

The Past in the Present. Landscape perception, archaeological heritage and marginal farmland in Jæren, south-western Norway

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This paper examines the background of conflicts in the resource management of a specific type of 'utmark' in the agrarian landscape. The historical relationship between empirically experienced 'utmark' and the resource management of archaeological heritage and environment surrounding it is analysed. The landscape perceptions of two professional management regimes are used as platforms to gain a wider understanding of worldviews in relation to the 'utmark' environment. The landscape orders are based on a landscape cosmology of prehistoric origin, but which modern versions are scaled differently, mirroring changes of worldviews. One management on the other superimposes an extreme dissonance of inferiority between contradictive landscapes aesthetics.

THINKING WITH, ABOUT AND IN-BETWEEN LANDSCAPES

When dealing with the topic of landscape perception a striking dichotomy is apparent. The landscape could represent a territory, which can be apprehended visually, and a set of relationships between people and places, which provide the context for everyday conduct (Thomas 2001:181). Hence a landscape refers to a picture in painting and drawing, or to natural parts of a country and a province or to a condition, custom and practice (NRO 1937:2860). While a picture or province may involve thinking about landscape as the perception of an object from outside, a condition, custom and practice explain thinking with landscape as the maintenance of cultural order and tradition of everyday life. When approaching relationships between resource managements of agrarian and cultural heritage landscapes the following questions could easily arise: how do human agents form connections in-between these relationships of landscape perceptions, and what constitutes the connections and disconnections between them?

In representing an in-between relationship of landscape perception, conflict is a situation of sharp disagreement or collision in interests between people or institutions whose objectives clash (Guralnik 1976:298). In the rural district of Jæren, Rogaland County, South-western Norway (Fig. 1), the protection of archaeological heritage and cultural environments surrounding it is met with hard conflicts from intensive cultivation, in particular the ‘utmark’ environment in the agrarian landscape. The examination of these conflicts in the landscape requires the applications of specific approaches, theories and methods. In analysing dissonance between interests in resource managements, it is necessary to review the complexity of the situation, and to single out mutual and contradictive factors at heart of the disagreements.

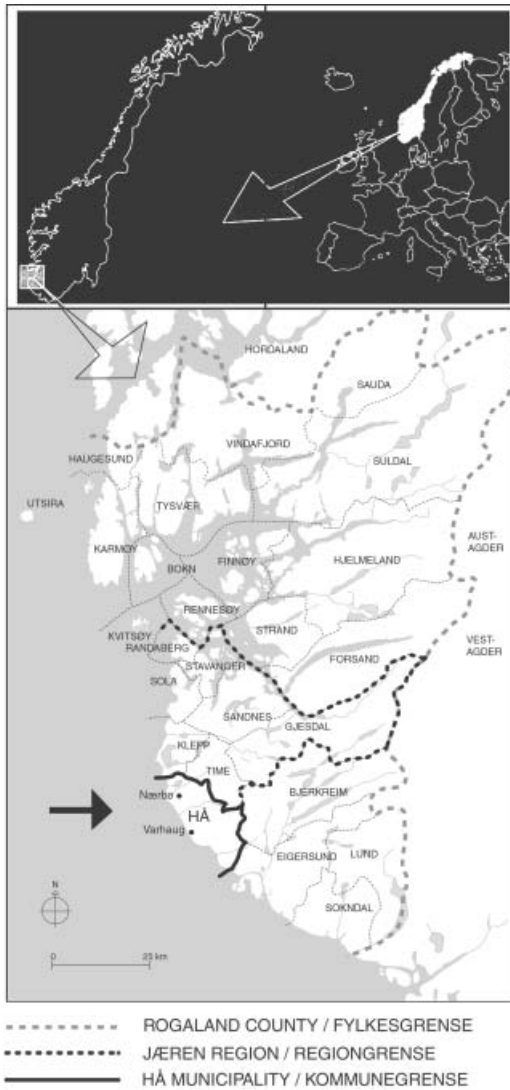


Fig. 1. Rogaland county with the Jæren region and Hå municipality (Lillehammer 2005:13, Fig. 1).

In this analysis we will investigate the relationships between worldviews of the 'utmark' environment and the landscape perceptions and cultural attitudes towards the caretaking of archaeological heritage in this type of environment. We will present the historical background and development of the 'utmark' environment, and discuss models suitable for managing archaeological heritage resources in the agrarian landscape. The analysis of data material extends from a diachronic and synchronic case study in the Jæren region, and involves the application of long-term and short-term approaches towards the 'utmark' environment in the present (Lillehammer 2004, 2005, 2006, in prep. a, b, c, Lillehammer & Prøsch-Danielsen 2001).

RELEARNING TO THINK ABOUT SPACE

Anthropology reports there is always someplace for people to experience (Bender 2007:136), but how does the beholder perceive it? In his work on 'non-places' Augé (1995) has challenged the modern conception of space: 'Experience has taught us to de-centre our way of looking, and we should make use of this lesson ... for we live in a world we have not yet learned to look at. We have to relearn to think about space' (Augé 1995:35–36). Modern life has resulted in the alteration of profound awareness about place and the relationship to history and the past resulting in the creation of non-places. We perceive or pass through these places, but only in a partial and incoherent manner, thus seeing only those visible phenomena of the exotic and spectacular significance in the landscape (Augé 1995).

Analyses of the interrelationship between anthropology and archaeology have pointed out theories and methods that contribute to the understanding of spatial orders, such as the existence of cosmologies within cultural frameworks that influence the everyday life of people. Cosmology is encapsulated in the term 'social epistemology', which explores the idea that truth derives from a cosmology and a common sense, which relationships are linked with culture, landscape and aesthetic. Aesthetic considerations involves life in general, and the particular worlds that people create for themselves, and how these change over time, either through their internal dynamics, or through encountering other people's worlds with a different cosmological and aesthetic basis (cf. Gosden 1999:34–35, 77–78, 152–153). As cosmologies have a practical meaning in cultural behaviour, they are analogies to realities in which the worldviews attempt to describe or map conceptual frameworks about origin and structure of the world. These worldviews can be extremely localised, become dominant over wide areas and be reflected and recovered in the spatial patterning of the material record (Ruggles 2005:13–14). How could such worldviews apply to conflicts in the agrarian landscape on the contemporary scene?

The conflicts between resource managements in dealing with cultural heritage in the agrarian landscape make the questions of cultural change, landscape cosmology and different worldviews an important issue towards understanding the past in the present landscape. With regard to the relationship between worldview and the concept of 'utmark', Steinsland (2005) reports that it is necessary to challenge the hypothesis of a correspondence between imaginative cosmology and the lived, everyday life, to see if the cosmology really fits, and to find out the relationships between variations of landscapes, empirical exploitation and the shaping of imaginary worlds (Steinsland 2005:145). In approaching the conflicts in the landscape we will de-centre our way of looking at the rural landscape of the Jæren region and examine landscape perceptions of the 'utmark' environment. In order to form a bridge between long-term and short-term developments in the agrarian landscape, and to test the landscape perceptions and cultural attitudes of the resource managements in the field, the investigation will focus especially on unnoticed, indistinctive archaeological heritage in this type of environment.

METHODICAL APPROACHES TO THE 'UTMARK' ENVIRONMENT

The Jæren region is situated on a small coastal rim without skerries and islands shielding it from the North Sea. The 'utmark' environment is part of a heathland of Atlantic distribution (Prøsch-Danielsen 2001, Prøsch-Danielsen & Simonsen 2000a, b), which in Jæren forms a background for the developments of pre-modern and modern land use (Fig. 2). According to modern agricultural terms, Hå municipality in South Jæren has the widest distribution of heathland in the region, as 25% of the surface is so-called uncultivated farmland. Therefore the case study is limited to this municipality.

The resource managements in the study represent two groups of informants: dairy farmers, managers of farmers' organisations included, and civil servants, archaeological heritage managers included. The assortment corresponds with private and public sectors in the management of cultural and natural heritages and agricultural resources and their environments in the agrarian landscape on local, regional and national levels in Norway. Due to practical reasons the informants were chosen partly randomly, partly deliberately from these networks in order to reach a wider distribution of information. Though the selection of farms involved in the long-term and short-term studies did not altogether correspond, they covered a geographical profile from seafront to upland. There is an excess of farmers in the long-term study, and an excess of civil servants in the short-term study. The over-balance was levelled out between the resource managers in part of the short-term study. However, the results from the analyses are indicative of the male voice on the local and regional levels.



Fig. 2. The agrarian landscape in Jæren is uniform and mainly treeless farmland of low-lying, undulating lowland with a restricted area of upland. The natural environment is scarce with remnants of forests, wetland and unfertilized pastures. Photos: Terje Tveit # Museum of Archaeology, Stavanger.

In the long-term approach interdisciplinary archaeology and palynology methods were supplemented with interviews. A specific type of mysterious earthwork of usually non-distinct character in the landscape – the so-called ‘fairy-ring’ – and the cultural environment surrounding it were singled out for examination. A survey of ‘fairy-ring’ localities covered 80% farms, which represented 22% of farms in Hå. Archaeological excavation and pollen sampling included 19 localities in the Jæren region, and nine localities were C-14 dated (Prøsch-Danielsen 2001:44, 54, Tables 1, 4). In the interviews the popular and scientific bases of knowledge about age and function of the earthwork and its environment were recorded. The selection of informants was similar to the short-term study, but the assortment of farmers was supplemented from other parts of Rogaland. There were 46 participants from the local and regional levels, who were predominantly males and aged between 23 and 97 years.

In the short-term approach qualitative methods were used, such as the application of drawing techniques supplemented with interviews. The resource managers and their cognitive profiles towards the modern farm-land and the ‘utmark’ environment were analysed. The interviews represented 36 resource managers (groups 1–2). The farmers were mainly born on farms in the local community and their age varied between 28 and 67 years. The civil servants had rural as well as urban backgrounds and their age varied between 30 and 63 years. There were 40% more males than females among the resource managers. In the total representation of the public administration twice as many civil servants were from the regional level.

All interviews were performed indoors at the premises of the participants, either as one to one interviews or in groups of 2–5 persons. The sessions were taped and lasted at an average of 1–1.5 hours. The informants were asked questions from an interview guide, which was prepared and distributed beforehand to the institutions of the civil servants, but presented directly at home to the farmers. The guide focused on the explanation of following concepts: ‘cultural heritage resource management’, ‘farming’, ‘cultural landscape’, ‘utmark’, ‘heathland’, ‘cultural heritage’, ‘cultural heritage monument’, ‘fairy-ring’, and ‘cultural environment’. The participants were invited to draw the typical landscape of a modern farm in Jæren – the ‘Jæren’ farm’ – after the interview sessions had finished, and to mark the functional centre and places of archaeological heritage in the farmland.

The choice of 97% informants who accepted the invitation was to elaborate the ‘Jæren farm’ in the form of mental maps on the background of their involvement in the management field (Lillehammer 2005:199, Fig. 55A–F). In the database their drawings were evenly distributed between the two groups of informants (Lillehammer 2005: 179, Table 9). Mental maps have behavioural implications in motivation, decision-making, and spatial search (Lowe & Pederson 1983:36), and could integrate hidden agendas in the maps (Harley 2001). In order to search for significant focal positions in the presentation of natural and cultural environments and archaeological heritage a specific method of visual analysis of the drawings was worked out.

RESOURCE MANAGEMENT OF THE ‘UTMARK’ ENVIRONMENT IN JÆREN

In Jæren the cultural environment consists of patchy-patterned heathland together with various cultural relics from pre-modern and modern land partitions and cultivation activities (Fig. 2). In the last 30–40 years an immense agrarian expansion has threatened the extinction of archaeological heritage outside less settled areas at the farms. The development has led to a heavy destruction of ancient monuments, in particular the indistinct archaeological heritage in the environment (Haavaldsen 1999).

As new areas have steadily been brought into cultivation and productivity has grown, partly due to the high rate of competition, agriculture production in the region has prospered. The extensive land clearances have ceased at farms where agricultural plantations are thriving and in good condition. Wasteland has been left uncultivated or unfertilized, as its agricultural value is restricted. The environment is gradually reforested, and the uniform character in the agrarian landscape has been changed (Holm & Sødal 1992:161). These marginal environments classify as 'utmark' in the modern farmland in Jæren.

When seen from the perspective of resource management, the term 'utmark' requires explanation, as it does not have an equivalent in terminology outside Scandinavia (Svensson 2005:133). In Norwegian legislature the concept applies to regulation of modern land use of uncultivated grounds, or to agricultural areas unused as infields covering a variety of cultural environments. Access to the 'utmark' and use of the areas are governed by ownership to land, and boundaries between infield and outfield are conditioned by cultural practice (A&G 1998:168).

However, in Norwegian Heritage Law (Lov 2001) the concept of 'utmark' is problematic, as the term is completely absent from the legal texts of the paragraphs. Consequently, 'utmark' is non-existent in the theoretical basis for protecting archaeological heritage in the landscape. From this perspective 'utmark' represents a non-place (Augé 1995), i.e. an environment of transit in order to reach central destinations formed by modern expansion and enterprise. How is this gap in the law dealt with in order to relate to archaeological heritage resources in the 'utmark' environment?

While a sustainable resource management could do with the steadfast conservation of some types of archaeological heritage and cultural environments, physical encroachments in the resource management of other types are unnecessary. Operational management plans are regularly worked out in order to secure the protection of heathland in Jæren (Schou et al. 2000), which also include indirectly the archaeological heritage in the 'utmark' environment. In this endeavour the agricultural sector plays an important role, either as partner or threat in caretaking the archaeological heritage in the agrarian landscape. It is therefore important that the cultural and natural heritage sectors cooperate with the agricultural sector on a mutual basis. By disregarding 'utmark' in the spatial ordering of cultural environments in the heritage legislature an imaginary place of isolation in harmonious balance compared to dynamic processes at work in the settled landscape has been created. In general historical terms an important question is how the 'utmark' environment has traditionally been recognized.

'UTMARK' CONCEPT, FARM CONCEPT, AND LANDSCAPE COSMOLOGY

The term 'utmark' is associated with the farm concept and settlement research history in referring to pasture and unfenced field (cf. Aasen 1977:887). The structure of the farmland includes a core settlement (tun), infields (innmark), and outlying fields and other natural resources (utmark) (cf. Bertelsen 2005:21). According to Myhre (2004) the farm concept represents a controversial theme about continuity and discontinuity patterns in the development of prehistoric agrarian settlements, farms and land use. The Norwegian word for farm is *gard*, which originally meant fence or field. With reference to the introduction of the infield-outfield system in the Iron Age (500 BC–AD 1030), the farm concept should not be used for periods earlier than the first centuries AD (Myhre 2004:44–45, 54). As an analytical tool for the study of landscape Bergstøl (2005b) also reports that 'utmark', in

the meaning of 'utmark'/outfield, is in conflict with the understanding of hunter-gatherer societies and the complexity of ethnic processes. The term has a cultural bias derived from Scandinavian farming communities, and should be avoided outside Norse farming communities.

The normative approach is to perceive the agrarian landscape of a farm from the spatial position of an enclosed centre in the farm-land, in this way integrating multiple environments of lived-in patterns, which distributive system constitutes the basis of a landscape order. In the Middle Ages (AD 1030–1537), and even earlier, people shared landscape cosmology of a complementary structure that distinguished between land inside or outside the main fence of a farm (Øye 2005:10, Fig. 1). In representing the physical and mental enclosure of a settled landscape compared to the disclosure of an unsettled landscape on the outside, the fence constituted a dual barrier between cultural and natural environments. In Scandinavia this type of landscape order has been linked with Norse mythology and a pre-Christian worldview of prehistoric origin (Solberg 2000, Solli 2002, Steinsland 2005:144–145). The landscape pattern is divergent from European Christian cosmology of the Middle Ages, which speaks of a spatial scale of different places with successively different values, from forest, via arable fields to buildings (Andrén 1999:392).

Øye (2005) reports the 'utmark' term to be relatively young, as in the Middle Age people used several words to distinguish between different areas at the farm. At the medieval farm (Frimannslund 1957:383–384, Øye 2002:361–395, 2004:110–119, 2005:10–11) the farmyard with buildings was situated in the core of farmland (tun), and surrounded with plots of arable land, meadows and enclosed pastures inside the fence (innan garðs). Outside the fence (utan garðs) pastures and wasteland covered stretches of forests, bogs, marshes, scrubs, fishing waters, hunting grounds and shielings. The outer-most outland was a no-man's land – a common land. The socio-economical scale on rights and use of land differed between what was private, joint or common, and the overlord, the King, regulated access and use of the common land. By the high Middle Age farms and groups of farms had established customary rights to areas in the common land, which were subject to a strict system of use and management (Øye 2004:119).

The essential meaning of the 'utmark' originates from the establishment of a land use system in the farm institution of the Iron Age. In distinguishing between physical and mental constitutions, and relating infield- outfield environments to a worldview of dual order, marginal environments in the agrarian landscape of a farm have been associated with pre-historic and mediaeval farm structures. The 'utmark' is an umbrella term indicating partly the outfield and outland with wasteland and common land outside the main fence, and partly areas in the periphery of a core settlement of the farmyard. Consequently outfield, outland, wasteland and common land apply as terms to describe the 'utmark' environment in this analysis. In order to search for the historical knowledge about land use and management of environmental resources, we will look more closely at the significance given to the 'utmark' and the models at work in archaeological research.

RESEARCHING MARGINAL LANDSCAPES OF AGRICULTURE – THE NORWEGIAN APPROACH

The marginal landscape has been a growing field of research interest (cf. Stene et al. 2005) and the objective of archaeological studies, systematic surveys and excavations of long standing in Norway (cf. Skrede 2002:10–16, Dahle 2005:9–14, Øye 2005:11). The beginning of the 20th century was the impetus to a movement that thrived on interests in local history. Shifts in focus on theory and methods appeared before and after the 1950s

and 60s and after the 1980s. In the 1970s different types of landscape chronologies were established due to the introduction of methods from the natural sciences in Scandinavia. More recently holistic approaches have led to the integration of societal aspects in order to meet criticism of the created image of self-supporting isolation. These research efforts draw upon the marginal landscape to investigate interacting processes between natural resources and land use (Dahle 2005).

Skrede (2002), Øye (2005) and Dahle (2005) report that research into 'utmark' has mainly focused on agricultural history and approaches to economical aspects, such as hunting, production of iron, extensive cultivation and the interrelationship between farm and shieling. In recent years a wider range of subjects has been studied in relation to European contexts (Holm et al. 2005, Andersson et al. 1998). In particular research on historical conflicts of outland use have focused on ethnicity and colonisation in Scandinavia, such as the relationships between Sámi and Norse (Zachrisson 2005) or hunter-gatherer, farmers and the Sámi (Bergstøl 2005a). On a broader scale these issues are part of international discourses on origin, identity, cultural heritage, cultural property and ethical issues in archaeology (cf. Cleere 1989, Turnbridge & Ashworth 1996, Lowenthal 1998, Layton et al. 2001).

The main attention in Norwegian settlement studies has been the investigation of long-term scales in the agrarian development, such as infield or outfield as separate elements of a farm (Skrede 2002:16). Few archaeological studies on the management of agrarian landscapes have been carried out (cf. also Austad et al. 2001, Julshamn et al. 2002, Holm 2004, Mjaaland 2004, Dahle 2005). Norwegian archaeology has suffered from a lack of research interest in agricultural activities because of dating problems in the material evidence (Holm 2004:30). The focus has been on the survey and excavation of building structures from dwellings in the agrarian landscape (cf. also Holm 2004:28). From the 1990s onward the scope of research has broadened thanks to national research programs on cultural heritage, environmental and landscape changes, and the focus on the traditional western farm as a cultural and biological system (Austad et al. 2001).

An archaeological analysis of the long-term management and use of 'utmark' in Romsdal, western Norway, has verified the distribution of principal resource areas at the farm to correlate with distance from the farmyard and to distinguish between farm-yard, infield and outfield in the farmland (Dahle 2005:35, Fig. 4.13). This tripartite structure of the land use system corresponds with the distribution of landscape zones at the mediaeval farm (cf. Øye 2005:11, Fig. 1). In representing an ancient landscape order the farmland distinctions mirror inclusive and exclusive parts of environments spaced in reference to a world's centre. What constitutes the historical relationships between farmyard, infield and outfield as integrated parts of farmland is, however, complicated to explain. New marginal land could be developed or former centres become peripheries (Svensson 2005:124). Spatial distinctions of landscapes could be the results of cultural difference and insulation or multiple processes of landscape and settlement transformation in the past. The spatial position of marginal land with reference to production centres could have altered agro-historical relationships on a long-term scale (cf. Fabech & Ringvedt 1998).

In order to find out the historical relationships between the 'utmark' and production areas in the pre-industrial landscape, three holistic centre-periphery models (1–3) have been at work in archaeological research on the European basis (cf. Andersson 1998:6). The models represent physical and cognitive aspects in landscape perception of the 'utmark' from different viewpoints. The marginal zone has been considered as follows (Andersson 1998):

- A part of an integrated farming system of economic, social and cultural significance, which includes a centre, the inland. Inland and outland are parts of a resource area, where the different parts make up each other (model 1).
- A production unit dependent on and adapted to external factors, but which marginal settlement lies outside central farm areas and in regions or contexts where its own economy is shaped or its own identity is acquired (model 2).
- A geographical area situated marginally on a large scale (model 3).

Archaeological approaches towards the 'utmark' have demonstrated (a) rigid models of production to be carefully applied to the landscape, and (b) that the marginal environment is less a place of isolation in the landscape (Andersson 1998:6–7). Model 1 represents shielings from earlier agrarian phases and different contexts. Model 2 refers to small marginal farms established relatively late as clearances. Model 3 implies marginal zones on a grander scale than models 1 and 2. Model 3 refers to geographical parts of a continent, which depend on and are used as marginal areas, such as Greenland to Europe and visa versa (cf. Andersson 1998:6). Model 3 is a coarse-meshed model, application of which is unsuitable to an analysis such as ours. In model 1 the marginal zone forms part of an agrarian system, while model 2 represents an independent production unit on the margins of a larger agrarian system.

Andersson (1998) reports difficulty in holding models 1 and 2 apart, as they have played different roles during different times. The marginal zone could be included or influenced by other systems outside its territory. In considering which models (1 or 2) are best suited the requirements for managing archaeological heritage resources we have to approach the long-term development of land use in the 'utmark' environment. We will focus on the environmental contexts in Jæren, and on the types of archaeological monuments relating to agricultural activities in the outfield, outland, wasteland and common land, such as stone fences, clearance cairns and stacking places.

AGRARIAN DEVELOPMENT OF 'UTMARK' IN JÆREN

In prehistoric farming a change occurred early in the cultivation practice from an extensive to an intensive land use (Myhre 2004). In Jæren the landscape transformation passed by stages over several thousand years (Prøsch-Danielsen & Simonsen 2000a, b). The earliest farming was a mixed process of forest clearance and agro-pastoralism, which escalated in animal husbandry around 2500/ 2200 cal. BC (Høgestøl & Prøsch-Danielsen 2006:23, 28). The deforestation was intentional and followed a three-staged pattern of cultural significance.

The agrarian development led to the breakthrough of neolithisation in late Neolithic (2500–2200 cal. BC), and to its continuation during the transgression of early Bronze Age. The advance is indicative of an entirely new 'cultural package' and new practices (Høgestøl & Prøsch-Danielsen 2006:28). The farming was on a small scale, and land use shifted naturally between cultivation and fallow. Pastures and arable fields were moved about, at first with no clear division between infields and outfields. Then the arable fields were settled more permanently to enclosures and restricted areas in the landscape of early Bronze Age (Juhl 2002:116).

Similarly, the earliest clearance cairns in Jæren were constructed in late Neolithic and early Bronze Age (Prøsch-Danielsen 1996, Bakkevig et al. 2002, Juhl 2002, Sageidet 2005). The clearance cairns are indicative of an expansive agrarian development in extensive farming practice, which is linked to settlements with rotating arable fields and pastures dispersed in the forest (Prøsch-Danielsen & Simonsen 2000a, b, Myhre 2004,

Soltvedt et al. 2007). The outland represented the forest and heathland spread to the pastures. In the late Bronze Age, from 900–700 BC onwards, the landscape was dominated by heather vegetation and had an open character without forest. In South Jæren scattered farming resulted in the expansion of outfield exploitation and the heathland vegetation was intentionally maintained (Prøsch-Danielsen & Simonsen 2000a, b).

The interdisciplinary result from the case study of ‘fairy-rings’ in Hå municipality, South Jæren, indicates the earthworks to occur in the pastures together with clearance cairns in the Iron Age (Fig. 3). The excavations of the ‘fairy-rings’ yielded dates at the earliest to the end of Migration Age (cal. AD 410–450) and at locations together with clearance cairns to late Iron Age (cal. AD 670–900) (Prøsch-Danielsen 2001:54, table 4). The original wetland environment (Prøsch-Danielsen 2001) indicates the integration of marginal land in the harvest practice of mowing, collecting and storing hay in the open air during the winter months. The land use of outfield and wetland resources relates to the infield-outfield system in the prehistoric farm structure of the Iron Age (Myhre 1974:74, Fig. 1, Myhre 2004:50–51, Fig. 51). Established in the form of a continuous stone string in the Roman Age (after AD 200) (Myhre 2004:52), this clear division between infield and outfield in the construction of a cattle fence was to form a basis for the development of medieval and post-medieval farm structures in Jæren (Myhre 1974:73, 78, 2004:Fig. 62, Lillehammer, A. 1979:35). The fixed relationship between infield and outfield corresponds with the agrarian development of farm structure elsewhere in the western part of Norway (Julshamm et al. 2002).



Fig. 3. Earthwork of ‘fairy-ring’, the relic of a ditched haystack base. Original distribution was alongside wet heaths and mires in the outfield and wetland environments (Lillehammer 2005:103, Fig. 3b, Photo: L. Prøsch-Danielsen).

As consequence of the Great Plague (c. AD 1350), a setback occurred at the end of the Middle Age, resulting in desertions of farms in Jæren. Abandoned farms were included in the common land and used as outfields, and boundaries were fluid between most of the farms in these parts of farmland. In the 17th century conflicts in land use broke out between farmers, who claimed adjustments of abandoned areas in the common land, and also desertions were resettled (Lindanger 1975). Gaps in the cultural memory about places of resource utilisation in the common land had been created. In the 19th century abandoned stacking places were linked with landscape myth of the fairyland, with 'fairy-rings' scattered around. In the folklore the heath-land and wetland were associated with nature's wilderness outside the cultivated farmland, and the 'fairy-rings' were thought to endanger people and animals.

References to the fairy myth were also part of a cultural intimacy in the farmers' cultural practice of resistance to domination. Following the state reforms and replacements in the agrarian landscape from the early 19th century onwards, private land and common land were shifted between the farms. The common land was regulated into private property with fixed boundaries in the farmland. The landscape patterns representing a mixture of enclosed plots, expansions or desertions of pre-modern origin (cf. Myhre 1974:74–77, Øye 2002:308–312) were crossed over by modern partitions (cf. Rønneseth 2001:239–240, Figs. 86–88). Although the ancient cultural practice of hay stacking in the outfield and outland continued as late as c.1970 in South Jæren, extensive modernisation, extensive land clearance and fertilization lead to the formation of a uniform distribution of resource areas at the farms. From the 1970s onward the agricultural expansion transformed most of the outfields and outland into cultivated infields. The fences were altogether removed or set further away from the infields.

Long-term analysis demonstrates that the 21st century modern farm structure in Jæren differs profoundly from land use systems of earlier agrarian phases. The positions of outfield, outland and common land were altered due to agricultural and demographic processes resulting in conflicts of land use. The 'utmark' environment could hold archaeological relics from cultivated soils, habitation and land use activities of ancient origin. A correspondence is present between the distribution of archaeological heritage and model 2 in the modern farmland. It is also possible that the distribution of pre-modern cultivated soils and structural features in the present ground of infields could point to locations of remnants from ancient agrarian settlements and land use. In the following we will examine the landscape perceptions of the 'Jæren farm', and consider both models 1 and 2 in relation to the resource management of archaeological heritage in the farmland.

LANDSCAPE PERCEPTIONS OF THE 'JÆREN FARM'

The informants mapped the landscape of the 'Jæren farm' with regard to social, economical, legal, historical and geographical conditions in the farmland in accordance to worldviews on the systematic distribution of buildings, land use and landscape resources. The structural organisation of landscape order in the drawings refers, for the purposes of this review, to the outskirts, outland, outfield, infield and farmyard.

When observed from periphery to centre, a correspondence is present between the two resource management groups in the spatial positions of cultural environments and model 1. The outfield and outland are situated outside the infield, and the farm-yard is considered the functional centre of modern agricultural management at the 'Jæren farm' (Lillehammer 2005:201–202, Tables 11, 12). Despite substantial concurrence in the ordering of farmland organisation, the outlines also indicate similarity, variation and difference between the two groups in the distributions of cultural environments and archaeological heritage.

The outskirts of the 'Jæren farm' represent, according to the farmers, lakes, bogs, heathland, roads, railroad, and 'neighbours land', and outland covers the heathland and hills. According to the civil servants the outskirts represent the sea, streams, lakes, roads, railroad and other farms, and outland covers lakes and bogs. To both groups the outfields hold pastures of cultivation, and the infields are cultivated environments with arable fields, meadows and pastures (Lillehammer 2005:256–257, Vedlegg 3).

In spite of the similarities in the ways they distinguished between productive and unproductive farmland at the 'Jæren farm', the groups varied with regard to the relationships between extensiveness and intensity of cultivation in the infield and outfield. With reference to the construction of a continuous fence in the early Iron Age (Myhre 2004), the position of a physical barrier between pastures in the infield and outfield also varies. It is as if there are inconsistencies concerning the conditions of pastures in the farmland. Hence the resource managers differ in acknowledging the expansions of cultivation in the heathland and wetland. These areas are, according to the farmers, unproductive farmland fringed on the outskirts or outland. The civil servants consider bogs to be integrated in the cultural environment, while the heathland has gone unnoticed, as if extinct by cultivation.

The historical perspectives of the two groups diverge with reference to the farmyard at the 'Jæren farm'. From a general point of view the farmyard represents a place of high significance in archaeological heritage resource management. In particular this concerns rescue operations in order to salvage constructional structures, such as postholes, ditches and hearths, from prehistoric and medieval dwellings. As Norwegian rescue activity seldom includes archaeological survey and excavation in this part of the farmland, the farmyard is a vulnerable place of modern occupation. Cultural heritage management is often unable to protect archaeological heritage at the core of agrarian settlements, especially underground structures that are invisible on the surface. By being easily destroyed during modern clearance and building operations, the situation also concerns ancient farmyards outside infields (cf. model 2).

The farmyard is considered by the civil servants to represent a historical node, a key to the explanation of agrarian landscape and settlement transformation in Jæren. This type of long-term perspective is lacking among the farmers, as the farmyard represents the operational centre in a modern subsistence economy as an integrated part of a bio-industrial landscape order. By representing modernisation processes, their landscape perspective is restricted. The modern farmyard is a standing symbol of short-term history from the 19th century onwards, which also taints associations with what is considered a normative distribution of archaeological heritage outside the agro-productive centre.

This is shown by a comparison between the distributions of archaeological heritage at the 'Jæren farm' with the Ordnance Map (Økonomisk Kartverk). The archaeological heritage consists of ancient monuments, of which visible and invisible features are scattered all over the farmland (Lillehammer 2005:209, Fig. 171). The distribution corresponds with models 1 and 2, and also matches the locations of archaeological heritage at the 'Jæren' farm outlined by the civil servants (Lillehammer 2005: 256–257, Vedlegg 3).

The landscape perception of the civil servants is opposite to that of the farmers, who partly disconnect themselves from the heritage landscape, and partly they do not communicate on the outside their dislike of the archaeological heritage. The ignorance of its inconspicuous character creates awareness similar to a non-place in the landscape of the 'Jæren farm'. The scattered distribution of archaeological heritage is limited to spectacular monuments on the visible surface. Marginalized either to pastures in the infields and outfields, or to the outland inside or outside the farmland border (Lillehammer 2005:256–257, Vedlegg 3), this could easily lead us to conclude that the archaeological monuments of indistinctive character in the farmland are ignored or overlooked by the farmers.

The analysis confirms that the landscape perceptions of the resource managers follow a culture-nature pattern of historical significance. The civil servants have applied the gaze of outsiders towards cultural-historical qualities in the farmland on a long-term scale. In regarding the farmyard a socio- economical node of farmers' landscape, their inclination forms a mutual ground between them. As the farmers keep their worldview within a modern framework of bio-industrial order, they appear as the locals who have been living continuously with working the place (Setten 2000a:225, 2001:26–27), while cultivating nature's own reserve (cf. Setten 2000a: 223–224, 2000b:153, 155). Their working the natural resources is linked with a striving for long-term survival and planning a prosperous economy, to the exclusion of cultural-historical resources. The cultural qualities have mainly a short-term perspective in the agrarian landscape. This creates a divide between natural and cultural interests between the two groups, which has consequences in the management of landscape resources.

As a result the analysis of drawings indicates correspondence as well as contradiction in the landscape perceptions of the 'Jæren farm'. The 'utmark' environment is fringed on the extreme margins of the farmland. A little of the traditional meaning of 'utmark' has survived agricultural change, as it applies to unproductive, uncultivated outland on the outside of outfields and farmland borders, and to outfields with specific reference to fertilized pastures of modern cultivation. The variations in acknowledging levels of cultivation in the farmland are difficult to explain except from an inside-out perspective of resource management. It would seem as if cultivation of pastures has been disconnected from the long-term knowledge about cultural changes of infield-outfield boundaries in the agrarian landscape. The pastures form a grey area in the landscape perceptions of the 'Jæren farm'. There is a fluid gap in the aesthetic outline that is puzzling to the explanations advocated in the resource management groups.

LANDSCAPE COGNITION – LANDSCAPE AESTHETIC

The analysis has revealed two distinct types of landscape cognitions of the 'Jæren farm' (Lillehammer 2005:205, Fig. 56). In profiling various insights of the farmland the resource management groups have demonstrated that their separate management styles can be linked with economical capital versus cultural-historical capital (Bourdieu 1995, Rosenlund 2000). The consequence is the representation of world- views that differ in-between the two groups with relevance to common sense and to what are morally considered right or wrong in the aesthetic outline of the 'Jæren farm' (Fig. 2) (Lillehammer 2005:208, Fig. 57).

In the analysis the pastures have emerged in the position of an in-the-middle category in bridging similarity and variation, difference and change in the relationships between landscape order and worldview, imaginary world and lived-in environment in the farmland. In the process of cultural change on long-term and short-term scales the pastures form essential parts. The variations between the resource managers in recognising cultivation levels in the pastures indicate the traditional partitions of the infield-outfield system to have disappeared, as if being of no importance.

In looking at the modernisation process and searching for cultural intimacy towards historical dimensions in the 'utmark' environment, the things that matter to the farmers are quite opposite to those that matter to the civil servants. The analysis of 'fairy-rings' revealed a correspondence between landscape cosmology, landscape mythology and everyday use of ditched haystack places in the heathland. In the 19th century the farmers' reference to fairy myth reflected an ancient resistance strategy that linked world- view and common sense with controlling expansions or contractions of territorial claims in the common land (cf. also Dahle 2005:98). The interviews with today's farmers exposed but little knowledge about fearsome landscape places and 'fairy-rings'. The agricultural modernisation has disrupted the

traditional narratives about landscape myth of the heathland and wetland and working places, resource utilisation, and land use of the outfield and outland. Still, the cultural attitude of resistance towards stately domination among the farmers has endured almost two hundred years of agrarian expansion. In showing off ambivalence towards undistinguished archaeological heritage in the farmland, the content of anxiety and concern has altered focus in the landscape.

The cultural attitudes towards managing outfield and outland environments point to a change from traditional to modern world-view among the farmers in Jæren. The present worldview is modelled on modern management ideals of operational planning a prosperous farm of orderly plantation. The 'utmark' environment represents non-profit places, the opposite of productive cultivation, and in spatial scale comparable with the successively different values of European Christian cosmology (Andrén 1999). The 'utmark' is not a wasteland, but keeps alive visions of nature's reserve.

The main objective of farming is improving the agricultural conditions of natural soils in the landscape, and the 'utmark' represents a potential space for expansive cultivation. In order to secure continuity for future generations in the family new fields have to be cleared in the heathland and wetland, other natural resources extracted from the outland not already transformed into productive grassland of fertilized pastures. The farmers' visions are based on a traditional cultural practice that runs on autopilot. Apprehensions of losing old or producing new opportunities of cultivation in the future are strongly felt. Behind the ignorance and rejection of cultural qualities in the archaeological heritage there is a fear of material loss (Buchli 2007:9), a deep concern for nature's potentiality in the farmland that disagrees with the protective idealism nourished by the civil servants towards the archaeological heritage.

An additional type of 'utmark' aesthetic also appears among some farmers. A link between landscape beauty and playing grounds favoured during child's play at far distances from the farmyard is present in the cultural memory of their childhood landscape. The cherished places are situated at locations in marginal environments, such as beaches, forests and riverbanks. As cultivation has later led to extinction of the playgrounds, the farmers have kept a cultural memory of nostalgia towards childhood places from past times. By representing unproductive areas in the outland, they have stuck to the common sense of expanding infields at the detriment of outfields and outland in the 'utmark' environment.

Based on a cultural heritage ideology the civil servants maintain an objective to protect all environments related to the ancient monuments as archaeological sources of knowledge and experience. In seeing the archaeological heritage integrated in the landscape the worldview revolves around an aesthetic that keeps historical links with the significant quality of an untouched cultural environment. In keeping track with a fast receding 'utmark', their fear of a material culture loss of archaeological heritage makes new land clearance hard to accept.

In the protection of qualities valued respectively there are links to moral rights and wrongs of what are considered the most important to manage securely in the 'utmark' environment: pastures with or without archaeological monuments. While both groups prefer the aesthetic outline of tidiness in the landscape order of the 'Jæren farm', governed by the Norwegian Heritage Law, the consequences of separate motivations are the struggles for or against state regulations.

LANDSCAPE ORDERS ON THE CONTRARY

Historical similarity, variation and difference between the resource managers are present in the landscape cognitions of the 'Jæren farm'. From the viewpoint of a centre and periphery model (cf. Øye 2005:10, Fig. 1) there is logic in the structural order of farmland where infield and outfield surround farmyard. The opposite would be the case where farmyard

encircles infield and outfield. As the farmland in Jæren may take the form of mosaic patterns in integrating a variety of natural and cultural components, there is also logic in these matters where infield surrounds outfield.

The centralised landscape pattern of model 1 has been shown to contradict the distribution of archaeological heritage in the farmland (cf. model 2), and to challenge the lived-in relationships between functional centre, infield and outfield at the 'Jæren farm' (Lillehammer 2005:109, Fig. A–B). From an empirical viewpoint we may conclude that the farmyard, and not the outfield, is the problematic element in model 1. By dropping the farmyard as the centre of model 1 the landscape perceptions of both management groups are legitimised.

The reason for using a centre and periphery model is not so much a matter of applicability. The question is the practicability in managing the 'utmark' environment by advantage or disadvantage. The aesthetic outline of the 'Jæren farm' is the result of modern landscape reforms. The agricultural progress has grown from the interplay between state regulations and local conditions. The implications in moulding the internal organisation of farmland in Jæren have transformed the outfield and outland into infield. This has caused the ancient landscape order between infield and outfield to break down. The development of complex relationships between environmental variations, empirical exploitation and the shaping of imaginary worlds have led to the formation of new landscape orders to contradict with the landscape order of prehistoric origin. How does this cultural change inflict upon the resource management of archaeological heritage in the agrarian landscape?

In the worldview of the farmers there is an over-simplification of the inferiority of the archaeological heritage in the landscape (Fig. 4). The distribution of archaeological heritage which is indistinct or invisible on the surface has not been recognized, or the awareness of its undistinguished character has not been communicated on the outside. On the contrary, the worldview of the civil servants is associated with the historical development of the agrarian landscape and manifested by the distribution of archaeological heritage in the farmland. While the archaeological heritage is widespread at the 'Jæren farm', the infield is heavily affected by modern ploughing activity. Fertilized pastures in the outfield are a less cultivated environment, and together with the outland had less damaged archaeological heritage. The 'utmark' according to the civil servants holds a larger cultural-historical value for enhancing knowledge about the past compared to the intensively cultivated infield.

However vaguely the levels of cultivation in the 'utmark' are acknowledged, moral rights and common sense among the informants have made us reconsider the landscape cognitions of the 'Jæren farm'. Although the functional organisation is similarly constructed between the resource managers, their resource interests differ on the natural and cultural basis. The economic-aesthetic profile in the spatial scale of the farmers is contrary to the cultural-aesthetic profile of the civil servants. In the resource management of the 'Jæren farm' the agricultural centre is divergent to the archaeological heritage centre in the landscape.

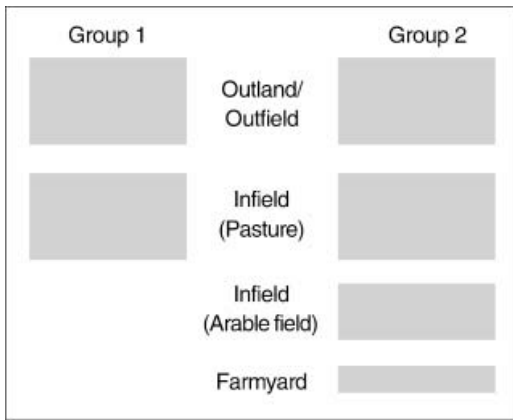


Fig. 4. Location of archaeological monuments (sketched grey) in the cultural environments at 'Jæren farm'. Group 1: Farmers, farmer's organisation included. Group 2: Civil servants, archaeologist included. (Lillehammer 2005:208, Fig. 57).

CONCLUSION

Marginality on the extreme explains the geographical location of the 'utmark' environment in the agrarian landscape in Jæren. With regard to landscape perceptions super-imposed by both resource managements on the other, separate worldviews of the 'Jæren farm' transgress the cosmological analogy to realities of inferior qualities. The landscape aesthetics diverge on the brink of a fast diminishing 'utmark' environment. The resource managers represent strikingly contradictory cultural practices; managing the archaeological heritage resources from two different positions that seem poles apart. While the worldviews no longer fit an ancient landscape cosmology of pre-historic origin, the terminology still persists. The 'utmark' concept represents a merging as well as a divide in understanding the hidden levels of meaning behind the images of the 'Jæren farm'.

As shown in the contrasting perceptions of landscape cognitions, the conflict between the two resource management regimes thrives on a tense relationship of utopian character (cf. Herschend 1998:334). No pastorals will be heard on the frontlines of 'utmark' in the future unless management tools are developed that aim to solve potential conflicts between the cultivation and preservation of the cultural environment. Behind the cultural attitudes amongst the resource managers there are underlying concerns with loss (Buchli 2007) of a type of environment in the agrarian landscape on the verge of transformation. It is the fear of material loss in potentiality that is at heart of the struggles between the two resource regimes. How would the cultural heritage establishment approach this static melancholy among partners in the future?

Peasants all over the world practice a long-established cultural behaviour in choosing the path of resistance to domination (Taylor 1989, Scott 1985). The farmers in Jæren are part of this peasant resistance history. With respect to traditional ways of solving the critical problems of resource management in agrarian landscapes, farmers prefer conflict in order to create or oppose change of circumstance. In effecting similar processes in the present the input has been to stick to negotiations, and to support moves by forming networks and mobilizing voluntary work. An important legal objective for the cultural heritage management has been the development of regulating tools in order to prevent further conflicts arising.

The analysis has demonstrated how much there is to reconsider in learning to think about space when dealing with relationships between landscape, culture and aesthetic. The mutual fear of material loss, however conflicting, is a factor that could unite efforts in overcoming problems with the protection of the 'utmark' environment in Jæren. With regard to lessening the tensions between heritage and agricultural resource managements the creation of links in-between long-term and short-term histories is needed. The farmers themselves have stated the need for more information about archaeological heritage at the farms. As shown by the destruction of childhood playgrounds the farmer keeps on converting the soil into new land, because it is the protection of natural soils that matters the most. While the farmland is steadily undergoing landscape change, the passing on to next generations the cultural places of past times is a moral issue.

In making outreach relevant to the public the facts about ancient landscapes and places have to be included, reconsidered and used in reference to those living with the archaeological heritage in the environment. By linking the preservation of archaeological heritage with the protection of natural soils, cultural heritage management could promote working relationships with the farmers as partners. This asks for the use of both models 1 and 2 to manage the archaeological heritage resources, and for the application of methods to negotiate in-between worldviews of separate cultural practice and experience. In order to promote sustainable protection of archaeological heritage and make preservation of 'utmark' the productive issue of the future, an upgrading of the cultural values amongst farmers is requested. In encouraging farmers to value themselves as the local agents of cultural processes in the landscape, they could become the own masters of identity creation. However difficult the historical terms and the farmers' contradictive strategies, a start would be to approach the short-term histories in the landscape (cf. Burström 2006).

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