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

Gitte Hansen and Per Storemyr (eds)



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Quarries, Products and People

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Editors of this book

Gitte Hansen Per Storemyr

Editors of the series UBAS

Nils Anfinset Randi Barndon Knut Andreas Bergsvik Søren Diinhoff Lars L. Forsberg

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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 Nesset, 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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Torbjørn Preus Schou



Trade and Hierarchy: The Viking Age Soapstone Vessel Production and Trade of Agder, Norway

The Viking Age soapstone vessel production and trade in Norway was a spatially allocated enterprise due to limited access to raw materials and the logistically confining topography of the country's rugged landscapes. In the southernmost Norwegian region of Agder, vessel production was concentrated along the waterways of the river Nidelva, which empties into Skagerrak near the agriculturally and archaeologically rich farms on the moraine soil of the Fjære parish. The research presented here looks into a number of aspects related to the soapstone industry of the Agder region, from the quarries and production sites, via distributional and topographical patterns, to the trade and consumption of the products. The implications of the soapstone industry for power structures and hierarchical developments of Agder during the Viking Period are addressed on a local scale as well as within a larger chronological and spatial context.

Introduction

Norwegian Viking Age sites (c. AD 800-1030) are commonly characterised by almost total absence of ceramic vessel fragments, apart from rare occurrences of imported ware in central settlements, such as Kaupang (cf. Skre 2007a). Instead, soapstone vessels seem to have completely replaced local pottery production around the beginning of the Viking Age, and judging from the archaeological assemblages of the period, these constituted the main domestic equipment for storage and cooking - in addition to iron pots and wooden vessels (Petersen 1951:380; Lossius 1977:13). Significant for archaeological studies, soapstone vessels do not appear in contexts dated to the period between the pre-Roman Iron Age and the Viking Age (c. AD 0–800) (Skjølsvold 1961:12; Pilø 1990). Pots of soapstone continued to be produced into the Medieval period (c. AD 1030-1537), but these later vessels seem to have been typologically different from those of the preceding period (Lossius 1977:50). The character of production and distribution of soapstone vessels seems to increase in magnitude during the Viking Age, from a rather limited nature in the first half of the 9th century, to widespread distribution networks and large quantities of affordable commodities in the 10th century. The main topic here is that this increase coincided with a general expansion in production and trade of such goods in Scandinavia as a whole (e.g. Christoffersen 1991; Näsman 1991; Sindbæk 2005), as well as changes in associated aspects, like means of transportation (Näsman 1991:37) and modes of payment (Hårdh 1996; 2007). In the following pages, I intend to discuss the Viking Age soapstone vessel production and trade of Agder in the southernmost part of Norway, and more specifically the area around the old parish of Fjære, and link this process up with the general economic development of the period.

Based on the research of my master thesis (Schou 2007), I would argue this production could be characterised as an industry, directed toward a large number of consumers living across southern Scandinavia, with close parallels to trade in other types of commodities (e.g. iron, quernstones etc.), which were increasingly mass produced specifically for trade purposes.

Geographical context

Regional description

Agder is today divided into two counties, Aust-Agder and Vest-Agder, with several towns along the coast. However, town settlements as a concept is in general a recent phenomenon in Norway, and the vast majority of the pre-industrial population lived in clustered or isolated farms and farmsteads scattered throughout the country. This is particularly true for the Agder region, with its long, roughly southward-flowing rivers moving through valleys, each more or less completely separated by characteristic steep, densely forested hills dotted with small lakes and bogs. Thus, due to topographical hindrances, the coast has traditionally provided the most practical communication route when moving in an east-west direction, while river valleys have been the preferable choice for travel and transport between north and south. The best agricultural land is situated along the coast,

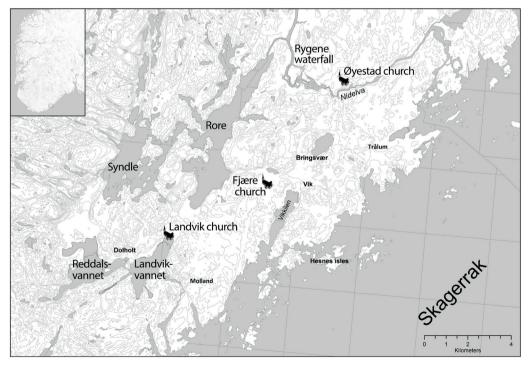


Figure 1. The parishes of Fjære and Landvik, today mainly the modern town of Grimstad. Some of the central farms mentioned in the text and topographical features are also shown here. Additionally, minor modifications of the Viking Age water level in the area are indicated, most notably in the two lakes Reddalsvannet and Landviksvannet.

and the mainland coast itself from Lindesnes and eastward (see e.g. Figure 2) is incised by numerous inlets, bays, and coves, in many places sheltered from the open sea of Skagerrak by islands and skerries (cf. Schou 2007:3–4).

The topography of Fjære

The Agder coast has provided traditional shipping with excellent anchorages, and one of the best is Vikkilen in Aust-Agder (Wikander 1985). During the Viking Age, this was the boat landing (Norse stóð) for several large farms lying along a fertile moraine ridge between the sea and the steep hills behind (Figure 1). Today, Vikkilen is the harbour of the town of Grimstad (pop. 20,000), but during the Middle Ages the area was divided into two agricultural parishes, Fjære and Landvik, which will be the geographical focus here and collectively termed the Fjære area (cf. Schou 2007). I have for the sake of simplicity adopted the Fjære complex as a term for the farms lying next to and just east of the Fjære medieval church, i.e. Fjære, Sæveli, Bringsvær, and Vik. The river emptying into the sea near the Fjære area is called Nidelva, stretching 210 km inland northward and crucially providing a potential transportation route for a multitude of commodities produced in the forested hills and mountains of Aust-Agder up until the early 20th century. Although a large and relatively violent waterfall called Rygene hinders unbroken travel from the interior to the coast, a viable traditional option has been to sail or row into the large lake Rore, just short of the Rygene falls, a choice preferred and used by the timber floating industry of the 18th and 19th centuries. From the shores of Rore, the Fjære area, the Vikkilen harbour, and the coast were easily accessed (Schou 2007:73-74). As will be argued below, the Fjære area is central to the understanding of the soapstone vessel trade in Agder and the regions bordering onto Skagerrak, as well as tentatively also contributing to the understanding of economic developments during the Viking Age.

Theoretical considerations

Structures

Søren M. Sindbæk (2005) showed how the duality of structure framework (cf. Giddens 1984:25) could fruitfully be applied to the study of the development of complex networks of production and trade during the southern Scandinavian Viking Age and early Medieval period. Groups of individuals constitute immaterial structures, which through repetitive practice create patterns of behaviour which are contextually limited by biology and technology, and their actions are both a medium for and a result of the practice they structure. In other words, social and economic patterns and relations emerge, develop and are maintained through (unconscious or subconscious) practice. Sindbæk argued that in a given context, relational interplay of individuals create networks bound together by central areas (nodes), wherein powerful individuals or groups emerge, capable of wielding more social and economic power than others located in more peripheral parts of the system (Sindbæk 2005:25). The main reason for this is their advantage of access to other and more extensive parts of the network, due to locational centrality, as well as potential monopoly on the connection between certain parts of the system. Associated with Viking Age social and economic structures is also the concept of routes and routinised practice, as routes are not only physical structures based on topography, but also social structures, which are realised as social institutions through the repeated and structured practice of routinised communication (Sindbæk 2005:30-32). This has great potential to alter associated socioeconomic systems, or strengthen those already in place, hence lead to accumulation or dissolution of power connected to certain key individuals or groups in a given society (Sindbæk 2005:42–43).

Regionalisation and institutionalisation

Various regions and areas are directly or indirectly pulled into a trading network, as nodes situated along routes of communication add more and more links to the system (Sindbæk, 2005;38). This centripetal force crystallises these areas into relative and defined hierarchies within the network, a process called *regionalisation*, while growth of structural principles and social systems which spatially and temporally bind individuals together through the abovementioned repetitive practice is termed institutionalisation (cf. Giddens 1984:130). Communication and trade are in this way two very powerful institutionalising conceptual agents. Structural principles can be authoritative resources (organisational aspects which crystallise individuals into e.g. specialists, leaders etc.), allocative resources (economical institutions which provide control over e.g. raw materials and land), and rules (e.g. regulations and standardisations) (cf. Giddens 1984:181–185; also cf. Sindbæk 2005:39–41). These structure social patterns, but an essential aspect is that they do not constitute structural principles until the preconditions for them to emerge are present in a given context, and structural processes transform them (Giddens 1984:33-34). Set in a context of Viking Age socio-economic developments, the soapstone vessel production could not provide more than very limited economic or political advantages until it was connected to the larger systemic network of southern Scandinavian production, trade, and consumption. This is the backdrop within which the archaeological material of the Fjære area and its social, economic and geographical contexts must be interpreted.

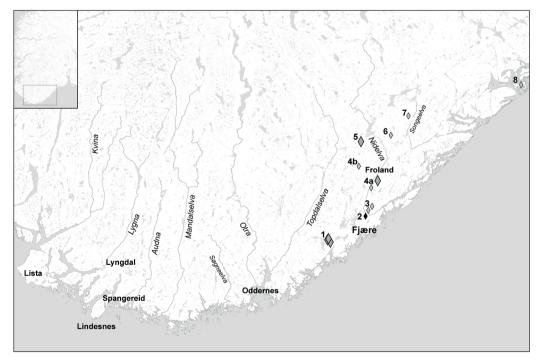


Figure 2. Map of the Agder region, showing main river valleys and central areas of the Viking Age. All the soapstone quarries known here are situated along the river Nidelva or near the Fjære area. The larger diamonds denote two quarries, while the smaller indicate one quarry. The black diamond denotes an approximately placed quarry. The quarries are: 1. Hisåsen, 2. Tøra, 3. Øyestad, 4a. Blakstad, 4b. Brattelandsåsen, 5. Sparsås, 6. Austre Vimme, 7. Østre Myre, 8. Skåtøy.

The soapstone vessels

The quarries of Agder

The central element of this article is that the allocative resources necessary for structuring the soapstone vessel trade are all found in a very limited area of Agder. Virtually all of the known quarries in the region are located in the wooded hills on either side of Nidelva, or near its tributary waterways (Figure 2). Except for the quarry at Tøra (Figure 2, no. 2), which contains poor quality soapstone and little or no traces of exploitation, production at these quarries seems to have been characterised by large-scale extraction, some places arguably bordering on industrial scale. Particularly Sparsås (Figure 2, no. 5), Austre Vimme (Figure 2, no. 6), and the cluster of quarries at Hisåsen (Figure 2, no. 1) were reported by Arne Skjølsvold in his influential studies of the Viking Age soapstone industry in Norway to be associated with massive waste heaps (Skjølsvold 1961:59-64; 1979). At Austre Vimme, he measured a waste heap to be 50 x 20 m and noted that it originally must have towered as high as 8 m. Its profile showed three separate phases of activity, although associated stray finds have generally consisted of Viking Age vessels and equipment (Skjølsvold 1979). It is uncertain when mass production of soapstone products ended at this quarry, but Skjølsvold himself argued against any post-medieval production there. Such dimensions are in any case suggestive of large-scale operations, and the fact that the waterway linking this quarry with Nidelva is called Grytebekken - from Norse grjót meaning stone as a raw material, and more often than not associated with soapstone vessels (cf. Skjølsvold 1961:5; Nymoen 2009:112) – is indeed striking. Following the Viking Age, some of the Nidelva quarries evidently also provided material for medieval church building in Aust-Agder, with e.g. baptismal fonts in central churches having been made of local soapstone (Solhaug 2013:30).

In addition to large heaps of waste, several quarries have numerous unfinished or broken vessels



Figure 3. Set of soapstone vessels from Hafstad which have not yet been polished, probably originating from the Hisåsen quarries. A mark had been carved into the third pot, which is interpreted as some sort of stone cutter's mark (see Figure 4). (Photo: Museum of Cultural History, University of Oslo).

lying about in their hundreds, as well as showing chisel marks and vessels still attached to the rock faces up to a height of 6–7 m. Tools of the trade have also been found, such as wooden ladders, clubs, and iron chisels (Skjølsvold 1961:57–60), and wooden scaffoldings were presumably used at e.g. Hisåsen to be able to reach all areas of the rock face and maximise the extraction from the soapstone vein (Skjølsvold 1961:74). Another indication of economical use of a limited resource is the fact that vessels were both hewn with the opening inward and outward of the rock face (cf. Skjølsvold 1961:84; Schou 2007:62). Generally, vessels were seemingly finished and polished further down the transport line, as both unfinished objects in the quarries and unfinished sets of vessels have been found near points where transfer from local to regional transport would have been necessary. One can argue that the pots were more resistant to breakage when transported through rugged and hilly terrain in an only roughly finished state, and it has been suggested that they were soaked in rivers, lakes, or bogs to ease the finer internal polishing nearer to their intentional markets or close to systemic nodal points (Skjølsvold 1961:83–92; Lossius 1977:62; Baug 2011:315).

Production and transport

One important stray find from the Fjære area illustrates the point where further treatment of the vessels was carried out. At the Hafstad farm on the isthmus between the lakes Reddalsvannet and Landvikvannet, a set of five soapstone vessels of decreasing size was found (Figure 3) (Skjølsvold 1961:89-90). These probably came from the Hisåsen quarries, and were still unpolished and perhaps put to soak, but subsequently forgotten. At Froland, c. 7 km upriver from the Fjære area, down the transport line from the quarry at Brattelandsåsen, another set of three pots was found in 1878 (Skjølsvold 1961:90-92). These examples indicate that the production included a practical aspect for both transportation and storage, as well as a spatial separation of various stages in the production line and standardisation of the process. On one of the five pots shown in Figure 3, a groove had been cut into the rim, very similar to stone masons' marks known from the Middle Ages (Figure 4). This practice has as far as I know only been documented on soapstone vessels from the southernmost coast of Norway. The other two examples were found at Flekkefjord in the westernmost part of Agder, and at the quarry of Skåtøy near the border between Telemark and Agder (Figure 2, no. 8) (Skjølsvold 1961:101-103). All these aspects of the Agder production with typological standardisation, practicality of transport and storage, massive waste heaps, and cutters' marks come together to suggest that the soapstone trade in the region was a lively and institutionalised activity (Skjølsvold 1961:120-122; Schou 2007:62). Some scholars (e.g. Grieg 1990) have argued that the



Figure 4. Carvings found on the rim of three soapstone vessels from Agder. The pots are from left to right from Flekkefjord, Fjære (see Figure 3), and Skåtøy (see Figure 2, no. 8) and the carvings are unique from Norwegian contexts. They have been interpreted as some sort of stone cutter's marks. (Photo modified after Skjølsvold 1961:101–103).

resources belonged to the nearest farms or farmsteads, while others (e.g. Skjølsvold 1961) thought for the reasons mentioned above that the soapstone vessels were mainly carved and fashioned by specialised craftsmen working for powerful individuals, perhaps chieftains or petty kings, who owned special resource rights. Skjølsvold referred to these craftsmen as 'pot smiths' (Norwegian *grytesmeder*) (Skjølsvold 1961:99–100). Based upon the same material, I have also argued that the latter of these theories seems to be the most plausible one (Schou 2007). I will now turn to relevant aspects of Viking Age soapstone vessel chronology and typology, as well as focusing on a short description of the archaeological material associated with the Fjære area.

Soapstone vessels and the archeological material of Fjære

Material and chronology

Viking Age soapstone vessels largely seem to be typologically standardised and usually divided into three main types, R728-730 (cf. Rygh 1999 [1885]). The bowl-shaped R729 (see Figure 3) is by far the most common type, with over 500 examples known from Norwegian Viking Age contexts (Risbøl 1994:122). Although both R728-729 are found throughout the Viking Age, there are far more examples known from datable 10th century contexts than there are from the preceding century, with over six times more (157 vs. 25 examples) of R729 (cf. Skjølsvold 1961:29), and the last type (R730) is only known from the 10th century (Petersen 1951:362; Risbøl 1994:122). A study of soapstone vessels known from datable Viking Age grave contexts, but with chronology divided into the early (800-875), middle (875-925) and the late (925-1050) Viking Age, has provided a somewhat finer chronological division (cf. Risbøl 1994:130-131). While the 75 years of early Viking Age graves included 34 vessels (less than 0.5 per year), the middle and late Viking Age had 29 (about 0.6 per year) and 130 vessels (over one per year) respectively, i.e. a development in annual average from a slight increase from c. 875 to more than a doubling from c. 925 compared with the early Viking Age. For the sake of argument it can be included that the three soapstone vessels from grave contexts in the Fjære-area, which allowed for a more detailed chronology within the Viking Age, all dated to the 10th century (Schou 2007:55). It is thus quite possible that the majority of Viking Age soapstone vessels can be dated to the late 9th and the 10th century, although perhaps not exclusively.

An object well-represented in the archaeological material from the Fjære area is the foldable bronze balance, often found with weights of various sizes and occasionally a birch bark case, which is characteristic for its foldable quality. This balance type is reckoned to be an import from the British Isles and dated to the period c. 880–1000 (Jondell 1974:33). Intriguingly, no less than *three* of these have been found in the Fjære area, and all of them in the mound clusters of the Fjære complex (Figure 5). This is a high number, as is evident from the distribution map of southeastern Norwegian weights and balances presented by Pedersen (2007:136), where the Fjære area clearly stands out. One particular aspect of the coastal Agder region, which is important to note in the case of chronology, is that the heathen practice of mound burials generally seems to have gone out of use by the mid-10th century and replaced by burial according to Christian practice (e.g. Larsen 1986:48; Skre 2007a:469). From this it follows that except in special cases, Viking Age grave goods in Fjære typologically dated to the 10th century most likely should be placed in the first half of this period.

Graves and status

No settlement excavations have been carried out in the Fjære area, and most of the archaeologically excavated material originates from grave mound investigations. The large majority of these graves

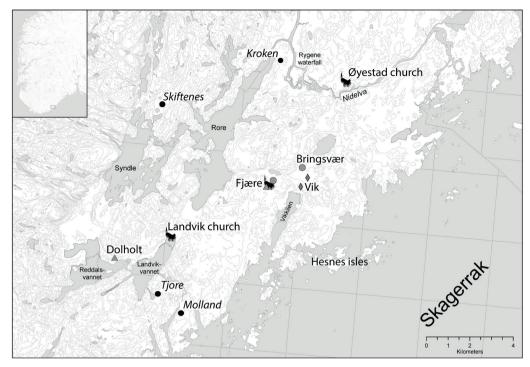


Figure 5. Map of the distribution of balances (triangle), weights (diamond), and combination of balances and weights (grey circle) from Viking Age graves in the Fjære area. The Dolholt equipment is from a 9th century context, while the rest date to the 10th century. There is a clear cluster around the Fjære farm and medieval church. The map also shows precious metal depots (black circle), which mostly seem to be associated with peripheral farms in the area, apart from the large Slemmedal depot found at Molland in 1982.

were excavated in the 1870s by Nicolaysen (1876; 1877; 1878) and then in 1880 by Winther (1881), while later investigations have been scattered throughout the following century. Even though these early archaeologists have later been criticised for having excavated perhaps too large a number of grave mounds in too short a period of time (e.g. Grieg 1990:124), they were both quite meticulous in their contextual documentation. For my study of the Viking Age material I have found that they produced reliable records (cf. Schou 2007). In addition to excavations, we also have available a number of finds discovered by farmers and other laymen since the 19th century and up to this date, with various degrees of contextual certainty (cf. Schou 2007:27–45 for detailed descriptions and discussion of contexts and material).

My study of the grave material in the Fjære area has provided some interesting, albeit tentative results. The material itself can be said to cluster in four separate areas, where individual objects or combinations of material indicate the burial of high-status individuals. The associated farms are from southwest to northeast Dolholt, Molland, the Fjære complex, and Trålum. Although it is difficult to be certain of the property boundaries of Viking Age farms, there are reasons for incorporating some neighbouring farms into one large property (cf. Schou 2007:37–39). All these central farms have large grave mounds from the early Iron Age as well as the Viking Age within their boundaries, but regarding the latter period, Trålum and Dolholt can only be said to conclusively have indications of the highest status burials from the early 9th century, while in the later Viking Age, they show more

modest material. Although the richest grave at Dolholt did contain a balance, it is not clear that this should be defined as a foldable type, and thus weapon typology still form the basis for a date c. 800–850. In contrast, the Fjære complex and Molland exhibit richly furnished graves from the late 9th to 10th century. However, it must be pointed out that the numbers on which this specific indication is based cannot be said to be statistically significant, and thus should only be seen as a tentative pattern.

Precious metal depots

Burying precious metal in the ground for various reasons is a well-known Viking Age practice. From the Fiære-area, four separate Viking Age precious metal deposits have been found and reported (see Figure 5), all mostly containing silver, a general trend of the period. Three of these come from peripheral farms in the region, namely Kroken, Skiftenes, and Tjore. The Kroken depot consisted of a silver cross, an Insular silver buckle, hundreds of various beads, and an Arabian coin dated 782–783, as well as supposedly a silver arm ring which was not sent to the Museum of Cultural History at the University of Oslo. This depot is commonly dated to the 9th century, and its clerical content makes it seem rather likely to be booty from Viking raids (Wamers 1997:10). The latter two depots consisted of two and one silver arm ring respectively, and possibly date to the 10th century (Grieg 1929:238). However, by far the largest precious metal depot from the Fjære area was discovered in 1982 at the Molland farm, which as mentioned above also exhibits richly furnished 10th century burials. This depot consisted of silver objects which weighed over 2100 g, as well as close to 300 g of gold, making it the second largest Viking Age silver depot in Norway. It included several gold and silver rings of various sizes, some smaller objects of silver and gold, as well as five coins, providing a terminus post quem of c. 920 for the depot (Skaare 1982:39). Interestingly, this secure 10th century depot can tell us something about the economic structure of the period in the Fjære area, as one of the arm rings had been cut down and presumably used as hack silver (Blindheim 1982:8). It provides an intriguing link with the many instances of balances and weights in the Fjære-complex graves, and can be integrated into the larger economic context of the Viking Age (see below).

The potential for communication and trade

Centrality and Viking Age spatial hierarchy

Even though an area contains archaeological material associated with status and economy, it is not given that it acted as a regional centre with nodal function within a network, which here is a seen as a prerequisite for structuring distribution and organisation of mass-produced commodities. Features associated with such areas must be actively studied in relation to their regional context to establish whether or not this was the case. To do this, I have adopted the terms *central area* and *central place*. The first refers to a spatially limited area within a region, containing advantageously structuring features within the contexts of communication and network compared to other parts of the region (relative periphery). Central places on the other hand, are conceptual complexes containing centralising and centripetal elements – e.g. ritual focus and administrative institutions – *within* a central area (Myhre 1987:184, fig. 13), usually also representing the most important political, religious, social, and economic functions within a region (Fabech 1999:455; Hedeager 2002:7). These aspects occur on varying scales of magnitude and size, both structuring a hierarchy on a vertical and horizontal level, influencing social and economic practice. Several criteria should be met to increase the likelihood of an area being a regional centre with a central place. These are generally related to natural conditions structuring communication and allocation of resources, as well as archaeological material associated

with status and wealth (Fabech & Ringtved 1995:19; Skre 2007a:49).

Communication and nodal function

The potential nodal function of the Fjære area in relation to its region and the communicative network is possible to approach in three different ways – land routes along the coast, sea routes, and routes from upland or inland areas. Norwegian topography is highly structuring when it comes to traditional land travel, and consequently the main routes have a high degree of structural continuity (Engesveen 2006:16). Medieval laws also indicate that this continuity could stretch back into the Iron Age (Steen 1934:217). By spatially mapping the distribution of Iron Age grave mound clusters and 18th century roads in the Fjære area (Figure 6), a picture suggesting clear visual associations between routes and grave monuments becomes apparent. The central nexus within the area is the Fjære complex, which, due to topographical hindrances of hills and sea, is where all these routes meet. Thus, the complex must be traversed when travelling by land in the area, with the principal node probably being the site of the Fjære medieval church. Traditional regional land routes to neighbouring areas are also known to have passed this way, making the Fjære complex both a local and a regional node for Viking Age and medieval land travel (Schou 2007:70–71).

Sea travel would have been the preferred method to get around on a regional and intraregional level in the Viking Age and along the parts of coastal Agder the safest sea lane was the sounds and basins situated between the mainland and an outer line of skerries and islands. Certain medieval itineraries list four main harbours between the main Norwegian Viking Age town of Kaupang and the cape of Lindesnes (see Figure 9), and the one which served the Fjære area is called Hesnessund (or alternatively the Hesnes isles) (Steen 1934:220). One noticeable element with these medieval harbours is that the link between the sea lane and the harbour itself would be the topographical feature of islands lying outside them poking into or across the sea lane, providing ships sailing along an otherwise rather monotonous coast with a navigable waypoint. Although several alternatives for anchorage or landing were most likely known and available for Viking Age and medieval sea travellers (Nymoen 2009), a socio-economic centripetality associated with the Fjære area probably made it an important destination for the repeated practice of communication. Intriguingly, one day's traditional travel by sea, c. 130 km (Crumlin-Pedersen 1983), from either Kaupang or Skien, an important medieval node for inland iron products and whetstones of Telemark (Christophersen 1989), would actually have ended up more or less exactly in the Fjære area, a spatio-temporal aspect of regional position which again suggests that it was advantageously located within the network of communication. This is also the distance from Fjære across Skagerrak to the northernmost parts of Denmark (Figure 9). Additionally, the protected bay of Vikkilen was in later times renowned for providing a good and safe harbour (Wikander 1985). Onward sailing into the night when travelling from the northeast, e.g. toward Ulvøysund (40 km further sailing) or Randesund (50 km further sailing), could potentially have jeopardised both crew and cargo. In fact, several Viking Age or early medieval shipwrecks have been discovered along this stretch of water - e.g. at Håøya just south of Vikkilen and in Kvåsefjorden between Ulvøysund and Randesund (Nymoen 2010; 2011). The recovered cargo associated with these wrecks represents more or less the full assortment of stone-based mass-produced commodities of the Viking Age - quernstones, whetstones, and soapstone vessels (specifically R729, cf. Nymoen 2010:135).

The third line of communication considered here is highly associated with the soapstone trade – transport of raw materials and goods from the upland/inland of Agder toward the coast. The main route was Nidelva, which meets the sea at Nedenes just northeast of Fjære. However, the waterfall obstacle of Rygene and subsequent narrowing of the river channel has traditionally structured large-

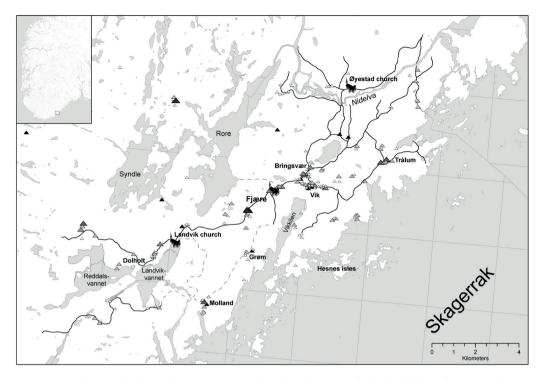


Figure 6. Map showing the relation between grave mounds and roads in Fjære. The black solid line indicates routes known from 18th century maps, while the dotted line indicates probable routes now vanished due to the growth of the modern town of Grimstad. The increasingly larger triangles denote increasingly larger clusters of grave mounds, respectively 1 (small white triangle), 2–5, 6–10, 11–15, 16–25, and over 25 separate grave mounds (large dark triangle). The small black triangles indicate grave mounds approximately located.

scale transport into the Rore lake, just upriver from Rygene. Apart from this, the river would probably have been quite navigable all the way from the inland lake of Nelaug in pre-industrial times (Schou 2007:73–74). Thus, it seems highly likely that all three types of regional and intraregional travel and transport would have ended up in the Fjære area in the Viking Age, with routes coming from inland regions, going along the coast, and following sea lanes all joining up there, probably providing the communicative advantage and nodal function necessary for regional centrality and centripetality.

Archaeological material

The specific archaeological material from the Fjære area has been touched upon above, but it will here be elaborated upon in the context of regional central areas and central places. One method put forward to indicate the presence of high-status individuals is the combination of weapons in Viking Age graves, where contexts with three types are seen as indications of the burial of a powerful figure (Solberg 1985). Clusters of these can indicate a central place, as can import or precious objects (Fabech & Ringtved 1995). Figure 7 shows the distribution of Viking Age graves containing two or more weapon types in southeastern Agder. The Fjære area clearly stands out as a cluster in an otherwise sparsely furnished region, suggesting that it was the main *locus* and central area for political, religious, and economic activity in the region.

Clusters of Iron Age grave mounds indicate routes and grave goods are related to status, but the character of the mounds themselves could arguably also indicate which farms or local areas were the most central in a landscape (see Figure 6 above). In the Fjære area, the farms with the highest numbers and largest sizes of grave mounds are again Trålum, Molland, and to a lesser degree the area around the Landvik medieval church. However, the Fjære complex is undoubtedly special in this respect, as it harbours several dozens of mounds of all sizes, even today. These lie clustered in large groups where all communication lines meet, i.e. around the Fjære medieval church above the Vikkilen bay. Additionally, it is also here that nearly all the weights and balances have been found, although not too much deposited precious metal. However, there are indications of widespread use of silver. One grave situated at the modern farm of Vik (cf. Schou 2007:35–36) contained a sword with a silver-gilded hilt, equipment for smithing, and a mould for silver ingots, implying that the person had regular access to precious metal. According to Fabech and Ringtved (1995:19), this is a particularly characteristic feature which suggests association with a central place, as is the occurrence of balances.

To conclude, it seems that the evidence, albeit tentative, supports the notion that the Fjære area acted as a regional central place toward which much of the communication and transport was channeled, both as a consequence of topography, but probably also due to its nodal function as an integrated part of the larger intraregional network (also cf. Stylegar 2009:88, 91). The central place within the area was located on the moraine just above Vikkilen, where the medieval church of Fjære was built around the turn of the first millennium AD, and where the farms of the Fjære complex lay and its inhabitants were buried. These people probably acquired more and more socio-economic regional power on an intra- and interregional scale as the Viking Age unfolded. My suggestion is that some form of control over the organisation of the soapstone vessel trade was a catalyst which caused these powerful figures in Fjære to accumulate increasing symbolic and real capital, which then could be converted to prestige and power, providing a political and economic advantage over other potential local and regional contenders for power positions.

The wider socio-economic context

Viking Age trade as an economic transition

In order to synthesise the soapstone vessel production and trade and the economic development of Agder into a diachronic perspective, it is necessary to describe some associated Viking Age aspects. A forcing factor for the development toward market economies is technological expansion in the fields of transportation and communication (Giddens 1984:192). The Viking Age can be characterised as a transitional period in many areas, including economy. In the 8th to early 9th century, the economy seems to have been largely based upon reciprocity and redistribution in Norway, like it was in the preceding Migration Period. However, by the mid-10th century, the economic system had integrated traits associated with medieval market economies (Skre 2000:169; 2007b:343). This development coincided with an expansion of trade in affordable commodities, but mass production would not have occurred without the incentive of a market consisting of an anonymous mass of consumers. Thus, the activity in the quarries along Nidelva and at Hisåsen was dependent on the network of contacts and nodal structure provided by the central area of Fjære (Schou 2007:80), and the specialised trade network itself was probably also dependent on cooperation with local powerful actors (Callmer 2002:155).

Transport technology in the Viking Age

Trade networks of a systemic character were also dependent on technology and institutionalisation of associated aspects of the trade. The system that emerged in the late 8th century, expanded during the 9th century to include broader and broader parts of the northern European society, characterised by commodities like soapstone vessels, iron, whetstones, and quernstones (Christophersen 1991:160; Baug 2006:6). It developed to become a complex hierarchical network of regions, nodes, and routes, connected to central political and economic regions in Western Europe and the Near East (Hårdh 2003:49; Sindbæk 2007:119), and attained full bloom in the 10th century. Developments within the transport sector were unavoidable products of an increasing focus upon heavy, affordable commodities (Näsman 1991:37), as well as a progressive factor feeding back into the system which again reexpanded. This led to a development tentatively traceable in the archaeological material of Southern Scandinavia, where ship types known from the 9th century constitute mostly warships, such as the *skeið*, while ships dated to the 10th century onward show a greater focus on carrying capacity, and

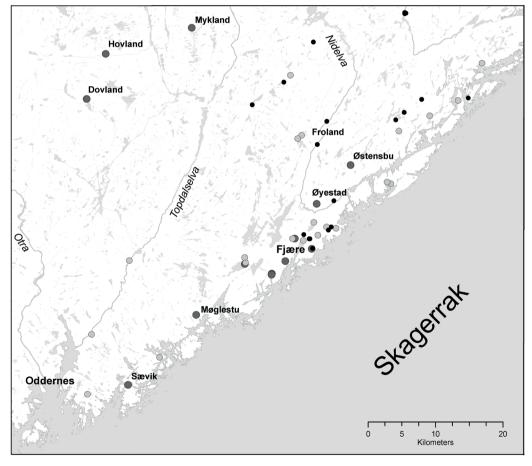


Figure 7. Map of south-eastern Aust-Agder showing the distribution of so-called status graves in the region. Small black dot indicates one weapon type, medium grey dot indicates two weapon types, and three weapon types in a burial is indicated by a large, dark grey dot. The cluster of graves in Fiære is striking.

include the specialised trading ship *knarr* (Crumlin-Pedersen 1991:75; 1999:12). Indeed, it is possible that trading activities supplanted the practice of raiding and plundering as chieftains and petty kings realised the economic potential of emerging mass consumption (Schou 2007:89). The characteristic Viking raids of the early 9th century gradually ceased through the period, while the trading system grew and was consolidated through institutionalisation and routinisation. This development seems to have continued into the next millennium, as suggested by the increasing number of known ship wrecks dating to the last part of the Viking Age (i.e. after c. 1000 AD) (Ulriksen 1998:223; also cf. Schou 2007:83).

Economic developments during the Viking Age

Integration of the hypothesised central place in Fjære into such a system would also act as a catalyst for economic changes there, moving it into a proto-monetary economy with standardised means of payment, which in turn fits well with the presence of balances, weights, and hack silver in the area. The system of weighing silver for payment grew up in parts of Scandinavia after c. 850 (Hårdh 1996:25-26). However, as Pedersen (2000; 2007) has pointed out, the mere presence of such objects need not necessitate the burial of a specialised trader or merchant so to speak, as they could also be associated with other activities, such as administrative functions. On the other hand, trade and administration are not mutually exclusive activities, and their association with the same area or even the same person is in fact not an unlikely scenario. Closer to the turn of the century, larger parts of southern Scandinavia started using the same standardised measurement system, so the system itself may have functioned as a guarantee in transactions, similar to the function currency would take later on (Hårdh 1996:60; Sindbæk 2005:46–48). This also coincided with the culmination of newly re-established import of Arabian silver c. 890–950 (Skaare 1976:52), indicating that the system was sufficiently institutionalised to become generalised practice. Thus, there are a lot of aspects associated with mass-produced commodity trade suggesting that the system acquired the prerequisites necessary to reach its full potential from c. 900, and progressively developed during the 10th century. Hårdh (1996) proposed that the content and character of precious metal depots could indicate how silver was used in a regional economic system, as well as economic changes within given Scandinavian regions. She argued that the difference between depots containing large ornamental rings and those with hack silver is an indication of different perspectives on silver in the society, i.e. prestige objects vs. more neutral characteristics and practicality. If one applies this to the material from Fjære (see Figure 5), there seems to be a focus on prestige in the more peripheral farms while the large depot from Molland incorporates both features (whole rings and hack silver) and could have acted within both spheres. However, silver and weighing equipment together is particularly associated with farms in the Fjære complex, which could indicate that these central farms were more attracted to a southern Scandinavian pragmatic view of silver and trade, although this would be speculation.

The regional soapstone vessel trade

The quarries shown on Figure 2 are the only ones known in Agder, but soapstone sherds and vessels have been found throughout the region in settlement and burial contexts (Figure 8). The soapstone veins other than those on Figure 2 closest to western parts of Agder are found in north-western Rogaland (Skjølsvold 1961:136–140), so it seems likely that most of the Viking Age households in Agder acquired their pots and vessels from the Fjære area. Based on the presumption that each household had two to three pots for cooking and storage and that the regional number of farmsteads in the Middle Ages were c. 3000 (Låg 1999:56), I have previously argued that a conservative estimate of vessels in Agder would have amounted to *at least* a total of five thousand for the period c. 800–950

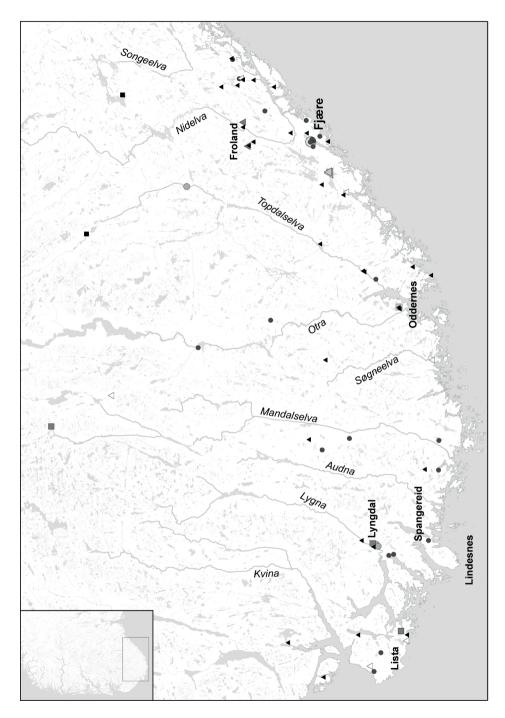


Figure 8. Map of Agder, showing Viking Age soapstone finds in the region as a whole. Triangles indicate stray finds of sherds or vessels, circles indicate vessels as grave goods, and squares indicate sherds found in settlement contexts. Sizes of geometrical figures indicate increasing amounts of material, from one to five and more.

(Schou 2007:66), of which the large majority probably came from the quarries along Nidelva and were distributed via a central place in the Fjære area. As shown on Figure 8, the finds are clustered in particular spots along the coast. These places, such as Lyngdal, Lista, Spangereid, and Oddernes, are generally thought to have constituted central areas during the Viking Age, as well as being associated with early medieval church buildings (e.g. cf. maps in Stylegar 2009). Thus, the distribution network was seemingly linked to powerful individuals or institutions on the consumption end, as well as on the production/organisation end of the process. The distribution pattern also suggests that peripheral inland parts of the region were dependently connected to the network via these central areas, as finds are found along the rivers toward the interior, as well as along the coastline.

The main Norwegian town and market bordering onto Skagerrak in the Viking Age was Kaupang in the county of Vestfold (e.g. Skre 2000; 2007a). However, even though there have been found numerous soapstone vessels and sherds from Viking Age settlement and burial contexts here, no quarries are known in this county. The nearest quarry lies on the island of Skåtøy on the coast of Telemark (Figure 2, nr. 8), which is the only quarry between the Fjære area and Kaupang. Apart from this, quarries are only known far inland in Telemark (c. 170 km away), in Akershus (c. 150-180 km away depending on the quarry), or across the Oslo fjord in Østfold (c. 120-140 km away), with respective distances approximately measured along waterways to Kaupang (Skjølsvold 1961:136-140). Provenience analyses have recently been carried out on soapstone material from this site (cf. Baug 2011:329-331). Intriguingly, the vessel sherds all seem to have originated from one quarry site, although among the quarries sampled for comparison, none proved a definite match. As the analysed samples came from quarries in Akershus and Østfold, there is still a possibility that Fjære supplied Kaupang with soapstone vessels in the Viking Age. However, further investigation would be necessary to answer this question (Baug 2011:331). Like Vestfold, soapstone vessels and sherds have also been found throughout Denmark, although the country does not have any naturally occurring soapstone. By far the largest quantity has been found in Hedeby (or Haithabu), the largest town in Viking Age Scandinavia, but unlike in Norway, pottery is ubiquitous in Denmark. The soapstone fragments found at Hedeby have tentatively been traced by mass spectrometry to geological regions in western Sweden or possibly Østfold (cf. Alfsen & Christie 1979:171-172), but this method is relatively old and not entirely certain. However, sherds and vessels found in northern Denmark and around Limfjorden (cf. Sindbæk 2005:141, fig. 6.6) may just as likely have originated in Fjære. Its geographical position on the coast probably strengthened its role as a nodal point associated with the network of communication and trade. The spatio-temporal relation with Kaupang and Skien, as well as Denmark, may suggest that the Fjære area retained a more prominent position in the trading network than other harbours along this coastline (Figure 9).

Possible modes of distribution

How did these soapstone vessels find their way from the Fjære area to their consumers? As implied above, they seem to have been transported from Fjære to other regional nodes or central places and from there distributed to respective hinterlands and inland settlements along the river valleys. It is difficult to establish which distribution scenario would be the most likely one, or indeed if several modes of distribution could have been in action at the same time. However, there is one indication that someone came to Fjære to acquire its mass-produced commodities, either as direct consumers or as independent middlemen, thus perhaps making it less likely that the people in Fjære themselves transported the wares out to consumers. The medieval harbour of Hesnessund is referring to the safe harbour of Vikkilen. The name 'Hesnes' is derived from Norse Esjunes, where the first part esja in fact is Norse for soapstone (Rygh 1905:119; Skjølsvold 1961:120). This means that Hesnessund

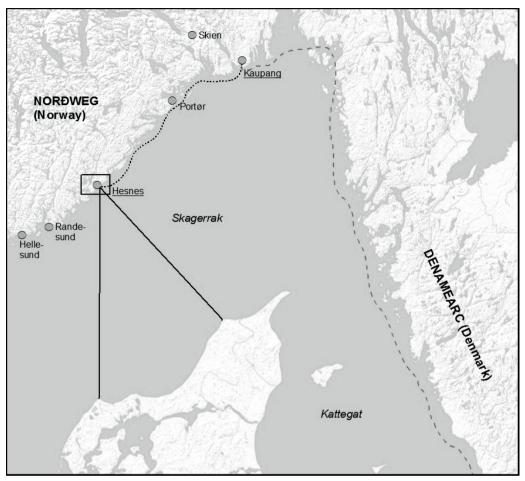


Figure 9. Map of probable routes along the rim of Skagerrak in the Viking Age, showing some of the main harbours along the Agder coast known from medieval sources, as well as the Viking Age town of Kaupang and the medieval town of Skien. (Reconstruction and modification of map in Crumlin-Pedersen 1983:36).

(cf. Figure 1), a topographical point by which a traveller would have navigated and identified as a way point on the route, actually means 'soapstone promontory sound'. The peninsula itself does not contain any naturally occurring soapstone at all, and thus it seems unlikely that the name was given to this natural feature by locals in Fjære. Instead, a valid explanation could be that it was named in this manner by people travelling along the sea lanes, denoting a point and haven along the route where soapstone products were available and could be acquired. This is in my view one of the strongest arguments for the hypothesis that the soapstone trade in Agder was channeled via – and probably also organised by – powerful actors in the Fjære area. Remains of this active trading network of travelling *knarr* are discernable on the map in Nymoen (cf. 2011:69), showing Viking Age and medieval shipwrecks along the Norwegian coast from the Sognefjord to Østfold. The Agder coastline from Lindesnes to Arendal, and particularly the stretch between Randesund and Fjære, is littered with wrecks, most of which seem to have carried quernstones, but also with evidence for soapstone vessels and whetstones, indicating a lively, but also hazardous regional trade in mass-produced commodities.

Conclusion

The soapstone trade in Norway was an industry providing an increasingly larger consumer market with affordable, mass-produced household wares, necessary for all Viking Age homes. The Agder region in the southernmost part of Norway was probably supplied with soapstone vessels mostly originating in the forested hills along the river Nidelva. The vessels were channeled through the central area at Fjære on the coast, and organised by powerful regional figures inhabiting a potential central place focused on the large farms around Fjære medieval church, which indeed increased their economic and social status through this trade. The activity included various actors on several levels during the process from quarry to consumers, i.e. in production, transport, organisation, control, and distribution. All these aspects were structured by a limited trading network probably emerging in the late 8th century, and expanding via institutionalising and regionalising processes to become a wide systemic hierarchical network of political and economic contact points, nodes, and communication lines in 10th century Scandinavia, in which Agder and Fjære played but a part. After initial contact with the system, both regionalisation and institutionalisation of the soapstone vessel trade progressively expanded within the structure of mass produced commodities trade, both stimulating to and being stimulated by the general expansion of the whole economic system.

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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.





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