Excavations at an Icelandic Elite Site, Gilsbakki 2008

Preliminary archaeological investigations in 2008 documented the extent, complexity, contents, and preservation conditions of well-stratified deposits at Gilsbakki, an important Icelandic elite site. Gilsbakki was a chiefly residence during the Viking Age and early medieval periods and retained local prominence as an ecclesiastic center into the first decades of the 20th century. Coring indicates that undisturbed cultural deposits reach depths of 2.0-2.4 meters across an area of at least 1000 m^2 in the site's core. Two small exploratory trenches, each 1x 5 m, revealed complex sequences of alternating midden and structural layers dating from the 13th-20th centuries within the top 1.5 meters of this deposit, with at least a meter of unexplored deposits beneath.

More than 2,000 finds from these trenches documented household economies focused on sheep farming and engaged in international trade networks from at least the 14th century to the present. Changing frequencies of ceramics, glass, metals and even early plastics in Gilsbakki's Early Modern deposits (ca. 1500-1920) document this farm's engagement with the outside world before, during and after the Danish colonial trade monopoly of 1602-1787, while underlying deposits preserve sequences of construction, demolition and occupation throughout the medieval period.

Preservation conditions are remarkably good and textile fragments from 13th to 19th century deposits provide particularly valuable insights into domestic production, dress, and exchange from the medieval to modern periods.

Context	Trench 1	Trench 2
Context 11	0	1
Cont. 10	2	0
Cont. 8	7	0
Cont. 7	11	0
Cont. 02/03	4	2
Total	24	3

Number of textiles and textile related fragments found at Gilsbakki in 2008.

Preliminary Analysis of Textile Finds from Gilsbakki

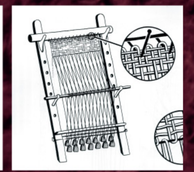
(Michèle Hayeur Smith)

Textiles are rare on archaeological sites; their preservation is dependent upon a sequence of particular environmental conditions. Overall, animal fibers preserve better than vegetable fibers, and at Gilsbakki all of the textiles are woolen.

Norse women generally used drop spindles for spinning wool and a vertical or warp-weighted loom for weaving. Warp threads were typically tightly Z-spun and single-plied to withstand the weight of the vertical loom. Weft threads were generally S-spun and single-plied. Although efforts were made to introduce the spinning wheel and horizontal loom into Iceland during the 18th century, neither innovation was rapidly accepted and yarn spun with a drop spindle was considered to produce superior yarn into the 19th century.

Icelandic woman using a drop spindle, the most common spindle used in Scandinavia, (ca. 1772).

Z-spun and S-spun thread.



Warp-weighted loom, commonly used in the Norse world.

Analysis of textiles

The number and quality of textile finds from Gilsbakki offer glimpses of the site's potential. The items recovered span a period of 700 years and document every step of textile production: raw wool and an iron wool carding comb fragment document the initial processing of wool; a lump of raw wool with partially spun threads attached is a product of drop spinning; woven fragments show a range of weaves including 2/1 and 2/2 twill weaves, tabby weave, and tablet weaving. Identifiable fragments from discarded textile objects document both production and consumption of finished products at the site. Elements of dress include a collar, a gusset, wrist bands, and sock fragments as well as other textile objects such as blankets, saddle furnishings, and saddle blankets.

Although textiles were recovered from both trenches, the majority came from Trench 1. The oldest dated sample (1300-1450 AD) at the site, however, was recovered from Context 11 in Trench 2. This is a very small fragment of an extremely fine and finely woven woolen tabby, bluish-green in color.

Oldest fragment from Trench 2, Context 11 (G2008-252)

- Z-spun warp, weft also looks Z-spun,1 ply.
- Weaving: tabby weave, very fine wool.
- 2.6 cm x 1.1 cm
- Dyes, unknown, although greenish in color with bluish undertones. Perhaps initially blue or purple, having taken on a greenish color as green dyes are poorly known from this period in Scandinavia.

Trench 1 textiles

Trench 1 produced the bulk of the textiles recovered in 2008, with the majority coming from Context 10 (ca. 1500-1600), Context 8 (ca. 1675-1750), and Context 7 (1750-1790). Homespun textiles from the lower strata were particularly well preserved and significantly extend the known corpus of preserved archaeological textiles from Iceland. A sample is examined here.

Gilsbakki fragment, possible collar (G2008-083)

Close up of Gilsbakki fragment (G2008-083)

D10594 from Herjolfnes, Greenland, 1350 AD

Trench 1, Context 10, ca. AD 1500-1600
Collar? (G2008-083)

- Spinning: S -spun weft with Z-spun, single-ply warp; wool.
- Weaving: 2/1 twill; over two/under one.
- Possible use: collar, slightly curved in shape, similar to one found at Herjolfnes, Greenland, no. D 10594.
- 25 cm long x 6cm wide
- Direct AMS date: 345±48 bp (AA83188), ca AD 1454-1642

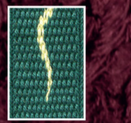
Gusset from Gilsbakki (G2008-074) and image from ca. 1668

Trench 1, Context 8, ca. AD 1675-1750
a. Gusset? (G2008-074)

- Spinning: Z-spun warp with probable S-spun weft; single-ply threads.
- Weaving: Twill 2/2 weave.
- Probably a gusset, with extreme felting due to wear under the arm.
- 43 cm long x 8.5 cm wide at widest point.

Close up of another 2/2 twill fragment (G2008-073) from Trench 1, Context 8. Possible saddle blanket.

Tablet-woven piped edging was often used on cuffs and the edges of woollen garments.



Contemporary example of tablet weaving (above), and of tablet weaving in the Norse style (below).

Close-up of tablet-woven edging. (G2008-074)

Tablet weaving bands? (G2008-074)

- Spinning: single-ply, Z-spun threads visible.
- Tablet weaving.
- Possibly trimmings/borders from garments, for wrists etc.
  a. (smaller): 7 cm x 1 cm
  b. (longer): 12.8 cm x 1.1 cm

Clump of raw wool with two spun threads visible on surface. (G2008-074)

- Spinning: S-spun
- Discarded spinning wool. Ethnographic and contemporary accounts suggest that clumps formed in the wool were often discarded or used as stuffing material for pillows, bedding etc.

Animal Fibers

The type of wool used in Iceland from earliest times to the present comes a breed of sheep known as the "European Vari-coloured Short tail" or "Northern Short-tail". These are the same sheep encountered in Greenland and indentified by Østergård as the raw material used for clothes in the medieval Norse cemetery at Herjolfnes, Greenland. This double-coated variety of sheep has a thick woolly undercoat and an outer coat of longer hair that is said to be a adaptation to the harsh climate. Their wool comes in a variety of natural colours: black, brown, roan, grey and white.

Dyes

Based on comparative material from Norse Greenland, the following materials were likely used in dyeing: blue and red were probably produced from woad (*Isatis tinctoria*) and madder (*Rubia tinctorum*), respectively. Both were used widely in the Norse world but would have been imported from Britain or mainland Europe. Brown dyes may have been obtained from tannins in bark, nuts, dead leaves, and peat and certain maroon browns could also be obtained from inorganic colorants such as iron.

Icelandic sheep, the Northern Short-tail variety.

Other Finds Related to Dress

In addition to textiles, the 2008 excavations recovered bone, copper alloy, and celluloid buttons, a vulcanite comb dating to the late 19th century and three shoe fragments. Two of the latter – from Trench 1, Context 10 (ca. 1675-1750), represent traditional Icelandic stitched and sole-less shoes. Another, also from Context 8, is a stitched and nailed sole fragment from an imported European leather shoe. A birch bark insole or patch still adhering to the inner surface of the sole perhaps attests to the rarity of this item and the care taken to extend its useful life.

Traditional Icelandic shoe, thought to have been used from the Viking Age to the early 20th century.

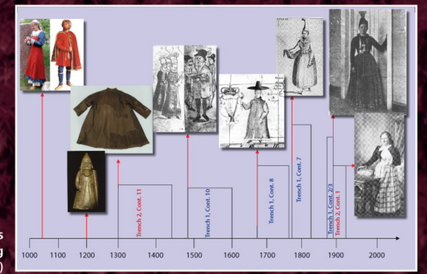
Trench 1, Context 8 (G2008-074b) Leather fragment from traditional shoe?

Trench 1, Context 8 (G2008-075a) European style shoe with welted sole and birch bark patch or in-sole.

So What Did People Wear at Gilsbakki?

The number and variety of textiles and textile fragments recovered from the extremely small area excavated in 2008 at Gilsbakki (< 5m^2) documents all stages in the process of textile production – from preparing wool to mending finished garments – and spans 700 years from the Early Medieval period to the early 20th century. These homespun textiles were used to produce clothing, bedding, blankets, saddle furnishings and more. Clothing styles of the periods encountered on this site represent local adaptations of general European medieval and post-medieval styles of dress, to which were added specifically Icelandic components such as the unique, curved and ornamental headdress referred to as *krókfaldur*.

However, Icelandic textiles were used not only to clothe the family but also in external trade. Icelandic homespun cloth ("*vaðmal*"), known for its excellent quality, was traded with Europe from the 10th century at least into the 17th. In August 1596, for example, a 60 tonne English ship engaged in the Icelandic trade docked at Yarmouth, England, carrying 640 yards of *vaðmal*, 240 *vaðmal* socks, 720 *vaðmal* mittens, and 18 *vaðmal* cassocks, all worth more than the fish that filled its hold. Given that the textiles from Trench 1, Context 10, date to this period, it is likely that the production and accumulation of woollen goods at interior farms like Gilsbakki would have played a valuable role in foreign exchange as well as meeting the household's needs.



Chronological sequence of dress practices in Iceland from the Viking Age to 1920 AD (right)

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