UBAS

University of Bergen Archaeological Series

Nordic Middle Ages – Artefacts, Landscapes and Society.
Essays in Honour of Ingvild Øye on her 70th Birthday

Irene Baug, Janicke Larsen and Sigrid Samset Mygland (Eds.)

UNIVERSITY OF BERGEN

8
2015

UBAS – University of Bergen Archaeological Series 8

University of Bergen,
Faculty of Humanities,
Department of Archaeology, History, Cultural Studies and Religion
P.O. Box 7800
NO-5020 Bergen
NORWAY

ISBN: 978-82-90273-89-2 UBAS 8
UBAS: ISSN 089-6058

Editors of this book
Irene Baug, Janicke Larsen and Sigrid Samset Mygland

Editors of the series UBAS
Nils Anfinset
Knut Andreas Bergsvik
Søren Diinhoff
Alf Tore Hommedal

Layout
Christian Bakke, Communication division, University of Bergen
Cover: Arkikon, www.arkikon.no

Print
07 Media as
Peter Møllers vei 8
Postboks 178 Økern
0509 Oslo

Paper: 130 g Galerie Art Silk H
Typography: Adobe Garamond Pro and Myriad Pro

Ragnheiður Traustadóttir

Spindle Whorls from Urriðakot

Spindle whorls are some of the most common textile-production equipment found in archaeological research in Iceland as well as in the neighbouring countries, found in graves, pit-houses and ruins of farm houses. During archaeological research at Urriðakot in Garðabær, just south of the capital Reykjavík, three spindle whorls were found: a fragment from the Viking era, and two from medieval times. Of the latter two, one was complete, although worn, and had runes inscribed, whereas the other was more or less complete with decor. This article centres on the two medieval ones, also looking briefly into spindle whorls from other Icelandic contexts, with special emphasis on whorls with runic inscriptions.

The archaeological structures at Urriðakot have been interpreted as remains of shieling practice. Shielings were seasonally used dwellings for specialised use of resources and an extension of the farms themselves. Very little research about shielings has been done in Iceland and little is known of textile-production in such contexts. There were no indications of weaving in the shielings at Urriðakot. The spindle whorls at Urriðakot, however, indicate that spinning was done at shielings as well as at farm houses.

Dwelling and activity at the shielings are themselves interesting for research and discussion, especially since this is a field that has not been investigated in a strict archaeological sense in Iceland. Yet, in the following, I will focus on the spindle whorls, their shape, size and decorations or inscription, in comparison to spindle whorls found in other archaeological contexts, and analyse their origin and age in order to see if they could shed a greater light on the context in which they were discovered and possible connection to nearby farms.

Research at Urriðakot

Archaeological surveying was done in the land of Urriðakot in 1995 as a part of the planning process for the area which was intended to become a residential area (Traustadóttir & Knútsdóttir Tetzschner 2005). The oldest written record of habitation at Urriðakot is from the 16th century (DI I, 1857). A pre-survey of the area in 2007 brought to light remains in two locations approximately 20 metres apart, one from the 10th and 11th centuries and the other from the 13th and 14th centuries (Traustadóttir et al. 2008). The site was excavated in 2010 and 2011. The results indicate that from the 10th to the 14th centuries, it was a shieling. In the beginning, it was used for grazing cows and dairy production but in the early 13th century, it changed into a shieling used for sheep (Fig. 1). During the excavation, a small longhouse, a byre, a working shed, a kitchen, a pantry, and a cooking pit came to light from the 10th to 12th centuries, and also the remnants of a dwelling, pantries and a kitchen from the medieval times or just after 1226, dated according to tephra layers. Permanent settlement

was not documented. Instead, thin layers of windblown soil observed between the cultural layers indicate seasonal use. Of special interest is how large the older shieling buildings appear. Even though the shieling was primarily used for keeping cow and sheep, it is likely that also pigs grazed in the woodland. This is evident in the local place-names Svínahlíð (swine slope) and Svínahraun (swine lava-field). In addition, it is likely that peat was cut in the area and that the woodland was used for making charcoal and gathering of twigs. In addition, trout has been caught in Urriðavatn (trout lake).

Figure 1. *Overview of the excavation area in Urriðakot. To the left a small longhouse, a byre and working shed are clear with all the postholes visible. To the right a smaller structure of a dwelling, pantries and a kitchen from the medieval times can be seen. (Photo: Alta ehf - Árni Geirsson)*

The archaeological work at Urriðakot opens several possibilities for further research, mainly in connection with old shieling activities and their development well into medieval times. As already indicated, the activities were not limited to animals. Wool for various purposes may have been spun at Urriðakot, such as yarn for weaving clothes and material for fishing nets.

Shieling research in Iceland

What has been regarded as basic published material about shielings and their function in Iceland has been an essay by ethnologist Egon Hitzler (1979). This was primarily based on written sources and was intended to be a summary of knowledge about shieling farming in Iceland. Hitzler's conclusion was that Icelandic shielings were comparable to Norwegian shielings and that they included a dwelling, a pantry and a kitchen.

The archaeologist Guðrún Sveinbjarnardóttir has studied deserted farms and shielings at Eyjafjöll community, in Berufjörður and the valleys in Skagafjörður, Austurdalur and Vesturdalur (Sveinbjarnardóttir 1992). According to Guðrún Sveinbjarnardóttir, the distance between the farms and the shielings was generally short, and there were one or two buildings at the shielings, divided into three or four spaces. The layouts were variable as well as the height above sea level. The oldest shielings were usually found in higher areas.

In the past two decades, archaeologist Ómar Smári Ármannsson has registered a total of 310 shielings in Reykjanes (Ármannsson 2007; www.ferlir.is). Their building structure is similar at all times, i.e. the space inside is divided into three parts, relatively simple and rather small,

one being a kitchen, separate from the others. Around most of the shielings, there are folds for animals, pens, shelters, night folds and other necessary parts for the shieling farming. Close to most of the places, water is available in the form of a watering place, brooks, lakes or wells, since they are necessary for the choice of location.

During the last decade or so, the interest of archaeologists in the subject has increased. Apart from Urriðakot, a shieling in sheep farming was fully excavated at Pálstóftir, 350 m above sea level, close to Kárahnjúkar in the east. The remnants were dated AD 950-1000 (Lucas 2008). The excavation showed that in addition to sheep farming, many types of activities took place there, for instance, bird catching and fine work with metal. Investigation ditches have also been dug in alleged ruins of shielings in Reykholtsdalur (Sveinbjarnardóttir et al. 2011, 162-175) and at Fornasel in Hafnarfjörður (Einarsson 2001). Both seem to confirm ideas about seasonal residence.

Dwellings at Urriðakot

The ruins of the modern farm at Urriðakot are positioned in a slight slope west of Urriðakotsholt (ridge) above the middle of a field north east of the lake Urriðavatn. The excavated area where the shieling was found was below and south of the farm mound. The placing of the shieling is typical for the Reykjanes peninsula, close to a lake and sheltered from the eastern wind and the main rain direction (Ármannsson 2007).

The farm Urriðakot is mentioned for the first time in a trading paper from 1563, a document used to declare ownership of farms, as one of nineteen farmlands that the king gets in trading from the Episcopal See at Skálholt (DI I, 1857). Archaeological research shows that the farm has been operating from the 10th century, even though written documents do not mention it, and was in use until it became desolate around 1960. The more or less deteriorated houses continued to be used for stock until they burned down in 1967 (Traustadóttir 2005). As mentioned, a longhouse, a byre, a working house and a cooking pit were registered in the research area, and the buildings were dated as from the earlier period, i.e. from the 10th to the 12th century. The longhouse was small, only 14 m in length, and had no fireplace. The buildings were only used occasionally, as can be expected because of limited use in time and the seasonal short stays. No evidence of more than one building-phase was seen (Traustadóttir 2010).

From the later period, just after 1226, remnants of living quarters, pantries and kitchens were found. Also these buildings were used with some seasonal breaks, but the building periods were separated and the houses were enlarged or made smaller according to necessities each time.

The buildings were dated on the basis of tephra and the relative strata, i.e. a settlement layer that fell in 871, a medieval one in 1226 and the one connected with Katla in ~1500 (Traustadóttir et al. 2008). The layers of tephra were clear and framed distinctly the period of the building and the use of the houses. For a more accurate conclusion of when the shieling action started at the place, a C14 analysis of bones and coal is intended.

Most of the artefacts found during the excavation at Urriðakot were impossible to date any closer than between the 10th and the 14th centuries by typological comparison. This, however, fits perfectly with the time frame of tephra layers. In all, 156 artefacts were found at the site.

Apart from the previously mentioned spindle whorls, one can mention pieces of a pot made of soapstone, whetstones, baking plates, three glass beads, and a ring of silver, knives, a copper thimble and many others. No organic remains were found.

Spindle Whorls

Spindle whorls were used to spin thread. The spindle was made of wood and was long and slim and thinner at the lower end. The whorl was variously of stone, lead, bone or wood. It was round, with a flat bottom and a convex upper side, and had a hole in the middle into which the upper end of the spindle was attached. The method of spinning thread was done so that the fibres were coiled around the spindle. The spindle was then rolled along the thigh of the person working with it, which would produce a wound thread from the fibres (Guðjónsson 1992, 12; Øye 1988, 32). These spinning tools are often found in archaeological excavations, and must have been commonly used. The wooden spindles, on the other hand, are rarely seen, as the material is not as durable as that of the whorls.

In her study of textile-production equipment from Bryggen in Bergen and the Viking-age town Kaupang in Vestfold county in Norway, archaeologist Ingvild Øye has made a system of grading spindle whorls, classifying them based on shape (Øye 1988, 38; 2011, 342). It is a known fact that spinning whorls weighing 25-35 grams would have been used to spin wool, and those over 50 grams to twine strings together (Øye 2011, 339). The diameter of the hole in the middle is most likely to distinguish one whorl from another (Rogers 1997, 1731). The spindle whorls from 9th to 11th centuries in Britain and from the medieval periods seem to be fairly standardised, with the hole in the middle measuring 9-11 mm in diameter, i.e. larger than earlier (Rogers 1997, 1731 58-89; Øye 1988, 35-36). Experiments show that the weight of the whorls compared to the diameter decides the product, i.e. whether the thread will be fine or coarse or whether it will be tight or loosely spun (Øye 2011, 341-342). A small whorl turns faster than a big one and will produce a tight and strong thread. A thicker string will be spun with slower turning. The heavier the weight of the spindle whorl, the thicker thread it will produce (Øye 1988, 32).

There were very few decorated spindle whorls found from the Viking period at Kaupang according to Øye (2011, 345) and about 17 per cent of the ones found at Bryggen were decorated, dating from the 11th and into the 14th century (Øye 1988, 42). In this respect, it is especially interesting that two of the three spinning whorls found at Urriðakot, both from the 12th to the 13th century, were decorated.

Spindle whorls from Urriðakot

Two of the three spindle whorls, which are from the 12th to the 13th century, that were found during the excavation at Urriðakot, nos. 2010-22-2 and 2010-22-4, were more or less complete and made from palagonite, an Icelandic stone. It is likely that the palagonite was retrieved from Esja, a mountain in Kjalarnes within the boundaries of Reykjavík, where there is transformed palagonite in various colours. In future research, it would thus be interesting to define the origin of the stone. The third whorl, no. 2011-26-100, was broken. It was made of imported soapstone, presumably from Norway. Soapstone does not occur naturally in Iceland but soapstone artefacts are relatively common in excavations from the Viking and Norse period (Vésteinsson 2000, 169).

Figure 2. *Spindle whorl made of soapstone [2011-26-100].*

Spindle whorl no. 2011-26-100, which is from the 10th to the 11th century, was most likely convex with a flat base of type A or B. It weighed 3.5 gr, and its longest part was 2.9 cm and the hole was approximately 13 mm in diameter. This piece was found in disturbed turf. The soapstone whorl seems to be in all aspects typical for imported whorls dated from the settlement of Iceland to medieval times (Fig. 2).

Spindle whorl no. 2010-22-4 is decorated, almost undamaged, and made from Icelandic greenish palagonite. It is convex with a flat base of type A, weighs 46 grams, and is 4.9 cm in diameter. The hole is 11 mm in diameter. It was found in a floor layer up against remnants of a wall. The decoration at the top looks like a flower with six petals stretching down the body of the spindle whorl. There are spots in slits where the petals split from each other, six in all, and two collars around the hole in the middle, one outside the other. Between the circles there are small squares and triangles, a total of 16. A small piece has broken off the edge of the spindle whorl so it has originally been a little heavier than the 46 grams. On the bottom of the whorl, on the flat side, three small holes have been made; one on the side where the edge has broken. The holes in the whorl puzzle, as their purpose is not obvious. Is it possible that something was to be placed into the holes to make the spindle whorl heavier, or were the holes made to make the whorl lighter? Further research is necessary to answer these questions. However, it is obvious that the spindle whorl has not served its original purpose after it was damaged (Figs. 3 and 4).

Figure 3. *Spindle whorl with decoration [2010-22-4].*

Figure 4. *The backside of the decorated spindle whorl with the holes [2010-22-4].*

Spindle whorl no. 2010-22-2 has runes, is undamaged and made of brownish Icelandic palagonite, but with a greenish effect. It is convex with a flat base of type A, weighs 90 grams, has a diameter of 6 cm, and a hole of 11 mm in diameter. The spindle whorl was found by the ruins of a wall or a sitting bench in the pantry. The whorl is smooth and has runes carved into it. They are faint, which indicates that the spindle was used for a long time. The runes are carved on the bottom side, i.e. the flat side (Fig. 5).

Figure 5. *Spindle whorl with runic inscription [2010-22-2].*

Þórgunnur Snædal, expert in runes, describes them thus:

> *Remnants of runes are carved on the flat side. Two f-runes, one mirrored, are very clear, they are equally high and the ring is wide or 2,2 cm. To the left of the mirrored f-rune are two lines which bend towards each other at the hole and hence it cannot be denied that they are the remnants of a u-rune. To the left of these lines is one more but the lower (upper?) half of it is worn off. From this line a short line is tilted down to the right. This could be the remnants of an n-rune. In addition it is possible to distinguish parts of several runes, but a discernable leg stands opposite the two f-runes. No remains of what definitely could be described as a knot are visible. After that two legs can be seen and possibly more towards the right side f-rune. It seems to me that originally a continuous row of runes was carved on the whorl. It is possible that more could be seen in a microscope but in my opinion it is not possible to read with certainty further runes. Since so few runes are preserved it is not possible to state what type of carving it has been, but it is most likely that the name of the owner was carved and/or the runic alphabet. The two f-runes could also be the owner's initials (Snædal 2011, 176).*

Since this spindle whorl was not damaged and was still usable, the owner must have lost it rather than thrown it away. Possibly, it fell behind a bench and was lost. The pantry where it was found was built just after the tephra fall in 1226. The whorl could, however, have been older and it is not impossible that it dates to the 12th century.

The weight of the two spindle whorls is interesting. One is 46 grams and the other 90 grams. The first one is rather heavy, compared to whorls from Bryggen, Kaupang or Viking age York (Øye 1988, 38; Rogers 1997, 1731; Øye 2011, 342). The latter one is exceptional since no

spindle whorl from Kaupang or York is as heavy, and of the 162 whorls made of stone from Bryggen, only eight weigh more than 50 grams (Øye 1988, 38; Rogers 1997, 1731; Øye 2011, 342). The weight of the palagonite ones indicates that they were used to spin together strings or to spin a thick thread. The diameter of the holes in the whorls conforms to the comparative collections from Bryggen and Kaupang.

The decoration on the spindle whorl no. 2010-22-4 from Urriðakot is similar to decorations on two spindle whorls from the Viking age found in Coppergate, York (Rogers 1997), except that there is more decoration and the craftsmanship is more skilled then in the older British whorl. Judging from the collection of finds, it can be assumed that Urriðakot was during the earlier phase shieling for well-off people. Among those artefacts were a silver ring, glass beads and a bronze thimble (Traustadóttir 2010). Hence, it is possible that decorated spindle whorls are more likely to be expected in such places than in poorer farms. No loom weights were found at Urriðakot and no other evidence of weaving. It can only be asserted that threads were spun in the shieling and then used for weaving elsewhere, e.g. home at the farm (Fig. 6).

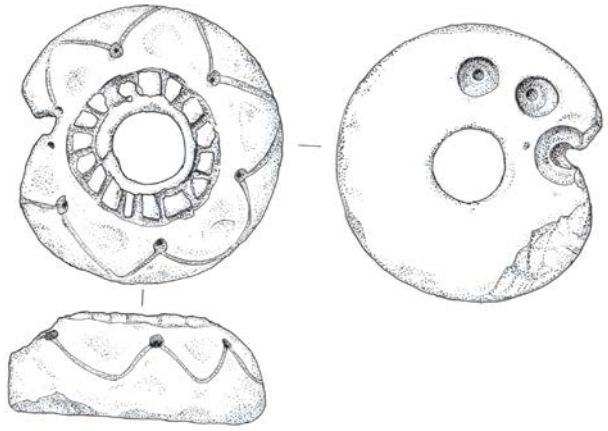

Figure 6. *Spindle whorl with decoration. (Drawing: Eavan O'Dochartaigh)*

The excavation at Urriðakot is the first completed excavation of a shieling that extends from the 10th century to the medieval period in Iceland. Therefore, there is little research available to compare with and a lot of new questions have emerged. It would be very interesting to excavate more shielings from the same period and compare the activities and use of the shielings. The closest contemporary farm which has been excavated is Hofsstaðir in Garðabær, about 3 km north of Urriðakot. There is a strong argument that the shieling at Urriðakot belonged to Hofsstaðir. Hofsstaðir was a wealthy farmstead and findings at Urriðakot support that it belonged to a high status farm. The shielings location is also geographically likely to have connections to Hofsstaðir. Old paths show a connection between the sites. This research is ongoing.

Spindle whorls in Iceland

No complete assessments have been made about spindle whorls found in Iceland, but archaeologist Kristján Eldjárn has discussed spindle whorls made from soapstone (Eldjárn 1951) and the archaeologist Guðrún Alda Gísladóttir treated spindle whorls in her master thesis (Gísladóttir 2004). Other information is most likely to be found in reports of excavations.

In Kristján Eldjárn's compilation, exact age analysis is often non-existent since many of the spindle whorls were found by chance due to soil erosion or as a pure coincidence. Kristján Eldjárn states that they are all from the era of settlement in Iceland and well into the Middle Ages. In all, he discussed soapstone spindle whorls from 27 sites in the country. In eight places, more than one was found, the most numerous were six discovered together in Gamla-Akbraut in Rangárvallarsýsla. They are all similar, flat base and convex on top. The largest has a diameter of 65 mm and is 28 mm thick, whereas the smallest has a diameter of 24 mm and is 8 mm thick. A few are flat on both sides or have the shape of quernstones. In most of them, the hole is slightly wider at the bottom than at top. Generally speaking, they have no decorations and are rather poor, but there are traces of decoration on some. On two, a circle is etched around the hole, one has a bridge across the hole, one is decorated with concentric circles, each outside the next one, and finally, one has irregular lines and dots on the top. Letters or initials are not registered (Eldjárn 1951, 54).

Guðrún Alda Gísladóttir studied 28 spindle whorls from the valley Þjórsádalur, including the ones that Eldjárn had discussed. All were found in excavations of ruins or on the top of ruins, in older as well as in younger remains of buildings. Most of them are made of stone, except one that was made of lead, and one of unknown raw material; nine of soapstone, the rest of soft red sandstone. Of the 26 whorls which are undoubtedly made of stone, two are decorated with crossing lines with irregular space between them on the convex side (Gísladóttir 2004, 141). Information about spindle whorls that have been found in Iceland is limited in written documents. Generally, their weight is not mentioned nor their size, such as the diameter of the spindle whorls or the hole in the middle. Hence an interpretation becomes difficult as well as all comparisons unless a more detailed research than rescue excavations is performed.

Together with the archaeologist Ómar Smári Ármannsson, I have studied spindle whorls found in excavations in Stór-Reykjavík, the capital and the communities around it. Those made of Icelandic stone seem to be of the same type of palagonite. The same applies to the two decorated spindle whorls from Urriðakot. The theory that the raw material comes from Esja, as mentioned above, needs to be further investigated but is supported by both the short distance to the place and also place names. The name of the mountain, Esja (Kvaran 2000), and the name of the farm Kléberg (soapstone), which is by the mountain, are interesting since both indicate stone carving. Ómar Smári Ármannsson experimented by carving spindle whorls from a stone picked up in a gully above Kléberg. It was soft and expedient for the work. Most of the spindle whorls from the capital area date from the settlement to the 12th or 13th century. Among those are the 19 spindle whorls found during archaeological excavation in Suðurgata, Reykjavík. All except one were made of soapstone. Nine were found in a longhouse from the first half of the 10th century (Nordahl 1998). Four spindle whorls were found at Hofsstaðir in Garðabær, of which two were made of soapstone and two of Icelandic palagonite, both from the younger building period of the farm, the 11th-12th centuries (Traustadóttir unpublished). Eight spindle whorls were found at Bessastaðir in Álftanes, of

Figure 7. *Experimented spindle whorls from a stone picked up in a gully above Kléberg.*

which six were made of soapstone, one of greenish palagonite and one of wood. The latter was younger or from after the medieval times. Not all circumstances concerning the finding at Bessastaðir are known but most of the whorls are from the 10th to the 12th centuries (Guðmundur Ólafsson, archaeologist, personal information, 2013). Six spindle whorls were found at Hrísbrú in Mosfellsdalur, of which four were made of soapstone and two of greenish palagonite. These are from the second half of the 10th century and the 11th century (Hansen et al. 2014). At the parliamentary spot in the centre of Reykjavík, nine spindle whorls were found, dating from the 11th and into the 14th centuries. Seven of these are made of Icelandic stone (Garðarsdóttir 2010; 2013).

Spindle whorls have also been found in four pagan graves, at Austarihóll in Skagafjarðarsýsla, Hrísar in Dalasýsla, Daðastaðir in Norður-Þingeyjarsýsla, and at Ketilstaðir in Norður-Múlasýsla. The whorl from Austarihóll is made of lead, is nicely circular, and with a flat base and a convex top. The one from Hrísar is also made of lead, and shaped like a half bowl. At the pagan grave at Daðastaðir, two soapstone ones were found. The spindle whorl found at Ketilstaðir is made of grey soapstone (Eldjárn 2000, 399-400).

Spindle whorls with decorations or runes

Decorated spindle whorls from medieval times or older are rare in Iceland. The author knows about seven besides the one found at Urriðakot, all of them less decorated. Often, they are decorated with circles or simple lines. One such whorl was found at Hofsstaðir in Garðabær. Two of the spindle whorls are made from soapstone, the others from Icelandic stone.

Øye mentions that spindle whorls from pagan graves in Norway are more often decorated than those found elsewhere (Øye 2011, 345). This is different in Iceland. No decorated

spindle whorls have been found in pagan graves. Burials of women are indeed only half as many as those of men (Eldjárn 2000, 595) but this is not an explanation since in Norway the pagan female burials are also fewer in number (Stylegard 2010, 71).

Artefacts with runes are not common archaeological finds in Iceland. Eleven such have been found, all from medieval times, five are spindle whorls. The spindle whorls with runic letters are all made of stone, probably most made of palagonite, and have been dated from the 11th to the 14th century. Besides the spindle whorl from Urriðakot, two were found in the vicinity of Reykjavík, whereas the others come from the south of the country (Snædal 2011, 167-185).

The oldest spindle whorl with runes was found at the parliamentary area in 2009. It is made of reddish palagonite and the inscription reads *uilburk:amik,* translated into Vilborg á mig / Vilborg owns me. It has been dated AD 871-1226 from the stratum where it was found, but Þórgunnur Snædal states that it is hardly older than from the 11th century (Snædal 2011, 169-170). Another spindle whorl with runes from the parliamentary area is made of greenish palagonite and has in view of the stratum been dated to AD 1226-1500. The runes read *…un a mic* , meaning …un(n) á mig / un(n) owns me, and according to Þórgunnur Snædal, it could be from the first half of the 13th century or possibly from late 12th century (Snædal 2011, 173). The first letters of the name that was originally on the whorl are not preserved but Þórgunnur Snædal thinks that the name could have been Guðrún, Þórunn or some other of the many women's names that end in -rún or -unn (Snædal 2011, 181).

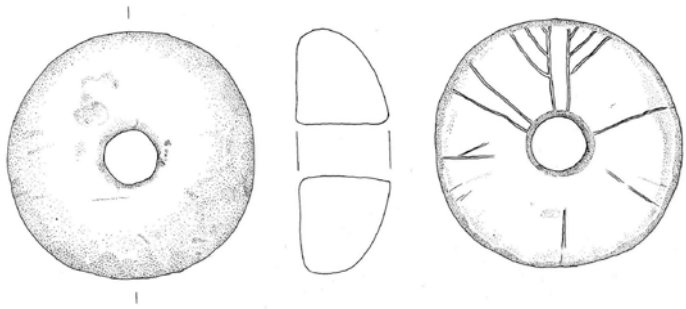

Figure 8. *Spindle whorl with runic inscription. (Drawing: Eavan O'Dochartaigh)*

A spindle whorl made of Icelandic sandstone was found in 1880 near the farm Hruni in Árnessýsla. It has not been weighed but was measured as 5.3 cm in diameter and the hole is 16 mm at the top and 18 mm underneath. The dating is based on the runes saying þora *: a mig*, meaning Þóra á mig / Þóra owns me, with a g-rune. Þórgunnur indicates that it is from the latter half of the 13th century or possibly from the 14th. The pronunciation indication *mig* instead of *mik* has hardly been common before the 14th century although it occurs in the 13th century (Snædal 2003, 36; 2011, 181).

A spindle whorl made from Icelandic sandstone was found at Stóramörk in Rangárvallasýsla during the summer of 1926 and was delivered to the National Museum in the following year. The circumstances of the find are unknown. The whorl has not been weighed but its diameter

is 5.5 cm, the hole is 14 mm on the top and 11 cm at the bottom. On the spindle whorl, the letters from the 16 letter alphabet are carved (Snædal 2003, 38; 2011, 181). The carving is: *mariafuþorkhniastbmly*. The alphabet was carved on different types of objects, often with the names of saints or prayers as protection against evil spirits or beings. María is undoubtedly the name of Virgin Mary as it was not used as a first name before the Reformation. Snædal concludes from the runes that the spindle whorl is not younger than from the middle of the 13th century (Snædal 2003, 38-39).

Three of the spindle whorls with runes, i.e. the one from Urriðakot and the two with the names Una and María, seem to be from similar time, the first half of the 13th century. It should also be kept in mind that the fourth one, Vilborg's spindle whorl, is thought to be at maximum a hundred years older, but it was found in a stratum that ends at 1226. The youngest belonged to Þóra and it is thought to be made during the latter half of the 13th century at the earliest. The spindle whorls can be dated to a period of at least half a century (AD 1200-1250), although the maximum span of time period could be two centuries (AD 1100-1300).

Spindle whorls with runic inscriptions make up a rather large part of the whorls which can be stated as being from the 12th and 13th centuries. It is not sensible to make great deductions from this since information to analyse the age of the whorls is missing; still, it indicates growing interest in the 12th century to mark their personal property. It is undoubtedly a part of the spindle whorls marked for Una, Vilborg and Þóra, but less likely for the one marked as María's property, as stated above, and only for the whorl from Urriðakot if the runes were from the name or initials of the owner.

It is interesting that all the spindle whorls with runic inscriptions were found on or close to large farms except the one from Urriðakot which comes from a shieling, but probably belonging to a large farm. Perhaps this indicates that this kind of an inscription is connected to well-off farmers rather than poor ones. It is therefore reasonable to assume that Urriðakot was a shieling for a prosperous farm.

Conclusion

Spindle whorls in Iceland are generally not different from spindle whorls in other countries around the North-Atlantic from the Viking age and medieval times. In earlier times, they were made of soapstone probably imported from Norway, but during the 11th century, native production seems to have expanded. The three spindle whorls found at Urriðakot fit this pattern, the oldest was made of soapstone and the two younger ones were made of Icelandic stone. Most of the spindle whorls with runes are from medieval times and are all made from Icelandic stone.

A theory has here been put forward, stating that the two younger spindle whorls from Urriðakot were carved in palagonite from mount Esja. It is also possible that this was the case for other whorls from the Reykjavík area, including those from Hofsstaðir in Garðabær. It is possible that the shieling Urriðakot was related to that particular farm. It would thus be interesting to analyse the origin of the stone in spindle whorls made in Iceland.

Decorated spindle whorls were an exception to the rule and spindle whorls with runes were generally connected to large farms. In addition, the spindle whorls at Urriðakot have evidently been regarded as attractive properties. The runic decorations indicate that this was a good reason for marking them to the owner. This idea seems to start to grow around 1200.

Possibly, the same person decorated both the Icelandic spindle whorls from Urriðakot. The craftsmanship is good on both of these. Not everybody could carve runes nor the art work which is seen in the flowers on one of them. Even though the flowers remind one of decorations on much older spindle whorls from Britain, this seems to be a total coincidence, especially when one has in mind that the form of the whorl does not give a great chance for diverse lines in the decorations.

Spindle whorl weight in the context of size has a significant role, indicating whether the string will be tight or loose, and whether it will be thick or fine. As this paper has shown, information about spindle whorls found in Iceland is far from satisfactory, which makes interpretation and comparisons more difficult. More studies are needed in the years to come.

References

Ármannsson, Ó. 2007. Sel og selstöður á Reykjanesskaganum vestan Esju. Heimildir, fjöldi, gerð og aldur. Unpublished BA thesis, Háskóli Íslands.

DI=*Diplomatarium Islandicum* (Íslenzkt fornbréfasafn), sem hefir inni að halda bréf og gjörninga, dóma og máldaga og aðrar skrár, er snerta Ísland eða íslenzka menn, 1933–1939. Þrettánda bindi 1555-1562. Hið íslenska bókmenntafélag, Kaupmannahöfn og Reykjavík.

Einarsson, B. F. 2001. *Fornasel. Prufuholugröftur í seljarústir suður af Straumsvík.* Fornleifafræðistofan, Reykjavík.

Eldjárn, K. 1951. Kléberg á Íslandi. *Árbók Hins íslenzka fornleifafélags*, 1940-50, 41-62. Hið íslenzka fornleifafélag, Reykjavík.

Eldjárn, K. 2000. *Kuml og haugfé* úr *heiðnum sið á* Íslandi*,* 2.ed. Friðriksson, A. (Ed.) Mál og menning, Reykjavík.

Garðarsdóttir, V. 2010. *Alþingisreiturinn 2008-2010.* Reykjavík.

Garðarsdóttir, V. 2013. *Alþingisreiturinn 2012*. Reykjavík.

Gísladóttir, G. A. 2004. Gripir úr Þjórsárdal. Reykjavík: M.A. ritgerð í fornleifafræði við Háskóla Íslands. Unpublished master thesis, Háskóli Íslands.

Guðjónsson, E. E. 1992. Um rokka, einkum með tilliti til skotrokka. *Árbók hins íslenzka fornleifafélags* 1991, 11-53. Hið íslenzka fornleifafélag, Reykjavík.

Hansen, S. J., Zori, D. & Byock, J. 2014. Artefacts from the Viking Age Longhouse at Hrisbrú. In Zori, D. & Byock. J. (Ed.) *Viking Archaelogy in Iceland. Mosfell Archaeological Project.* Turnhout Brepols Publishers.

Hitzler, E. 1979. *Sel - Untersuchungen zur Geschichte des isländischen Sennwesens seit der Landnamezeit.* Universitetsforlaget, Oslo.

Kvaran, G. "Hvað þýðir nafnið Esja?". *Vísindavefurinn* 7.3.2000. Retrieved from: http://visindavefur.is/?id=190 (accessed January 2014).

Lucas, G. M. 2008. Pálstóftir: A Viking Age Shieling in Iceland. *Norwegian Archaeological Review*, 41(1), 85-100.

Nordal. E. 1998. *Reykjavík from the archaeological point of view*. Aun12. Societas Arcaelogica Upsaliensis, Uppsala.

Rogers, P. W. 1997. Textile production at 16-22 Coppergate. In Addyman, P. V. (Ed.) *The archaeology of York 17: The small finds.,* Published for the York Archaeological Trust by the Council for British Archaeology. INST ARCH DAA 410 Y.6 Series YOR 17/11

Snædal, Þ. 2003. Rúnaristur á Íslandi. *Árbók Hins íslenzka fornleifafélags*. 2001-2002, 5-68. Hið íslenzka fornleifafélag, Reykjavík.
Snædal, Þ. 2011. Rúnum ristum gripir frá Alþingisreitnum og Urriðakoti. *Árbók Hins íslenzka fornleifafélags,* 166-185. Hið íslenzka fornleifafélag, Reykjavík.
Stylegar, F. A. 2010. Hvorfor er det færre kvinne- enn mannsgraver fra vikingtiden i Norge? *Primitive tider,* 12. årgang, 71-80.
Sveinbjarnardóttir, G. 1992. *Farm Abandonment in Medieval and Post-Medieval Iceland: An Interdisciplinary Study.* Oxbow Books, Oxford.
Sveinbjarnardóttir, G., Dahle, K., Erlendsson, E., Gísladóttir, G. & Vick, K. 2011. The Reykholt Shieling project: Some preliminary results. In Sigmundsson, S. (Ed.) *Viking Settlements & Viking Society*. Papers from the proceedings of the sixteenth Viking congress, 162-175. Hið íslenzka fornleifafélag and University of Iceland press, Reykjavík.
Traustadóttir, R. & Tetzschner. R. K. 2005. *Fornleifaskráning vegna deiliskipulags á Urriðaholti í Garðabær. Rannsóknarskýrslur.* Byggðasafn Skagfirðinga, Sauðárkrókur.
Traustadóttir, R., Sigurgeirsson, M. og Hansen, S. J. 2008. *Forkönnun á Urriðakoti.* Antikva ehf., Garðabær.
Traustadóttir, R. 2010. *Urriðakot. Fornleifarannsókn 2010. Framvinduskýrsla.* Antikva ehf., Garðabæ.
Traustadóttir, R. Hofsstaðir í Garðabæ. Unpublished report.
Vésteinsson, O. 2000. The archeology of Landnám: Early Settlement in Iceland. In Fitzhugh, W. F. & Ward, E. I. (Eds.) *Vikings: The North Atlantic Saga*, 164-174. Smithsonian University Press, Washington and London.
Øye, I. 1988. *Textile equipment and its working environment, Bryggen in Bergen, c 1150-1500.* The Bryggen papers, Main Series, Vol. 2. Universitetsforlaget AS, Oslo.
Øye, I. 2011. Textile-production Equipment. In Skre, D. (Ed.) *Things from the town. Artefacts and Inhabitants in Viking-age Kaupang*. Kaupang Excavation Project. Publication Series, Vol 3. Norske Oldfunn XXIV, 339-370. Aarhus University Press, Aarhus.