

# UBAS



University of Bergen Archaeological Series

## **Soapstone in the North Quarries, Products and People 7000 BC – AD 1700**

Gitte Hansen and Per Storemyr (eds)



UNIVERSITETET I BERGEN

9  
2017



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**Quarries, Products and People**  
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UBAS – University of Bergen Archaeological Series 9

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NORWAY

ISBN: 978-82-90273-90-8 UBAS 9

UBAS: ISSN 0809-6058

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Cover: Arkikon, [www.arkikon.no](http://www.arkikon.no)

### **Print**

07 Media as

Peter Møllers vei 8

Postboks 178 Økern

0509 Oslo

Paper: 100 g Arctic volume white

Typography: Adobe Garamond Pro and Myriad Pro

# Preface

This book has been a long time in the making. It is an outcome of the five Norwegian University Museums' joint research programme *Forskning i Felleskap* (FIF, 2010–2015), supported by the Research Council of Norway. FIF kindly facilitated a number of workshops and meetings between archaeologists, geologists and craftspeople, all with a common interest in premodern soapstone quarrying and use. The result is the chapters of this book, which are based on studies carried out over the last two decades and, for the most part, are published scientifically for the first time. We very much thank the authors for participating in this venture. We also thank several colleagues – archaeologists, geoscientists and craftspeople – that assisted the editors in peer-reviewing the chapters: Irene Baug, Birgitta Berglund, Laura Bunse, Poul Baltzer Heide, Richard Jones, Tor Grenne, Torbjørn Løland, Therese Nasset, Astrid J. Nyland, Lars Pilø, Kevin Smith, Lars F. Stenvik, Frans Arne Stylegard and Stephen Wickler; we are very grateful for the job you have done. Not least, thanks go to Tromsø University Museum, NTNU University Museum (Trondheim) and the University Museum of Bergen for their economic support in publishing the book.

Bergen/Hyllestad, Spring 2017

Gitte Hansen

Per Storemyr





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# Slipsteinberget Soapstone Vessel Quarry. Home Production or Professional Craft?

*A case study of the large Slipsteinsberget soapstone quarry at Sparbu in Nord-Trøndelag County (central Norway) is presented. The archaeological evidence indicates that professional craftspeople worked at the soapstone quarry, producing vessels for larger markets, over a period of at least 400 years, from the early 11th to the 15th century. Discovery of finished vessels, two house ruins attached to the production, the large volume of the production and the exploitation methods all bear witness of a large-scale industry with distinct structures and methods.*

## Introduction

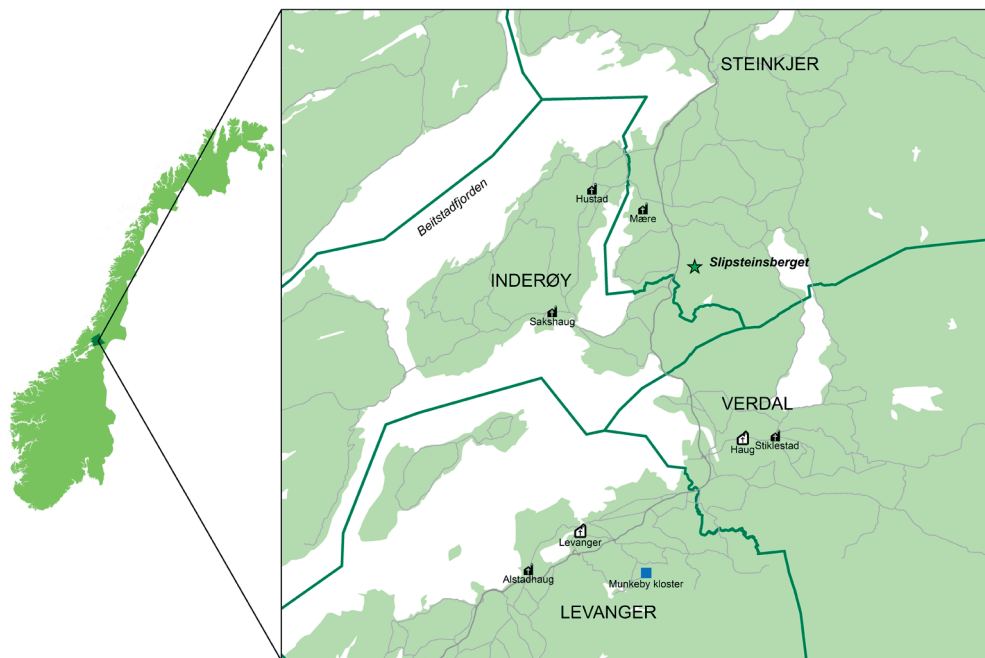
Stone quarries are sites where traces of what was once a production area can help us gain an insight into working methods, techniques, extents and aspects of the social life of those who had their place of work there. Through archaeological studies of human-induced traces in and around the Slipsteinsberget soapstone quarry in Sparbu, central Norway, attempts have been made to get nearer to the stonecutters. Were they local craftsmen who made vessels for use in their own households or specialists who made their products for sale on a larger market?

## **Slipsteinsberget in Sparbu**

The Slipsteinsberget quarry in Sparbu is situated in the Steinkjer municipality, about 15 km south of the town Steinkjer in Nord-Trøndelag County (Figure 1). The small hill covers an area of 20,000 m<sup>2</sup> and rises 20–30 m above a surrounding landscape characterised by amphibolite and various schists. The hill is a serpentinite ‘dome’ with a marginal zone of talc and soapstone along its steep periphery (Mortenson 1973; Storemyr & Heldal 2002:365–366)

The top of the hill lies at an elevation of 188 m ASL and today, the area is covered by full-grown spruce and deciduous forest. There are spoil heaps as a result of quarrying almost around the entire hill, and the site is not easily accessible, with steep slopes and a wet bog on the eastern side. In the soapstone zone, there are distinct traces of the use of sharp-pointed tools and the extraction of soapstone vessels. Vessel production mostly took place as open-cast operations, but there are also five small underground quarries.

Stone and minerals have been quarried and mined at Slipsteinsberget in recent history. There is reason to believe that attempts were made at quarrying decorative stone for the restoration of the Nidaros Cathedral in the late 19th century, albeit probably unsuccessfully. Later, between 1930 and 1960, talc was produced and during the Second World War, the Germans took charge over the manufacturing plant, which produced powder for salves (cf. Mortenson 1973). The quarry is still in



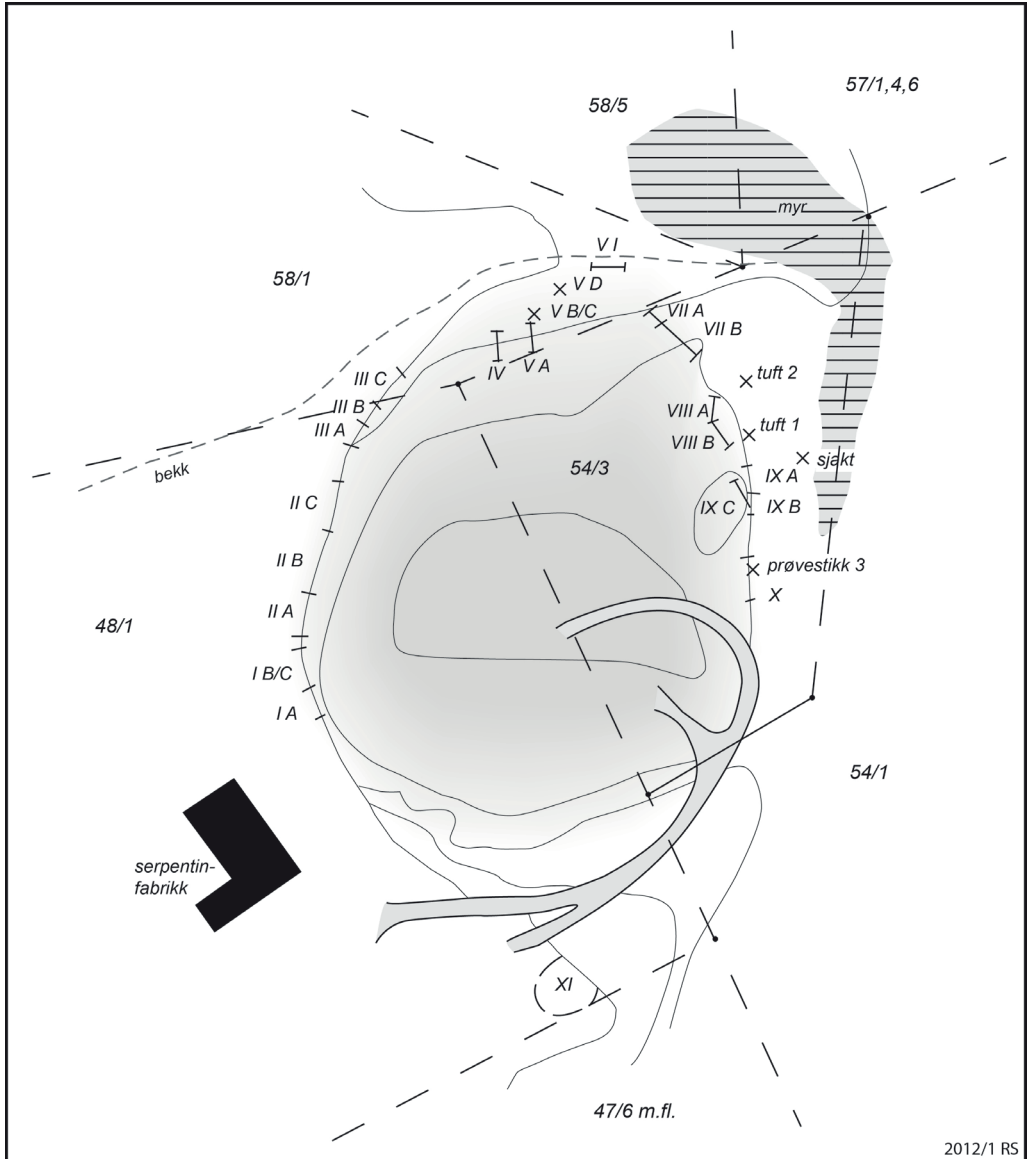
**Figure 1.** Slipsteinsberget quarry is situated in Steinkjer municipality. There are seven churches and one monastery, all built from stone in the 12th century, near the quarry. (Map: Nord-Trøndelag County Administration).

operation and today, serpentinite is being produced. Along the entire southern side, blocks from the inner parts of the hill are being extracted. The green stone, resembling Italian *verde antico*, is sawn and polished and mainly used for floor tiles.

Slipsteinsberget is part of a much larger quarry landscape in the Sparbu area, including nearby soapstone and marble quarries that have been exploited for decorative stone and as sources for lime production since the early Middle Ages (Storemyr 2015a, 2015b:173–180).

### **The problem at discussion**

Karin Gjøl Hagen (1994:29–30) uses the word *professional* for a craft specialist who works with the aim of selling his products as opposed to production for use within the household of the craftsperson. As early as in 1869, Anders Lorange wrote that a soapstone industry must have existed in the Viking Age and that the products were objects of trade (Lorange 1869:47). Haakon Schetelig was of the same opinion in 1912 and thought that the production of soapstone pots in the Viking Age was on such a large scale that it could not only have been intended for local needs, but also for export to other parts of Norway and abroad. Schetelig refers to the soapstone vessels in the Viking Age as an industrial commodity of considerable importance (Schetelig 1912:73). In Sigurd Grieg's work *Det norske håndverks historie* (The History of Norwegian Crafts) from 1936, the soapstone industry was listed under the name 'home industry'. Grieg believed that it is highly unlikely that soapstone vessels were made by professional craftsmen, but rather by people from the farms situated near the old quarries. He found it natural that farmers produced vessels when they had a moment to spare between the work seasons on the farms and that half-finished vessels were transported down to the farms for finishing. Arne Skjølvold, on the other hand, reached the conclusion that the smallest



**Figure 2.** Sketch map of Slipsteinsberget. The Roman numerals show surfaces that have traces of vessel extraction. The hill is c. 200 m Long N—S. (Illustration: R. Sauvage).

soapstone quarries were operated by individual consumers, but argues that there were professional stone cutters at work in the majority of the larger quarries (Skjølsvold 1961:104pp). Large spoil heaps, pots with stonecutter marks on the rim and the use of scaffolding are some of the arguments he uses for characterising the craft as a professional one.

The question is whether, by means of the archaeological material in one specific stone quarry, it could be possible to get closer to the old stonecutter tradition by analysing the traces that are left behind there. The remnants are diverse, and it will be up to us to find them, interpret them and

establish connections.

In 1999 and 2000, archaeological surveys and excavations of the Slipsteinsberget quarry were carried out. Quarry faces covering more than 1000 m<sup>2</sup> were studied, both in underground and open-cast quarries. On the eastern side of the hill, two house ruins that are believed to relate to the production were found (Figure 2). Both houses seem to have fallen into disuse in the 1400s. Parts of a spoil heap were also recovered half a metre down in a bog. The dates from the bog indicate that the quarry was used for vessel production from at least the early 11th century and up until approximately 1400 (Østerås 2002).

## Local needs or larger markets?

In the following, I will bring up four elements concerning the investigations of Slipsteinsberget that will be central in the discussions on whether this was a quarry meant for local needs or for specialised production aimed at larger markets. We have to presume that the same operations and the same tools were used whether the pots were made for personal use or mass-produced for a market. But are there differences to be traced using other means than tool marks?

### *The scale of production*

The first question that naturally arises is the scale of production. How many soapstone vessels were made at Slipsteinsberget? Traces from stonecutting activities were found all around the hill in five underground quarries and nine opencast quarries. On the 1032 m<sup>2</sup> of rock face that have been investigated, traces of 910 extractions of vessels or attempts at extraction were recorded. Of these, 330 were left hanging as rough vessel chunks on the rock wall, while 580 were negative impressions, that is, extraction marks where the vessel preform had been removed. Without doubt, the majority of what was extracted are circular, bowl-shaped vessels, and all of them were carved out with the base projecting from the rock surface. In addition, a few rectangular, unfinished chunks are still left; they may have been intended for vessels with a long handle, a so-called *skafthkar* (saucepan). From the form of the quarry faces one can assume that, generally, vessel preforms were extracted in three layers, thus it is possible to multiply the visible extraction marks by three, obtaining a total production of 2730 pots.

At the early Iron Age soapstone vessel quarry at Kvikne in Hedmark County, Arne Skjølvold (1979:116) used a 'vessel density' of 3,6/m<sup>2</sup> and assumed 3–4 layers of extraction. If we assume an average of three layers in Slipsteinberget, this way of calculation will imply a production of more than 11,000 pots, that is, a quadrupling of the first calculation. Now, it should be pointed out that the vessels from Kvikne had a different form and were 1000–1500 years older than those at Slipsteinsberget.

Previously, it has been estimated that 3000 to 6000 m<sup>3</sup> of soapstone were quarried in Slipsteinsberget (Mortensen 1973:4). Each vessel may have required c. 1/3 m<sup>3</sup> of rock, and the total production would therefore range between 9000 and 18,000 pots.

But if we, instead of using the quarry faces as a point of departure to work out the amount, rather look at the spoil heaps, then the situation changes. The spoil heaps are consistently situated in close proximity to the quarry faces around Slipsteinsberget, and in most places, the lowermost traces of vessel extraction are covered by spoil. The recorded vessel traces are therefore only a fraction of what actually exists on the rock face.

We may use the quarrying area XI (Figure 2) as an example. This is a surface measuring c. 30 m<sup>2</sup>, with traces of vessel extraction. The rock overhang indicates that vessel preforms were extracted in

three layers, which corresponds to an extraction area of 90 m<sup>2</sup>. At the rear edge of the extraction area, there are three clearly delimited spoil heaps that can be directly connected to vessel production. The volume of the heaps is c. 244 m<sup>3</sup>, which would give about 3 m<sup>3</sup> of debris per m<sup>2</sup> recorded rock face. If we presume that this calculation can be transferred to the rest of Slipsteinsberget, where a total of 1032 m<sup>2</sup> of vessel extraction has been documented, we will have to multiply by three to obtain the total quarried area not covered by spoil, thus in the order of 3100 m<sup>2</sup>. By again multiplying by three to obtain the total amount of spoil, we end up with more than 9000 m<sup>3</sup>. We must then multiply by three to get a rough estimate of the number of pots produced, which thus will be in the order of 25–30,000.

Clearly, such calculations have many pitfalls and can never be accurate. As a form of qualified guesswork, they nevertheless give an indication of the *order of magnitude* of the production: a few tens of thousands of vessels over a period of at least 400 years. Using a total of 30,000 vessels, this implies an average production of 75 vessels/year, which is probably way beyond local needs.

### **Exploitation of the raw material**

The extraction marks can be divided into two types. The first is found on near-vertical quarry faces and represents the most common extraction method at Slipsteinsberget, with many preforms still attached to the bedrock. The extraction spots seem to be rather randomly placed, but this is probably a misconception and rather a result of varying properties of the bedrock (hardness, serpentine content, crack pattern etc.). The stonemasons understood the practicalities of varying rock properties and thus concentrated on extracting vessels at places where the rock was both soft and firm enough for a good end-result.

The second way of extraction is connected to often steeply sloping rock faces, with negative extraction marks now forming ‘stairs’ along the slopes (Figure 3). This form of extraction seems well organised, and the raw material has been used to the maximum, indicating sound knowledge of extraction techniques and rock quality. With quarry faces sometimes situated more than six metres above the current ground level, it is likely that the workers used scaffolding, ropes and ladders to reach the highest areas.

The stonemasons were also skilled in making adits for underground mining (Figure 4). The reason why the mines do not extend further than 8–9 m into the bedrock is because the core of Slipsteinsberget contains hard serpentine, as mentioned above.

In summary, vessel quarrying at Slipsteinsberget, especially connected to the second type of extraction, gives the impression of organised activity. In my judgement, there must have been sound plans behind much of the work, including the collaboration of several persons.



**Figure 3.** The second way of extraction with removal scars looking like stairs in the hill slope. (Photo: B. Østerås).





**Figure 4.** The entrance area to one of the mines at Slipsteinsberget. (Photo: B. Østerås).

### **Vessel production**

The majority of the tool marks in Slipsteinsberget are narrow and demonstrate the use of pointed tools, either pointed chisels or pick axes. The pointed chisel leaves a long, semi-continuous track in the rock, and there are small depressions along the track, created by each blow with the mallet. It may be hard to distinguish these from the marks of a pick axe, but if a pick is used, it is difficult to hit the same track at the same angle several times successively. Thus, the marks are straight, but shorter and less connected. In addition, the point of the pick axe is often a bit broader than that of the chisel, and the marks are thus blunter.

To produce the shape of the vessel and to obtain enough room to split the preform loose, a fair amount of stone needed to be removed along the periphery of the blank. This was relatively rough work and probably carried out by using a pick. When the form of the vessel had been completed, the blanks were split off using a tool resembling a small wedge, probably a flat chisel (Figure 5).

What happened to the preform once it had been split from the rock? Thirty-two soapstone fragments were collected from the spoil heaps and brought to the NTNU University Museum in Trondheim (T22500). Twenty of these clearly were fragments of soapstone vessels, whereas the rest was identified as soapstone with cut marks, presumably spoil. Investigations showed that the finishing operations of the vessels took place in the quarry itself. Not only had the hollowing out been started, but several of the vessels were nearly finished when they cracked and were left in the spoil heaps. Both T22500:17 and T22500:25 are parts of vessels. Both are bowl-shaped with a 15 cm mouth rim; T22500:25 has a 12 cm long handle with a triangular section right on top of the mouth rim. The wall of the vessel is less than 1.5 cm thick, but the base is missing. On the inside, the hollowing out had been carried out using a groove technique with a fairly small, pointed tool. The exterior, the rim and the handle were polished with a tool with a slightly curved edge, c. 1.2 cm wide (Figure 6).

The vessel with the handle was deposited in a stratigraphic layer that included a few pieces of



charcoal. They were  $^{14}\text{C}$  dated to  $775 \pm 50$  BP (cal AD 1225–1285), thus in the high Middle Ages. Regarding style, the vessel bears a resemblance to Myrvoll Lossius' type A pot, known to date very broadly from the early Middle Ages and up to the 1300s (Myrvoll Lossius 1977:50; Vangstad this vol.), which is in accordance with the  $^{14}\text{C}$  date.

In regards to T22500:17, the hollowing-out process had not come that far. The vessel wall is 3 cm thick and the marks from a pointed chisel criss-cross on the inside. The exterior, on the contrary, is so smooth that it is natural to assume that some sort of polishing (with sand?) was carried out.

Several pieces of vessels with exterior polishing were found, but only one piece was polished on both the inside and the outside (T22500:20). The wall is less than 2 cm thick (Figure 7). This implies that at least some of the vessels were completely finished at the quarry site. Myrvoll Lossius (1977:71) arrived at an opposite conclusion in her examination of the vessels from Borgund, where she states that the last finishing touch was made by specialist craftsmen or private individuals in the town. Also, Irene Baug (2008:333) arrived at the same conclusion as Myrvoll Lossius in her study of the soapstone material from the Viking Age Kaupang in eastern Norway. Thus, it seems that there was not just one tradition in regards to the location of finishing soapstone vessels.

The investigations at Slipsteinsberget also included a collaboration with stonemason Eva Stavsøien at the Restoration Workshop of the Nidaros Cathedral (NDR), Trondheim. Based on experience and knowledge about soapstone craft in the Middle Ages, Stavsøien concluded that the extraction of preforms was by far the simplest part of the vessel production. An expert stonemason would probably extract several preforms on an ordinary workday. If there were any doubts as to whether the preform would detach where it was supposed to, or if the quality of the stone was sufficiently satisfactory, it did not take long to start carving out a new preform at a more suitable place. The challenge started with the hollowing-out of the vessel (Eva Stavsøien, pers. comm., see also Stavsøien this vol.).

If the soapstone at Slipsteinsberget was used in the household of the craftsperson only, we would hardly find finished, polished vessels at the quarrying site itself. For a mere household production, including only one or a few vessels at a time, it would be natural that as little work as possible was carried out at the quarry site and that it was considered more convenient to bring unworked preforms back to the farm for finishing.



**Figure 5.** Experimentation with extraction of preforms (Eva Stavsøien). A pickaxe is used to produce the shape of the vessel and a flat chisel to separate the preform from the bedrock. (Photo: B. Østerås).



**Figure 6.** Part of handled vessel found in Slipsteinsberget (T22500:25). The vessel is dated to AD 1225-1285. (Photo: B. Østerås).



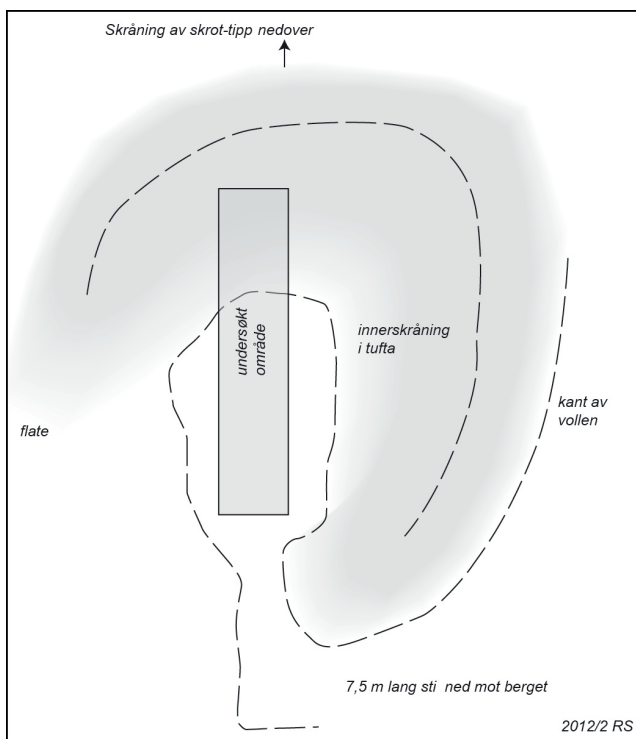
**Figure 7.** Part of vessel wall where both the inside and the outside have a smooth finish (T22500:20). (Photo: NTNU University Museum).

### The house ruins

Very few prehistoric house ruins have been found in ancient stone quarries in Norway. Skjølsvold (1969:235) mentions one of them, a stone-built construction measuring 12–15 m<sup>2</sup>, about 80 m northwest of the soapstone quarry at Kvikne in Hedmark, which dates back to 500–200 BC. Skjølsvold suggests that the hut may have functioned as a shed or temporary dwelling for the stonemasons.

Only a few metres apart from each other, there are two house ruins at the eastern side of Slipsteinsberget; they were built on the spoil heaps of the quarry (Figure 2). The base of ruin 1 is c. 2.5 x 4.5 m, with a distinct entrance area measuring 1.25 x 1.25 m. From here, a 7.5 m long path leads to the quarry face. Thus, the connection between the house and the extraction area seems to have been important. The floor is covered with slabs of soapstone, but there are also remains of a wooden floor in between the slabs. The wood has been <sup>14</sup>C dated to 690 ±70 BP (cal AD 1280–1390) and 470 + 50 BP (cal AD 1420–1450). Therefore, the house seems to have been in use from the 13th to the 15th century.

Our excavation showed no signs of hearths in ruin 1, but on the floor, there were many fragments of finished soapstone vessels. Thus, it is reasonable to in-



**Figure 8.** Plan drawing of house ruin 1 with excavated area (marked in gray) and the path leading down to the rock hill. (Illustration: R. Sauvage).

terpret the house as a stone workshop (Østerås 2002:53ff). Here, the vessel makers could sit sheltered from wind and weather and work the vessels into finished products (Figure 8).

Ruin 2 was also placed on the spoil heap, but measuring 6 x 6 m, the ground plan is bigger than that of ruin 1. The exit is not facing the extraction area, but a nearby bog. It is possible that the bog on the eastern side of Slipsteinsberget once was a small lake and that this was the water supply of the people who worked here. Moreover, the lake may also have been a place to soak the vessel preforms. We know of several instances where both finished and unfinished soapstone artefacts have been found in bogs and lakes, like, for example, the 25 cm tall soapstone vessel with a rounded base that was found more than 1 m down in a bog at Vikstrøm on Hitra island (central Norway) (Figure 9).

The explanation may be that moist soapstone is, indeed, easier to work than a dry and brittle one which has been left to dry out for some time. The bog at Slipsteinsberget was not investigated further with a view to possible depot finds, but the associated spoil heap was dug to a depth below the current surface of the bog. The organic material in the bog could be dated back to the 11th century AD (<sup>14</sup>C-dating).

In ruin 2, there was a hearth located in the north-eastern corner and a test pit provided a charcoal sample dating to 695 ±45 BP (cal AD 1285–1375). Thus, it seems that the houses may have been in use simultaneously and were abandoned at some stage in the early 1400s.

The discovery of house ruins, one of them clearly a workshop for producing vessels, indicates that professional craftsmen were indeed working at Slipsteinsberget. It is unlikely that local people, in need of a vessel or two every now and then, would have gone to the troubles of setting up a workshop for finishing vessels as well as housing in the quarry. Local people would presumably, as argued above, have brought preforms back home to the farm for finishing.

### Household production or export?

There are no provenance studies currently available to indicate vessel sale from Slipsteinsberget to larger markets such as the medieval towns in central Norway, especially Trondheim, and beyond. Yet, the archaeological evidence, including the scale of production, certainly hints at export to markets beyond the local one in Steinkjer/Sparbu.

Over a 400-year-period, from the 11th century to the 1400s, on average, some 75 vessels may have been produced annually. There were probably many ups and downs, and years of intensive production followed periods with no production at all.

There were 75 farms in Sparbu county in the late Middle Ages, in the 1430s according to Aslak Bolt's jordebok (Jørgensen 1997:18A–23B). Thus, the question arises: did these farms need a new soapstone cooking vessel every year? Probably not, since a soapstone vessel was rather durable and



**Figure 9.** Soapstone vessel from the early Iron Age found in a bog at Vikstrøm on Hitra (T3767). (Photo: P. Fredriksen, NTNU University Museum).

would most likely last for many years.

How many of these farms may have had access to Slipsteinsberget as a source of raw material? Today, there are no less than seven property boundaries meeting at the quarry. Two of the farms, Andstad and Landstad, are named farms that (according to the ending *-stadir*) probably were cleared already in the Viking Age. Could the boundaries be an indication of a strong interest in the deposit far back in time? Was it important to claim a piece of the deposit because soapstone was considered a key resource?

Few archaeological finds of soapstone vessels have been made in north-Trøndelag, and only five have been localised to the old Sparbu parish. With one exception, they are finds connected to the quarry. The last one is from a grave not far from Slipsteinsberget. There may be a number of explanations for this; the production of vessels in Slipsteinsberget may not have reached its peak before the custom of grave gifts died out with the introduction of the Christian faith in the Middle Ages. But the lack of finds may also be an argument in favour of the assumption that the vessels were produced for export rather than ending up as kitchen utensils on the local farms.

In the same way as there were blacksmiths in the rural districts or shoemakers and other types of craftspeople, one could imagine that there were stonemasons. Maybe a few specialists on some of the farms in Sparbu gathered every year and met at Slipsteinsberget to act as part-time specialists?

It is highly likely that the intensity of the production increased towards the end of the 12th century and onwards to the Black Death. At that time, we know that there was a high quarrying activity in Trøndelag in connection with the building of stone churches and monasteries. In Innherad, in the neighbouring municipalities Levanger, Verdal, Steinkjer and Inderøy alone, seven churches and one monastery were built during the 12th century (Ekroll 1997). There was a strong medieval stonemason tradition, with one centre in Trondheim and another in Sparbu (Storemyr 2015a, 2015b:173–180), and it may have been the same people who worked both building and decorative stone and vessels.

There was a strong population growth in the period under study, and the Norwegian medieval towns were established. As a consequence, the demand for refined products also increased. In connection with archaeological excavations around Nidaros Cathedral in Trondheim, several remains of finished and half-finished soapstone pots have been found (Domkirkegården TA 2001/05. Shaft 13). The stonemasons here probably made use of the left-overs from the building sites to produce other soapstone objects.

## Concluding remarks

The archaeological sources at Slipsteinsberget in Sparbu indicate that professional craftspeople worked at the soapstone quarry over a period of at least 400 years. The discovery of finished pots, two house ruins, the volume of the production and the exploitation of the raw material bear witness of a large-scale industry with distinct structures and methods.

We may find the people behind the production in the stonemason traditions that developed in the Middle Ages in connection with the building of churches and monasteries, and a growing market for finished vessels in the towns. I suggest that among the stone builders, there may have been travelling specialists who made their living as stonemasons, also producing vessels during parts of the year. Part-time specialists could as well be local craftspeople from the rural district. In any case, the production of soapstone vessels in Slipsteinsberget must by far have exceeded the local needs and the vessels must have been transported as finished products out of the quarry to new markets.



## Acknowledgements

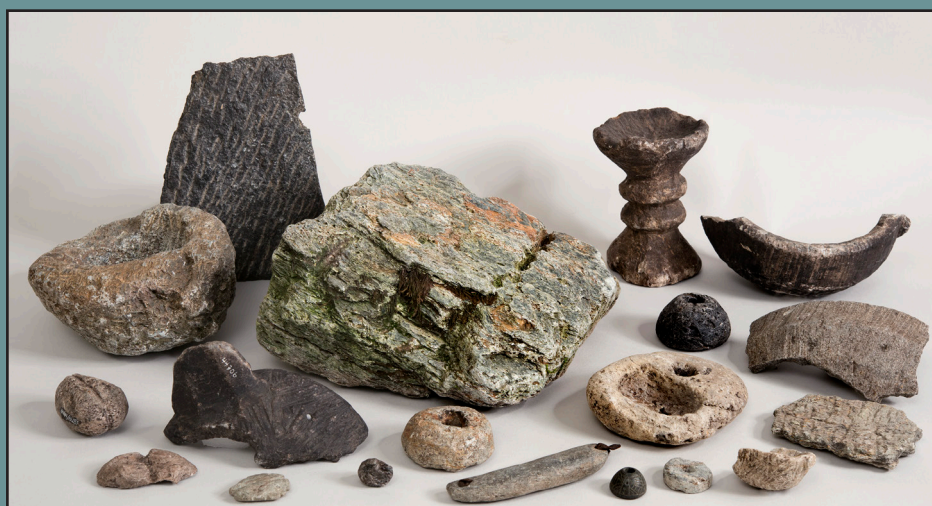
I want to thank Vedis Bjørndal (University Museum of Bergen) for translating the Norwegian manuscript into English. Also thanks to Per Storemyr for correcting and adapting the English translation.

## References

- Baug, I. 2011. Soapstone Finds. In Skre, D. (ed.) *Things from the Town. Artefacts and Inhabitants in Viking-age Kaupang*, 311–337. Kaupang Excavation Project. Publication Series, 3. (Norske Oldfunn XXIV, Aarhus).
- Domkirkegården TA 2001/05, 2001. Unpublished archaeological report, Norwegian Institute for Cultural Heritage Research (NIKU), Trondheim.
- Ekroll, Ø. 1997. *Med kleber og kalk. Norsk steinbygging i mellomalderen 1050–1550*, Oslo.
- Grieg, S. 1936. *Det norske håndverks historie*, 1, Oslo.
- Hagen, K. G. 1994. Profesjonalisme og urbanisering. *Universitetets Oldsaksamlings Skrifter. Ny rekke*, 16, Oslo.
- Jørgensen, J. G. 1997. *Aslak Bolts Jordebok*. Riksarkivet, Oslo.
- Lorange, A. 1869. Student A. Lorange's udsigt over hans antikvariske virksomhed i 1868. *Foreningen til norske fortidsminde-merkers bevaring. Aarsberetning for 1868*, 40–84. Kristiania.
- Lossius, S. Myrvoll. 1977. *Kleberkarmaterialet fra Borgund, Sunnmøre*. Arkeologiske avhandlinger fra Historisk museum, no.1. Universitetet i Bergen, Bergen.
- Møllerop, O. 1960. Kleberkar fra keltetid. *Stavanger Museum. Årbok 1959*, 21–40.
- Mortensen, M. 1973. Talk og serpentinforkomster i Sparbu, Nord-Trøndelag. *NGU Norges geologiske undersøkelse*, 290, 1–16.
- Petersen, J. 1934. De eldste norske kleberstenskar fra Jernalderen. *Finska Fornminneforeningens Tidskrift*, XL, Helsingfors.
- Pilø, L. 1990. Early soapstone vessels in Norway from the Late Bronze Age to the Early Roman Iron Age. *ACTA Archeologica*, 60, 87–100.
- Schetelig, H. 1912. Kar av kleberstein fra jernalderen. In Brøgger, A.W (ed.) *Oldtiden, tidskrift for Norsk forhistorie*, 49–73.
- Skjølsvold, A. 1961. *Klebersteinsindustrien i vikingetiden*, Oslo.
- Skjølsvold, A. 1969. Et keltertids klebersteinsbrudd fra Kvikne. *Viking*, 33, 201–236.
- Skjølsvold, A. 1979. Gryteindustrien i Kviknefjellene for over 2000 år siden. In Nyland, R. (ed.) *Fortiden i Søkelyset. Datering med <sup>14</sup>C metoden gjennom 25 år*, 111–119, Trondheim.
- Storemyr, P. & Haldal, T. 2002. Soapstone Production through Norwegian History: Geology, Properties, Quarrying and Use. In Herrmann, J., Herz, N. & Newman, R. (eds): *ASMOSIA 5, Interdisciplinary Studies on Ancient Stone – Proceedings of the Fifth International Conference of the Association for the Study of Marble and Other Stones in Antiquity*, 359–369. Museum of Fine Arts, Boston, June 11–15, 1998, London.
- Storemyr, P. 2015a. The medieval quarries at Sparbu: A Central Norwegian 'little sister' of the Purbeck quarry landscape in England. In Indrelid, S., Hjelle, K. L. & Stene, K. (eds) *Exploitation of Outfield resources – Joint research at the University Museums of Norway, Universitetsmuseet i Bergen Skrifter* no. 32, 141–154, Bergen.
- Storemyr, P. 2015b. *Nidarosdomens grunnfjell. En reise i steinbrytneres fotspor fra Det gamle Egypt til Europas nordligste katedral*. Nidaros Domkirkes Restaureringsarbeideres forlag, Trondheim.
- Østerås, B. 2002: Klebersteinsbrotet på Sparbu. Kva undersøkingar av eit klebersteinsbrot kan fortelje om gamle steinhoggartradisjonar. Unpublished hovedfag thesis, Norwegian University of Science and Technology, Trondheim.
- Østerås, B. 1999. Eit klebersteinbrot fortel si historie. *Spor*, 14, 2, 23–25.
- Østerås, B. 2001. Rapport frå Slipsteinsberget i Sparbu. Top-Ark, dok.nr 20253, Unpublished report at NTNU University Museum, Trondheim.
- Østerås, B. 2005. Rapport. Arkeologisk utgraving av klebersteinsbrotet på Kvikne. Kvikne klebersteinsbrudd – fjellsameige Kvikneskogen vest gbnr 140/12 – Bubakk/ Sandbekkdalen, Tynset kommune, Hedmark. Saksnummer 2008/20486. Unpublished report, University of Oslo.

## Soapstone in the North. Quarries, Products and People. 7000 BC – AD 1700

Soapstone is a remarkable rock. While it is soft and very workable, it is also durable and heat-resistant, and with a high heat-storage capacity. These properties have been recognised and valued around the world since prehistoric times, and soapstone has been used for a multitude of purposes, ranging from everyday household utensils to prestigious monuments and buildings. This book addresses soapstone use in Norway and the North Atlantic region, including Greenland. Although the majority of the papers deal with the Iron Age and Middle Ages, the book spans the Mesolithic to the early modern era. It deals with themes related to quarries, products and associated people and institutions in a broad context. Recent years have seen a revival of basic archaeological and geological research into the procurement and use of stone resources. With its authors drawn from the fields of archaeology, geosciences and traditional crafts, the anthology reflects cross-disciplinary work born of this revival.



ISBN: 978-82-90273-90-8