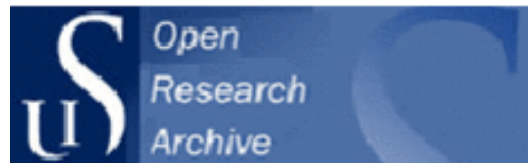




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Selsing, L. (2012) The Early Settlement of South Norway after the Last Deglaciation: A Diasporic Perspective . *Norwegian Archaeological Review* 45(2), pp. 177-205. © Taylor & Francis.

Link to official URL: DOI: [10.1080/00293652.2012.721390](https://doi.org/10.1080/00293652.2012.721390)
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The Early Settlement of South Norway after the Last Deglaciation: A Diasporic Perspective

By Lotte Selsing

Abstract

Based on a theoretical approach of diaspora theory and the use of ethnographical comparative analysis, it is argued that the early settlement of South Norway probably brought about diasporic conditions. Archaeological and natural science records are applied to discuss the migrations of mobile hunter-gatherers with a shamanistic reindeer culture from the Continent, after deglaciation of the Weichselian ice cap. This paper discusses the diasporic people's identity, their survival as a group, their adaptation to the new environment and the development of an independent reindeer culture characterized by relics and meeting places, after the break in the regular contact between people in the area of origin and South Norway.

Keywords

- diaspora theory,
- pioneer,
- colonization,
- late glacial and Mesolithic settlement,
- mountain area,
- sea ice

Introduction

The earliest settlement of South Norway is an ongoing interdisciplinary discussion in archaeology (Indrelid 1975, 1978, Mikkelsen 1978a, Johansen and Undås 1992, Bjerck 1994, 1995, 2007, 2008a, 2009, Bang-Andersen 1996, 2012, Fuglestedt 2001, 2005, 2009). It has been proposed that people followed the reindeer northwards from the North European Plains and to the mountain area in South Norway after the last glacial maximum (e.g. Rolfsen 1972, p. 146, Johansen and Undås 1992, p. 16, Fuglestedt 2001, 2005). The routes of immigration – either from the south to southwest from the North Sea Plain and Denmark or from the southeast via Sweden – have been discussed. In both instances, the origin was Continental Europe. The economic base has been the main focus along with the people's relationship to their material culture (typology), the expansion of a marine adaptation and settlement, and the use of a phenomenological framework to understand the earliest settlement of a shamanistic reindeer culture (Schmitt 1995, Fuglestedt 2005, 2009, Bjerck 2007, 2009).

As a natural scientist, my point of departure will concentrate on the use of diaspora theory on the natural and archaeological records to open a discussion about the usefulness of this concept concerning the hunter-gatherers' bases of migration on the Continent and the northwards migrations and settlements in new areas in South Norway in the course of their mobile life. Diaspora theory (Hall 1990, Shaye and Frerichs 1993, p. i, Clifford 1994, Brah 1996, Ghannam 1997, Jacobsen 2001a, 2005, 2008, Byrne 2004, Lilley 2006, Vertovec 2008, p. 275) is chosen here because it gives a deeper understanding of people's cognitive reactions towards movements into new geographical areas. There has been limited interest in the archaeological application of this theory to prehistoric population

movements. Generally, this aspect is examined in the recent literature not as a diaspora, but described as colonization or migration (Lilley 2007, p. 294). Knutsson (2005) and to a certain degree also Fuglestad (2001, 2009) are good examples.

Based on studies on people and nature in the mountain area of South Norway, with emphasis on the Mesolithic (Selsing and Wishman 1978, 1984, Selsing 1986, 1996, 1998, 1999, 2010, Blystad and Selsing 1988), the diaspora theory has been proposed by Selsing (2010, p. 294). As the hunter-gatherers in South Norway may have brought a reindeer culture from the Continent (see Rust 1943), the approach has been expanded here to elaborate on the mountainous adaptation, with reindeer as the cultural element paralleling a marine adaptation in a yearly round. Many Early Mesolithic sites are located along the Norwegian coast (Bjerck 1995, 2007, 2008a, Nærøy 2000). The reindeer (*Rangifer tarandus*) ranged the lowlands of Southwest and West Norway from 14,800 cal. BP until at least 10,300 cal. BP (see Mangerud 1977, Lie 1986; cal. BP is used because it is neutral to religion), probably until the forest became dense about 10,200–9800 cal. BP, with open areas only available at higher levels (see Paus 1992 and Selsing 2010, ch. 7.5.1.). Reindeer were hunted both on the Continent and by groups who had migrated to South Norway. However, people also utilized marine resources when they stayed on the coast. The meaning of reindeer to their culture is questioned (e.g. Bjerck 2008a). It is, however, well argued that the reindeer culture was embedded in the human–reindeer relationship in a maritime adaptation in Southwest Norway and thus hunting reindeer was maintained (Fuglestad 2005, 2009, 2012, see also Welinder 1981). Accordingly, the diasporic perspective will be applied mainly to the mountain area, and the marine aspect will not be discussed (see Fuglestad 2012, pp. 11–12). Ecological arguments are used, not to discuss ecological theory, but to clarify the diasporic arguments for the first time in north European archaeology.

From a diasporic perspective, the following aspects will be examined: maintenance of identity, survival as a group, adaptation to a new environment without surrendering group identity and development of an independent reindeer culture after the break in regular contact between the area of origin and South Norway. The discussion on the interrelationships between a shamanistic way of life and the use of material relics and meeting places to embody the diasporic aspects of the culture, as well as the inclusion of the mountain area in the yearly round, is based on an ecological view of the changing palaeogeography, flora and fauna, and on the characteristics of hunter-gatherers and their relation to the natural environment from ethnographical comparative analyses (Binford 1978, 1983, 2001, Woodburn 1980). The geographical areas from where people may have originated are the continuous area of the British Isles, the North Sea Plain, the North European Plains, Denmark and South Sweden, collectively named the Continent in this paper (Fig. 1). This geographical range is less than half of the Arctic environment used systematically by the Inuit (see Aporta 2009, p. 132).

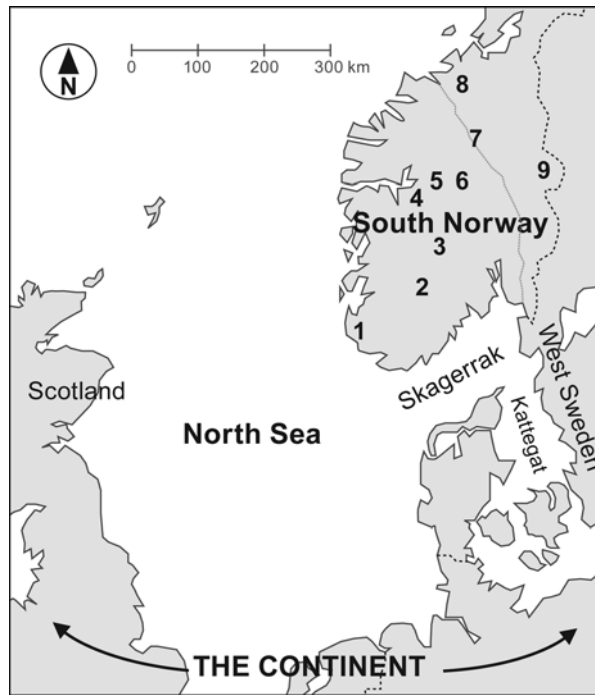


Fig. 1. Map of northern Europe with the important place names and areas mentioned in the text. The Continent includes, in this paper, the continuous landscapes of the British Isles, the North Sea Plain, the North European Plains, and southern Scandinavia. 1. Southwest Norway, 2. the mountain area in northern Telemark, 3. Hardangervidda, 4. Årdalsfjellet, 5. Lærdalsfjellet, 6. Hemsedalsfjellet, 7. Gudbrandslågen, 8. Trollheimen and 9. Skardlia. Design: Martin Blystad.

HUNTER-GATHERERS AND THE APPLICATION OF A DIASPORIC PERSPECTIVE

Diaspora theory is used in this relationship to understand and explain how basic aspects of a society and its social processes are included in and influence migrations and establishment in a new landscape. Safran (1991) and Cohen (1997, p. 26) have suggested some common features that represent a diaspora condition. They include dispersal, shared history and biocultural background, distinction from the host society and relationship with the homeland, including memory, visions or myths about the original area, and the possibility of return. Diaspora groups establish communication, cooperation and support to maintain stability. An important difference between the diaspora characteristics of ancient hunter-gatherer migrants and migrants of today is flexibility. Also, the people that migrated during the deglaciation period were not forced into exile by other people and did not encounter a native host community. Because of these important differences the term diasporic will be used (cf. Clifford 1994), and the differences will be discussed below.

Hunter-gatherers have been characterized as being straightforward, behaviourally flexible, and adaptable, with free access to landscapes; their behaviour is characterized by consciousness, traditions and customs (Binford 1978, 2001, Knutsson 1995, Brody 2002a [1981]). According to my assumption, and compared to common features of diaspora, the flexibility of the ancient migrants may have caused a significant inclination to change (see Fuglestad 2005, pp. 60, 63, 224, 2012, p. 10). As part of their cosmology, the migrants may have facilitated the inclusion of new knowledge and insight about the

environment in a gradually consolidated landscape. Triggered by movements into unknown areas during the large and relatively fast changes in nature during the deglaciation period, handling change could have been the rule of life. This behaviour may have been part of a cultural baggage, which included action strategies for decisions about movements. A cognitive approximation of movements could have been the necessary basic approach for extending the settlement area. Knutsson (2005, pp. 181–187) suggested that the changing environment was a meeting with the unfamiliar, unexpected, unknown and unstable world, with critical societal consequences for the people in North Sweden during the early part of the Holocene. As argued here the changing environment may, however, not have been critical as people had migrated in more or less unknown landscapes for a long period already. The changing nature and migration history are outlined in the next section.

Another vital difference is that the ancient hunter-gatherers were mobile, while diaspora cultures of today are not. Mobility as an integral part of life on the move is considered to influence elements of the hunter-gatherer culture (e.g. Kelly 1995, p. 111, Knutsson 1995, pp. 199, 203, Aporta 2009, p. 164). Migrations into unknown areas are based on people's motivation and decisions to cross frontiers, and such movements were probably also a part of the Continental hunter-gatherer culture. With large land-use areas and a low threshold for migration, extended migrations northwards were perhaps only a little farther than usual, within a well-known setting. The requisite knowledge for a serious migration into unknown areas and for return voyages (Graham 1990, p. 45, Irwin 1992, 2007) may have been obtained during processes of extensions. Hunter-gatherers would not migrate empty-handed from the area where they lived; following Moore's (2001), and King's (2003, 2006 [1997]) statements, the establishment of the hunter-gatherers would require both men and women, prey for hunting, prototypes of tools, and probably also raw materials.

The people that migrated during the deglaciation period were probably not forced into exile by other people. The changing nature that started after the last glacial maximum in more southern areas occurred over vast areas and could have resulted in a long-lasting migration process for mobile people. Thus the groups could have pushed each other towards the north on their way into new landscapes as a way to continue a life with few neighbours. However, Housley et al. (1997) have presented a theory which can be regarded as the opposite: people were pulled towards uninhabited areas. The landscape contained many potential resources as plants, animals and hard rocks and the changing nature made the natural environment richer. As long as the uninhabited landscape looked familiar, it should have been easy to migrate. This process, which can be compared to the terrestrial and maritime migration processes in America and Oceania, respectively (King 2003, 2006 [1997], Howe 2007, Meltzer 2010), was not finished before the ice caps had melted.

Consequently, the early hunter-gatherers did not encounter a native host community because they were the first to migrate into new areas during the deglaciation process. They were not confronted nor did they have to struggle with another culture or worldview for acceptance of their own identity and culture. As long as the use of new areas arose from extended travels during migrations, a break from traditions and affinity was probably not necessary because the mobile hunter-gatherers migrated in a world of continuous change, with few if any people. However, people did have social contact with each other and common meeting places in the new areas.

BASES OF MIGRATION TO THE SOUTH NORWEGIAN AREA

We cannot be sure what information about the environment was important for the ancient hunter-gatherers and we do not know what details in the landscape they judged as vital, but we can make a calculation of their assessment ability. There are several examples of hunter-gatherers who, when observing the landscape through which they move so intensively and thoroughly, remember all the details on a route they used only once (Bergman 1927, p. 210, Birket-Smith 1943, p. 210, Moltke 1943, pp. 84–85, Binford 1978, Brody 2002b [2000], p. 54, Aporta 2009, p. 145 cited Ikummaq 2000, Meltzer 2010, pp. 221–223, 231). The sense of orientation is among the oldest and best preserved parts of the brain in evolution, localized together with memory and mental maps stored in the brain (Kjelstrup et al. 2008, Derdikman et al. 2009). Based on these examples, my assumption is that hunter-gatherers maximized their use of this part of the brain and that this speciality may have been connected to the importance of survival and avoiding getting lost.

An important base of migration was the natural setting and we have information on the nature during the deglaciation after the last glacial maximum from natural science research. This deglaciation was characterized by large climate changes, which affected the land–sea relationship, the flora and fauna, and thus migrations. Following deglaciation, the tundra environment moved to the north and later into the alpine region. The melting of the ice cap over Scandinavia and the British Isles allowed Atlantic water to move into a bay between South Norway and Scotland, which was enlarged towards the east through Skagerrak and Kattegat 21,400–20,300 cal. BP (Andersen and Borns 1994, fig. 2-46, Coles 1998, Houmark-Nielsen et al. 2005, palaeomaps; calibration Bronk Ramsey 2003 and Stuiver et al. 1998; see Mangerud et al. 1974 for the geological chronology). Denmark and South Sweden were deglaciated 20,300–17,400 cal. BP (Houmark-Nielsen et al. 2005, p. 10). The west coast of Sweden deglaciated before 13,500 cal. BP and in the central part an archipelago developed, with a tidal mixing front which provided an enhanced biological productivity and an increased carrying capacity (Fredén 1988, Schmitt et al. 2006). A varied marine fauna is inferred to have lived in these areas whenever a marine palaeo-North Sea, Skagerrak and Kattegat existed (Jonsson 1995, Kindgren 1995, fig. 1, table 4, Aaris-Sørensen 2009). The environments in the North European Plains were, until the transition to the Holocene, in many places characterized by aeolian activity, unstable ground and sporadic vegetation cover (Kolstrup and Jorgensen 1982, Kolstrup 1995, 1997, fig. 1, 2002). Parts of the North Sea were dry land dominated by polar desert and arctic tundra for a long time before the Bølling chronozone (Andersen and Borns 1994, p. 55, Sejrup et al. 1994, p. 12). The vegetation productivity probably made the North Sea Plain habitable for hunter-gatherers during the Late Weichselian chronozone (Schmitt et al. 2006, p. 6) as in the surrounding areas. The palaeolandscape changed markedly until the transition to the Holocene (Blystad 1989, Andersen and Borns 1994, fig. 2-53, Andersson and Knarrström 1999). The position of the marine polar front was located at the Spanish southwest coast, with oscillations until late Younger Dryas chronozone, and sea ice with icebergs covered the North Atlantic during the cold season, except presumably during the Allerød chronozone (see Andersen and Borns 1994, fig. 2-53).



Fig. 2. Finnsbergvatn (Sumtangen) a classical Mesolithic site at Hardangervidda. Photo: Svein Indrelid. Printed with permission.

Mammals of the late glacial and early Holocene are well documented in North Germany, Denmark, South Sweden and South Norway, with large ungulates and their predators (Undås 1942, Mangerud 1970, 1977, Indrelid 1975, 1994 [1986], Blystad 1983, Blystad et al. 1983, Lie 1986, 1988, 1990, Aaris-Sørensen 1988, 1995, 1998, 2001, Bratlund 1991, 1994, 1996a, 1996b, 1999, 2002, Holm and Rieck 1992, Liljegren and Lagerås 1993, Liljegren and Ekström 1996, Hakala 1997, Prøsch-Danielsen 2000, Rankama and Ukkonen 2001, Street et al. 2001, Østbye et al. 2006, Aaris-Sørensen et al. 2007, Sommer et al. 2008, Grøndahl et al. 2010). The distribution of the fauna in time and space was determined by the dynamic changes in the distribution of land, sea and ice (Aaris-Sørensen 2009, p. 50).

Another important base of migration was settlement. Radiocarbon dates indicate evidence of people on the North European Plains before 18,000 cal. BP. Human migrations northwards have been recorded 17,000–16,100 cal. BP, with a settlement increase 15,600–14,000 cal. BP also recorded for Denmark and South Sweden. In addition, a major expansion further north took place at the transition to the Holocene to West Sweden and South Norway (Bokelmann 1978, Bokelmann et al. 1983, Fischer and Tauber 1986, Holm and Rieck 1992, Holm 1993, Petersen and Johansen 1993, Schmitt 1994, Nordqvist 1995, Kindgren 1996, Larsson 1996, Housley et al. 1997, Ballin and Saville 2003, Bjerck 2008a, 2009, Fuglestad 2009, Saville and Ballin 2009).

EARLY SETTLEMENT AND DIASPORIC CONDITIONS

An overview of the situation before diasporic conditions developed is presented first, to provide a basis of why diasporic conditions are proposed to have arisen when the regular sea ice disappeared.

During the deglaciation phase, hunter-gatherers on the Continent crossed the Skagerrak and the North Sea in order to explore a new, but legendary landscape in South Norway, and later to include and change it into a cultural landscape (Fuglestad 2005, pp. 45, 224, ch. 5, Aaris-Sørensen et al. 2007, p. 921). This re-immigration into northern Europe can be seen as a historical social process in two steps, limited by environment and resource factors and defined as the pioneer phase and the residential camp phase by Housley et al. (1997).

The marine areas of consideration, including the Norwegian coast, consist of very productive marine biotopes with rich resources (Rowley-Conwy 1983, p. 119, Bjerck 2009, p. 121). With the focus on South Norway, the southwest coast deglaciated and was open to settlement as early as 16,800–15,600 cal. BP, with a varied terrestrial fauna and vegetation varying from herbal tundra societies to birch forest of changing density until the transition to the Holocene (Paus 1988, 1989a, 1989b, 1990, 1992).

A possible scenario is that the weak and as such debated traces in the coastal areas of Southwest and West Norway (Nydal 1960, p. 88, Mangerud 1970, p. 137, 1977, p. 49, Rolfsen 1972, p. 148, Simonsen 1973, Indrelid 1975, p. 14–15, Lie 1986, 1988, 1990, Johansen and Undås 1992, Rokoengen and Johansen 1996), which started 14,600 cal. BP and represent the pioneer phase, were left by a few small groups of hunter-gatherers as the first to scout and make use of previously more or less unknown and uninhabited areas. Bjerck (2009, p. 119) did not accept these traces as indication of human use because of lack of undisputable evidence. Differing from him, my assumption is that they indicate that the area was known to people on the Continent soon after deglaciation and that the early discovery and exploration probably were part of a migration habit which sporadically included South Norway in an extended cycle outside their regular area. The area had an economic potential for people as also indicated by the evidence of settlement in Scotland from the Bølling chronozone (Ballin et al. 2010), which may be confirmed by Aporta's statement (2009, p. 132) that the Inuit have made systematic use of the Arctic environment as a whole. The age of the start of the pioneer phase is also in accordance with a theoretical extrapolation to the north, based on the radiocarbon dates of Housley et al. (1997, figs. 14–15). The pioneer phase left few traces, even though it may have lasted more than 3000 calendar years.

The mobile people who used South Norway in this period may not have experienced isolation from the area of origin because contact over large geographical areas was normal and migration to this area was a part of their traditional lifestyle. During this period and until late Younger Dryas chronozone, the annual sea ice in the North Sea and the Skagerrak must have been so regular and normal during the cold season that ice-dependent communities on the Continent could have taken it for granted and used it in their travels as they became acquainted with the areas beyond the sea (see Aporta 2004). The sea ice made contact between the two areas simple (Wishman 1979, 2008, Coles 1998, p. 45, Bratlund 1999, pp. 33–34, Irwin 2007).

The seasonal cycle of sea ice is strongly linked to Inuit identity, knowledge and survival in the Canadian Arctic today (Laidler 2006). Here the sea ice was regarded as the 'home', 'classroom' or 'highway', the big helper which bridges the sea and a place of culture and history (Rasmussen 1955 [1932], p. 63, Inuit Circumpolar Council 2008, Laidler et al. 2009, 2010, p. 69, Aporta 2010, p. 177).

The Inuit also had camps on the sea ice in the same general locations every year which leave no archaeological remains (Aporta 2002, pp. 342–344). The Arctic regions will be affected by some of the largest and most rapid climate changes in the world in the future (IPCC 2007). For hunter-gatherers the climate changes in the late Younger Dryas may be compared to the situation which exists today for the Inuit in the far north, with increased risk when travelling during the long winter season (Ford et al. 2008, p. 55, 2010, table 3, Tremblay et al. 2008, Laidler et al. 2009).

Following Housley et al. (1997, pp. 44–45), a more or less planned settlement, the residential camp phase followed the pioneer phase. The residential camp phase is indicated by the expansion of a settlement over vast areas from the west coast of Sweden to the Norwegian Atlantic coast, including Scotland, as indicated by the archaeological record for the period 12,100–11,200 cal. BP. The material culture in this period suggests that related groups of hunter-gatherers may have settled these large areas, including the North European Plains (Troels-Smith 1963, Johansen 1964, Fischer and Tauber 1986, Skar and Coulson 1987, Gjerland 1990, Schmitt 1994, Bjerck 1995, 2008a, 2008b, 2009, Kindgren 1995, 1996, Nordqvist 1995, 1999, Prøsch-Danielsen and Høgestøl 1995, Larsson 1996, Kutschera and Waraas 2000, Fuglestad 2001, 2009, Jakslund 2001, 2008, 2011, Schmitt et al. 2006, 2009, Ballin et al. 2010, Skjelstad 2011, Schaller Åhrberg forthcoming). The establishment of the residential camp phase 1500–2500 calendar years later than calculated from a theoretical extrapolation based on Housley et al.'s dates (1997, figs. 14–15) may have had several reasons which are discussed here.

The effect of the climatic amelioration 11,900–11,400 cal. BP started in Southwest Norway, with an initial increase in temperature already about 12,600 cal. BP (Paus 1989a, p. 195). In this period, the North Sea Plain was flooded and the Skagerrak broadened (Flint 1971, fig. 13-4, Coles 1998, fig. 10, Schmitt et al. 2006). The immigration of the forest and an increase in the hunter-gatherers' prey may have contributed to an increase in the human population.

The rapid increase of new settlements around the Kattegat, Skagerrak and the North Sea were not possible without seagoing vessels. A successful exploration indicates the development of seagoing vessels, which was an important condition for a maritime oriented lifestyle (Mikkelsen 1989, pp. 78–79, Bjerck 1995, p. 141, 2007, p. 7, 2008a, p. 84, 2009, Sellevold and Skar 1999, p. 9, Bailey 2008, p. 365, Fuglestad 2012, p. 6; and see Ellmers 1996), after the regular seasonal sea ice disappeared. Terrestrial food continued to be a dominant part of the diet in the Preboreal and Boreal periods at an inland site in western France, with differentiated regional economic and settlement adaptations (Schulting et al. 2008, Terberger et al. 2012, p. 347). Such a regionalization may also have been true in parts of South Norway, as indicated by a diet dominated by maritime food at a coastal site (Sellevold and Skar 1999), at least for some groups. Reindeer was probably hunted in the lowlands, both in the Late Weichselian and the Preboreal chronozone (see Indrelid 1994 [1986], p. 235, Fuglestad 2012, pp. 17–18). The disappearance of the animals from Denmark and South Sweden about 10,300 cal. BP (Liljegren and Lagerås 1993, pp. 20–21, 28, Liljegren and Ekström 1996, p. 138, Aaris-Sørensen 1998, p. 98, Aaris-Sørensen et al. 2007, p. 921) may have resulted in increased migrations of people northwards.

The 'delay' of the residential camp phase could have been caused by the presence of regular seasonal sea ice, which would have made it easy to use other areas considered to be better and safer than South Norway with the unfamiliar rocky and steep mountainous topography. The 'delay' could have been further lengthened because successful establishments in new types of landscapes presuppose the development of a collection of new knowledge and insight into nature to make the land-use area productive (Sjurseike 1994, p. 140, Brody 2002b [2000], p. 148). With travel and hunting on sea ice as

the traditional way of life, boats were used to a lesser degree in the short, ice-free season, which may have added to a 'delay' in the establishment along these coasts in this period.

It is a logical statement, at least for me, that the regular contact between the hunter-gatherer groups in the area of origin on the Continent and the migrants in South Norway was maintained until the ice no longer covered the sea every cold season, so that safe travel became possible only with seagoing vessels (see e.g. Ford et al. 2009, Laidler et al. 2009). Travel over significant distances of exposed water is vulnerable to wind, floating ice and fog, affecting the ability to use boats and compromising safety (Ford et al. 2008, p. 56 cited Aqiaruq 2004 and MacDonald 2004). My assumption is that the missing sea ice became a serious obstruction to people's travels and caused a break of the regular contact and communication with the area of origin after a very long period. In addition, problems may have arisen suddenly because the climate change at the transition from the Younger Dryas to the Holocene occurred abruptly, perhaps even within a few decades (Dansgaard et al. 1993). This period may have resulted in many dangerous situations and other difficulties (see e.g. Aporta 2004, 2010, p. 166, Ford et al. 2009, Laidler et al. 2009). This event may have led to the establishment and development of diasporic conditions for the migrants. Knutsson (2005) pointed to a similar situation for northern Swedish hunter-gatherers in the early part of the Mesolithic. He proposed the importance of history in threatening situations and crises, for instance connected to rapidly changing environments, to have mediated an active relationship to the past through material culture and hunting techniques.

Fuglestad (2005, p. 270) assumed close social relations between the hunter-gatherers in Southwest Norway and northern Germany until 10,200–9500 cal. BP, which is much later than proposed here for the establishment of a residential camp phase based on the disappearance of annual sea ice about 11,900–11,400 cal. BP.

DIASPORIC FEATURES OF HUNTER-GATHERER SOCIETIES IN SOUTH NORWAY

Common dilemmas faced by dispersed people are the maintaining of identity, how to survive as a group and how to adapt to the new environment without surrendering the group identity (Safran 1991, Shaye and Frerichs 1993, p. i, Cohen 1997, p. 26, Vertovec 2008, p. 277). In the sections below, I will discuss how an independent reindeer culture may have developed in South Norway after the break in regular contact with people in the area of origin and the role of the mountain area in a diasporic reindeer culture.

To illustrate how a diasporic situation could have been in South Norway, the main characteristics of diaspora theory are incorporated here in a narrative presentation.

It is possible that the new situation, with regard to the lack of communication with the area of origin, without regular sea ice in the cold season may have been felt as an expulsion from the original area by the mobile hunter-gatherers in South Norway. The migrations, which included South Norway, were probably maintained until the ice no longer covered the sea every cold season. The missing sea ice became, for a period, a serious obstruction to regular communication because seagoing vessels presented a greater risk in bad weather situations compared to travelling over sea ice, which also made return voyages to the original area more difficult if not impossible. After that time travel by boat may have been substituted for travel over sea ice year round, which would have compromised safety when covering significant distances of exposed water. This situation had consequences for mobility. The

travel and communication system had to be changed and boat (or land) routes had to be established to replace the sea ice routes.

The new situation may have been felt as being in exile because of the splitting-up of people with a common identity and traditions (see Jacobsen 2001a, p. 22). For the early hunter-gatherers, the changed sea ice conditions may have resulted in reduced ability to procure traditional food and changes in hunting strategies, as for the Canadian Inuit, hunting close to the community because it became difficult to reach distant hunting areas due to long travel times without the sea ice (Ford et al. 2008, p. 49, 2009, 2010, table 3, Laidler et al. 2009). Changes in the settlement pattern for the hunter-gatherers in South Norway compared to their ancestors on the Continent are here postulated to be a consequence of the restrictions in mobility. For many groups this may have resulted in a marked reduction of the yearly land-use area, with maritime and reindeer landscapes as the two extremes. Such a new settlement pattern may be explained within a cultural framework, taken as the expression of a wish and a need to include the reindeer in the life cycle as part of people's culture in the residential camp phase. This proposal is based on diaspora theory which involves modification of social organization related to the maintenance and strengthening of a cultural identity by former lifestyle (see Jacobsen 2001a, p. 11, Vertovec 2008).

THE REINDEER CULTURE AS A BASAL PART OF THE DIASPORIC CONDITION

The migrations of hunter-gatherers were from areas where the reindeer culture was closely integrated into the cosmology. Shamanism may have been an important part of the diasporic situation related to maintaining cultural identity, traditions and customs from the Continent. These are the proposals Fuglestad (2005, p. 267) put forward about stories of the common mythic origin of people and reindeer that had to be maintained in order to carry out life in the new area, and which could have increased the motivation to kill a reindeer even more. In the end this was only possible in South Norway and at the very latest, only in the mountain area of South Norway.

As a base of the dispersed hunter-gatherers' cosmology and cultural heritage (see e.g. Vertovec 2008, p. 275), the shamanistic reindeer culture is therefore an important part of the hypothesis of the diasporic conditions presented in this paper. The collective creation of a new identity is related to the original landscape because it could set a standard of what to do in the new place at the same time as the area was structured based on social relations, duties and expectations (Ghannam 1997). In search of the known, the present in relation to an activated past could have been used as an instrument in constructing values (Knutsson 2005, p. 205), i.e. a conservative element with similarities to the theory of diaspora. Thus the reindeer as the known and activated past could have been used as a symbol of the biocultural background, embodying symbols of the diasporic group's collective identity through visions and myths associated with this lasting relationship to the origins (cf. Ghannam 1997, Jacobsen 2001a). Such a diasporic situation generates energy and makes people feel in contact with the powers of the universe when tackling everyday life (Jacobsen 2001c, pp. 102, 122).

If the reindeer could have represented a domestic world, in contrast to the unfamiliar world of hard rock and mountains, they may have been important in making the new world familiar and comfortable. At the same time, the animals must have been part of a tradition of the past and a conservative element of their diasporic culture (see Jacobsen 2001a, p. 16, Døving 2010, p. 10). To give reindeer this role in the new diasporic situation follows the assumption that cosmological features and cultural heritage take on a renewed meaning and often remain a central element in the conservation of the cultural

identity (cf. Vertovec 2008, p. 275). This may be taken as attempts to maintain ties with country and kin, and to control access to cultural heritage, which are closely related to aspects of life in a diasporic condition (Lilley 2006, p. 37). The reindeer may thus have compensated for the loss of symbolic capital (cf. Ghannam 1997) and thereby contributed to keeping the cultural traditions of the area of origin alive.

THE MOUNTAIN AREA AS PART OF A DIASPORIC REINDEER CULTURE

People with a reindeer culture had their yearly round in lower areas as long as the herds lived there. As the forest became dense, about 10,200–9800 cal. BP, the reindeer moved to areas with alpine vegetation, recorded in the southwestern coastal mountains already 11,200–10,200 cal. BP and at Hardangervidda after 9500 cal. BP (Bang-Andersen 1990, pp. 225–226, Indrelid 1994 [1986], p. 235). The South Norwegian mountain area became a changing, delimited and permanent refuge for this type of environment (see Indrelid 1977, p. 136). Assuming the reindeer were the tundra type, the forest limit would have controlled their movements (e.g. Johansen 1978, p. 58, Moe et al. 1978, Skogland 1994, 2006, Selsing 2010). My postulate is that from then on, the mountain area took over the conceptions and symbols passed down from the ancestors on the Continent. The earliest settlement in the mountain area in South Norway is 10,000 (11,200)–9500 cal. BP (Selsing 2010, appendix 2 with references) which is in accordance with a general deglaciation about 10,200 cal. BP.

Even if not all images of prehistoric human activities have an ecological intent (Gustafson 1995, p. 14, Uleberg 1999, p. 42, Fuglestvedt 2000, p. 60, Nærøy 2000, p. 7), reindeer was without doubt an economic resource, perhaps marginal, but important when hunter-gatherers stayed in the areas where the animals lived. Bergsvik (2002b, p. 18) has presumed that long-distance movements may not have been carried out in the early Neolithic purely for hunting, as all subsistence could be met within a short distance from the settlements all year round, which may also have been the case during most parts of the Mesolithic. From a modern point of view, there are no rational reasons to move from rich resources in the lowland to the narrower spectrum of resources in the mountain area (Gustafson 1988, Gundersen 2004, pp. 103, 113, 128).

Based on this reasoning, the habitation of the mountain area is postulated to have been the result of it being a biotope for the reindeer, and closely related to a prolongation of the original reindeer culture and to rituals that had required reindeer hunting. The diasporic movement into a new and different landscape may have influenced people's culture and worldview (see Jacobsen 2001a, p. 16). This implied the (re)construction of a mental landscape, and new and different experiences and knowledge to be generated and tied to stories, myths and traditions relating to the new landscape (see Boaz 1998, 1999a). The reindeer may have constituted a cultural bridge from old myths and traditions to the new diasporic situation and could have contributed to the socialization of the mountainous landscape. Thus the animals were deeply integrated in and an indispensable part of people's culture. These considerations may explain why the mountain area was used continuously (Selsing 2010, pp. 180–181, figs. 48–49), when it was not necessary to leave the coast for survival reasons.

I have made a calculation to make a proposal of when the residential camp phase could have ended. This phase was characterized by social processes related to the diasporic cultural elements of mobile hunter-gatherers with a Continental origin, where reindeer played an important role. Based on radiocarbon dates from archaeological sites in the South Norwegian mountain area, a large increase in settlement followed by a marked culmination was recorded in the period 8400–7500 cal. BP and was

characterized by a consolidated pattern of travel (Selsing 2010, chs. 7.4.1, 7.5.). This is later than the cultural changes about 9400 cal. BP at the coast, with a regionalized use of the landscape and reduction in mobility (Olsen and Alsaker 1984, Olsen 1992, Bjerck 2007, 2008a). An increase in the population along the west coast 8900–7800 cal. BP (Nygaard 1990, p. 234) may have increased settlement in the mountain area as well.

The culmination may confirm that the settlement consisted of a strong and viable reindeer culture with a perspective beyond reindeer as an economic resource. This is, however, long before there was general good access to reindeer pastures due to the high forest limit. However, the subalpine forest, where most of the archaeological Mesolithic mountain sites are located, may have been the only area where the three large ungulates (elk, red deer and reindeer) could be hunted (Selsing 2010, p. 294, see also Indrelid 1977, pp. 139, 1994 [1986], Mikkelsen 1989, pp. 24, 67–68). Thus a diasporic reindeer culture probably existed in a period when reindeer herds were limited. This may be an example of how people's culture and worldview can be more powerful than their rational action to optimize the ecological intent as proposed in the theory of human behavioural ecology and optimal foraging strategies based on ecological explanations (Winterhalder 1981, 2001, Winterhalder and Smith 2000).

The marked decline that followed the culmination in settlement may indicate a weakening of the reindeer culture. Given that diasporic elements of a reindeer culture existed at least for some groups of hunter-gatherers until this decline, the residential camp phase lasted from before 11,400 cal. BP until at least 7500 cal. BP, a minimum of 3900 calendar years. Probably, the hunter-gatherers of a reindeer culture did not maintain personal contact with people on the Continent for this entire period, but conservative diasporic elements of their original culture may have been integrated with the reindeer culture. This could have been based on their own exclusiveness, which enabled them to survive as a group for such a long period. Is it possible that the diasporic reindeer culture could last for such a long period?

Newell et al. (1991, pp. 17–20 with references) measured the lifespan of dialectic tribes (collection of bands which share a common culture) by using the direct historical approach in North American archaeology. The earliest dated manifestations of ethnographic societies and their cultural continuity were traced into and through the contact period with Europeans. The result showed that the recorded aboriginal minimum longevity is highest for T'atsaot'ine (Yellowknives), 1980 years. This provides a rough approximation of the minimum temporal parameters of the lifespan of dialectic tribes. This minimum calculation is half the longevity estimated for the duration of the groups of Mesolithic diasporic reindeer culture. This culture is, however, referred to as generally homogeneous and the people lived in a nature with only small environmental changes compared to North American dialectic tribes who lived in a period with big cultural changes caused by the invasion of Europeans, who also radically altered the environment. A conclusive duration of 3900 calendar years of the reindeer culture with Continental diasporic roots for some groups in South Norway is reasonable. The same conclusion comes from a comparison with the classic diaspora, from which the term diaspora originated, the Jewish diaspora, which has existed for at least 2600 years (Elazar 2012).

CREATION OF SYMBOLIC RELICS AND ESTABLISHMENT OF HOLY PLACES OF DIASPORIC ORIGIN

The characteristics of an early phase of a diaspora indicate a detachment from the area of origin, concluding with a re-creation of a religious way of life in the new living place. A reindeer shamanism based on the universal mutual relationship and interaction between humans and animals could have been developed with special rituals and magic. In a diasporic world, the shamanism could have been a conception for understanding cultural and social phenomena, providing guidelines for a set of symbols, actions and rituals through which people were mobilized (see Jacobsen 2001a, p. 13). For people in the Mesolithic, rituals were an important part of everyday life, not only the ‘otherworldly’ (Engelstad 2009, p. 599).

Some consequences of this condition would have been related to material culture. Following diaspora theory, my proposal is that when there were enough people, diasporic groups may have focused on the establishment of holy places and physical processions, using holy objects and relics to claim public space and express the psychological marking of the loss of the home area in a new place (cf. Jacobsen 2001b, Døving 2010, pp. 8–9). Early migrating people's relationship to these two elements, relics and sacred places, has also been proposed by Knutsson (2005, pp. 187–188, 209) as a necessary aspect of cultural reproduction through material culture, used to bridge the present with the past in North Sweden during the early part of the Holocene.

RELICS AS PART OF A DIASPORIC CONDITION

Nowadays, the establishment of diaspora groups is completed by the transfer of a relic from the area of origin, signifying the ultimate confirmation of a break with this area and the final symbolization of the group as being permanently stationed in the new area (Jacobsen 2001a, 2001b). With regard to hunter-gatherers of the Mesolithic, we have to search for relics that should have been a stable, universal, easily accessible and material manifestation of their shamanism. They should also have functioned as an attachment to their cultural heritage and as a key symbol of their identity, as Byrne (2004) implied for indigenous people. Accordingly, it is proposed that the cultural heritage was symbolized by the reindeer, the embodiment of a relic from the mythical place of origin. Also flint is suggested to be a relic used to establish a connection and create identity. After ‘transfer’ of the relics, they may have formed an inherited identity among people in the new land. Without these relics, people were left outside and not included in the society and its cultural activities.

It is probably necessary and important that the cultural relic in a mobile lifestyle be portable. Both reindeer and flint were suitable for fulfilling this quality. Reindeer moved by themselves, and flint was of a size that made it easy to transport. Both reindeer and flint may have been archaic markers of the migrating people, and which originally were either moved or brought from the original area on the Continent. Flint was found everywhere in the area of origin. Whether it was a ‘miracle’ or taken for granted by the hunter-gatherers, flint was also found around the coast of South Norway, which could

have been experienced as a confirmation of the successful transference of cultural traditions to the new landscape. When the mountain area was settled, it was necessary to bring along flint, as it does not exist in the Norwegian bedrock, but is found only in the glacial sediments along the coast (see e.g. Sejrup et al. 1998, Berg-Hansen 1999).

Flint was an important raw material for practical human needs throughout the Stone Age in South Norway. However, in the present theoretical approximation of the shamanistic view of diasporic hunter-gatherers, flint may have been both a relatively easily accessible and preferred raw material and also a relic as a part of the establishment in the new area. Thus the sacral and the profane may have been merged inextricably in the same communicative processes between humans and nature, displayed in symbols and rituals universal to shamanism (Vorren and Eriksen 1993, Eliade 1994 [1957], Sjurseike 1994, pp. 144–145, 147–149, Roman 2009, p. 22). Northwards, the occurrence of natural flint is sparse. The migrations that far were probably not ‘delayed’ and there are no indications of another cultural tradition compared to the south (e.g. Bjerck 2009). However, even if the migrating hunter-gatherers brought the same elements from the Continent and the typological record in South Norway is the same, the decision-making calculations of landscape use in different groups may have caused development in different directions (see e.g. Madden 1983, p. 196). In my opinion, it is not reasonable that the same cultural development occurred in exactly the same way when people migrated long distances in new landscapes all along the Norwegian coast, even if the same lithic typological artefacts existed. This situation, so different from that of their ancestors, may have been met with different decisions and therefore variations in how they met the new challenges, e.g. raw materials. Such interpretation lacks, however, evidence in the lithic typological record from the closely related Komsa, Fosna/Hensbacka, Ahrensburg and early Maglemose tradition in north Europe (e.g. Kindgren 1996, Larsson 1996, Bjerck 2009, pp. 123–125, Schmitt et al. 2009). For South Norway only a few traces of the material culture other than lithics exist.

Lithic raw material may give an indication of belonging and direction of origin. Flint in the South Norwegian mountain area has been interpreted as an indication of contact with specific areas and a high amount of flint as the result of frequent contact with the coast (Johansen 1978, p. 265, Gustafson 1988, p. 55, Mikkelsen 1989, Indrelid 1994 [1986], pp. 250, 275, Sjurseike 1994, p. 112, Bang-Andersen 1996, p. 219, 2008, p. 11, Boaz 1999b, p. 148). However, flint may have had its origin anywhere along the coast (Alsaker 1982, pp. 39–45, Indrelid 1994 [1986], p. 172, 276), and changes in the amount may have been related to diasporic events.

Flint is found in (nearly) all collections of Mesolithic artefacts from the South Norwegian mountain area (Mikkelsen and Nybruget 1975, Johansen 1978, pp. 69–71, 144, 184–185, 265, 283, Gustafson 1982a, 1982b, 1988, Randers 1986, pp. 92, 94, Mikkelsen 1989, p. 79, Bjørge et al. 1992, Indrelid 1994 [1986], Sjurseike 1994, Boaz 1999b, p. 136, Bang-Andersen 2008, p. 112). The practical demand for flint here should, however, not be overestimated as the total amount is very small and the quality is often varying or poor (e.g. Mikkelsen 1989, pp. 79, 83–84, Indrelid 1994 [1986], p. 171, Bang-Andersen 2008, p. 114). This indicates that flint may have been important, independent of the amount and quality.

Flint was the dominating raw material around the coast of South Norway during the Mesolithic with few exceptions. Usually, more than 90 per cent of the artefacts were made of flint with a little quartz, quartzite and rock crystal, with a decrease of flint towards the end of the period (e.g. Bang-Andersen 1981, 2008, Bjørge et al. 1992, Olsen 1992, table 4, fig. 55, Indrelid 1994 [1986], Nærøy et al. 1994, Ballin and Jensen 1995, Høgestøl 1995, Glørstad 2004, Bjerck et al. 2008, Skjelstad 2011, p. 226). In the mountain area, the amount of flint in relation to other raw materials varies, but the percentage is

generally much smaller than in the lowlands. In the Early Mesolithic sites in the Southwest Norwegian coastal mountains, the amount of flint artefacts is comparable to what is found in the lowlands (Bang-Andersen 1990, see, however Tørhaug and Åstveit 2000, p. 37). It seems incomprehensible that the use of other good lithic raw materials, such as quartz, quartzite and rock crystal, was not more widespread. An explanation for flint as the preferred lithic raw material above all may be found in the diasporic meaning of this raw material as a symbol of the origin and the ancestors. The exceptionally high amount of flint in the lowlands for such a long part of the Mesolithic could also have been caused by flint representing the reindeer in these areas where they did not occur, at the same time as it was a good all-round lithic raw material.

Seeing flint as a cultural relic of mythical origin could explain why this type of artefact material had such a large distribution in the mountain area where it does not occur naturally and where other useful local lithic materials were readily available (see Indrelid 1977, p. 143). Roman (2009, p. 124) has mentioned flint among the things in the shamanic worldview that were often believed to possess a life force or spirit. Flint, which like other lithic materials lasts 'forever', thus could mark a presence in the landscape and a contact with the power of nature.

Regarding flint as a symbol of the cultural affinity to the area of origin and the past, this could make techniques, production and the use of stone tools a part of the communicative system of material culture (see Sjurseike 1994 for jasper). In this relationship, leaving artefacts, not the amount, but the presence of material evidence, was important as a marker of the group's presence in the landscape at sites planned for reuse (Sjurseike 1994, pp. 142–144, 147–149). Granted flint was ritually deposited, giving it back to nature may have been intended to unveil a belonging and an identity of the holy origin. The presence of flint at sites may have had a double function: a shamanistic marker – the relic – of the origin myth, and a practical marker of the useful raw material for tools for hunting the cultural totem, i.e. reindeer. Following Meltzer (2010, p. 236), flint deposited at the sites could have represented caches or depots of this material. This may find a confirmation in the Inuit tradition of leaving behind the tools and implements needed for hunting reindeer, because they would revisit their camp next year, and much of what they needed would remain there (Nunavut and its people 2007). The reuse of artefacts in a new cultural context may have been important for cultural reproduction. In general, material culture may have communicated the worldview as references to the ancestral past (Knutsson 2005, pp. 190, 194, 200). Following this line, Knutsson (2005, pp. 201, 207) has argued that early hunter-gatherers knew and returned to old sites (sacred places) to actively use the relics and thus they were part of their known past. Sjurseike (1994, p. 131) has proposed that the Mesolithic jasper quarry in Skardlia, East Norway represented a special, important place, both at the beginning and at the end of the yearly cycle. Similarly, the traditions connected to the original use of flint on the Continent, and brought to coastal South Norway, where in both places flint occurred naturally, mean that deposits of flint in the mountain area may have had the same value as a quarry as a sacred place for reuse.

As communication between groups probably changed over time, so did the direction of the origin of the flint deposited in the mountain area. It could have been transported over large areas through the hunter-gatherers' mobile and flexible life, deposited by intention followed by reuse of the deposited flint. In a diasporic framework, the cycle of the people was woven into the cycle of the reindeer through the hunt and the rituals connected to the cult. In this way, the two extremes of the land-use area, the mountain area and the coast, two valuable and relatively equal types of landscapes, were integrated as symbols of this mobility through reindeer movements in the mountains and flint originating at the coast, with both representing relics of the Continent. Reindeer and flint are, in this relationship, interpreted as expressions of a common place of origin, symbolizing a safe and stable

aspect of life. In this setting, the two mobile relics were necessary as a continuous confirmation and incarnation of the reindeer culture symbolized by the permanent establishment in the new area. The use of reindeer and flint as relics in a diasporic framework is, in my opinion, a pragmatic and straightforward argument for the practice of hunter-gatherer shamanism, which implies that giving something back to nature is an expression of the symbiotic relationship with nature.

DIASPORIC MEETING PLACES IN THE MOUNTAIN AREA

In a diasporic society, the cosmology is reflected in the material culture of sacred places used to maintain cultural identity and rituals, and treated as symbols of the establishment in a new area (cf. Jacobsen 2001a, p. 23, 2005, pp. 10–12, Jordan 2001, 2003). Assuming a yearly round with the mountain area as one geographic extreme to be a diasporic response in order to maintain not only pre-migrating cultural and social factors, but also the residential patterns in the new environment, it would have been an important factor in the creation of the religious institutions of the migrating people (cf. Clarke et al. 1990, Ebaugh et al. 2000).

Based on ethnographic evidence, trails and routes to strengthen the culture have probably been used for generations as reported by Aporta for the Canadian Inuit (2004, 2009). The Inuit perceive their land-use area as organized by routes and landmarks in a network of lines through which people and animals move and where they comprehend the totality of their land and access its resources (Aporta 2004, p. 12 cited Collignon 1996, p. 98). Networks and alliances were necessary for their subsistence and for social gatherings. Lines of communication and migration tend to follow natural lines and rivers and watercourses often make up the core in the traditional use of the landscape for social purposes, as borders and meeting places (Yengoyan 1968, p. 188, Osgood 1970 [1936], Binford 1978, Forsberg 1985, p. 14, ch. 7.4., Brody 2002a [1981], pp. 175–176, 195, Aporta 2004, pp. 19, 27, 2010, p. 167).

A meeting place may have a strategic location of economic value used for hunting, exchange of experiences and material objects, maintaining alliances between groups and finding partners, while at the same time being a sacred place. Sharing knowledge facilitates communication. This means that knowledge could accumulate regularly among many people who achieved deep insight about the nature, e.g. about risks and adaptive strategies (Ford et al. 2008, p. 53). Common facilities such as exchange of raw materials and tools (see King 2003, p. 248 for the Maoris and Meltzer 2010, p. 237 for the early Americans) during meetings could have served to maintain traditions with a symbolic value of reliving the mythical origin.

The sacred places of the diasporic reindeer culture to maintain identity and rituals are proposed also to fulfil the intention of meeting places in general. As they represented valuable geographical knowledge with regard to where prey was located, the meetings could also have been a confirmation of the sacred places in the landscape. To acknowledge the reindeer and their visible appearance, holy meetings had to be carried out in the right places shown by the migrating reindeer. They are proposed to have been located where the reindeer lived, in the lowland as well as the mountain area, to fulfil the demands where it was possible to practise the hunting traditions and rituals used to reflect and promote diasporic practices. People could execute holy acts related to summer and autumn, when the reindeer hunt was prepared and carried out, while other traditional activities took place (e.g. Gustafson 1988, pp. 55, 64, Indrelid 1994 [1986], Fuglestedt 2009, p. 313, see also Brody 2002a [1981], ch. 10, 2002b

[2000], pp. 335–336). Such arrangements would strengthen the affinity between groups that participated and also function as a powerful binder for acceptance of identity. To distinguish these meeting places from others in the Mesolithic, analogous to 'hui', the Maori word for culturally defined meeting places and gatherings (King 2003, 2006 [1997]), and to represent an important tradition that mobilized people in their support for maintaining and obtaining the recognition of symbolic strength and pride in their shamanism, culture and identity, selected places in the mountain area where the reindeer occurred could have been used for meetings by people with a reindeer culture. This proposal has similarities with the interpretation of rock carvings in western Norway as traditional, social and religious centres with yearly gatherings (Olsen and Alsaker 1984, p. 100).

Where should we look for diasporic meeting places in the archaeological record? The distribution of originally wild reindeer today and the Mesolithic pine forest limit (e.g. Johansen 1978, fig. 40, Andersen and Hustad 2004, p. 24, Selsing 2010, fig. 44) concretize the potential area of meeting places. The extent of many archaeological mountain sites is limited, and remains of material evidence are modest, small or non-existing, *inter alia* because of hunter-gatherers' indifference to material goods (e.g. Binford 1978, 2001, Knutsson 1995, p. 200, Brody 2002a [1981]). Indrelid (1977, pp. 132–135) divided the Mesolithic mountain sites at Hardangervidda into the largest, the middle sized and the smallest. Most of the small sites are poor in artefacts and interpreted as sites related to active hunting. The largest sites were interpreted as the result of frequent use over a long period (see Indrelid 1977, pp. 132, 135, 1994 [1986]). My proposal is that many of the largest sites were used as diasporic sacral meeting places by people who gathered from different areas at the coast to fulfil this conservative element of the reindeer culture and at the same time the relics, flint and reindeer were merged in the diasporic reindeer hunt.

The mountain settlement in the Mesolithic (Johansen 1978, pp. 195, 274–288, figs. 144, 146, 148, 150, 152, Mikkelsen 1978b, p. 109, Gustafson 1981, p. 9, Randers 1986, pp. 26, 62, 89, Nygaard 1990, Bjørge et al. 1992, pp. 300, 302, Olsen 1992, p. 252, Indrelid 1994 [1986], pp. 172, 276) indicates that communication routes west of the main water divide, situated close to the west coast, were mainly to the west. Hunter-gatherers from these areas also crossed the water divide towards the east and used the upper parts of watercourses draining towards the southeast. The settlement in the southern part of the mountain area indicates that east of the water divide the contact was primarily towards the southeast and south (Indrelid 1977, p. 139, 1994 [1986], Mikkelsen 1978b, p. 109).

The hypothesis of a western limit for Mesolithic mountain sites ('Vestgrense') located between the bottoms of the fiords has been discussed (Indrelid 1973, 1975, p. 6, 1977 see map fig. 8, 1994 [1986], Gustafson 1981, 1982a, 1982b, Kvamme and Randers 1982, Randers 1986). The western limit is located west of the present weather divide, which probably was located farther west in the Mesolithic than today because of the general climatic conditions at that time (Selsing 2010, p. 150). The winter pastures in the mountain areas beyond the western limit were probably too poor for reindeer because of the maritime climate conditions and were also too small to breed a large enough reindeer population for a safe hunt, while the extensive mountain areas farther east had good and safe hunting areas (Johansen et al. 1979, Gustafson 1981, p. 6, 1982a, 1982b, Randers 1986, see Skogland 1994, fig. 2 or Andersen and Hustad 2004, p. 24). Compared to the diaspora theory, this limit could have excluded or reduced people's use of these minor mountain areas from the west coast after the deglaciation period when the forest limit was high. People, however, had easy access by boats to the extensive mountain areas farther east via the bottoms of the fiords.

Granted the religious procession to be a holy space in movement, the moving relic of the reindeer herds may have been identified as shamanistic processions for fusing the animals to people through

celebrations, which are a normal part of ritual life in diaspora in order to display religion and identity (see Jacobsen 2008, pp. 217–219). For hunter-gatherers this is also in accordance with ethnographic evidence that a whole band may camp together in seasons of good foraging to hold ceremonies (Service 1971 [1962], pp. 46–47). Bergsvik (2002a, p. 309) has similarly argued for networks maintained through collective social events and actions that presupposed the locations of common ritual places in the landscape. Within defined but flexible structures, holy meetings may have been arranged as ceremonies, above all to strengthen the common identity, but also in honour of the prey.

The pattern of settlement in the mountain area described above opens the possibility that people who originated in lower areas in the southeast, south and west had contact with each other in the mountain area using networks of routes to meet seasonally (Mikkelsen 1978b, p. 115, fig. 18 and Selsing 2010, ch. 9). It is confirmed by the distribution pattern of greenstone and diabase axes and adzes originating in the quarries in the southern and northern parts of the west coast, which indicates an extensive spread of material up to 600–650 km. This demonstrates contact between the quarries and the river valleys in the forested interior of eastern Norway in the Mesolithic and reveals networks of mobile hunter-gatherer communities (Olsen and Alsaker 1984, p. 93, fig. 13). Such movement of raw material artefacts found outside the ordinary distribution area may have had its origin in networks to make alliances visible (Skjelstad 2003, p. 44).

Sites in the mountain area as a communication area between people from different areas could fulfil the demands of sacred meeting places. Compared to the communication around the coast, the mountain area in many cases may also have offered the easiest route between different groups of hunter-gatherers along the coast. The watercourses have a natural continuation to the outer coast and the sea via the fiords. The large watercourses in South Norway have their springs at the water divide in the mountain area with short distances between the springs of adjacent watercourses which drain in different directions. People who used adjacent watercourses could meet each other at the water divide. They could have had a crucial role as being within reasonable proximity to even marginally and distantly located coastal groups from several directions, covering large areas in South Norway (see Madden 1983).

The sacred diasporic meeting places could represent junctions in communication networks. Diasporic meeting places located close to the water divide are suggested to have had such a crucial role. As an argument for this, the classical sites at Finnsbergvatn (Sumtangen), sites 765 and 768, 1190 m a.s.l. at Hardangervidda are chosen as a representative (see Indrelid 1994 [1986], pp. 143–147) (Fig. 2). They are located close to the water divide of a watercourse draining west. The distance to the adjacent east draining watercourse is less than half a kilometre, while the distance between known Mesolithic sites is about 3 km. The recorded finds are artefacts, house constructions and fireplaces, one of which was delimited by a ring of small stones. The age is 9400–7500 cal. BP (two periods), i.e. the final use coincides with the decline after the period of settlement culmination in the mountain area mentioned above. The stratigraphy and the radiocarbon dates indicate reuse over a long period. The occurrence of e.g. rhyolite and points made of this material shows contact between the site and the west coast (Mikkelsen 1978b, p. 110, see also Indrelid 1994 [1986]). The oldest house construction from Hardangervidda is from site 768 with an age of 8400 cal. BP which coincides with the beginning of the culmination period. The find circumstances indicate an investment in an important site for long-lasting use and it is proposed to interpret the fireplace with a ring of small stones as an indication of a sacred place located at an important crossing point of reindeer. These sites and the area where they are located must have been of special importance. In a diasporic framework this area has several characteristics which point it out as a meeting place where people from the west and the east could meet. People who used this area could fulfil a need for a sacred meeting place.

Many Mesolithic sites at Lærdalsfjellet, Årdalsfjellet, Hemsedalsfjellet, the mountain area in northern Telemark and other places at Hardangervidda (Martens and Hagen 1961, Johansen 1978, Schaller 1984, Mikkelsen 1989, Bjørge et al. 1992, Indrelid 1994 [1986]) located close to lakes, rivers and springs satisfy the criteria of sacred diasporic places. Like the sites at Finnsbergvatnet, other sites located in the spring areas of the watercourses which drain in different directions may have been the sacred meeting places of people from several directions, and perhaps different cultures, who met to exchange knowledge and other cultural elements. An ethnographic example of a meeting place between people from different cultures was recorded by Ingstad (1975 [1951], p. 121), where the Inuit met with other aboriginal peoples in northern Canada.

DIASPORA – NO DIASPORA

Different kinds of objects have, in an archaeological context, been identified as having the same social value as diasporic relics. Mahler (2011 with references) has mentioned special, attractive elements that are considered exotic, alternatively ritualized objects, such as the polished point butted felsites axes used in the migration to Shetland during the Neolithic. The distribution of Lapita-style ceramics has been seen as critical to successful migration to the Pacific from about 3500 cal. BP, held as a symbol of shared social identity and long-distance alliances and named a diaspora by Lilley (2007, pp. 299–300). On the other hand, the distribution of e.g. jasper artefacts in eastern Norway during the Mesolithic was not diasporic, but a use of a raw material identifying a group of mobile, but not migrating, hunter-gatherers (cf. Sjurseike 1994). The same is probably valid for the two types of flint moved up to 1000 km from their outcrops, interpreted by Zhilin (2003) as an expression of the communication network, covering large areas of east Europe in the Preboreal and the early Boreal chronozones.

The deglaciation process in eastern Norway was later than in other parts of South Norway and, combined with the high marine sea level (Carlson et al. 1979, Garnes and Bergersen 1980, Bergersen and Garnes 1983, Sørensen 1983, fig. 17, Vorren and Mangerud 2006, p. 514), this may have been an obstacle to early migration to this area. The reindeer (as well as the brown bear, *Ursus arctos*) probably did not migrate to this part of South Norway before the Subboreal chronozone (Lie 1988, pp. 231–232, 1990, Liljegren and Lagerås 1993, pp. 28, 32–34, Rankama and Ukkonen 2001, Andersen and Hustad 2004, pp. 14–15, Røed 2005, Andersen et al. 2006, pp. 12, 82, Østbye et al. 2006). Another possible obstacle to the development of a reindeer culture could have been the Gudbrandsdalslågen river, which crosses South Norway from coast to coast, southeast to northwest. Since the forest had grown dense, it covered the low pass point of the river (612 m a.s.l.). Therefore, it may have been a borderline for the immigration of reindeer from the south, if the animals did not migrate that far north in the Late Weichselian along the coast. Hunter-gatherer groups in this area used quartzite in the Mesolithic and not flint as their main lithic raw material in the tool equipment and clearly stand out from people with coastal contact in the south and west (Gustafson 1988, Sjurseike 1994, Stene et al. 2010). To these people, flint probably was not a relic as a symbol of their origin and they did not identify themselves with a reindeer culture from the Continent as defined in this paper.

The larger amount of flint artefacts at sites in the southern part of the mountain area compared to the small amounts in the north (Indrelid 1977, p. 143) may be the result of a strong reindeer culture in the south and a weak (or non-existing) one in the north of the mountain area. This difference may have been due to the great distance from the north to the ancestors on the Continent, making it more difficult to fulfil diasporic cultural demands compared to the southwest as the core area of a diasporic reindeer culture. However, the reason may be as simple as the lack of reindeer in the north.

It is reasonable to conclude that a diasporic reindeer culture did not develop in the whole of South Norway.

CONCLUSIONS

The introduction of the theory of diaspora, combined with ethnographical comparative analyses, indicates the theory to be a fruitful approach, which highlights new aspects regarding the Mesolithic societies in South Norway. Probably, the hunter-gatherers brought diasporic conditions of a shamanistic reindeer culture from the Continent to South Norway following the change in nature during the deglaciation after the last glacial maximum. The diasporic conditions could have reduced much of the uncertainty in people's lives. In this model, the reindeer represents a domestic world of the familiar in contrast to the unfamiliar and different world of hard rock and mountains in South Norway. It is suggested that, to strengthen the identity and staying power of the group, their worldview acquired the implementation of new functions that changed a series of cultural and social phenomena. Holy meeting places were established as the cognitive markers in the new landscape. Based on the diaspora theory, it is proposed and argued that reindeer and flint were the symbols and embodiment of physical mobile relics, i.e. the material manifestation of the shamanistic reindeer culture of hunter-gatherers to connect and identify with the mythical place of origin.

ACKNOWLEDGEMENTS

Grete Lillehammer read drafts of the manuscript and is greatly acknowledged for comments on the content, terminology and the English, which have improved the manuscript considerably. Jenny-Rita Næss also gave inspiring feedback on an earlier draft. John F. Smedstad Moore corrected the English. Eva Schaller Åhrberg and Bjarne Grønnow and his staff at SILA, The National Museum in Copenhagen, have added to improvements through discussions and proposed literature. I am grateful to these persons, the editor, the two referees and the Museum of Archaeology, University of Stavanger that granted the funding for the project through the Foundation for Female Research Initiatives and the Norwegian Research Council.

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