

The meaning of place: attachments to Femundsmarka National Park, Norway, among tourists and locals

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In Norway, the management of natural and cultural resources is subject to increasing public scrutiny. Conflicts are escalating over many issues concerning the balance between preservation and utilisation. Traditionally conflicts over issues like growth in commercial nature tourism, predator control, forest policies, protected areas management, cultural heritage protection, and rights associated with common access, have been explained in terms of opposing values, attitudes, and goals between urban and rural interests. However, historical differences between the urban and rural in terms of social conditions, employment opportunities, services, cultural norms, and lifestyles are no longer clear-cut or predictable. Nor can differences between urban and rural communities easily explain attitudes or values held in relation to the environment. To examine how a local community and a population of tourists feel about an area we examine data from two separate surveys from the Femundsmarka–Røros region in Southern Norway. This region includes a wilderness-type national park and a historic mining town recognised as a World Heritage Site and including a diverse agricultural landscape. We compare the perspective of the community with that of tourists regarding the strength and nature of attachment to place, and reasons and priorities for resource protection. We also assess how residence and experience of using the area affect attachment to place and attitudes to management priorities. The results have implications both for the management of this particular area, and for how we approach attitude diversity in resource management.

Keywords: attitude diversity, place attachment, Røros

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Introduction

Recent years have witnessed the emergence of ‘place’ as an organising topic for research on the human dimensions of natural resource management. Sense of place and place attachment have been the focus of studies of both residents of a geographic locale and tourists/visitors to geographic locales. Increasingly, studies of tourism-related issues, as well as studies of people’s relationships to place, deal with the management of local culture and heritage (McCool & Moisey 2001). Management of resources, and the various systems of meaning attributed to resources, inevitably imply some level of conflict among different groups with attachment to the resources. Often this can take the form of diverse opinions about the terms ‘place’ and ‘heritage’. Hence, we need to know more about the processes of attachment to specific places and improve what now often appears as highly contested ways of land-resource management (Tunbridge & Ashworth 1996).

Building on a long history of community studies in rural sociology (Van Es & Brown 1974, Waggener 1977), locals have been asked how they feel about their community and surrounding region, while local social and political processes related to the management of that region have been explored. Building on a fairly long history of tourist and visitor preference studies in natural resource management (Wagar 1964, Lime & Stankey 1971, Hendee et al. 1990, Driver et al. 1991), non-resident visitors have been asked about their attachments to attractions and landscapes that make up the region. Relatively few studies compare the views of residents and visitors (including seasonal residents) regarding management priorities (Green et al. 1996). Community studies focus

on the community-related infrastructure, social networks and interactions whereas tourist-visitor studies focus on natural and cultural landscape features. Few, if any, studies have compared resident and visitor attachments to community or landscape features.

Much of the literature on natural resource conflicts, tourism and cultural heritage is premised in one way or another on an ‘insider-outsider’ distinction, whether defined as locals versus tourists, local versus national interests, or newcomers versus old-timers (Price & Clay 1980, Smith 1989, Blahna 1990, Fortmann & Kusel 1990, Lee 1991, Green et al. 1996, Knaap et al. 1998, Selman 1998). It is not difficult to find statements in this literature that claim wide differences in values, preferences, interests, and lifestyles, or in political power and influence between insiders and outsiders (Shands 1991, Egan & Luloff 2000). Similarly, the emergence of ‘grass roots collaboration’ in natural-resource policy is premised to a large extent on the assumption that local citizens hold different values towards the environment than more distant, generally urban populations (Weber 2000). Yet the empirical support for insider-outsider resource conflicts is often weak or absent (Sofranko 1980, Green et al. 1996, Nelson 1997, Stewart 2000). As Lee (1991) argues, resource managers’ understandings of local communities are often clouded by misconceptions, including the idea that long-term residents are often at odds with newcomers over natural resource management policies. Rather, there is some evidence that new rural migrants are not necessarily importing different values into a local community, but reinforcing value differences that already exist (Fortmann & Kusel 1990). As Tunbridge & Ashworth (1996) point out, there is a difference between ‘past’ and



'heritage'. The first is history described through various selective accounts, while the latter is a contemporary product shaped from history. The creation of heritage is controversial, contested, and subject to continuing negotiation among interested parties. Land management typically involves a mixture of natural and cultural resources, and it may be too simplistic to assume that locals and others have significantly different perceptions of the complex process and phenomenon of 'heritage'.

From the growing 'place' perspective we see two weaknesses in these 'culture clash' (Blahna 1990) views of natural resource conflict. One is that most studies focus on abstract value and preferences statements (e.g. utilitarian versus preservation values) as opposed to place-specific meanings and conflict. For example, Blahna (1990) found that although there were indeed value differences between newcomers and long-term residents, individuals from these two groups worked together to oppose forest clear-cutting. Fortmann & Starrs (1990) found similar cooperation in the opposition to wood-burning power plants in California.

Second, expectations of insider-outsider differences are in part based on extrapolations from large-scale studies of demographic correlates of environmental attitudes rather than from site- or place-specific comparisons of newcomers and long-term residents. Much of the presumed difference between insiders and outsiders comes not from direct observations of the values of insiders and outsiders but from generalisations about the influence of demographic variables on environmental attitudes. Numerous studies have sought to explain differences in environmental attitudes based on demographic variables including length of residence, urban residence, upbringing, income, and occupation (Van Liere & Dunlap 1980, Lowe & Pinhey 1982, Milbrath 1984, Sheldon & Var 1984, Inglehart 1990, McCool & Martin 1994). Demographic variables and residential status become 'stand-in' predictors of insidedness, which do not necessarily represent specific involvement in and commitment to a locale. Because young, high-income urbanites tend to score high on environmental concern, a presumption is made that tourists and recent migrants to a rural area are more likely to reflect these demographic characteristics and therefore hold different values and preferences.

The premise of this paper is to look at the level of commitment and attachment as a determinant of values and priorities rather than drawing inferences based on tenuous assumptions of differences inferred from residential status. We do this at two levels. One is to examine what are the important aspects of the place (e.g. natural landscape, cultural features) associated with a sense of attachment. The other is to examine how management priorities for the area differ by attachment level. In both cases, a comparison is made between the explanatory power of attachment and residential history.

The concept of place

In studies of natural resource conflict the insider-outsider distinction is often built around rural or community sociology, but the concept has also received considerable

attention in human geography (Tuan 1974, Relph 1976, Buttimer 1980). In geography the concept of place is fundamental since it can serve as a unit of analysis for integrating natural and social science concepts of the environment (Sack 1997). Zimmerer (1994) has pointed out how human geography and ecology share three key ideas: understanding the importance of history, working with and being conscious of different levels of spatial scales, and dealing with and interpreting subjectivity. Thus, in the applied context of environmental management, which tends to draw heavily from natural science definitions of the resource base, drawing insights from human geography's attempts to describe the human experience of place (e.g. how residents and visitors experience a sense of place or attachment) may prove useful for characterising the human dimensions of natural resource management.

This paper takes as its starting point the humanistic and phenomenological tradition within geography, in which place refers to the 'locales in which people find themselves, live, have experiences, interpret, understand and find meaning' (Peet 1998, 48). This tradition developed as a reaction against an overly positivistic views of place that dominated geography in the 1950s and 1960s in which place was understood, not as a centre of meaning, but as simply a physical location in space. For Relph (1976) the foundation of such a place concept is what he calls 'existential insidedness' – a phrase he used to characterize a sense of belongingness and deep and complete identity with a place (Relph 1976, 55). Similarly, for Tuan (1977), the development of a sense of place amounts to a sense of insidedness made possible by the long-term accumulation of experience in a place. More recently, Hay (1998) has differentiated various degrees of insidedness, from the superficial sense of place among tourists and transients, the partial sense of place among long-term visitors and holiday-home owners, the personal sense of place typical of residents, to ancestral and cultural senses of place. According to Hay, the high level of residential mobility in modern society encourages the development of partial or personal sense of place, noting that 'those with more superficial connections to place do not develop the strong attachment that is often found among insiders raised in the place' (Hay 1998, 5).

While humanistic geographers have focused on the experience of insidedness, for critics the nature and desirability of insidedness is contested and problematic. First, much of the humanistic tradition has focused on the negative consequences of rootlessness and placelessness, the sense of decline in community and neighbourhood, and concerns over the negative consequences of high residential mobility (Giuliani & Feldman 1993). Thus, while strong place bonds are seen as having a positive effect on psychological well-being, from the humanistic perspective such bonds may also be maladaptive as low mobility is strongly associated with low economic and social well-being. The humanistic tradition has also been criticised for its overly romantic if not anti-modern and exclusionary view of place as constituted by authentic social relations (Massey 1993, Shurmer-Smith & Hannam 1994, Harvey 1996). Rather than protecting authentic places from the eroding forces of commodification and globalisation, the desire to maintain an authentic,

insider's relationship to a place may perpetuate social inequities. To Harvey (1996) it is naive to expect that authentic places will respect the positive Enlightenment values of human diversity and justice for those that would be labelled 'outsiders'. Massey (1993) sees place as a particular constellation of global and local processes. Places may have a character of their own, but one that is possible to experience without subscribing to Heideggerian notions of essentialism and exclusivity. Places, in other words, can be seen as socially constructed entities to which various people experience different degrees of attachment and identification.

Second, much of the research and thinking in tourism and community studies assumes that where or what one calls home is straightforward enough, that one's sense of home and identity is singularly rooted in a local place. This has long been reinforced in fields such as demography, geography and anthropology, where the movement of people, rather than being seen as an integral aspect of social life, has been regarded as a special and temporary phenomenon classified under such headings as migration, refugee studies, and tourism (Hastrup & Olwig 1997). Yet increasingly, modern forms of dwelling, working and travelling involve circulating through widely-dispersed places and regions and geographically extended networks of social relations (McHugh & Mings 1996, Rojek & Urry 1997, Urry 2000). This dispersion of identities has important implications for how we think about sense of place and place bonds. Owning and using a summer cottage or second home, for example, may represent a thoroughly modern kind of identity distributed across multiple places and, at the same time, an attempt to escape from modernity by constructing a more enduring sense of place, rootedness, or identity in a second home (Tuan 1980, Williams & Kaltenborn 1999). Thus, it is increasingly difficult to use the traditional indicators of place of residence or the nature and depth of community involvement as the locus of 'home'.

Among the critics of the humanistic perspective on place, in which mobility is often presumed to produce psychologically deleterious effects (placelessness and rootlessness), some have begun to offer more psychological models of place attachment as a process of identity formation in response to the modern, global age. Giuliani & Feldman (1993), for example, suggest a model built on Proshansky's concept of place identity (Proshansky et al. 1983), in which the development of place bonds is viewed more 'as an enduring and changeable process related to the construction and maintenance of identity in a changing social and physical environment' (Giuliani & Feldman 1993, 268). In this paper we explore the implications of such a model for natural resource management. Specifically, in contrast to community and humanistic approaches to sense of place – in which transients and tourists are presumed not to develop strong attachments in comparison to 'insiders' who were raised and/or have resided for long periods of time in a place – we look at the influence of attachment as a psychological variable, independent of place or length of residence, on landscape management preferences.

Empirical studies in both rural sociology and geography have tended to equate development of place attachment and sense of place with length of residence, often relying on

length of residence as a surrogate measure for place attachment (Kasarda & Janowitz 1974, Goudy 1982, Sampson 1988, Hay 1998). Though these studies suggest an association between length of residence and place attachment, length of residence may not be altogether appropriate as increased mobility may allow people to establish bonds with places that they only visit or live in on a temporary or part-time basis (McCool & Martin 1994, Kaltenborn 1998). Consequently, we set out to examine three issues in this paper. The first has to do with the psychological nature of attachment. How does attachment differ from length of residence or place-specific experience as an explanatory factor in natural resource management? The second issue pertains to how the process of attachment applies to visitors and tourists. Does the process of attachment apply to people who are not residents, and if so, how does it vary from residential attachment? Assuming tourists develop attachments like residents, do such attachments have similar implications for managing the natural resources of the area? The third issue concerns what people (tourists or residents) become attached to. Are tourists and residents attached to the same aspects of a place?

Beyond addressing these questions, a potentially useful distinction in analysing place attachment among the local residents of Røros and the tourists visiting Femundsmarka is the difference between the nature and strength of attachment. Preferences for different types of landscapes, i.e. which attributes of the place people like and feel attached to, as well as the strength of this attachment, are believed to be salient in terms of how people form attitudes and priorities towards management options. These dimensions of attachment relate both to general commitment to a specific place, and also say something about the relative valuing of place attributes. In the context of Røros and its surroundings, this includes an array of cultural and environmental attributes that we do not attempt to separate, but rather see as interlinked elements of the larger place that has value for its users.

Methods and analysis

Study area and research design

This paper is based on two separate surveys regarding the management of a national park in south-central Norway. The study area covers the *kommune* (local authority district) of Røros, and Femundsmarka National Park (Fig. 1). Røros *kommune* has a population of 4000, of which the majority live in the town of Røros. This is a small mountain community formed around copper mining that began in 1644. Today Røros is a World Heritage Site due to its unique location and architecture and the particular land use that developed in this area. The town and surrounding areas are popular with tourists during the summer season. Røros is an administrative centre for the region, and the local economy is based on a mixture of tourism, agriculture, and public service sector funding. The unique history and blend of natural and cultural qualities of the town and its surroundings make it an interesting object of study, since a number of management



Fig. 1. The location of Røros and Femundsmarka National Park in Norway.

issues deal with integrating natural and cultural history and development (Daugstad et al. 1999).

Femundsmarka National Park comprises c. 400 km² of alpine areas, mountainous forest, lakes and watercourses. It is a wilderness type of park with a network of designated trails, a few cabins and lodges for recreationists, but otherwise little infrastructure and few facilities. The park can be accessed at several points by car, foot or boat. Femundsmarka National Park is located south of the town of Røros and lies partly within the boundaries of Røros *kommune* and partly within Engerdal *kommune* to the south. To visiting tourists, Femundsmarka is an attractive and fairly easily accessible wilderness area. To the inhabitants of Røros, it is part of their surroundings and constitutes their 'backyard'.

One survey addressed Norwegian tourists and was carried out in Femundsmarka in 1998. Trail registers, in which visitors filled in a card with names and addresses, were used

to develop a sampling frame. From the 1131 cards collected between 25 June and 10 September 1998, a sample of 1000 respondents was drawn to be sent a mail questionnaire. The sample was drawn to give an even distribution of respondents across the entry points. After two reminders, a net sample of 750 respondents was obtained, giving a 75% response rate. The questionnaire covered recreation use characteristics, experiences, perceptions of environmental impacts and disturbance, attitudes towards management, attachment to place, expenditure and willingness to pay, as well as background characteristics of the respondents.

In 1999 we conducted another survey with a representative sample of the resident adult population (above 15 years of age) of Røros *kommune*. Respondents were first recruited by telephone. A data collection agency contacted a random representative sample of approximately 50% men and women according to the national register of residents (if a person declined, the sampling continued until a net sample of 700 was reached). Each potential respondent was given an introduction to the project, and asked if he or she would complete a mail questionnaire later. After two reminders, a net sample of 438 respondents was obtained yielding a 62.6% response rate. This study contained questions on recreation use patterns, attachment to place, landscape perception and preferences (a large sheet with colour pictures was included with the questionnaire), attitudes toward management and land use, environmental beliefs, attitudes toward modernisation, and background characteristics.

Analysis

The two questionnaires contained similar questions on place attachment (the strength and nature of attachment), and reasons or potential objectives for protecting and managing a large area with natural and cultural qualities. In the community survey seven-point scales were used, and in the Femundsmarka visitor survey, five-point scales were used. To aid comparison between the two studies, the seven-point responses from community residents were adjusted to a five-point scale by multiplying responses by five-sevenths.

For both data sets a measure of place attachment was developed using four questionnaire items modelled after the place attachment measure developed by Williams et al. (1992). From these four items a single, three-category variable of place attachment (strength of attachment) was defined by computing a mean score across four place attachment items and splitting the sample into three, roughly equal-sized groups (Tables 1 and 2). To test the effect of residence and former experience of the area, a two-category classification was computed for the community sample based on whether or not they had lived only in Røros during their life span or also outside the community. For the tourist sample a two-category classification was computed based on whether or not they had visited Femundsmarka prior to the current trip.

The effect of strength of place attachment on the nature of attachment (i.e. what attributes of the environment people are attached to) and on management priorities was tested using analysis of variance (ONEWAY, SPSS). The effect of

Table 1. Attachment to place among residents of Røros kommune.

Attachment Item	Mean Attachment Level			Total	Standard Deviation	N
	Group 1 (n = 164)	Group 2 (n = 145)	Group 3 (n = 172)			
The area feels like a part of me	3.1	4.0	4.8	4.0	1.0	477
No other places provide the same opportunities to do what I like in my spare time	2.2	3.1	4.2	3.2	1.2	479
I identify strongly with this area	2.8	4.0	4.7	3.8	1.0	478
This area enables me to do the work I like	2.6	3.6	4.4	3.5	1.2	471

The original response format, 1 = Absolutely disagree – 7 = Absolutely agree, was rescaled to a 5-point scale.

residence and former experience of the area on attachment to place and on management priorities was tested with the same type of analysis for the two samples.

Results

Attachment to place

Local residents generally reported a relatively high level of attachment to Røros as a place. The four items elicited different responses, but scored on the positive/agreement side of the scale (Table 1). Tourists to Femundsmarka expressed a somewhat lower level of place attachment (Table 2). Both local residents and tourists expressed different degrees of attachment to different attributes of the environment. Local residents reported that the natural environment and social networks are particularly important. However, the cultural landscape, cultural values and local history are also salient elements in their sense of place. It is notable that all the attributes of the environment included here elicited fairly positive responses. Local residents saw all of the attributes as important elements of their attachment to place. Furthermore, the level of place attachment has significant effects on what people are attached to. Those with the highest level of attachment to place (Group 3) scored higher on the importance of each environmental attribute than those expressing medium (Group 2) and low (Group 1) levels of attachment (Table 3).

Among the tourists in Femundsmarka, the picture is somewhat similar. All of the environmental attributes were rated as important for their experience of the place. In the

tourist sample, we also find significant differences among the three groups. Again, those with the highest level of attachment valued the environmental attributes higher than those with medium and low levels of attachment. It is interesting to note that the local population was perceived to be a positive element in their experience of place, along with local cultural history and the cultural landscape. Even to the visiting tourist, Femundsmarka is not just a wilderness or natural area. It is also seen to have important cultural and social attributes (Table 3).

Place attachment and management priorities

There are both similarities and differences in how local residents and tourists viewed reasons for protecting and managing a natural and cultural landscape (Table 4). There was a common pattern in the way both groups gave high ratings to the protection of nature, wilderness and cultural qualities of the landscape. More use-oriented aspects such as hunting and fishing, maintaining agricultural practices, and facilitating research and education, are seen as somewhat less desirable. Both groups viewed commercial tourism as the least desirable management priority.

Among the local residents, the level of place attachment has a significant effect on the responses for all of the reasons except for 'facilitating fishing, hunting and outdoor recreation'. For 'facilitating fishing and hunting' and 'facilitating commercial tourism', the group with a medium level of attachment group has the lowest score. For management reasons, increasing level of attachment to place is related to

Table 2. Attachment to place among tourists in Femundsmarka.

Attachment Item	Mean Attachment Level			Total	Standard Deviation	N
	Group 1 (n = 199)	Group 2 (n = 180)	Group 3 (n = 184)			
The area feels like a part of me	2.0	3.2	4.2	3.1	1.2	558
No other places provide the same opportunities to do what I like in my spare time	1.3	2.6	3.9	2.5	1.3	560
I identify strongly with this area	1.6	3.1	4.3	3.0	1.3	560
I get more enjoyment out of doing what I do here than I would from doing the same activities in other places	1.4	2.8	4.2	2.8	1.3	559

Response format: 1 = Absolutely disagree – 5 = Absolutely agree.

Table 3. Effects of strength of attachment on the nature of attachment.

Nature of Attachment	Community (Røros)							Tourists (Femundsmarka)						
	Mean Attachment Level			Test Statistics				Mean Attachment Level			Test Statistics			
	Group 1	Group 2	Group 3	Grand Mean	F-value	Sign.	N	Group 1	Group 2	Group 3	Grand Mean	F-value	Sign.	N
Natural environment	3.9	4.4	4.7	4.3	50.65	0.000	480	4.3	4.5	4.8	4.5	29.41	0.000	551
Cultural landscape and its current use	3.3	3.8	4.2	3.8	42.254	0.000	478	3.2	3.4	3.7	3.4	11.73	0.000	539
Social networks, friends and family	4.1	4.3	4.7	4.4	23.54	0.000	477	3.7	3.7	4.0	3.8	6.33	0.002	542
Local cultural history and cultural values	3.2	3.8	4.3	3.8	61.65	0.000	476	3.4	3.5	3.9	3.6	13.25	0.000	550
Mining history (R)	3.0	3.5	4.0	3.5	36.24	0.000	479							
Outdoor recreation/Traditions	3.6	4.2	4.5	4.1	43.2	0.000	477	3.9	3.9	4.2	4.0	10.18	0.000	
Local/resident population (FM)								2.7	3.0	3.5	3.0	26.74	0.000	546
Special trip companions (FM)								3.2	3.5	3.8	3.5	14.22	0.000	537

Response formats: Femundsmarka: 1 = Unimportant – 5 = Very important; Røros: 1 = Unimportant – 7 = Very important (rescaled to a 5-point format).

FM: Femundsmarka (tourist sample) only; R: Røros (community sample) only.

Table 4. Effects of place attachment on attitudes towards management priorities.

Management Priorities	Community (Røros)							Tourists (Femundsmarka)						
	Mean Attachment Level			Test Statistics				Mean Attachment Level			Test Statistics			
	Group 1	Group 2	Group 3	Grand Mean	F-value	Sign.	N	Group 1	Group 2	Group 3	Grand Mean	F-value	Sign.	N
Protect cultural monuments	4.2	4.4	4.7	4.4	12.39	0.000	477	4.2	4.2	4.3	4.2	0.79	ns.	542
Protect scenic landscapes (R)	4.2	4.3	4.6	4.4	12.70	0.000	476	4.4	4.4	4.5	4.4	2.20	ns.	544
Protect cultural landscapes (e.g. Sami cultural sites) (FM)								4.2	4.3	4.3	4.3	0.69	ns.	544
Sustain actively used agricultural landscapes (R)	3.7	4.1	4.3	4.0	17.26	0.000	475							
Protect genetic diversity/resources	4.0	4.2	4.5	4.2	16.37	0.000	471	4.3	4.4	4.3	4.3	0.11	ns.	542
Facilitate hunting, fishing and outdoor recreation	4.1	3.8	4.2	4.1	2.22	ns.	477	3.5	3.7	3.8	3.7	4.0	0.02	543
Facilitate commercial tourism	3.0	2.8	3.3	3.0	7.13	0.001	476	2.2	2.2	2.1	2.2	0.16	ns.	541
Maintain/protect ecosystems in their natural state	4.0	4.2	4.5	4.2	20.63	0.000	475	4.4	4.4	4.5	4.4	0.57	ns.	548
Protect wilderness and untrammeled nature	4.0	4.2	4.6	4.3	15.65	0.000	476	4.5	4.5	4.6	4.5	2.22	ns.	548
Protect old land use and harvesting practices	3.5	3.8	4.3	3.9	28.56	0.000	478	3.7	3.7	3.9	3.8	4.36	0.01	549
Facilitate research and education	3.7	3.9	4.1	3.9	9.45	0.001	478	3.7	3.6	3.6	3.6	0.13	ns.	544

Response formats: Femundsmarka: 1 = Unimportant – 5 = Very important; Røros: 1 = Unimportant – 7 = Very important (rescaled to a 5-point format).

FM: Femundsmarka (tourist sample) only; R: Røros (community sample) only.

Table 5. Effects of residence and experience of use history on the nature of attachment.

Nature of Attachment	Community (Røros)					Tourists (Femundsmarka)						
	Residential History			Test Statistics		Visitation History			Test Statistics			
	Røros	Other	Grand Mean	F-value	Sign.	N	First Visit	Prev. Visit	Grand Mean	F-value	Sign.	N
Natural environment	4.4	4.3	4.3	1.00	ns.	476	4.4	4.6	4.5	1.72	ns.	555
Cultural landscape and its current use	3.8	3.7	3.8	2.03	ns.	472	3.4	3.5	3.4	1.50	ns.	542
Social networks, friends and family	4.5	4.3	4.4	4.08	0.04	473	3.8	3.8	3.8	1.54	ns.	546
Local cultural history and cultural values (FM)	3.9	3.7	3.8	6.9	0.009	470	3.4	3.7	3.6	1.86	ns.	553
Mining history (R)	3.7	3.4	3.5	9.28	0.002	474						
Outdoor recreation/traditions	4.2	4.1	4.1	2.11	ns.	471	3.9	4.1	4.0	1.68	ns.	549
Local/resident population (FM)							2.9	3.1	3.1	1.75	ns.	548
Special trip companions (FM)							3.2	3.7	3.5	1.95	ns.	539

Response formats: Femundsmarka: 1 = Unimportant – 5 = Very important; Røros: 1 = Unimportant – 7 = Very important (rescaled to a 5-point format).
FM: Femundsmarka (tourist sample) only, R: Røros (community sample) only.

Table 6. Effects of residence and experience of use history on attitudes towards management priorities.

Community (Røros)				Tourists (Femundsmarka)							
Residential History				Test Statistics		Visitation History				Test Statistics	
Røros	Other	Grand Mean		F-value	Sign.	N	First Visit	Prev. Visit	Grand Mean	F-value	Sign.
Management Priorities	4.3	4.4	4.4	1.08	ns.	474	4.2	4.2	4.2	0.000	ns.
	4.3	4.4	4.4	0.73	ns.	472	4.5	4.4	4.4	0.02	ns.
							4.3	4.2	4.3	0.17	ns.
	4.2	4.0	4.0	4.94	0.03	471					
	4.1	4.3	4.2	4.37	0.04	467	4.4	4.3	4.3	0.01	ns.
	4.0	4.1	4.1	0.32	ns.	474	3.6	3.7	3.7	0.02	ns.
	3.0	3.0	3.0	0.07	ns.	472	2.4	2.1	2.2	0.03	ns.
	4.2	4.3	4.2	2.04	ns.	472	4.5	4.4	4.4	0.01	ns.
	4.2	4.3	4.3	0.50	ns.	472	4.5	4.6	4.5	0.00	ns.
	3.9	3.9	3.9	0.01	ns.	475	3.7	3.8	3.8	0.00	ns.
	3.8	4.0	3.9	4.29	0.04	474	3.7	3.6	3.6	0.02	ns.

Response formats: Femundsmarka: 1 = Unimportant – 5 = Very important; Røros: 1 = Unimportant – 7 = Very important (rescaled to a 5-point format).
FM: Femundsmarka (tourist sample) only, R: Røros (community sample) only.

increasing perceived importance of each of the potential management objectives.

Experience with area and attachment to place

Residential history (among local residents) and experience of the area (among tourists) had a limited effect on the nature of attachment these groups felt toward the environment. Among the tourists to Femundsmarka, 37.9% ($n = 224$) had never visited the place before, while 60.7% ($n = 357$) had made one or more visits to the area earlier. Among the Røros residents, 32.2% ($n = 157$) had never lived outside the community, while 67.8% ($n = 311$) had also lived other places. For the tourists in Femundsmarka, former experience of the area (i.e. having visited the place before or not) did not elicit significant differences in the views of how important the environmental attributes are for attachment.

Among the local residents there were significant differences for the items 'social networks, friends and family, local cultural history and cultural values' and 'the mining history'. For these items, those who had only lived in Røros reported the highest scores, i.e. they considered these aspects of the environment to be more important for their attachment to the area than those who have also lived outside Røros (Table 5).

Experience of area and management priorities

Residence and experience of use history have little effect on how local residents and tourists viewed potential management objectives. For the tourists, no significant differences in how appropriate or important they thought the various objectives to be were identified on the basis of whether they had visited the area before or not. Among local residents differences in residence, i.e. whether or not they had lived only in Røros or also in other places, significantly affected responses for three objectives, i.e. 'sustaining actively used agricultural landscapes', 'protecting genetic diversity/resources', and 'facilitating research and education' (Table 6).

Discussion

The results of this study suggest that level of attachment does influence management preferences specific to a locale. Both locals and tourist value the place and most of its attributes the way they were presented in this study. For both groups we also found that the level of attachment had a positive effect on valuing the various environmental attributes. The level of place attachment affected attitudes towards management priorities. In most cases the perceived importance of potential management objectives increased with increasing levels of place attachment.

Conversely, residence and experience of use history had limited effects on the nature of attachment among both locals and visitors. Neither did they have much effect on attitudes toward management priorities, although some effect is detected for certain objectives among locals in Røros. Differences between residents and tourists appeared to be small compared to within-group differences across levels of

attachment. In other words, the general patterns of how place attachment and residence affects attitudes toward management are comparable for tourists and locals. It should be noted, however, that the influence of place attachment is somewhat stronger for local residents than for tourists.

This study supports the notion that attachment to place, at least to some extent, captures a broader range of meanings related to the environment than demographic variables such as residency. In Norway, as indeed in a number of other countries, debates concerning natural resource and cultural heritage management often revert to a simplistic distinction between locals (insiders) and non-locals (outsiders) when it comes to explaining different attitudes in conflicts. This is understandable because media and other public forms of communication are prone to simplify highly intricate problems. Furthermore, land-use debates are also subject to a dominant theme in political rhetoric these days: namely the desire to democratise management and empower local communities in land-use and resource decisions (Kagen 1999). This creates a context in which one is easily led to believe that each group (local residents and outsiders) subscribes to a cohesive set of values distinct from those of the other group when in fact there may be as much value diversity within groups as between groups (Lee 1991). With much of the literature and thinking organised around the insider-outsider distinction – whether in the form of locals versus tourists, locals versus national interests, or old-timers versus newcomers – it becomes easy to assume that insiders and outsiders have different types of values and that they will take different stands on policy issues and attitudes toward management priorities.

What further complicates this is the fact that the definition of 'local' and distinctions between insiders and outsiders becomes increasingly fuzzy, and, as we have argued earlier, perhaps often not valid nor relevant. Conventional differences between urban and rural, traditional and modern are no longer so discernible (Halfacree 1993). Previously, it has been common to think in terms of clear differences in social and cultural conditions, employment opportunities and services between rural and urban parts of Norway. However, current trends of modernisation including increased mobility, new technology, economic restructuring, changing land use policies, changing public services and not least, communication patterns, render traditional stereotypes obsolete. For instance, some farmers in Norway now use the Internet as much as young people in the cities.

Røros is a UNESCO World Heritage Site, and there is controversy over what this means and how it should be managed (Vistad 1999b, Daugstad & Vistad 1999). Strong restrictions are placed on the refurbishment of buildings and new constructions, yet Røros also strives to become a modern service and tourist centre. Tourists view the town and its residents as special and novel (Vistad 1999a, Daugstad et al. 1999). Femundsmarka is the 'backyard' of the Røros community. Many residents identify strongly with this area as their wilderness, and as a carrier of cultural identity since the area has provided vital resources for the community for centuries. At the same time Femundsmarka is a national park, and as such is also a 'national interest'. This evokes both positive and negative feelings among locals, and conflicts

with visitors have occurred. There are thus competing discourses over place meanings associated with Femundsmarka (Kaltenborn & Riese 1998). Yet locals and visitors also seem to share important values. This diverse and contested image of Femundsmarka is a classic case of 'dissonant heritage' (Tunbridge & Ashworth 1996). User groups solely defined on demographic or behavioural variables may not capture salient elements of such place meanings nor explain natural resource conflicts very well.

The main implication of this study is that both research studies and policy discussions need to focus on the place-specific relationships of respondents and stakeholders respectively. The lesson from the place literature, and from these findings, is that it is necessary to examine the diverse ways in which people are tied to a place, and not to reduce this to simplistic categorical assignments based on residential history (long-time versus short-time, or resident versus non-resident or partial resident). Insider-outsider dichotomies tend to focus on abstract value and preference statements, rather than identifying place- and context-specific meanings and values. Demographic variables, such as residential status, are often unsatisfactory surrogates for insideness, rather than identifying actual commitment to place. In the modern world of globally mobile people, the focus should be on how people form diverse ties to various places, and on how those differing ties condition their views regarding the management of the resources of these places. In the post-modern vernacular we need to deconstruct the many existing and evolving 'localisms' built into our research and policy-thinking.

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References

- Blahna, D. J. 1990. Social bases for resource conflicts in areas of reverse migration. Lee, R. G., Field, D. R. & Burch, W. R., Jr. (eds.) *Community and Forestry: Continuities in the Sociology of Natural Resources*, 159–178. Westview Press, Boulder, Co.
- Buttimer, A. 1980. Home, reach, and the sense of place. Buttimer, A. & Seamon, D. (eds.) *The Human Experience of Space and Place*, 166–187. Croom Helm, London.
- Daugstad, K., Binns, K. S., Grytli, E. R., Liavik, K., Prøsch-Danielsen, L. & Vistad, O. I. 1999. *Bergverksbyens omland. Om ressursbruk, vern, kultur og natur i Rørosområdet*. NIKU Temahefte 29, Norsk institutt for kulturminneforskning, Trondheim.
- Daugstad, K. & Vistad, O. I. 1999. Lokalsamfunns- og forvaltningsperspektiv på verdensarvområdet Røros. *Naturforvaltning og samfunnsfag. Referat fra konferanse i Oslo 12. og 13. oktober 1999*. DN-notat 6, Direktoratet for naturforvaltning, Trondheim.
- Driver, B. L., Brown, P. J. & Peterson, G. L. (eds.) 1991. *Benefits of Leisure*. Venture Publishing, State College, Pennsylvania.
- Egan, A. F. & Luloff, A. E. 2000. The exurbanization of America's forests. *Journal of Forestry* 98 (3), 26–30.
- Fortmann, L. & Kusel, J. 1990. New voices, old beliefs: forest environmentalism and long-standing rural residents. *Rural Sociology* 55 (2), 214–232.
- Fortmann, L. & Starrs, P. 1990. Power plants and resource rights. Lee R. G., Field, D. R. & Burch, W. R., Jr. (eds.) *Communities and Forestry: Continuities in the Sociology of Natural Resources*, 179–194. Westview Press, Boulder, Co.
- Giuliani M. V. & Feldman R. 1993. Place attachment in a developmental and cultural context. *Journal of Environmental Psychology* 13, 267–274.
- Goudy, W. 1982. Further consideration of indicators of community attachment. *Social Indicators Research* 11, 181–192.
- Green, G. P., Marcouiller, D., Deller, S., Erkkila, D. & Sumathi, N. R. 1996. Local dependency, land use attitudes, economic development: comparisons between seasonal and permanent residents. *Rural Sociology* 61 (3), 427–445.
- Halfacree, K. H. 1993. Locality and social representation: space, discourse and alternative definitions of the rural. *Journal of Rural Studies* 9 (1), 23–37.
- Hastrup, K. & Olwig, K. F. 1997. Introduction. Olwig, K. F. & Hastrup, K. (eds.) *Siting Culture: The Shifting Anthropological Object*. Routledge, London.
- Harvey, D. 1996. *Justice, Nature and the Geography of Difference*. Blackwell, Oxford.
- Ilay, R. 1998. Sense of place in developmental context. *Journal of Environmental Psychology* 18 (1), 5–29.
- Hendee, J. C., Stankey, G. H. & Lucas, R. C. 1990. *Wilderness Management*. North American Press, Golden, Co.
- Inglehart, R. 1990. *Cultural Shift in Advanced Industrial Society*. Princeton University Press, Princeton, NJ.
- Kagen, R. A. 1999. Trying to have it both ways: local discretion, central control, and adversarial legalism in American environmental regulation. *Ecology Law Quarterly* 25(4), 718–732.
- Kaltenborn, B. P. 1998. Effects of sense of place on responses to environmental impacts. A study among residents in Svalbard in the Norwegian high Arctic. *Applied Geography* 18 (2), 169–189.
- Kaltenborn, B. P. & Riese, H. 1998. Friluftsliv og konfliktdimensjoner i Femundsmarka nasjonalpark. *Landbruksøkonomisk forum* 2, 15–26.
- Kasarda, J. D. & Janowitz, M. 1974. Community attachment in mass society. *American Sociological Review* 39, 328–339.
- Knaap, G. J., Matier, D. & Olshansky, R. 1998. Citizen advisory groups in remedial action planning: paper tiger or key to success? *Journal of Environmental Planning and Management* 41 (3), 337–354.
- Lee, R. G. 1991. Four myths of interface communities. *Journal of Forestry* 89 (6), 35–38.
- Lime, D. & Stankey, G. H. 1971. *Carrying Capacity: Maintaining Outdoor Recreation Quality*. Recreation Symposium Proceedings, 174–184. USDA Forest Service, Northeastern Forest Experiment Station, Upper Darby, Pa.
- Lowe, G. D. & Pinhey, T. K. 1982. Rural-urban differences in support for environmental protection. *Rural Sociology* 47 (1), 114–128.
- Massey, D. 1993. Power-geometry and a progressive sense of place. Bird, J., Curtis, B., Putnam, T., Robertson, G. & Tickner, L. (eds.) *Mapping the Futures: Local Cultures, Global Change*, 59–69. Routledge, London.
- McCool, S. F. & Martin, S. R. 1994. Community attachment and attitudes toward tourism development. *Journal of Travel Research* 22 (3), 29–34.
- McCool, S. F. & Moisey, R. N. (eds.) 2001. *Tourism, Recreation and Sustainability. Linking Culture and the Environment*. CABI Publishing, New York.
- McHugh, K. E. & Mings, R. C. 1996. The circle of migration: attachment to place in ageing. *Annals of the Association of American Geographers* 86 (3), 530–550.
- Milbrath, L. W. 1984. *Environmentalists: Vanguard for a New Society*. State University of New York Press, Albany, NY.
- Nelson, P. B. 1997. Migration, sources of income, and community change in the nonmetropolitan Northwest. *Professional Geographer* 49 (4), 418–430.
- Pect, R. 1998. *Modern Geographical Thought*. Blackwell, Oxford.
- Price, M. L. & Clay, D. C. 1980. Structural disturbance in rural communities: some repercussions of the migration turnaround in Michigan. *Rural Sociology* 45 (4), 591–607.
- Proshansky, H. M., Fabian, A. K. & Kaminoff, R. 1983. Place-identity: physical world socialization of the self. *Journal of Environmental Psychology* 3, 57–83.
- Relph, E. 1976. *Place and Placelessness*. Pion, London.
- Rojek, C. & Urry, J. (eds.) 1997. *Touring Cultures: Transformations of Travel and Theory*. Routledge, London.
- Sack R. D. 1997. *Homo Geographicus: A Framework for Action, Awareness and Moral Concern*. John Hopkins University Press, London.
- Sampson, R. J. 1988. Local friendship ties and community attachment in mass society: A multilevel systemic model. *American Sociological Review* 53, 766–779.
- Selman, P. 1998. Local Agenda 21: substance or spin? *Journal of Environmental Planning and Management* 41 (5), 533–553.

- Shands, W. E. 1991. Problems and prospects at the urban-rural interface. *Journal of Forestry* 89 (6), 23–26.
- Sheldon, P. J. & Var, T. 1984. Resident attitudes of tourism in Northern Wales. *Tourism Management* 5, 224–233.
- Shurmer-Smith, P. & Hannam, K. 1994. *Worlds of Desire, Realms of Power: A Cultural Geography*. Routledge, New York.
- Smith, V. L. 1989 (ed.) *Hosts and Guests: The Anthropology of Tourism*. University of Pennsylvania Press, Philadelphia.
- Sofranko, A. 1980. Job seekers and amenity migrants from metropolitan areas: differences and impact potential. Sofranko, A. & Williams, J. D. (eds.) *Rebirth of Rural America: Rural Migration in the Midwest*. North Central Regional Center for Rural Development, Iowa State University, Ames, IA.
- Stewart, S. I. 2000. Amenity migration. *Trends 2000: Proceedings of the Fifth Outdoor Recreation and Tourism Trends Symposium (17–20 September)*. Michigan State University, East Lansing, MI.
- Tuan, Y. F. 1974. *Topophilia: A Study of Environmental Perception, Attitudes, and Values*. Prentice-Hall, Englewood Cliffs, NJ.
- Tuan, Y. 1977. *Space and Place: The Perspective of Experience*. University of Minnesota Press, Minneapolis, MN.
- Tuan, Y. 1980. Rootedness versus sense of place. *Landscape* 24(1), 3–8.
- Tunbridge, J. E. & Ashworth, G. 1996. *Dissonant Heritage. The Management of the Past as a Resource in Conflict*. Wiley, Chichester.
- Urry J. 2000. *Sociology Beyond Societies: Mobilities for the Twenty-First Century*. Routledge, London.
- Van Es, J. C. & Brown, J. E. 1974. The rural-urban variable once more: some individual level observations. *Rural Sociology* 39 (3), 373–391.
- Van Liere, K. D. & Dunlap, R. E. 1980. The social basis of environmental concern: a review of hypotheses, explanations, and empirical evidence. *Public Opinion Quarterly* 44, 191–197.
- Vistad, O. I. 1999a. Kva er Bergstaden og omlandet for rørosingar. Daugstad, K. et al. *Bergverksbyens Omland. Om ressursbruk, vern, kultur og natur i Rørosområdet*, 423–450. NIKU Temahefte 29, Norsk institutt for kulturminneforskning, Trondheim.
- Vistad, O. I. 1999b. Røros and the locals: World Heritage Site and vernacular landscape. Setten, G., Semb, T. & Torvik, R. (eds.) *Shaping the Land. Vol. III: The Future of the Past. Proceedings of the Permanent European Conference for the Study of the Rural Landscape, 18th session in Røros and Trondheim, Norway, 7–11 September 1998*, 531–542. Papers from the Department of Geography, University of Trondheim, New Series A, No. 27, Trondheim.
- Wagar, J. A. 1964. *The Carrying Capacity of Wildlands for Recreation*. Forest Science Monograph 7, Society of American Foresters, Washington DC.
- Waggener, T. R. 1977. Community stability as a forest management objective. *Journal of Forestry* 79 (11), 710–714.
- Weber, E. P. 2000. A new vanguard for the environment: grass-roots ecosystem management as a new environmental movement. *Society and Natural Resources* 13, 237–259.
- Williams, D. R. & Kaltenborn, B. P. 1999. Leisure places and modernity: the use and meaning of recreational cottages in Norway and the USA. Crouch, D. (ed.), *Leisure Practices and Geographic Knowledge*, 214–230. Routledge, London.
- Williams, D. R., Patterson, M. E., Roggenbuck, J. W. & Watson, A. 1992. Beyond the commodity metaphor: examining emotional and symbolic attachment to place. *Leisure Sciences* 14, 29–46.
- Zimmerer, K. 1994. Human Geography and the 'New Ecology': the prospect and promise of integration. *Annals of the Association of American Geographers* 84 (1), 108–125.