

## **Residents' adjustments to adjacent national parks: A place-bound structuration perspective**

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<b>Abstract</b> <p>The paper surveys residents' adjustments to their local national parks and explores place-bound structuration theory as a way to explain the results. Such an approach was considered to be necessary because the international literature on local community adjustments to national parks is rather contradictory, with each study seeming to elicit different reactions from local residents. Making inferences from the literature is therefore not without risk. The study aims to assist the making of inferences by examining the place-related local community processes that come to play when implementing and managing national parks.</p> <p>The study concerns Linnansaari and Seitsemien National Parks in Southern Finland; the former was created in 1950s the latter in the 1980s. Data was collected in 2007 by mailed questionnaires to household located in postal districts adjacent to the national parks.</p> <p>Most residents considered their local national park to have brought benefits to their locality. Nevertheless, a range of attitudes towards park-based development was found ranging from opposition to unconditional acceptance. These attitudes were conditional upon both personal and communal experiences, often consisting of challenges to established local activities (e.g. forestry) or as perceived opportunities for new activities. The time element, essential to the dialectic process of structuration, was only weakly observed. However, a greater opportunity for new (tourist-based) business was perceived by residents adjacent to the older park. A surprisingly slow place-attachment process in both areas was considered to slow the structuration process. Younger residents and residents with shorter domicile in the localities were more likely to accept park-based development than older residents and residents with longer domicile. Farmers and forest owners were more likely to oppose park-based developments. Local authorities, but less so the park authority (Metsähallitus), were considered to have hindered the integration of the parks into their communities by lack of co-operation (negotiation).</p> <p>While the majority of residents perceived many benefits from the national parks, the study indicated that the introduction of space-demanding projects (national parks) that had no previous (local) institutional role has disturbed the lives of local residents. This gains expression by opposition, or reserved attitudes, to the national parks, as well as a limited response to the opportunities created by the parks.</p>			
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## Foreword

Nature protection areas such as national parks are important areas from the standpoint of nature conservation. Their creation or expansion is, nevertheless, a significant event in the lives of the residents who live adjacent to them. Traditional livelihoods may be disturbed, while traditional privileges such as hunting and fishing rights may be curtailed. Land ownership and with it land-based livelihoods, such as commercial forestry, mineral extraction or fishing may be terminated. In extreme cases, land may be compulsory acquired. On the other hand, because nature protection areas such as national parks are managed in such a ways that they also become important areas for outdoor recreational activities, they can attract substantial visitor flows. These in turn create a demand for tourist services, thereby creating new enterprise opportunities.

The acceptance of a major new land-use project, such as a national park, and especially one that challenges or disrupts traditional land use and ownership, requires a significant adjustment process on the part of the residents affected by such projects. The research literature on such adjustments suggests that conclusions from one area are not readily transferable to another area. This paper sets out to examine why this may be. The study aims to create information for local decision-makers and national park managers that will assist the planning and management of protection areas and national parks and their integration into their local communities.

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Helsinki, 13th June, 2008

Ashley Selby  
Project co-ordinator

## 1 Introduction

### 1.1 Background and problem setting

Major changes are occurring in the socio-economic structure of rural areas of Finland as a result of the decline in the number of active farms and the continued out-migration of the young, economically active population. Many active farms are responding to these changes by diversifying into processing and services. In 2003, of c. 80 000 farms in Finland c. 23 000 had diversified into other segments of the economy (Niemi and Ahlstedt 2005). Of these diversified farms, c. 2 000 provided hospitality and tourism-related services.

Compounding the pressures on its agriculture and forestry, Finland is a party to international agreements committing it to intensify nature conservation activities, especially concerning the protection of forest-related biotopes. The network of nature protection areas and national parks that has so far been established is weighted towards wilderness areas on State-owned land in Northern Finland. However, there are increasing demands for the protection of forest biotopes specific to Southern Finland. This involves the removal of land from economic production and sometimes difficult negotiations with private landowners (e.g. Mönkkönen and Primmer 2006, Horne 2006).

The international literature on tourism has shown that land areas that have been set-aside for nature protection and national parks are often tourist attractions. The money flows created by tourism supplement local economies, to some degree compensating for any losses of income that may have resulted from the establishment of the nature protection area (e.g. Bergstrom et al. 1990, Cordell et al. 1992, Berghäll 2006). The wilderness national parks in Finnish Lapland are an example of such a development (Laakkonen 2002, Saarinen 2001, 2003, Saarinen and Järviluoma 2002, Kauppila 1999a and b, 2004, Huhtala 2006). However, the national parks in Lapland differ considerably in both their size and physical nature, as well as in the scale of their tourist developments, to the small protection areas and national parks located in Southern Finland (Selby et al. 2007a) where the compulsory setting aside of private forest land for nature conservation is often contested (e.g. Oksanen 2003, Paloniemi 2006, Paloniemi et al. 2006). Further, given the small scale and diversity of the national parks in Southern Finland, there is no guarantee that the development of the tourist industry that has been experience in Lapland will be repeated to offset losses in income from set-aside land.

Many of the issues raised in the literature on tourism-community relations have been summarised by Pearce et al. (1996) who found that the results of empirical studies were often contradictory. For example, entrepreneurs were reported by Pizam (1978) and Thomason et al. (1979) to be more positive about tourists than other community groups. Conversely, Keogh (1990) found no significant differences between business owners and local residents in their perceptions of tourism. Murphy (1983) found significant differences concerning perceptions of the economic benefits of tourism between residents, administrators and business owners. Older residents were found to be less positive about tourism by Ritchie (1988), but Davis et al. (1988) found no relationship between demographics and attitudes towards tourism. No significant relationship between community attachment and the perception of tourism was found by Lankford and Howard (1994). McCool and Martin (1994) found that newcomers to a district became attached to community rather quickly – thus reducing the difference in attitudes towards tourism between long-term and new residents. Davis et al. (1988) found that people born in a place were more positive about tourism than newcomers. Similarly, people who had lived longer in a community were positive

about some types of tourists (Brougham and Butler 1981). Sheldon and Var (1984) found that local attitudes towards tourists (in North Wales) were found to be more positive in high density tourist areas than in low density areas; a result that was opposite to findings by Pizam (1978) and to a lesser degree to Allen et al. (1988). Mason and Cheyne (2000) studying residents' attitudes to potential tourism development in New Zealand found that both negative and positive attitudes were linked to community attachment. There was both support and opposition to the development, with women more opposed than men concerning the perceived negative impacts.

Finnish investigations do not help to clarify such contradictions. Of the few existing studies, Järviluoma (1993) found that the extent to which local residents were able to share the benefits to the local economy brought by tourism had an effect on their attitudes towards the national park in question. Tourism was also considered to have improved the local infrastructure and provision of services. The social effects of tourism on local society had not been as positive as the economic benefits, partly because of the perceived threat of tourism to the traditional values in the local community (Järviluoma 1993). In addition, Järviluoma (1993) found that residents' attitudes towards national parks were affected by their socio-economic status, their dependency upon incomes from tourism, the frequency of contact with tourists, and the distance of their residence from the tourist attraction. Rämetsä et al. (2005) examined the attitudes to nature conservation and nature-based tourism in two areas of northern Finland. Residents' attitudes were not homogenous, and were often contradictory. For example, the benefits of nature protection and nature-based tourism were perceived by some residents, whereas others considered that the negative effect of conservation and tourism on traditional livelihoods was too great. Further, Kuuluvainen et al. (2002) found mixed messages with respect to the need for increased areas of forest protection in Southern Finland.

## 1.2 Aim of the study

The present paper examines the local residents' experiences of two national parks (Seitsemäen and Linnansaari) in southern Finland. Because of the international literature on the local effects of protection areas, national parks and their associated tourist development present contradictory evidence of the local effects, the study attempts to explain residents' experiences and the attitudes derived from them using a place-bound structuration framework. The structuration framework should be able to capture the interaction of individual lifepaths and any disturbances to the traditional local livelihoods that may have occurred because of the creation of the national parks. The results of this approach should be able to provide information about the nature of the local adjustment process that will be of assistance to local decision-makers and national park managers when planning, managing national parks and integrating them into their adjacent communities.

Seitsemäen National Park (45.5 km<sup>2</sup>), a forest and esker protection area in western Finland, was established in 1982 on state land, with restrictions on the use of adjacent private land. Linnansaari National Park (93 km<sup>2</sup>, of which 59% water), a lacustrine archipelago protection area in eastern Finland, was established in 1956 and expanded in the 1980s. The park's creation involved both state and private land. The compulsory purchases made at the time caused considerable local debate, but according to some sources local residents came to recognise the value of the park (Pollari 1998). Currently, Seitsemäen receives about 40 000 visitors a year; Linnansaari around 30 000 (Selby et al. 2007a). This is close to the average number for visitors per park for all national parks in Finland. In particular, the study examines how local residents perceive the effects of the national park on their daily lives. Do they perceive the park to be an opportunity for

their community to revitalise its economy, or does the park bring restrictions on the exploitation of local resources? And how have these perceived effects affected residents' attitudes towards the national park?

The investigation addresses an area of research that has received little attention in Finland. Studies on the effects of tourism on local economies (e.g. Kauppila 1999a and b, Saarinen 2003) and of what makes areas attractive to tourists (Aho 1994, Saarinen 1996, 2000, 2002, Järviluoma 2001, Pouta and Sievänen 2002, Huhtala et al. 2004) have largely concentrated on the large, wilderness national parks of Finnish Lapland, an exception being Lovén (2004) and Puhakka (2007) concerning the Koli National Park in Eastern Finland. Studies of local residents' reactions to the presence of intense tourist development areas in their midst have also been confined to Finnish Lapland (e.g. Aikio and Aikio 1991, Järviluoma 1993) where social and economic conditions differ considerably from those in southern Finland.

The contradictory results in the international literature on the local effects of tourism and upon local residents' reactions to protection areas and the visitors offered very limited scope for the creation of *a priori* working hypotheses to guide further studies. Petäjistö and Selby (2007) present empirical results for Seitsemien National Park in Southern Finland that differ sufficiently from e.g. Järviluoma (1993) for Finnish Lapland as to present further evidence of a lack of commonality between different regions when it comes to local effects of national parks and other protection areas. What appears to be required is a conceptual tool, or tools, for considering the context of the local effects of national parks. The following sections briefly examine such conceptual tools.

## 2 Theoretical considerations

### 2.1 The man-environment relationship, space and place

The relationship between man and his environment has long fascinated thinkers in a number of disciplines; not least human and behavioural geography that are specialised in examining the spatial aspects of the human condition (see e.g. Ley and Samuels 1978, Gregory 1981, Stoddart 1981, Johnston 1983, Gregory and Urry 1985 for detailed discussions). Samuels (1978) noted that an important epistemological property of the humanistic approach to understanding is *holism* (i.e. the whole is greater than the sum of parts, e.g. society is more than a simple collection of individuals). Such an epistemology has long been recognised as being both *dialectical* and *contextual* (Vidal de la Blache 1903, 1926). Understanding consists not just seeking "cause and effect", but the identification of series of phenomena and their interaction. This process of interaction creates the *genre de vie*, or life-style; "the integrated result of physical, historical and social-cultural influences surrounding the human relationship to milieu in particular places" (Buttimer 1978;60).

Central to this process are "agency" and "structure" (Gregory 1981;5), where *agency* is the capacity of individual humans to *act* independently, and *structure* is those factors such as social class, religion, gender, ethnicity, customs, etc. that limit or influence the opportunities that individuals may have. "The whole of life goes forward within 'structures' of ... visible and invisible rules, which prohibit this action and assign special symbolic significance to that..." (Thomson 1978, cited by Gregory 1981;8). The presence of rules raises the important issues of negotiation and contestation. Thus, if, within the rules, individual and social actors "confront



each other as creative agents (then) their engagements can consciously or otherwise reaffirm or refashion the domain within which they take place” (Anderson 1980, cited by Gregory 1981;8). Agency and structure therefore form a continuous dialectic where society forms the individuals who create society (Gregory 1981, Johnston 1983), which in turn creates place from space (see also Cox and Mair 1991).

The dialectic reproduction of society is given closer attention by the theory of structuration in which social systems are both the medium *and* the outcome of the practices that constitute them (Giddens 1979; 69). Human agency (action) takes place within structural contexts. Thus, because it deals with place, time and local institutions, the theory of structuration appears to offer a conceptual tool with which to examine the relationship between local residents and an “institutional project” such as a national park or protection area. The following sections present a brief outline of the theory of structuration as it would apply to the problem in hand, while particular attention is given to an application of structuration theory by Pred (1984) that emphasizes *place*.

## 2.2 Theory of structuration as a tool for understanding local residents’ attitudes

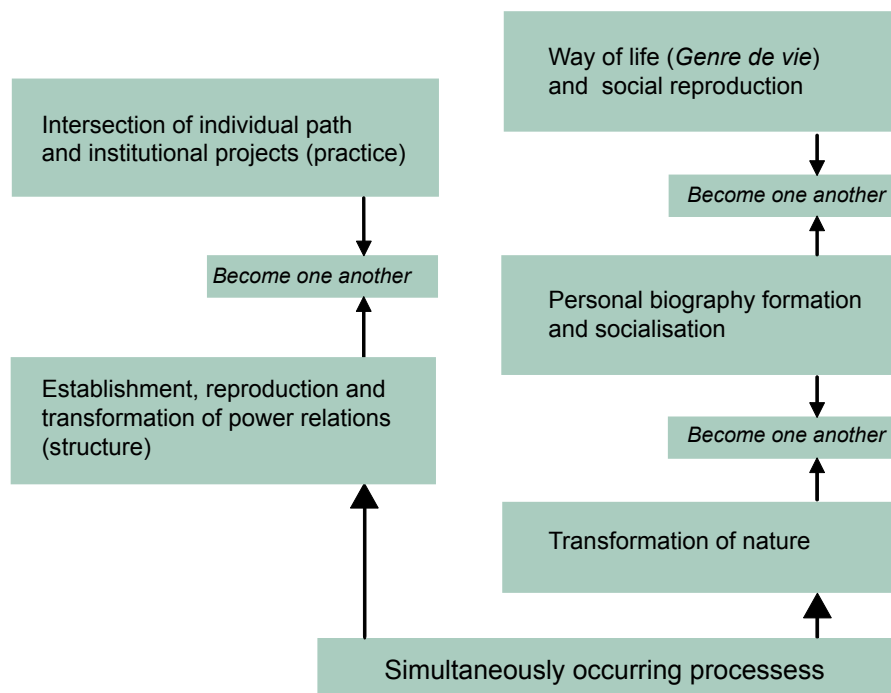
The theory of structuration (Berger and Luckmann 1967, Giddens 1976, 1979, Bourdieu 1977, Layder 1981, see also Johnston 1983; 87–121, Thrift 1979, 1983) focuses on social practices that are ordered across space and time and expresses the mutual dependence of structure and agency (Giddens 1979; 69). *Agency* does not just refer to a series of discrete acts combined together, but to a continuous flow of conduct and discourse (e.g. Moscovici 1981, 1984, Halfacree 1993, Jones 1995, Elands 2000, Wiersum and Elands 2001). Time therefore plays a central role in the structuration process (e.g. Hägerstrand 1967) Agency is located in time, and concerns the temporality of day-to-day conduct (Giddens 1979; 55). *Action* can be conscious or unconscious. With conscious action, it is always necessary to consider the unintended consequences of intentional actions, especially where the reproduction of institutions is in question (Giddens 1979; 59). Because a national park can be considered to be an “institutional project” (cf. Pred 1984) then unintentional outcomes are likely to arise from the establishment of a national park in a given area. Such outcomes may be positive or negative. Giddens (1979; 56) notes that it is a necessary feature of action that, at any point, the agent “could have acted otherwise”: either consciously in terms of attempted intervention in the processes of “events in the world”, or passively in terms of forbearance. Thus, an individual’s *reaction to the establishment of a park could be either actively hostile or passively acquiescent*.

*Structuration* refers to a ‘structuring property’ or a tendency to form a structure (Giddens 1979; 64). This occurs through the rules and resources (sets of transformation relations) that are recursively implicated in the reproduction of social systems. *Resources* are defined as those created by human action; they are not those resources given by nature. Social structures make social action possible and at the same time that social action creates those very structures. The most deeply entrenched practices that constitute any social system are *institutions*, the rule of which can only be understood in the context of the historical development of all aspects of society. They are recursively implemented in social practices (Giddens 1979; 65). Through *socialisation*, rules of behaviour are absorbed and become *taken-for-granted* (see also Ley 1977). Socialisation, social reproduction and social transformation always become one another because the individual is shaped by society and society is shaped by the individual – a dialectical relationship. In this way, societies create place out of space.

## 2.3 Structuration and place in the context of an imposed national park

The place-specificity of structuration makes the theory particularly interesting in the context of the present investigation because of its ability to identify place-specific social adjustment processes. Pred (1984) has paid particular attention to this aspect of structuration by creating a *theory of place as historically contingent process* (Figure 1). The basic premises for the theory are derived from structuration theory, i.e. for any given area, *social reproduction* is considered to be an ongoing process that is inseparable from the everyday performance of the activities of a locality's constituent institutions – both formal and informal (Pred 1984; 280–2). This leads to the perpetuation or modification of the institutions themselves by their continual intersection with the life-paths of individuals in that locality. Each of society's component institutions are considered to be inseparable from the everyday and longer-term projects of e.g. production and consumption for which society is responsible. Place can therefore be conceptualised as the location of an unbroken flow of local events.

Place always involves an appropriation and a transformation of space and nature that is inseparable from the reproduction and transformation of society in time and place (see also Gustafson 1984). Only human action can produce place: place “becomes”. The “becoming-place” is therefore a historically contingent process based on transformation of nature and the creation of resources (Pred 1984; 279, compare Lefebvre's (1991) “production of space” and Marx's “fetishism” in Merrifield 1993). The “becoming place” is a process in which the reproduction of social and cultural forms, the formation of (personal) biographies, and the transformation of nature ceaselessly become one another *at the same time* that space-time specific activities and power relations become one another. *Thus, the creation of a national park or protection area, as an exogenously imposed institutional project, can be considered to be incontrovertibly part of the becoming-place process.*



**Figure 1.** Components of the structuration-based theory of place as historically contingent process (after Pred 1984).

In any given place, certain institutional projects (activities) are dominant in terms of the demands they make upon the limited time resources of individuals, i.e. the impact they have on the daily- and life-paths of a locality's resident population (Pred 1984; 282). These impacts affect the details of individual consciousness and socialisation, e.g. via the process of discourse (e.g. Moscovici 1984, Jones 1995, Elands 2000, Wiersum and Elands 2001, Selby et al. 2007b).

Dominant institutional projects (activities) are related to the local structure of people's livelihood and the daily life-paths of individuals by means of the time-allocation given to each project and by scheduling precedence over other (competing) institutional projects. Dominant projects also require a commitment to partake (e.g. labour- and time-intensive dairy farming, forest work, etc.). Thus, the dominant projects (e.g. farming and forestry) create the most significant *individual-path/project* interactions and are therefore most important in the place-specific structuration process (Pred 1984; 283). The introduction of a space-demanding project such as a national park that has no previous institutional role in the locality is likely to disturb the established individual-path/project interactions by imposing new space, time and scheduling precedence, as well as perhaps terminating some interactions, e.g. where the private land has been compulsory purchased and given protection status thereby terminating an individual's or a community's opportunities for economic activity.

Dominant institutional projects are both the source and outcome of the most significant structural properties and social relations within a place, i.e. the actors are landowners and non-landowners, farmers and non-farmers, etc. Dominant institutional projects have mostly been identical with local material production and distribution or with the operation of a locally dominant mode of production (Lefebvre 1991, Merrifield 1993), e.g. family farming and forestry. Thus, the creation of *place* is consequent upon production and distribution projects and the spatial and social division of labour associated with them. Both elements are a product of the time-space flow of the structuration process. This is especially so within agricultural- and forestry-based communities where the spatial and social division of labour is largely or completely local (Pred 1984; 283).

Part of structuration and becoming-places process is the development over time of a sense of place and place-attachment (Relph 1976, Tuan 1977). Relph (1976; 65) observes that an authentic sense of place is created from "being inside and belonging to *your* place both as an individual and as a member of a community, and to know this without reflecting upon it". He also argues that such an authentic sense of place is as important in contemporary societies as it was in previous societies because it provides an important sense of identity for individuals, and through them, for their communities (*ibid.*). Individuals' participation in dominant institutional projects and the creation of associated discourses can be seen as part of this process. Relph (1976; 67, citing Norberg-Schulz 1969) notes that "While places acquire meaning simply because we live in them, their architecture and man-made landscape are not superfluous, for human life requires a system of places that have structure and form and meaning" (see also Ley 1977, Gustafson 2001).

*Following from the above arguments, it can be expected that the longer individuals have lived in a locality and the more they have place-specific histories that interact with the spatial and social aspects of institutional projects related to production and the division of labour, and the more they experience place-attachment, the more likely it will be that they will possess negative attitudes towards the imposition of a national park project in their locality.*

It can be expected that an imposed institutional project such as a national park will disrupt the historical process of structuration. Restrictions on traditional land uses and rights will have

affected some residents' livelihoods, and these problems will have led to a negative discourse. The (historical) accumulation of cultural and social practices (*sedimentation*) is generated by the creative potentials of individual residents. This creativity is nevertheless constrained by the limited number of (dominant) production and distribution activities and other cultural and social forms that are found in an area: "Only so many ... types of social interaction can individually or collectively be accommodated and mastered by residents on a daily or periodic basis" (Pred 1984; 284). To cope with such constraints, "the dialectics of practice and culture lead, via conflict, contradiction, or innovative decision-making, to the creation, redefinition, or elimination of institutional projects" (Pred 1984; 285). However, because local skills and knowledge are in a dialectic relationship, the *sedimented* cultural and social knowledge that concerns the production and distribution of (e.g. agricultural and forestry) goods constrains the institutional projects that may occur in the locality because of the limited practical skills and other knowledge that are available and usable (Pred 1984; 285, Merrifield 1993). On the other hand, any modifications to the demands upon local resources that change the balance between existing projects may also *release resources for new projects*. A new institutional project, such as the creation of a national park, may be an enabling innovation that releases local creative capabilities. It may also introduce new structural properties to the local dialectic (Pred 1984; 284).

Thus, structuration would seem to be apposite for describing the establishment of national park-projects in regions previously dominated by forestry and farming. This is especially so where exogenous (political and economic) forces are redefining the viability of historically embedded institutional projects such as small-scale family farming and which are creating the need for local innovative projects. *It can therefore be expected that local residents who are embedded in the traditional production-oriented projects (agriculture and forestry) will be less likely to perceive the opportunities offered by new institutional projects such as national parks. Conversely, such opportunities will be more likely to be perceived by residents with fewer or weaker ties to sedimented values.*

The theory of place as historically contingent process includes the *transformation of nature* as an inseparable element that has to be understood in terms of the prevailing power relations at the core of the local social structure: "Whether nature is transformed for the purpose of family subsistence, group survival, mutual community benefit, or individual or corporate profit, power relations are present in so far as any resource control and any rules and norms of behaviour are brought into play" (Pred 1984; 289, see also Marsden et al. 1993). It can therefore be expected that the exogenous imposition of a change in land use such as a nature protection area or national park will also change the local balance of projects that have traditional transformed nature.

New institutional projects require space and *they cannot be accommodated locally unless their spatial and temporal coordination is possible within the existing framework of dominant and associated institutions* (Pred 1984; 289, Lefebvre 1991; 31–33, 318–319, Merrifield 1993). Historically-specific power relations between individuals, groups and institutions largely determine a) which nature-transforming projects are permitted, hindered or forbidden; b) how scarce local and non-local resources are modified directly by labour and indirectly by other means; and c) which humanly created elements of place flourish, merely survive, fall into disrepair, or are demolished (Pred 1984; 289). Power relations are considered to be the underlying structural bond that unites the individual, society and nature together in the time-specific practices that create "place" (Pred 1984; 289, 294). Power and power relations are usually institutionally embedded and always involve one or more group of actors (e.g. landowners and entrepreneurs). Power relations in any form and at whatever level they operate, cannot be separated from the realm of action and

everyday practices (Pred 1984; 289, Gidden 1976, 1979, Marsden et al. 1993). Power relations cannot be transformed without either the modification of already-employed project definitions and rules or the elimination of a project and its associated content definition and rules (Pred 1984; 290, Lefebvre 1991; 164–166). Contestation and renegotiation occur among institutions when their projects bring them into economic, political, or social competition with one another.

Power relations that affect the transformation of nature are directly applicable to the creation of a national park or protection area. The state authority uses its power to impose a space-demanding project on a particularly locality. The division of space between embedded, traditional institutional projects and a new project such as a national park therefore involves a dialectic relationship between demand and command, where the key questions in any conflicts that arise are: ‘For whom?’, ‘By whose agency?’, ‘Why and how?’. Where command is employed, the production of space proceeds solely according to the dictates of power (Marx 1967, Lefebvre 1991; 116). It is therefore likely that *the establishment of a national park will lead to conflicts when, via negotiations or compulsory purchases, traditional institutional projects such as family farming*

**Table 1.** Elements of the structuration process and the expected local outcomes following the establishment of a national park or nature protection area.

Elements of the place-bound structuration process	Expected outcome from establishment of national park project
<p>1) In any given place, dominant (traditional) institutional projects affect the daily- and life-paths of the resident population:</p> <ul style="list-style-type: none"> <li>- by affecting the details of individual consciousness and socialisation.</li> <li>- by means of the time-allocation and scheduling precedence given to dominant projects over other (competing) projects.</li> <li>- by affecting the traditional division of labour.</li> </ul>	<p>Negative attitudes to the establishment of a new institutional project (national park) will be associated with:</p> <ul style="list-style-type: none"> <li>- residents' length of domicile</li> <li>- residents' place-attachment</li> <li>- residents' close ties with dominant (traditional) institutional projects</li> <li>- disruption of dominant projects.</li> </ul>
<p>2) Structuration is a time-related iterative process. It can be expected that disturbances to traditional projects caused by a new institutional project will decrease over time as local resources adjust to the new situation.</p>	<p>The longer a new institutional project has been in a locality the more positive will be local attitudes towards it.</p>
<p>3) The imposition of an institutional project such as a national park will disrupt the historical process of structuration because:</p> <ul style="list-style-type: none"> <li>- restrictions on traditional land uses and rights will have affected some residents' livelihoods (resulting in a negative discourse).</li> <li>- the accumulation of cultural and social practices (<i>sedimentation</i>) that is generated by the creative potentials of individual residents over time is disturbed.</li> </ul>	<p>Local residents who are embedded in traditional production-oriented projects (agriculture and forestry) will be less likely to perceive the opportunities offered by the new, national park project. Opportunities created by a new institutional project such as a national park are more likely to be perceived by residents with weaker ties to sedimented values</p>
<p>4) The establishment of a new institutional project such as a national park leads to conflicts when:</p> <ul style="list-style-type: none"> <li>- via negotiations or compulsory purchases, traditional institutional projects such as family farming and forestry are terminated.</li> <li>- classes, such as landowners, that originally possessed power have to adjust to new set of power relations.</li> </ul>	<p>Classes that originally possessed power (e.g. private landowners, etc.) can be expected to possess more negative attitudes towards the national park than classes that do not possess local power.</p>
<p>5) Modifications to the balance between existing projects may also release resources for new projects.</p>	<p>Farmers can be expected to diversify to take advantage of opportunities created by national parks.</p>

*and forestry are terminated. Classes, such as landowners, that originally possessed power have to adjust to new set of power relations. These classes can be expected to possess more negative attitudes towards the national park than classes that do not possess local power.*

The elements of the structuration process discussed above and the expected local outcomes following the establishment of a national park or nature protection area are summarised in Table 1.

## **2.4 National parks as institutional projects**

Two contrasting national parks in Southern Finland (Linnansaari and Seitsemien) were chosen on the basis of a classification study (Selby et al. 2007a). Both parks are located in areas where small-scale family farming and private non-industrial (household) forestry have long been the dominant institutional projects. Consequently, these are areas where strong forest-based discourses occur (Selby et al. 2007b). Farming and forestry in Finland have undergone considerable socio-economic changes over the past forty years as labour-intensive manual methods gave way to mechanisation, small, non-viable farms have closed, and the young and economically active have migrated to growth centres elsewhere. Thus, traditional institutional projects (agriculture, forestry, as well as institutions such as the family) have weakened, or at least changed in their nature, i.e. they are changing under the iterative transformation process that is structuration. The division of labour in forestry in particular has shifted from farm-based labour to contractors thereby creating new patterns of production and distribution, and revised spatial and social divisions, as the local institutions transform in time and space (cf. Merrifield 1993).

The creation of national parks, i.e. major institutional projects, into these environments threatened, at least initially, the established institutional projects, as well as creating new power relations in their respective communities. The established reproduction of local power relations were also disturbed by new power relations (e.g. Suomi et al. 2008).

## **3 Material and methods**

Data was acquired by mailed questionnaire in summer 2006. The population for the study was all c. 1 400 households in those postal districts of Ikaalinen and Kuru that penetrated into Seitsemien National Park and all 2 600 household in the postal districts Rantasalmi, Enonkoski, Joroinen, Kangaslampi and Savonlinna that penetrated into Linnansaari National Park. In both cases, the largest distance of households from the parks in question was about 30 km. The inclusion of all households rather than a sample was for financial reasons – an inexpensive delivery service was provided by the Finnish Post Office that did not require addressing, while the acquisition of addresses from the population register would have been very expensive. The second round of questionnaires employed the same method. The return rate was 40% (586 observations) for Seitsemien and 33% (850 observations) for Linnansaari. The data acquisition method prevented a survey of the non-responses.

The design of the questionnaire consisted of four sections (see Petäjistö and Selby 2008). The first section contained questions concerning the purpose and benefit of the national park as perceived by the household in question. This section included questions concerning household income from direct or indirect employment by the park, as well as the perception of possibilities for

entrepreneurship. The second section addressed the social consequences (benefits, disturbances and conflicts) of the national park and its influx of visitors on the everyday life of the community. The third section was formed by a battery of propositions that concerned national parks and nature protection, rural tourism and rural development to which the respondent was asked to agree or disagree on a five-point Likert scale. The aim was to ascertain the attitudes of the responding persons as a basis for assessing their responses to the other questions in the survey. The final section concerned the demographics and socio-economic status of the responding individual.

The frequency distributions of the variables were initially examined and exploratory tests made of variable interrelations using e.g. tabulation and correlation analyses. Because of its ability to create a new, reduced data set to be produced from the large (original) data set (principal axis) factor analysis was employed to determine the underlying dimensions of sets of variables in the variable matrix. Orthogonal varimax rotation was employed to optimise the variance captured by each component. The new variables were given names appropriate to their content and their theoretical background. Factor scores were computed for each observation and saved as new, standardised variables in the data matrix. The factor score-based variables were subsequently subjected to k-means cluster analysis. This is a method that seeks to group observations by common variables. Each observation was assigned to a group so that between-group variance of attributes is maximized and the within-group variance is minimized. The resultant groups formed a classification variable against which variables of interest were subjected to the F-test for the difference of group means. The Pearson Chi-square test for the differences of frequency distributions and the Spearman rank-correlation were also employed. Computations in all cases were made using SPSS for Windows versions 14 and 15.

## 4 Empirical results

### 4.1 Residents' attitudes to national parks and nature protection, rural tourism and rural development

Residents were asked to respond to a set of propositions that concerned national parks and nature protection, rural tourism and rural development. A five-point Likert scale was employed ranging from totally agree to totally disagree. The responses were examined by principal components analysis in order to detect common sets of attitudes. A five-component solution that extracted 60% of the total variance was the most satisfactory (Table 2). The fifth component was achieved by reducing the eigenvalue threshold to 0.90 rather than unity. While the component captured only 7% of the variance, its extraction greatly clarified the solution as a whole. The components are interpreted as follows:

*Factor 1 Threat to nature and rural way of life.* The factor concerns the detrimental effects of visitors to protection areas and national parks. These detrimental aspects include the threat to nature, pollution, intrusive infrastructure, restrictions on forestry, and a weakening of the local rural milieu and living conditions. The negative attitude towards national parks that is represented by the component is supported by the objection to everyman's rights as well as opposition to the use of tax-payers' money for rural development.

In terms of structuration, the factor shows residents protecting their *genre de vie* and their opposition to new institutional projects that are not based on sedimented values. The factor captures part of

**Table 2.** Varimax-rotated factor-analytic model of residents' opinions concerning nature protection areas, rural tourism and their relationship to local development.

Propositions	Factor 1*	Factor 2*	Factor 3*	Factor 4*	Factor 5*	Initial communalities
	Factor loadings**					
Nature-based tourism is a threat to nature	0.67					0.45
National park services (e.g. infra) destroy the wilderness experience	0.65					0.37
Tourism increases the pollution of nature protection areas	0.63					0.41
Visitors to national parks weaken living conditions and the pleasure of residency	0.59	0.35				0.47
Tourists bring values that conflict with rural traditions	0.56					0.34
Everyman's rights rob rural residents of control over their own land	0.48	0.35				0.38
Taxpayers' money should not be wasted on rejuvenating rural areas	0.37			-0.34		0.21
Protection areas obstruct traditional livelihoods		0.68				0.44
Protection areas create problems for forestry in adjacent areas	0.31	0.66				0.50
More forests and biotopes should be protected		-0.42	0.40			0.34
Protection areas are the cause of local conflicts of interest		0.42				0.25
Protection areas benefit local businesses			0.58			0.40
Tourism encourages the protection of nature and heritage			0.57			0.36
Landowners should relinquish, with compensation, valuable sites for nature protection and tourism			0.51			0.33
Tourism brings essential income to rural areas			0.43			0.29
Rural areas are a tourist attraction				0.71		0.38
Recreational homes bring vitality to rural areas				0.52		0.32
National parks and protection areas should be planned only in close cooperation with local residents				0.44	0.41	0.30
National parks and protection areas should only be extended if there is no disadvantage to local residents and businesses.					0.72	0.29
<i>Initial Eigenvalues</i>	5.56	2.28	1.57	0.94	0.91	
Proportion of variance explained, %	14.57	9.74	8.94	7.01	4.84	

\* Explanation of factors:

F1: Threat to nature and rural way of life

F2: Problems and conflicts

F3: Benefits and opportunities

F4: Recreational-based development with local controls

F5: Strict local conditions on establishment of protection areas

\*\*Loadings under +/-0.30 omitted for clarity.



the divergent dynamics of the structuration dialectic – the process by which nature transforming projects are permitted, hindered or forbidden (Pred 1984; 289). The component also captures the conflict between micro/micro-level dimensions of structuration where macro-scale institutions (e.g. the state) interact with micro-scale institutions that concern the transformation of resources via local projects.

*Factor 2 Problems and conflicts.* The factor concerns problems brought to forestry and traditional livelihoods by the proximity of a national park or protection area. It also concerns the conflict of interests created by national parks. The negative effects of rights of access (everyman's rights) on landowners own rights and the weakening of the pleasure of residence (e.g. restrictions on hunting and fishing). The proposition proposing more forest and biotope protection is rejected in accordance with the nature of the factor. In terms of structuration, the factor captures residents' perceptions of the disturbances created by the imposition of a new institutional project at the perceived expense of embedded socio-economic structures. The factor captures an aspect of the divergent dynamics of the local structuration dialectic, i.e. the challenge created by a new activity (institutional project) to the historically embedded individual path – project intersections in the place-bound structuration process (Pred 1984; 283).

*Factor 3 Benefits and opportunities.* The factor concerns residents who perceive the benefits of protection areas such as national parks. These include the opportunities for business created by national parks, the extra income generated and the stimulus to nature protection created by tourism. Rural tourism is considered to be beneficial and so there is no opposition to an increase in areas set-aside for the protection of forest bio-types and cultural heritage, or to landowners being required to set-aside land for nature and heritage protection. In terms of the place-bound structuration process, the factor represents local residents who have an innovative attitude to the use of local resources. The factor also captures a positive attitude towards local development based on protection areas. In terms of structuration, the factor captures an aspect of socialisation (Pred 1984; 287), where residents recognise the value of local also captures an aspect of the structuration dialectic – the freeing of (time- and space) resources that in turn permit the expansion and/or appearance of new projects (Pred 1984; 285).

*Factor 4 Recreational-based development with local controls.* The factor is characterised by residents' recognition that rural areas are attractive to tourists and that holiday homes are a source of vitality to rural areas. Public funding is welcome (the proposition that the taxpayers' money should not be used for rural development does not gain support). On the other hand, it is considered that protection areas should only be planned in close co-operation with local residents.

The component concerns residents who perceive an aspect of the divergent dynamics of local structuration dialectics, i.e. the challenge created by new institutional projects (national parks) to the historically embedded individual path/project intersections in the place-bound structuration process (Pred 1984; 283) that nevertheless need local safeguards (control). The acceptance of public funding for developing the potential local benefits from the new projects captures the micro/micro-level dimensions of structuration where macro-scale institutions (e.g. the state) interact with micro-scale institutions that concern the transformation of resources via local projects (Pred 1984; 289–290). Also captured is the need for more consultation and perhaps a renegotiation of the terms (with the implied acceptance of rules) under which local nature is transformed and by whom.

*Factor 5 Strict local conditions on establishment of protection areas.* The factor contains only two variables, but both represent the need for constraints on authorities that plan the establishment or expansion of protection areas. The strongest loading concerns the condition that there should be no disadvantages to local residents or business, while the second concerns the condition that local residents should be involved with the planning of protection areas.

In terms of structuration, the factor captures residents who feel the need for more consultation and perhaps a renegotiation of the terms (with the implied acceptance of rules) under which local nature is transformed, and by whom. The component reveals an aspect of the *divergent* dynamics of the local structuration dialectic (i.e. a resistance to the imposition of (exogenous) institutional projects that transform the local nature).

In so doing, it reveals the challenge created by the new institutional project to the historically embedded individual path – project intersections in the place-bound structuration process that includes issues of the division of labour and issues of local power relations (Pred 1984; 283).

#### Differences in residents' attitudes between Seitsemien and Linnansaari National Parks

The means of the factor scores were computed and the F-test was applied to the differences of means for each national park in order to determine whether differences in attitudes were observable. In most cases there was no significant difference ( $P > 0.69$ ). The greatest difference ( $P < 0.02$ ) concerned *Factor 3 Benefits and opportunities* for which residents adjacent to Seitsemien National Park obtained a negative mean scores (-0.06) while residents adjacent to Linnansaari National Park obtained a positive mean score (0.04). Thus, Linnansaari residents perceived better opportunities for nature-based tourism than Seitsemien residents. A possible cause for this is the fact that Linnansaari National Park is 20 years older than Seitsemien National Park and so residents have had longer time for the park to be accepted and for its opportunities to be perceived; i.e. the structuration process has had a longer time in which to operate. However, the presence of nearby tourist centre of Savonlinna and the diverse lucustrine environment of the park may also cause local residents to be more aware of tourist-based opportunities.

## 4.2 Attitude groups

Factor analysis forms new discreet variables for subsequent analysis – each factor represents a continuum along which each observation will be located according to the factor score obtained. The attitudes represented in by the factors are not mutually exclusive. By grouping each individual observation according to the factor scores obtained (Table 3), a further insight into residents' attitudes is obtained. This, in turn, provides another opportunity to observe the process of structuration.

*Cluster 1 Opposition to public projects.* This group is characterised by negative loadings on most forms of development – locally controlled or not. In particular, groups members are against publicly funded local developments (strong negative score for Factor 4). Few benefits or opportunities are perceived, while parks are seen as a threat to nature and the local way of life. Given the anti-development attitude, the negative score obtained by residents in this group concerning local preconditions for development indicates that residents in this group oppose development as such and see no additional benefit in “local controls”. When considered in the context of the strong negative score for factor 4, the group would seem to oppose any interference of public institutional

**Table 3.** K-means clusters based factor-analytic model of residents' opinions concerning nature protection areas, rural tourism and their relationship to local development (see Table 1).

Factors	Cluster 1*	Cluster 2*	Cluster 3*	Cluster 4*	Cluster 5 *	Cluster 6*	F	P
Grouping coefficients based on factor scores								
Factor 1**	0.27	1.20	0.75	-0.57	-0.49	-0.20	305.59	<0.001
Factor 2**	-0.05	0.61	0.09	0.97	-0.53	-0.40	258.72	<0.001
Factor 3**	-0.60	-1.07	0.52	-0.26	0.16	0.24	161.31	<0.001
Factor 4**	-1.91	0.10	0.05	0.15	0.20	0.13	204.94	<0.001
Factor 5**	-0.46	0.34	0.20	0.39	0.34	-1.17	386.12	<0.001
N	97	144	270	234	440	253	1438	
%	6.7	10.0	18.8	16.3	30.6	17.6	100.0	

\* For explanation of cluster 1–6, see Table 4 (p. 20).

\*\* For explanation of factor 1–5, see Table 2 (p. 16).

projects in their way of life. *In the context of structuration, this group opposes new institutional projects and the process of structuration that will bring acceptance of the new (national park) projects is only just beginning.*

*Cluster 2 Mainly threats and few benefits from park development.* Residents belonging to this group are characterised by their strong conviction that the parks are a threat to nature and to the local way of life and have brought problems and conflicts (Factors 1 and 2 obtain positive scores). Strong local preconditions (Factor 5) also gains support. Members of this group do not perceive many benefits or opportunities coming from the parks. They are neutral concerning publicly funded development (score close to zero). *In the context of structuration, this group resists new activities (institutional projects) such as national parks. The process of the place-bound structuration process that will bring acceptance of the new (national park) projects is only just beginning. The recognition of both threats and benefits could mean that a basis is being form for future “negotiations” within the place-bound structuration process.*

*Cluster 3 Threats and opportunities – conditional national park development.* The residents in this group, while considering that protection areas such as national parks are a threat to nature and the local way of life, also perceive, albeit to a lesser degree, that such projects bring benefits and opportunities. They do not oppose such projects as such, but require that they are subject to local controls. *In this group, the place-bound structuration process would appear to be more advanced. The group, while perceiving threats and opportunities, requires “negotiations” via the local controls that they feel should be applied to national park developments.*

*Cluster 4 Problems, but park-based development with strict local control.* Residents belonging to this group are characterised by conditional opinions towards the parks. They consider that the parks have brought problems and conflicts including disturbances to local (traditional) livelihoods (Factor 2). They also feel that there should be strong local control of the establishment and development of protection areas, such as national parks (Factor 5). However, they support the use of publicly funded (tourist) development (Factor 3) and so are not against development as such, even though they do not generally see that the parks have brought benefits and opportunities (Factor 3). Conversely, residents do not see the national parks as a threat to nature and the local way of life (negative coefficient for F1). *The members of this group appear to be one step further in the place-bound structuration process. They perceive problems that require local negotiations (controls) but do not oppose public funded, new, forms of livelihoods (institutional projects) such as tourism.*

**Table 4.** Three resident attitude-groups derived from the cluster analysis, and their distribution in Seitsemien and Linnansaari National Parks. (Structuration interpretation in italics.)

Original cluster	New group	Collective interpretation	Number and proportion of residents in group			
			Seitsemien National Park		Linnansaari National Park	
			N	%	N	%
Cluster 1: Opposition to public institutional projects Cluster 2: Mainly threats and few benefits	Group 1: Opposition to national park-based development	Most critical group: Resistance to national park creation and publicly financed development. <i>This step represents residents at the initial stages of the structuration process. Opposition to new projects and no mention of negotiations.</i>	106	18.0	135	15.9
Cluster 3: Threats and opportunities – conditional NP development	Group 2: Reservations concerning park-based development	Less critical than Group 1: Awareness of threats and opportunities created by the national parks. Strong desire for local controls (implying negotiations) on park development. <i>This step represents residents at early stages in the structuration process.</i>	112	19.0	158	–
Cluster 4: Problems, but park-based development with strict local control Cluster 5: Controlled park-based development	Group 3: Conditional acceptance of park-based development	More positive than Group 3: Awareness of opportunities despite problems. National park creation and development accepted subject to local controls. <i>Opportunities from new institutional project (parks) subject to negotiation in the structuration process.</i>	273	46.4	401	47.2
Cluster 6: Unconditional acceptance of park-based development	Group 4: Unconditional acceptance of park-based development	Most positive group: Unconditional acceptance of national parks. No local controls are required. <i>Park development accepted with no need for negotiation.</i>	97	16.5	156	18.4
Total			588	100.0	850	100.0

$\chi^2 = 1.713, df=3, P=0.634$

*Cluster 5 Controlled park-based development despite lack of problems.* Residents belonging to this group are characterised by their support for strong local controls on the development of the national parks but also support publicly funded development because they also perceive that the parks have brought benefits and opportunities. This group of residents do not see the parks as a threat to nature and the local way of life, nor do they consider that the parks have brought problems and conflicts. *In terms of the place-bound structuration process, this group continues to require local negotiations concerning the development of new institutional projects.*

*Cluster 6 Unconditional acceptance of national park-based development.* Residents in this group have similar characteristics to those of the previous cluster (5) in that benefits and opportunities are perceived and the use of public funds to support local development is supported. The group differs in not requiring local preconditions (Factor 5 obtains a strong negative score). *This groups*

has completed the place-bound structuration process in that opposition to, and the need for negotiations with, new institutions projects have been removed.

The use of six clusters was found to be rather cumbersome. It also increased the risk of too small cell sizes for  $\chi^2$ -tests. The clusters could, however, be logically re-grouped into four classes to form a simple continuum (Table 4). The difference in the distribution of the groups in each national park was statistically non-significant ( $\chi^2=1.64$  df=2, P=0.44). Given the parks' differing ages, histories, locations and physical nature some differences might have been expected.

### 4.3 Attitude group characteristics

#### 4.3.1 Age, education, residence and place-attachment

The frame of reference indicated that in the place-bound structuration process the introduction of a new activity (institutional project) would affect traditional individual-project paths. It was argued that residents with strong ties to traditional activities such as forestry and farming, with long ties to the locality through residence, and other feeling of place-attachment would be more likely perceive disturbances to their individual- project paths.

The relationship between residents' age classes and their attitude grouping is shown in Tables 5 and 6. Table 5 shows that the over-65 age-group is over-represented in attitude groups 1 (*Opposition to park-based development*) and group 2 (*reservations concerning park-based development*), the two groups with the most prohibitive attitudes towards national park-based development. Conversely, in group 4 (*Unconditional acceptance of park-based development*) the under 45 age-groups is strongly over-represented while the oldest age group is strong under-represented. Thus, the younger age classes accept the development brought by institutional projects such as national parks whereas the older generations tend to oppose them.

**Table 5.** The distribution of residents' age classes by attitudes to national park-based development. (Percentages in parenthesis.)

Age class, years	Group 1*	Group 2*	Group 3*	Group 4*	All
44 or less	50 (16.2)	43 (13.9)	137 (44.3)	79 (25.6)	309 (100.0)
45-64	103 (15.4)	110 (16.5)	321 (48.1)	133 (19.9)	667 (100.0)
65 and over	80 (19.0)	107 (25.4)	195 (46.3)	39 (9.3)	421 (100.0)
All	233 (16.7)	260 (18.6)	653 (46.7)	251 (18.0)	1397 (100.0)

$\chi^2=47.56$ , df=6, P=<0.001 Spearman corr.=0.146,  $T_{\text{approx.}}=-5.522$ ,  $P_{\text{approx.}}<0.001$

\* For explanation of groups 1–4, see Table 4 (p. 20).

**Table 6.** Residents' mean length of residence and age by attitudes to national park-based development.

Residence characteristics	Group 1*	Group 2*	Group 3*	Group 4*	F-test F-value	P
Length of residence, years	43.0	41.5	36.7	27.4	23.35	<0.001
Resident's age, years	56.9	60.9	56.0	51.0	19.71	<0.001
N	223	255	652	249		

\* For explanation of groups 1–4, see Table 4 (p. 20).

There is a strong relationship between residents' age and their length of residence in the localities in question (Pearson correlation = 0.54,  $P < 0.001$ ,  $n = 1379$ ). The mean age of residents (56.2 years s.d. 14.9) and the mean length of residence (36.9 years, s.d. 23.3) indicated that mobility has remained low once the residents had moved into the districts as young adults. It is therefore not surprising to find that attitudes to national park development are dependent upon length of residence; the longer the length of residence the less support there is for national park-based developments, and vice versa (Table 6). The relationship is statistically significant at  $P < 0.001$ . The relationship between age and attitudes is not quite so inter-dependent.

Place attachment is logically associated with length of residence (e.g. Rowles 1983, Relph 1976, Mesch and Manor 1998). Place attachment was assessed using a three-point scale (1 = hardly any, 2 = quite strong, 3 = very strong). Its association with length of residence is very strong ( $F = 160.35$ ,  $P < 0.001$ ), with the lowest attachment class having a mean length of residence of 15.6 years, the second 24.8 years and the highest attachment class 44.0 years. There was a fairly clear relationship between attitude groups and place attachment (Table 7). The most noticeable result is that residents with a weak or (only) fairly strong place attachment are over-represented in group 4 (*Unconditional acceptance of park-based development*). Residents with weak place attachment are similarly over-represented in group 3 (*Conditional acceptance of park-based development*). Conversely, residents with strong place attachment are over-represented in groups 1 and 2 that are generally opposed to park-based development. An anomaly in the result is the over-representation of residents with weak place attachment in attitude group 1 (*Opposition to park-based development*). This may be due to a recognised effect where residents who have recently moved to a district for hedonist reasons then object to any further incomers or developments.

**Table 7.** Residents' place attachment by attitudes to national park-based development. (Percentages in parenthesis.)

Place attachment	Group 1*	Group 2*	Group 3*	Group 4*	Total
Hardly any	18 (19.8)	15 (16.5)	35 (38.5)	23 (25.3)	91 (100.0)
Fairly strong	53 (14.0)	59 (15.6)	176 (46.6)	90 (23.8)	378 (100.0)
Very strong	160 (17.3)	187 (20.2)	441 (47.6)	139 (15.0)	927 (100.0)
Total	231 (16.5)	261 (18.7)	652 (46.7)	252 (18.1)	1396 (100.0)

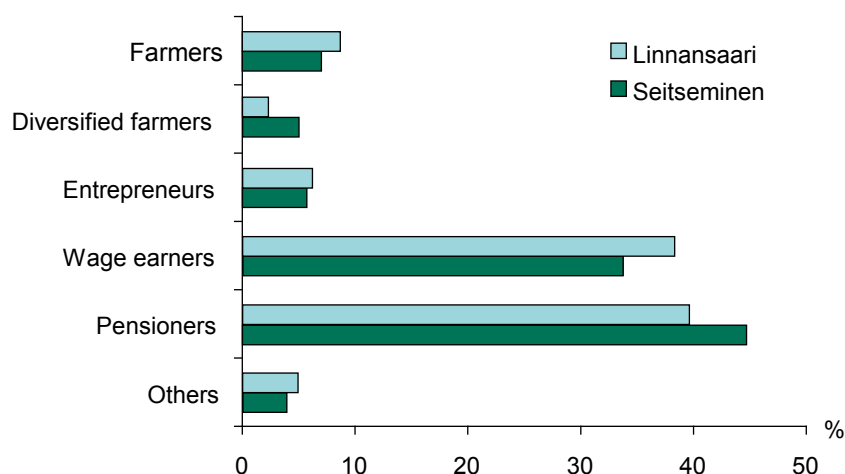
Pearson  $\chi^2 = 21.41$ ,  $df = 6$ ,  $P = 0.002$ ; Spearman correlation =  $-0.09$ ,  $T_{\text{approx.}} = -3.38$ ,  $P_{\text{approx.}} = 0.001$

\* For explanation of groups 1–4, see Table 4 (p. 20).

#### 4.3.2 Land ownership and vocational status

The distribution of vocational groups in the localities of the two national parks is shown in Figure 2. The distributions are similar, with the major difference being in the proportion of diversified farmers (5% in the Seitsemien data compared to 2.3% in the Linnansaari data).

The frame of reference postulated that new activities (institutional projects) might threaten dominant projects (traditional activities). Further, social groups with local power, e.g. landowners, would perceive a threat to their traditional status from the activity. It can therefore be expected that landowners (e.g. farm and forest owners) will form such a group, and that they may perceive a new, land demanding project such as a national park, as a threat to established values. Examining attitudes to national parks by professional groups lends only limited support to this contention (Table 8). Farmers and diverse farmers (i.e. farmers with diverse sources of income) are, as expected, over-represented in group 1 (*Opposition to park-based development*), but they are under-



**Figure 2.** Distribution of vocational groups as a percentage of all residents, Seitsemien and Linnansaari National Parks.

represented in group 2 (*reservations concerning park-based development*) where they might have been expected to be over-represented. However, pensioners are over-represented in group 2, and many of these pensioners are retired farmers. Farmers and diverse farmers are over-represented in group 3 (*conditional acceptance of park-based development*) but under-represented in group 4 (*unconditional acceptance of park-based development*).

Entrepreneurs, by nature of the vocation, might be expected to welcome new opportunities for business (e.g. Christensen 1989, Hills et al. 1997, Singh 2000) created by a new activity (institutional project) such as a national park with its attendant visitor flows. The expectation is partly met, as entrepreneurs are under-represented in attitude groups 1 and 2, but they are strongly over-represented in group 3 (*conditional acceptance of park-based development*). Entrepreneurs are only slightly over-represented in group 4 (*unconditional acceptance of park-based development*).

Wage-earners, who have weaker links to traditional landownership classes, who have less place attachment and who might benefit from any job opportunities resulting from park-based development, are strongly over-represented in group 4 (*unconditional acceptance of park-based development*). Similarly, the “other” group (consisting of students, unemployed, etc.) which has the weakest links to traditional local landed and power classes, and who exhibit weaker place

**Table 8.** Frequency distribution of vocation status by attitudes groups. (Percentages in parenthesis.)

Vocational status	Group 1*	Group 2*	Group 3*	Group 4*	Total
Farmer	26 (23.4)	15 (13.5)	62 (55.9)	8 (7.2)	111 (100.0)
Diverse farmer	13 (27.7)	3 (6.4)	27 (57.4)	4 (8.5)	47 (100.0)
Entrepreneur	9 (10.8)	8 (9.6)	51 (61.4)	15 (18.1)	83 (100.0)
Wage earner	77 (15.2)	79 (15.6)	219 (43.3)	131 (25.9)	506 (100.0)
Pensioner	101 (17.4)	140 (24.2)	263 (45.4)	75 (13.0)	579 (100.0)
Other (student, unemployed, etc.)	8 (12.7)	11 (17.5)	28 (44.4)	16 (25.4)	63 (100.0)
Total	234 (16.8)	256 (18.4)	650 (46.8)	249 (17.9)	1389 (100.0)

Pearson  $\chi^2=76.51$  df 15  $P<0.001$

\* For explanation of groups 1–4, see Table 4 (p. 20).

**Table 9.** Distribution of size of forest holdings by attitude groups. (Percentages in parenthesis.)

Area of forest, ha	Group 1*	Group 2*	Group 3*	Group 4*	Total
Under 15	26 (12.9)	42 (19.8)	99 (46.7)	45 (21.2)	212 (100.0)
15-29	19 (16.8)	26 (23.0)	59 (52.2)	9 (8.0)	113 (100.0)
30-59	33 (25.6)	26 (20.2)	61 (47.3)	9 (7.0)	129 (100.0)
60 and over	22 (21.8)	8 (7.9)	63 (62.4)	8 (7.9)	101 (100.0)
Total	100 (18.0)	102 (18.4)	282 (50.8)	71 (12.8)	555 (100.0)

Pearson  $\chi^2=39.52$  df =9,  $P<0.001$ ; Spearman Corr.  $-0.12$   $T_{approx.}=-2.91$   $P_{approx.}=0.004$

\* For explanation of groups 1–4, see Table 4 (p. 20).

attachment, are also strongly over-represented in group 4 while being under-represented in group 1 (*opposition to park-based development*).

Land ownership is a central element in the process of place-attachment (see section 4.3.1. above). Place-attachment often embodies the social, economic and cultural links of an individual to his/her locality, as well as bringing about the sedimentation of values and power structures at the local level. This can be demonstrated with respect to farmers in Table 9.

Nearly half (46%) of residents in the study owned forest land, mostly in their home commune. The proportion was slightly higher adjacent to Seitsemien National Park (50%) than Linnansaari (43%). Ownership of forest land was found to reduce unconditional acceptance of park-based development with non-forest owners, while similarly increasing forest owners' opposition to national parks and their development (Pearson  $\chi^2=31.48$ , df=3,  $P<0.001$ ; Spearman correlation=0.132,  $T_{approx.}=-4.94$ ,  $P_{approx.}<0.001$ ).

In addition, the attitudes of forest owners towards the park-based development were related to the area of forest they owned, but not in a logical way (Table 8). Forest owners with relatively large holdings were over-represented in group 1 (*opposition to park-based development*) as expected, but the group of owners with the largest forest areas were also over-represented in group 3 (*conditional acceptance of park-based development*) in which the smallest forest owners were also over-represented. However, the over-all trend is for owners of smaller forests to be more supportive of park-based development than owners with larger forest areas. This may be because forest owners with small areas are more likely to have recreational objectives for their forests (Kuuluvainen et al. 1996, Karppinen 1998). Another reason might be that small forest owners are not so embedded in the locality. Both interpretations are supported by the fact that residents with smaller areas of forests have lived in their localities for significantly shorter times than those landowners with larger forests (Pearson  $\chi^2=41.73$  df=12,  $P<0.001$ ).

### 4.3.3 Opportunities, conflicts and co-operation

In the frame of reference it was postulated that new activities (institutional projects) that challenged traditional activities would lead to a re-adjustment of livelihoods, with some activities losing and other gaining. In the present study, economic losses caused by the national parks in question were experienced by 88 (6.3 %) of the residents in the survey, and economic gains were experienced by 125 residents (Table 10). Residents suffering economic losses were over-represented in attitude group 1 (*opposition to park-based development*) but under-represented in group 3 (*conditional acceptance of park-based development*) and especially group 4 (*unconditional acceptance of park-based development*). Conversely, and as expected, residents in the survey who had gained



**Table 10.** Residents perceived economic losses and gains caused by local national parks by attitude groups. (Percentages in parenthesis.)

Economic effects of national parks	Group 1*	Group 2*	Group 3*	Group 4*	Total
Economic losses <sup>1)</sup>					
No	198 (15.0)	249 (18.9)	626 (47.5)	244 (18.5)	1317 (100.0)
Yes	36 (40.9)	14 (15.9)	35 (39.8)	3 (3.4)	88 (100.0)
Total	234 (16.7)	263 (18.7)	661 (47.0)	247 (17.6)	1405 (100.0)
Economic gains <sup>2)</sup>					
No	218 (17.4)	233 (18.6)	595 (47.5)	207 (16.5)	1253 (100.0)
Yes	16 (12.8)	18 (14.4)	54 (43.2)	37 (29.6)	125 (100.0)
Total	234 (17.0)	251 (18.2)	649 (47.1)	244 (17.7)	1378 (100.0)

<sup>1)</sup> Pearson  $\chi^2=45.34$ ,  $df=3$ ,  $P<0.001$ ; Spearman Corr. = -0.152,  $T_{\text{approx.}} = -5.76$ ,  $P_{\text{approx.}} < 0.001$

<sup>2)</sup> Pearson  $\chi^2=13.94$ ,  $df=3$ ,  $P=0.003$ ; Spearman Corr. = 0.084,  $T_{\text{approx.}} = 3.13$ ,  $P_{\text{approx.}} = 0.002$

\* For explanation of groups 1–4, see Table 4 (p. 20).

economically from the presence of the parks were under-represented in groups 1 and 2 and over-represented in group 4 (Table 10).

As a further measure of the re-adjustment of livelihoods as part of the process of place-bound structuration, residents were asked whether they were planning to start, or currently starting-up, a new business venture. Of the 1389 answering, 23 (1.7%) replied that they were seriously considering a new business, while another five (0.4%) were in the process of starting a business. Of these 28 residents, 13 were living adjacent to Seitsemien National Park and 15 were living adjacent to Linnansaari. Of the 23 residence just starting their businesses, 17 were located in attitude groups 3 and 4 (i.e. the groups that conditional or unconditionally accepted park-based development), with three each in attitudes groups 1 and 2 (that either opposed or held reservations with respect to park-based development). Of the five residents who had just started their businesses, four were located in group 3 and one in group 4. The low cell count prevented statistical testing.

The planned or actual start-ups of new ventures were largely confined to the under 54-year age-groups, and especially the under 35s. Again, the low cell count prevented statistical testing. Nevertheless, the result supports the place-bound structuration process in which it was expected that younger sections of the community with concomitant reduced place-attachment and fewer sedimentation-effects would be likely be less committed to traditional dominant projects.

The number of planned and actual start-ups by vocational groups is shown in Table 11. In absolute terms, and in the context of local development, the results are not very encouraging. From a structuration perspective the results are inconclusive, even contradictory. Farmers, entrepreneurs and “others” (i.e. students, unemployed, etc.) are proportionally more likely to be interested in new venture start-ups. The place-bound structuration process postulates that people in vocations that are less likely to be committed to dominant projects are more likely to perceive new opportunities. However, farmers are here shown to be relatively active in creating or planning new ventures. To what extent this indicates the postulated re-deployment of released resources cannot be determined from the material available. Only three of the 28 residents who had started- or planned to start a new venture reported having suffered economically as a result of the national park; one was a farmer and two were entrepreneurs.

**Table 11.** Distribution of start-ups or planned start-ups by vocational groups.

	Farmers	Diversified farmers	Entrepreneurs	Wage earners	Pensioners	Others	Total
Seriously considering new venture	5	0	2	9	3	4	23
Just started new venture	0	1	2	2	0	0	5
Total	5	1	4	11	3	4	28
Total number in vocational group	111	47	83	506	579	63	1389
% interested in new ventures	4.5	2.1	4.8	2.2	0.5	6.3	2.0

The development of the national parks resulted in conflicts of interest in the local population arising from land use restrictions in the park areas (Petäjistö and Selby 2008, Suomi et al. 2008). For example, traditional hunting and fishing rights were terminated, land use restrictions were imposed on private land adjacent to the national parks, e.g. restrictions on gravel and mineral extraction and commercial forestry, while the development of Linnansaari also required compulsory land purchases. Changes in the local infrastructures (road closures) have also led to conflicts of interest, e.g. longer journeys to work and services. One in four (26%) of the residents in the survey were aware of conflicts of interest that had arisen from the parks. There was proportional more awareness of conflicts amongst residents adjacent to Linnansaari National Park (28%) than Seitsemien (23%) – a situation that reflects the more aggressive institutional measures required when establishing and extending Linnansaari National Park (Suomi et al. 2008). Despite this, there was no difference in the distributions of the attitude groups of Seitsemien and Linnansaari residents with respect to the perception of conflicts of interest. In both districts, there was only a tendency for experience of conflicts to result in over-representation in group 1 (*opposition to park-based development*), with a similar tendency for no experiences of conflicts of interest to result in over-representation in group 4 (*unconditional acceptance of park-based development*).

However, there were clear differences in the perception of conflicts of interest resulting from the national parks differed by vocational groups (Table 12). Farmers, diversified farmers (i.e. farmers with supplementary businesses or incomes) and entrepreneurs were the most keenly aware of such conflicts.

**Table 12.** Perceived conflicts of interest by vocational groups. (Percentages in parenthesis.)

Vocational group	Has park caused conflicts of interest			N
	Can not say	No	Yes	
Farmer	39 (36.1)	24 (22.2)	45 (41.7)	108 (100.0)
Diversified farmer	9 (20.5)	13 (29.5)	22 (50.0)	44 (100.0)
Entrepreneur	28 (34.1)	22 (26.8)	32 (39.0)	82 (100.0)
Wage earner	205 (40.8)	163 (32.4)	135 (26.8)	503 (100.0)
Pensioner	291 (51.5)	165 (29.2)	109 (19.3)	565 (100.0)
Other (students, unemployed, etc.)	26 (41.3)	24 (38.1)	13 (20.6)	63 (100.0)
Total	598 (43.8)	411 (30.1)	356 (26.1)	1365 (100.0)

Pearson  $\chi^2=58.17$  df.10 P<0.001

There was significant variation between vocational groups in the degree of satisfaction in the way in which local authorities had cooperated with local residents concerning the development of Linnansaari NP ( $\chi^2=33.89$   $df=20$ ,  $P=0.03$ ). Diversified farmers were the most dissatisfied of the vocational groups, with 16% considering that cooperation had not been satisfactory, and 21% considered that cooperation had been satisfactory. Of the farmers, 42% were satisfied with the level of cooperation; the figures for the other vocations being entrepreneurs (55%), wage earners (41%), pensioners (50%) and others (32%). A similar question specifically targeted the management of Linnansaari National Park (Metsähallitus). Satisfactory levels were much higher in all vocational groups than for local authorities, with an average 45% being satisfied, but again, farmers, diversified farmers and entrepreneurs were the most dissatisfied.

Conflicts of interest are solved by negotiation between the interested parties concerned, a process that is central to the place-bound structuration process. Respondents were asked whether the resolution of conflicts had, to their knowledge, been considered satisfactory, but 55% could not say. Of the remaining responses, there was a clear relationship between experiences and attitudes (Table 11) although the number of residents who considered solutions to conflicts to have been very satisfactory were relatively few (<10%). Residents who considered solutions to conflicts to be unsatisfactory were over-represented in groups 1 and 2 that opposed or had reservations about park-based development. Residents who were very satisfied or fairly satisfied with solutions to conflicts nevertheless remained cautious about park-based development as they are proportionally over-represented in group 2 (*reservations concerning park-based development*). Similarly, residents who considered solutions to be fairly satisfactory are over-represented in group 3 (conditional acceptance of park-based development).

In the Linnansaari residents' survey, extra questions were asked concerning the success of local negotiations. Residents were asked how well local authorities and Metsähallitus (the national park authority) had co-operated with residents concerning park-development related issues. Omitting the respondents who could not say (40%), seven percent of the remaining residents considered that co-operation with local authorities had been very satisfactory and 67% considered co-operation to have been satisfactory. As in the case of conflict resolution (Table 13) there was a clear relationship between attitude grouping and satisfaction, with the least satisfied residents being proportionally over-represented in attitude groups 1 and 2 and the satisfied residents being over-represented in attitude groups 3 and 4 ( $\chi^2=68.55$ ,  $df=9$ ,  $P<0.001$ , Spearman Corr. 0.265,  $T_{\text{approx.}}=6.05$ ,  $P_{\text{approx.}}<0.001$ ). With respect to the role of Metsähallitus, the situation was rather different. Only 4% of respondents could not say. Of those who did give their opinion, c. 16% were very satisfied and over half (55%) were fairly satisfied. Residents who were dissatisfied with Metsähallitus were strongly over-represented in attitude group 1 (*opposition to park-based development*) and

**Table 13.** Satisfaction with resolution of park-related conflicts by attitude group, with "cannot says" omitted. (Percentages in parenthesis.)

Conflict resolution	Group 1*	Group 2*	Group 3*	Group 4*	Total
Not at all satisfactory	22 (28.6)	8 (10.4)	38 (49.4)	9 (11.7)	77 (100.0)
Not very satisfactory	36 (31.6)	13 (11.4)	53 (46.5)	12 (10.5)	114 (100.0)
Fairly satisfactory	6 (5.2)	26 (22.6)	66 (57.4)	17 (14.8)	115 (100.0)
Very satisfactory	3 (10.0)	7 (23.3)	14 (46.7)	6 (20.0)	30 (100.0)
Total	67 (19.9)	54 (16.1)	171 (50.9)	44 (13.1)	336 (100.0)

Pearson  $\chi^2=35.31$   $df=9$   $P<0.001$ ; Spearman Corr. 0.154  $T_{\text{approx.}}=2.85$   $P_{\text{approx.}}=0.005$

\* For explanation of groups 1–4, see Table 4 (p. 20).

almost absent from group 4 (*unconditional acceptance of park-based development*). Conversely, residents who were satisfied with the way in which Metsähallitus has conducted its relations with local residents were strongly over-represented in attitude groups 3 and 4, and virtually absent from group 1 ( $\chi^2=93.61$ ,  $df=9$ ,  $P<0.001$ ; Spearman corr. 0.309,  $T_{\text{approx.}}=7.36$ ,  $P_{\text{approx.}}<0.001$ )

An underlying question in this study is what effect have the national parks had on local development in general. Most residents in the study (72%) considered that the effects of the parks on local development had been positive or very positive. Only 11% of the residents considered that the effects had been negative or very negative. Negative effects were more readily perceived by farmers, diversified farmers and pensioners, whereas positive effects were more likely to be perceived by wage-earners, “others” and entrepreneurs. Farmers, diversified farmers and entrepreneurs were also the most ambivalent with respect the effects of the parks on local development.

Residents adjacent to Seitsemien National Park were more satisfied on the over effects of their park on local development than residents adjacent to Linnansaari ( $\chi^2=12.58$   $df=4$ ,  $P=0.013$ ). This was largely because there were proportionally more residents in the Linnansaari survey who considered that the park had had a very negative effect on local development (4% compared to 1% in Seitsemien).

Residents who considered that the parks had had a negative effect on local development were strongly over-represented in group 1 (*Opposition to park-based development*) and virtually absent from group 4 (*unconditional acceptance of park-based development*) ( $\chi^2=248.24$ ,  $df=12$ ,  $P<0.001$ ; Spearman corr. 0.306,  $T_{\text{approx.}}=12.06$ ,  $P_{\text{approx.}}<0.001$ ). A very similar result was obtained for a related question that asked whether the residents’ localities had become better places to live because of the presence of the national parks ( $\chi^2=131.52$ ,  $df=9$ ,  $P<0.001$ ; Spearman corr. 0.199  $T_{\text{approx.}}=7.54$ ,  $P_{\text{approx.}}<0.001$ ).

## 5 Summary and discussion

The analysis examined the attitudes and experiences of residents adjacent to two national parks in southern Finland, and whether those attitudes could be explained in a place-bound structuration framework. National parks were seen as an imposed institutional project (i.e. activity) that disturbed the traditional, rural, land-based activities (institutional projects) based on primary production (e.g. agriculture and forestry). In the structurationist theory of place as historically contingent process (Pred 1984) traditional activities (institutional projects) are considered to be in a dialectic relationship with each participating individual’s life-paths. The individual life-paths and the project (activity) paths interact over time in positive and negative ways to create new sets of activities and lifepaths through discourse and the adjustment dialectic of the structuration process. The exogenous imposition of a national park amidst such a set of activities (projects) should therefore elicit a new adjustment dialectic with individuals’ reacting positively or negatively to the new activity until the structuration process results in a new set of local projects and values.

Factor analysis based on a set of attitude propositions yielded new variables, the explanations of which could be interpreted in a place-bound structuration framework. Cluster analysis based on these factors was able to create a four-group attitude continuum ranging from acceptance of to opposition to park-based development. This, too, could be explained in terms of place-bound structuration.

The material had a number of short-comings. For example, the original propositions did not enable the analysis to capture whether the acceptance or opposition to national parks was passively acquiescent or actively hostile (Giddens 1979; 56). Consequently, the analysis could not reveal the effects of local action that occurred at the time of the parks' formations. However, willingness to participate in the structuration process was captured by propositions that concerned local the importance of local participation in the planning and development of the national parks. Studying the behaviour of these variables (propositions) throughout the factor and cluster analyses was an important element of the analysis. An assessment of the co-operation that occurred between the local authorities and Metsähallitus (the park authority) with local residents also provided an indication of the process of negotiation between agents that is part of the local dialectic process and essential to the place-bound structuration process.

The results of the study are summarised in Table 14. Four elements of the place-bound structuration process were identified in the frame of reference leading to five expected outcomes. These were, for the most part, supported by the empirical evidence gathered from residents living adjacent to Seitsemien and Linnansaari National Parks in Southern Finland. The expected outcomes of the place-bound structuration process were identified in most cases.

Some of the empirical results did not seem to support the expected outcomes. First, the majority of residents considered that the national parks had benefited local development in general, and yet new venture opportunity recognition was weak, with few residents planning or starting new ventures. Secondly, planned or actual enterprise start-ups were expected to be associated less with residents who were embedded in the traditional institutional projects and more with residents who were less associated with dominant projects, e.g. farming and forestry. In the event, the new enterprise activities were more likely to be associated with farmers, as well as (expectedly) entrepreneurs.

The process of structuration predicts the occasional releasing of resources as former institutional projects weaken or come to an end, thereby releasing these resources for new projects. The enterprise start-ups by farmers can possibly be seen as evidence of this aspect of structuration. Diverse farmers were the least likely to have planned or new ventures. The outcome is surprising until it is assumed that those farmers have already diversified by starting new ventures and that few businesses can diversify continuously. Thus, it might be expected that, given the extra time afforded to residents adjacent to Linnansaari for the place-bound structuration process to operate, there would be proportionally more diversified farmers in that locality compared to Seitsemien, but the reverse was the case. Seitsemien National Park was also created on State land, so the greater proportion of diversified farmers is not a response to the release of local resources.

It was expected that the length of residence would increase residents' attachment to sedimented values and that they would therefore be less likely to perceive new business opportunities related to the national park and its visitor flows. In the event, the length of residence had no statistical association with planned or actual new ventures.

It was expected that the dialectic, place-bound structuration process would be further developed in the vicinity of Linnansaari, which is twenty years older than Seitsemien National Park. The importance of the time element in the structuration process was evident when comparing the mean factor scores of the residents of the two park areas. Residents' perceptions of the opportunities offered to nature-based enterprises was significantly more developed in the older park. However, for the majority of attributes the differences between the responses of the residents of each park

**Table 14.** Summary of results.

Elements of the place-bound structuration process	Expected outcome from establishment of national park project	Supportive results	Non-supportive results
<p>1) In any given place, dominant (traditional) institutional projects affect the daily- and life-paths of the resident population:</p> <ul style="list-style-type: none"> <li>- by affecting the details of individual consciousness and socialisation.</li> <li>- by means of the time-allocation and scheduling precedence given to dominant projects over other (competing) projects.</li> <li>- by affecting the traditional division of labour.</li> </ul>	<p>Negative attitudes to the establishment of a new institutional project (national park) will be associated with:</p> <ul style="list-style-type: none"> <li>- residents' length of domicile</li> <li>- residents' place-attachment</li> <li>- residents' close ties with dominant (traditional) institutional projects</li> <li>- disruption of dominant projects.</li> </ul>	<ol style="list-style-type: none"> <li>1) Long residence resulted in greater opposition to national parks.</li> <li>2) Weak or moderate place attachment led to a greater acceptance of national parks</li> <li>3) Ties to dominant institutional project(s) led to lower tolerance of national parks.</li> <li>4) Forest ownership reduced unconditional support for national parks and increased opposition to national parks.</li> <li>5) Opposition to the national parks was proportionally greater in cases of large forest ownership.</li> <li>6) Residents with smaller areas of forests have lived in their localities for significantly shorter times than those landowners with larger forests.</li> </ol>	<ol style="list-style-type: none"> <li>1) Opposition to national parks was not systematically associated with the strength of place attachment.</li> </ol>
<p>2) Structuration is a time-related process. Disturbances to traditional projects caused by a new institutional project will decrease over time as local resources adjust to the new situation.</p>	<p>The longer a new institutional project has been in a locality the more positive will be local attitudes towards it.</p>	<ol style="list-style-type: none"> <li>1) Residents in the older park (Linnansaari) were more able to perceive benefits to nature-based enterprises than residents in the younger park (Seitsemien).</li> </ol>	<ol style="list-style-type: none"> <li>1) Time-related structuration effects between the parks not observable from the distributions of attitude groups.</li> </ol>
<p>3) The imposition of an institutional project such as a national park will disrupt the historical process of structuration because:</p> <ul style="list-style-type: none"> <li>- restrictions on traditional land uses and rights will have affected some residents' livelihoods (resulting in a negative discourse).</li> <li>- the accumulation of cultural and social practices (sedimentation) that is generated by the creative potentials of individual residents over time is disturbed.</li> </ul>	<p>Local residents who are embedded in traditional production-oriented projects (agriculture and forestry) will be less likely to perceive the opportunities offered by the new, national park project.</p> <p>Opportunities created by a new institutional project such as a national park are more likely to be perceived by residents with weaker ties to sedimented values.</p>	<ol style="list-style-type: none"> <li>1) Negative effects on local development were more readily perceived by farmers, diversified farmers and pensioners.</li> <li>2) Low level of new opportunity recognition.</li> </ol> <p>1) The younger age classes were more likely to accept national park development whereas the older generations tended to oppose it.</p> <p>2) Planned or actual enterprise start-ups were largely limited to the under 54-year age group, and especially the under 35s.</p>	<ol style="list-style-type: none"> <li>1) The majority of residents considered national parks had benefited local development in general.</li> </ol> <p>1) Weak association between length of residence and planned and new ventures.</p> <p>2) Farmers were proportionally the most active regarding planned and new ventures.</p>
<p>4) The establishment of a new institutional project such as a national park leads to conflicts when:</p> <ul style="list-style-type: none"> <li>- via negotiations or compulsory purchases, traditional institutional projects such as family farming and forestry are terminated.</li> <li>- classes, such as landowners, that originally possessed power have to adjust to new set of power relations.</li> </ul>	<p>Classes that originally possessed power (e.g. private landowners, etc.) can be expected to possess more negative attitudes towards the national park than classes that do not possess local power.</p>	<ol style="list-style-type: none"> <li>1) Negative effects on local development were more readily perceived by farmers, diversified farmers and pensioners.</li> <li>2) Residents aware of local conflicts of interest were more likely to oppose national parks. Residents unaware of conflicts were more likely to unconditionally accept national parks.</li> <li>3) Dissatisfaction with solutions to conflicts was more likely to be related to negative attitudes to the parks.</li> <li>4) Park-related conflicts of interest differed by vocational group, mostly by farmers.</li> <li>5) Farmers, diversified farmers and entrepreneurs were the most dissatisfied with local authorities. Differences between the vocation groups were significant.</li> </ol>	
<p>5) Modifications to the balance between existing projects may also release resources for new projects.</p>	<p>Farmers can be expected to diversify to take advantage of opportunities created by national parks.</p>	<ol style="list-style-type: none"> <li>1) Farmers were more likely to establish new enterprises (release of resources?)</li> </ol>	<ol style="list-style-type: none"> <li>1) Forest owners opposition to national parks (no apparent release of resources).</li> <li>2) Diversified farmers had very few planned or new ventures.</li> <li>3) There were proportionally more diversified farmers adjacent to the younger national park.</li> </ol>

were statistically non-significant. This result could mean that, twenty years is insufficient time for the structuration process to work *in the localities in question*. Evidence for this conclusion is suggested by the very slow process of place attachment that was observed – residents were still feeling weak place-attachment after 15 years residence or more. Places are the context in which interpersonal relationships occur (e.g. Mesch and Manor 1998, citing Altman and Low 1992). If attachment to place is slow to occur, as observed, then the place-bound dialectic process of structuration is also likely to be slow. Following this, the acceptance of new institutional projects such as national parks may also be slow.

Despite these deviations from the expected results, there was strong evidence that the various attributes associated with sedimentation (e.g. length of residence) and ties to traditional institutional projects (farming and forestry) and relative power in the local community (e.g. size of forests) each caused residents to possess negative attitudes towards the national parks. Conversely, younger members of the communities in question were more tolerant of the parks, while planned and new ventures were more likely to occur in the under 54 age group, and especially the under 35 age-group.

Conflicts of interest arising at the time of the creation and/or expansion of the parks in question had largely been resolved years ago, with the exception of hunting, fishing and mineral extraction rights, but the conflicts remained as “local legends” and still affected residents’ attitudes towards the national parks (see Suomi et al. 2008). This result indicates the social importance of the negotiation over, and solutions to, land use contestations when establishing new institutional projects such as nature protection areas such as national parks. Failures can reverberate through the resident community for many years to come and may affect the outcomes of future negotiations concerning new institutional projects, e.g. park expansion or development plans.

Residents adjacent to Linnansaari considered that Metsähallitus (the park authority) had been more successful in such negotiations than had local authorities (Suomi et al. 2008), while residents adjacent to Seitsemien National Park were particularly critical of their local decision makers with respect to the integration of the park into the local community (Petäjistö and Selby 2008). The analysis also revealed local residents’ wish for greater local participation and control over the planning and development of their adjacent national parks (i.e. new institutional projects). Allen et al. (1988) reported similar local residents’ concerns about a lack of opportunities for participation in planning when it came to tourist developments (see also Pearce et al. 1996). The perception of such weakness in the dialectic process of place-bound structuration is, of course, part of the process. If such grievances are not successfully negotiated, then residents may feel threatened by later, new institutional projects, especially where they challenge traditional, embedded values and activities. For new projects to succeed, residents must be able to see that the resources released from a traditional activity can be re-directed to a new activity (project) that benefits the community as a whole, and they must be able to participate in the negotiation process. Residents may nevertheless require assistance from local authorities to be able to participate in the process, as well as perceive and act upon any new opportunities so created (e.g. Long 1984, Hills et al. 1997), and it is here that the residents’ criticism of local authorities is particularly pertinent (Petäjistö and Selby 2008, Suomi et al. 2008).

Other studies, based on the same data, found that the parks were considered to have benefit their local communities, e.g. via improvements in local services (Petäjistö and Selby 2008, Suomi et al. 2008). However, the number of new enterprises that have been created, or are planning to be created, in the districts in question is rather low. So, the underlying question as to whether the

restrictions on traditional livelihoods caused by the creation of national parks can be offset by new opportunities that the parks create does not obtain a clear answer. There was no statistically significant difference in the planned start-ups between Seitsemien and Linnansaari National Parks. This result may not be surprising given that both parks are over 20 years old and that the initial responses to new opportunities (via the structuration process) may have already taken place. On the other hand, Linnansaari is considerably older than Seitsemien, and so differences in entrepreneurial responses might have been expected, and yet this was not found. On-going enterprise studies (in cooperation with Metsähallitus) in the same districts may provide an answer. However, the fact that farmers and younger age-groups were most active in creating new enterprises suggests that opportunities are being perceived. This may indicate that, as required by structuration, resources that are being released by restrictions caused by the national parks are being channelled into new projects.

In terms of the theory of place as historically contingent process, place always involves an appropriation and a transformation of space and nature that is inseparable from the reproduction and transformation of society in time and place. The “becoming-place” is a historically contingent process based on the transformation of nature and the creation of resources. This study has indicated that the introduction of space-demanding institutional projects (national parks) that had no previous (local) institutional role have disturbed the individual-path/project interactions of local residents. This gains expression by opposition, or reserved attitudes, to the national parks, as well as a limited response to the opportunities created by the parks. The final outcome of these local effects of national parks must therefore await further local developments in the structuration dialectic.

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