical ways, though differently (Mathison, 2012:20-21).

Tapestry weaving can be woven from the right side or from the back side, depending on the design, weaver, and culture. When

weaving strips or squares, the weft thread runs back and forth across the warp. The basic binding is plain weave, though twill is occasionally used, so complex loom technology is not required to create tapestry. As the name suggests, tapestry is woven according to an image or model, though many weavers also start without drawings, letting imagination and inspiration guide the work.

Tapestry weaving is defined by the warp being entirely covered by the weft threads. Colors and shapes of the weft create the image. The fabric is usually composed of many small or large color areas, with the weft moving back and forth. Color interplay is crucial, as are techniques for blending colors, creating light and shadow, and overall composition. The yarn and its colors are like a painter's palette and brush, and sensitivity to composition, form, color, and technique is essential.

Tapestry can be woven in a frame or loom, horizontally or vertically. It can be done on very simple equipment, like a small frame, usually about 60×80 cm. A comb or beater is used to press the weft down. Many types of tapestry looms exist, including those with tied heddles that are pulled down when a shed is opened, similar to the Warp-weighted loom. Other looms use heddles, a shuttle, and sticks to open the shed. This type of loom is often called a gobelin loom, with the heddles tied similarly as in the Warp-weighted loom and to open the sheds you step on the two treadles.



Fig. 32

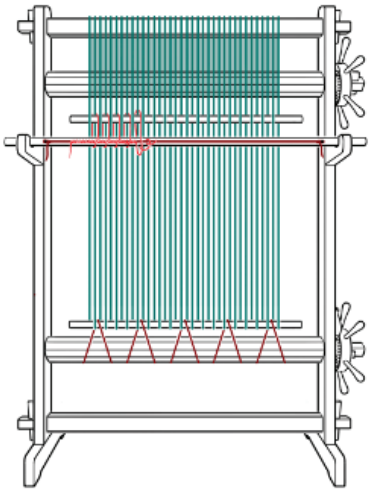


Fig. 33

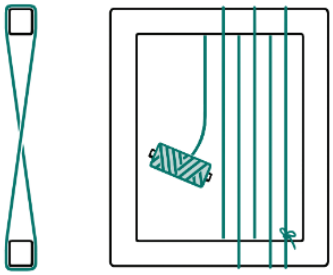


Fig. 34

Final Word

In this discussion of craft traditions in Iceland from the time of settlement to the present day, detailed attention has been given to the methods that were most common in the country and that mattered most for the nation's livelihood. It is clear that weaving, and later knitting, were the most widespread techniques and were of greatest importance to Icelanders - indeed, they were essential for the survival of the nation and its economy. Woolen cloth (*vaðmál*) and shaggy cloaks (*röggvarfeldir*) formed the basis of foreign exchange earnings and were the main export goods of Icelanders during the first centuries of settlement. When they learned to knit, knitted goods also became an important export, alongside fish and woven textiles. Needle-binding was necessary and common in the early centuries of settlement, but once knitting was adopted, that method almost entirely disappeared; the same can be said of fulling.

It can be said that techniques such as tablet weaving were essential in Iceland, as described above. All bands, cords, harnesses, pack ties, and garment trimmings had to be produced in people's homes, making these skills extremely important to master.

Embroidery was practiced in monasteries and in wealthier households. It was neither a necessity nor an export product, but it demonstrates the creativity and originality of Icelandic women. The works that have been preserved, both in Iceland and abroad, are therefore important evidence of the artistry and skill of women in this country.

For nearly a thousand years, Icelanders were self-sufficient, reusing and repairing all textiles produced in rural areas. These methods were passed down from one generation to the next over centuries; craftsmanship was highly valued and considered a precious asset in life.

Ragnheiður Björk Þórsdóttir

List of Words

English	Icelandic
altar cover	altarisdúkur
altar frontal	altarisklæði
appliqué	applikering
artistic embroidery	listrænn útsaumur
artistic weaving / tapestry weaving	listvefnað eða útvefnað
backstitch	afturstingur
basic binding systems	frumbindingar
beater	gaffal
bed curtains	rúmtjöld
bird's eye twill	hringavaðmál
binding	binding
braided bands	brugðin bönd / fléttuð bönd / snúin bönd
broken chevron twill	skekkt oddavaðmál
broken twill	skekkt vaðmál
butterfly	skilhönk
card (tablet weaving)	spjaldvefnaðar spjald
ceremonial hanging	víxluklæði
chair cover	sessuborð
chasuble	höklull
chevron twill	oddavaðmál
children's clothing	barnaföt
color combination	litasamsetning
color interplay	litasamspil
composition	myndbygging
computerized loom	tölvuvefstóll
counterbalance loom	trissuvefstóll
countermarch	gagnbinding
countermarch loom	gagnbindingarvefstóll
coverlet	rúmábreiða
crochet	hekl
cross weaving	krossvefnaður
cultural artifacts / national treasures	þjóðminjar
currency	gjaldmiðill
damask	damask
decorative art	skreytilist
domestic weaving	nytjavefnaði
double weave tvöfaldur	tvöfaldur vefnaður
double-faced weave	tvöfaldar bindingar
drawn thread work	holbeinsaumur
ecclesiastical items	kirkjugripir
ecclesiastical needlework	kirkjuleg útsaumsverk

English	Icelandic
ecclesiastical vestments	kirkjuskrúði
Egyptian tablet weaving	Egypskur spjaldvefnaður
embroidery	útsaumur
embroidery patterns	útsaumsmunstur
embroidery techniques	útsaumsgerð
embroidery yarn	útsaumsgarn
epic work	epískt verk
export product	útflutningsvara
felting	þæfing
fibers for weaving	vefjarefni
flat stitch	flatsaumur
flax hör	lín
floral stitch	blómstursaumur
floss weaving	flosvefnaður
free embroidery	frjáls útsaumur
geometry	geómetría
gobelin stitch	góbelínsaumur
gobelin tapestry	góbelínvefnaður
gobelin tapestry loom	góbelínvefstóll
ground weave	grunnbindingarnar
hat	húfa
heddle	hafalda / höföld
heddle bars	hafaldaskaft
heddle rod	vefskaft
historical craft	sögulegt handverk
horizontal	láréttur
Icelandic glit	Íslenskt glit
Icelandic goldwork	baldýring
Icelandic sagas	íslenskar fornsögur
industrial production	iðnaðarframleiðsla
insulating properties	einangrunareiginleikar
jack loom	tjakkvefstóll
Jacquard loom	Jacquard-vefstóll
knitting	prjón
knitting board	prjónastokkur
knitting book	prjónabók
knitting needles	prjónar
knitting pattern	prjónauppskrift
lace	blúnda
loom	vefstóll
loom weights	kljásteinar

English	Icelandic
loop stitch	lykkjuspor
metallic yarn	málmgarn
mittens	vettlingar
modernism	módernismi
monk's belt	salún
mural art	vegglistaverk
national costume	þjóðbúningur
needle binding	nálbragð
needle-binding	vattarsaumur
nun	klaustursystir
overshot	Austurbotnsdregill
palette	palletta
painter	málari
paten cloth	patínudúkur
pattern	munstur
pattern draft	vefnaðarmunstur
pattern weft	munsturband
pearl stitch	perlusaumur
perishable material	forgengilegt efni
pile weaving	flosvefnaður
plain weave	einskefta
polygonal squares	marghyrndir reitir
power loom	verksmiðjuvefstóll
Pre-Raphaelite	Forrafaelítar
profile draft	kaflamunstrum
recycled	endurnýting
reformation	siðaskiptin
rosepath	rósabandavefnaður
running stitch	beinn saumur
saddle blanket	söðuláklæði
satin	ormeldúkur / formeldúkur
secular embroidery	veraldlegur útsaumur
settlement period	landnám
shed	skil
shed rod	skilfjöl
shuttle	skytta
silk embroidery	silkiútsaum
spinning	spuni
spinning wheel	spunahjól
spindle	halasnælda
spring wool	vorull

English	Icelandic
status symbol	stöðutákn
stem stitch	steypilykkja
sweater	peysa
tablet weaving	spjaldvefnaður
tapestry	refill
tapestry loom	myndvefnaðarstóll
tapestry weaving	myndvefnaður
textile	textíll
textile art	textíllist
textile craft	textílhandverk
textile design	textílhönnun
textile designer	textílhönnuður
thermal tempering	varmatemprun
thread	þráður
trading goods	verslunarvara
twill	vaðmál
vertical	lóðréttur
wall hanging	refill
warp	uppistaða
warp beam	slöngurifur
weft	ívaf
weaving pattern	vefnaðarmunstur
weaving software	vefnaðarforrit
wool processing	tóvinna
wool fabric in plain weave	ullareinskefta

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