Endemic time-spaces of Finland: from wilderness lands to ‘vacant production spaces’

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Traditional land use and occupancy of the wilderness lands of Finnish pre- and early-historic communities has not received much discussion in contemporary geographical debates. This article explores such occupancies and analyses transformations to present land use through two case studies: the Lake Kuivasjärvi basin in Western Finland and the Linnunsuo marsh-mire in Eastern Finland. Environmental justice provides the analytical framing through which the processes of change are analysed within each case by using historical geographical data and reviewing literature. Both locations were communally used by occupying villages prior to the advent of the industrial era. Yet the forestry and peat production industries that were pursued in the twentieth century ignored this historical use and saw them as ‘vacant spaces’ to be developed. In Linnunsuo, a post-production space has developed since the end of the peat production.

Keywords: traditional land use, wilderness (erämaa), Finland, Kuivasjärvi, Jukajoki, environmental justice

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Introduction

Terrestrial traditional land use and occupancy in Finland to a large extent remains hidden in contemporary international geographical inquiries. The modern and established notion of environmental justice is used to explore the legality of the state and its agencies to own, decide and rule on the lands and waters in Finland and is compared with concepts of endemic or pre-state collective uses of the lands that remain contested (Lehtinen 2003; Sheridan & Longboat 2006). In this paper, a return to an ethical geography that emphasises responsible approaches is used to critically re-examine history, place and time to respond to modern questions (Lehtinen 2009). Ethical geography is aware of the past practices of the discipline and positions the new approaches in a post-colonial, or in the case of this inquiry, in an environmental justice view.

The present article sheds light on traditional land use practices in Finland. The Sámi geographies and traditional siida territories are, due to their cross-border and indigenous natures, well described (Nickul 1982; Helander 1999; Mustonen & Mustonen 2011). Siida are pre-colonial, self-autonomous, endemic, nomadic Sámi villages that existed until the 19th century but which existed amongst the Skolts up until 1944. Today, the siida council, albeit in a stripped form, still exists amongst the Skolts. While Finnish aquatic traditions, uses and occupancies have received renewed interest in the last few
years, the terrestrial land use change from ‘traditional/endemic times’ to modern times is open to further studies (Salo 2013a, 2013b; Mustonen 2014a). However, the exploration of the Roma and Swedish uses of the lands is beyond the scope of this article.

In regard to the uses of lands in Finland in the context of environmental justice, I review the established basic legal rights in the Constitution of the Republic of Finland (The Constitution of Finland 1999; Määttä 2003; Schlosberg 2007). Then, by using ‘ethical’ geographical analysis of two case studies, the argument is made that while the modern nation-state of Finland, through its institutions, has defined the individual rights of the citizens, the pre-state collective rights such as the Sámi land and water ownership and the uses of the waters and lands of the Finnish villages are, for the most part, undefined and hidden (Vilkuna 1971; Aikio 1977; Lehtinen 2009; Mustonen 2014b). Therefore, they often remain ignored.

The pre- to early-historic cultural uses of terrestrial ecosystems and locations of predominantly local-autonomous human societies will be explored (Salo 2013a). As a geographical concept they constitute traditional time-spaces and uses of land based on seasonal cycles (Loy 2001; Thrift & May 2001). Time-spaces are “spatial variation, a constitutive part rather than added dimension of the multiplicity and heterogeneity of social time” (Thrift & May 2001: 5). They are products of dynamic human-nature interactions, including sometimes unequal inter-relationalities. Furthermore, sacred places in these time-spaces provide spatio-temporal non-linearities (Itkonen 1948a, 1948b; Lehtinen & Mustonen 2013). Within such places this often manifests in the human behaviour of access, avoidance and cultural, customary relations. Sacred here refers to a communally defined, significant marker in the given time-space (Helander 1999). Non-linearities of such places are often hard to capture as they differ from the demarcated and three-dimensional readings of landscapes and places. They are, essentially, endemic. Endemic means internal, place-bound and culturally-specific (Sheridan & Longboat 2006).

The article describes in brief the Sámi indigenous traditional siida or winter village territories as they constitute the oldest known human terrestrial presence in Finland. Then, using two cases, one from the Western Finnish cultural area of Satakunta (Lake Kuivasjärvi watershed) and the other from North Karelia in Eastern Finland (Linnunsuo marsh-mire in the Jukajoki basin), the transition from traditional uses of the lands to modern context is explored. The cases were chosen as they portray elements of the endemic uses of land as well as being the subjects of traceable natural resource exploration. This process is fundamentally central to the transformation of ecosystems and human societies in Finland. Studies of this experience of the ‘traditional’ Finnish villages and land uses have thus far been mainly descriptive (Jutikkala 1942). In this article, I use the concept of environmental justice to analyse the process of change through to the present situation in order to illustrate the dynamics of this transition.

The first sections of this inquiry develop the conceptual and analytical framework that will be used to look at the transformations from pre-colonial to current land use – environmental justice. This is followed by a method and literature section outlining the case study methodology and data sets; a literature review on environmental justice in Finland and a description of relevant traditional land uses in Finland are provided. Case studies then follow, after which a discussion section and conclusions position the discussion in a wider matrix and offer some reformative steps.

Exploring environmental justice

Environmental justice (EJ) has evolved in the United States and North America over the past decades as a concept with various meanings (Schlosberg 2007). In the policy realm, the Environmental Protection Agency in the US defines the term as follows (EPA 2015):

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, colour, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

This EPA definition is the result of various North American socio-ecological developments. Schlosberg (2007: 6–7, 158) stresses a need for bridging debates where EJ links with a number of converging
themes from ecological (human and non-human worlds and their interlinkages) and environmental (historically against racism and anti-toxins) directions (also Rechtschaffen & Gauna 2003: 3, 6–7). Harvey (1996) highlights the development of values. Rechtschaffen and Gauna (2003: xix) point out that EJ is one of the most ‘dynamic’ spheres of justice globally.

Within this dynamic concept, Schlosberg (2007: 4) as well as Rechtschaffen and Gauna (2003: xix) emphasise that diverse discourses of EJ often stress mal-distribution, which arises when marginalised groups ‘receive’ less justice due to their positions in relationship to power and resources (Harvey 1996: 137, 155, 385; Lehtinen 2003). Schlosberg (ibid.: 64) further brings to the fore the relationship the Navajo have with their places and ‘co-habitated’ landscapes (Lehtinen & Mustonen 2013). They are sacred to the often-sovereign indigenous nations. Rechtschaffen and Gauna (ibid.: 35, 57, 421) stress the siting, situating and scaling of the EJ issues into localities and places. This illustrates that the EJ concept as used in North America recognises the struggles of justice and power, disturbances and the existence of the land of marginalised peoples.

Indigenous and local-traditional communities are globally often victims of environmental injustices (Harvey 1996: 187; Smith 1999; Lehtinen 2003; Anaya 2004; Cram et al. 2013). This may happen directly such as through loss of land or indirectly in underhand ways (Berger 1999). Rechtschaffen and Gauna (2003: 143, 421) discuss the role of toxins in defining the power, health and foods of indigenous peoples. According to Harvey (1996: 203–204) the issues of scale should not prevent us from addressing these injustices where they occur. Therefore, EJ has many sides and faces ranging from indigenous grievances to toxin issues.

Lehtinen (2009) offers a reading of the European EJ debates. According to him the recent environmental history of the continent defines the context more than the social-ecological issues of North America. A turning point came with the Chernobyl accident in 1986. Cross-border pollution and the need to take care of future generations emerged as lead themes in European EJ movements. The idea of a risk was now a reality for the first time since the Second World War (ibid.: 536).

In this paper the concept and discourses of environmental justice are applied to the context of Finland. The varied definitions evolved in the North American context are used as a point of departure that I contrast with the Finnish context. To do this I draw upon the established standards of environmental justice in North America. In order to bridge the debate to include the periphery of Europe, including Finland, an essential starting point for the focus on questions of Finnish EJ debates is group capability, which may be seen as part of the post-liberal turn within EJ, as a partial counterpoint to accepted liberal discourses (Lehtinen 2003, 2009; Schlosberg 2007: 37–39).

It is recognised that the local and indigenous communities often bear the brunt of ecological injustice (Smith 1999; Määttä 2003; Anaya 2004; Mertens et al. 2013). This is the case in the US in regard to the Navajo nation and uranium mining. For Schlosberg (ibid.: 98, 125), EJ represents a varied ‘toolkit’ where the diverging discourses can find a common direction despite their pluralities, lack of uniformities and heterogenic readings. Yet, due to their urgencies, EJ concerns the need for them to be addressed ‘simultaneously’.

In regard to the Fennoscandian history of EJ developments Ebbeson (1996: xviii) stresses the history of the “tragedy of commons” – environmental impact on the natural systems due to self-interest uses of lands – and the international environmental progress, such as the Stockholm Conference 1972. The evolution of global politics and law from a two-party dynamic towards a multi-polar world produces the new frames of justice (Ebbeson 1996: 10, 26; Harvey 1996; Määttä 2003; Ervasti 2012: 60). Ervasti (ibid.) sees them as converging. In Europe, state sovereignty, rights and duties still remain major forces, despite the challenges created for example by cross-border pollution (Lehtinen 2009).

Territory of Finland has been occupied by various human societies such as Sámi, Finns and Swedish for millennia. However, as a political entity, Finland is one of the youngest countries and nation-states in Europe, having been established on the 6 December 1917. It is located at the north-eastern corner of Europe, bordering Sweden, Norway and Russia. In short it is a ‘recent state’, having formed less than 100 years ago. Recent history has seen a civil war of 1918, three wars in the 1940s as a part of the Second World War and a rapid industrialised transformation in the post-war context. The unique position between East and West produces the endemic notions of EJ. Määttä (2003: 113) argues that there are two mechanisms in order to bring justice into the environment and its uses domestically:
first, by issuing legislation that provides for better environmental juridical protection, and secondly, by implementing the existing legal norms in ways that put more emphasis on environmental values. A new concept of ‘justice ecology’ might solve the gaps and scaling with global debates.

The transformation of traditional Finnish land use emerges strongest in the undefined community commons, many of which are to do with the occupancies of the particular villages. These commons, it is argued through the geographical analysis, are still communally-used by the descendants of pre-state collectives of Finland. For the purposes of the cases in this paper, the commons are limited to the Sámi traditional siida communities and documented wilderness areas (erämaa) of Finnish villages (kylä) (Jaakkola 1925; Vilkuna 1971; Lehtinen 2009). For this paper ‘wilderness’ is a specific cultural concept of Finnish traditional land use. The English concept of wilderness contains the notion of a ‘wild’ territoriality. Yet, the concept erämaa in the Finnish language implies an occupied, lived territoriality, a hunting/fishing space of a family use area.

The modernity of the ‘environmental management mentality’ has penetrated much of the governance and terminology of environmental-ecological discourse in Finland. It remains embedded also in the legal tradition (Ervasti 2012: 79). Traditional understandings of land uses within ecosystems and knowledge remain marginalised (Lehtinen 2009: 537). It is therefore relevant to investigate the switch from the community uses into vacant production of land that manifests the present industrial land uses spaces (Granö 1930; Raivo 1999, 2002; Tanskanen 2000).

This vacant (production) space is a central discourse for the industrial demarcation of lands (Raivo 1999, 2002). In the case of boreal ecosystems, the re-naming and demarcation of ecosystems or parts of them for ‘pure’ assessment justified the placement of any territory within a political demarcation for ‘production’ (Granö 1930). The past or present local-traditional or indigenous uses of lands are for the most part invisible occupancies of the same times and spaces of this top-down arrangement. In Finland, Ervasti (2012: 15) stresses the need of the sociology of justice to remain ‘open’ to many disciplines. Central to the Finnish legal tradition is the notion of (continental) justice and law (Määttä 2003). In the modern society the norms cover almost all spheres of life. Their role in EJ may be muddled by these processes. Additionally, the gaps of common law, the European Union and continental legal traditions bring tensions to the EJ discourses (Ervasti 2012: 185).

Examples have been reviewed from research literature in regard to the current situation in Finland in the context of EJ. The distinct geographical positioning of Finland as well as the transformation of communal lands into a modern nation-state provide a new and relevant inquiry of what EJ means both in the context of past events and in the current era. Lehtinen and Rannikko (2003) provide an overview of how EJ manifests in the Finnish context. They are not the same as in North America (Määttä 2003: 110). Lehtinen (2003: 10, 23) defines the Sámi and traditional Finnish wilderness communities as having preserved non-globalised, specific cultural relations and shared responsibilities for nature. This provides an uneasy transferability of the international concepts of EJ into the national context (Määttä ibid.: 128–129).

Lehtinen (2003: 17–23, 25–27) defines the scales affecting the fluctuating cultural-historical senses of EJ in Finland as follows:

1. Communal relations and a sense of justice with nature flow from pre-historical times. They are often incompatible with and critical of the international, global and EU level notions of nature, immanence, conservation and regulation. Especially the local-traditional and Sámi villages face this problem. The specific histories of Finnish colonisation of the Sámi and strong regional governance play a role too (Aikio et al. 2010). Aikio (1977) argues that the Sámi have their own own ‘ecosystem’ of co-habitation.

2. Flows of information and commerce produce levels of belonging, governance and clustering that erode and alter the ‘traditional-local’ justice, nature relationship and agency, which include gender equality, animal rights and, increasingly, societal class. Yet, the North American EJ debates bring new forms of reflections to the national context.

EJ in the Finnish context is summarised: firstly, it is a distinct concept that is defined by the international processes (meaning not limited to a single space) of environmental problems as seen from the position of Finland; and secondly, it includes the relations, historical transformation and (mis-)uses of direct power against the traditional Finnish (Mustonen 2014a, 2014b) and indigenous Sámi
communities (Aikio et al. 2010). Donner-Amnell (2003: 143) agrees that while Finland strives to maintain an international image of upholding EJ, domestically and locally the track record is controversial at best.

**Research methods and approach**

The methods contain, firstly, analysing the maps of Sámi and wilderness territories, including the demarcation of the lands and their transformation to production spaces and, in the case of Linnunsuo, to a post-production site. Secondly, the framework for the literature analysis highlights the transition and current stage of the cases. This includes geographical analysis and selected research literature. The literature review was narrowed down to refer mostly to the Sámi and wilderness territories, their characteristics and transformation historically. Materials have been included from relevant historical Finnish documents and the contemporary science discussion. Thirdly, the analytical frame of environmental justice allows for an updated reading of the events of Finland and the contextualisation of community transformations in this northeastern periphery of Europe (Lehtinen 2009).

What do we know about the specific Finnish wilderness land uses? The wilderness communities and lands were primarily hunting and fishing economies with limited slash and burn agriculture present in selected sites late in their existence. Koivunen (1992) notes that the wilderness areas were connected with a ‘central house’ or a village sometimes dozens of kilometres away from the harvesting areas. Essentially there was a core house, which operated wilderness lands for hunting and fishing as a part of the seasonal cycle. As such, the wilderness was a time-space – a location for the hunting and fishery activities and a time for the seasonal harvests as a part of the cycles of the communities including customary/spiritual interactions with the landscape. According to Koivunen (1992) the traditional land uses of the boreal traditional communities are not easy to categorise in the Eurasian North. The Sámi siida has been documented as consisting of semi-nomadic fishing and herding rounds (Nickul 1982). However, the Finnish Iron Age wilderness territories and community land use remain partly an enigma. Koivunen (1992) presents the analytical notion of a ‘core’ and the wilderness hunting territories. He points out that the wilderness system is not only a fixed habitation. It contains elements of seasonal territoriality which is better known about in relation to the indigenous land uses that are present in Central and Northern Siberia.

Salo (1997) and Koivunen (1992) trace the historical development of the use of territories in the wilderness communities. According to them at first, in pre-historic and early historic times, the wilderness territories of the Finnish houses were a mix of close proximity use areas and, towards the Middle Ages, rather distant territories that were sometimes over 120 kilometres from the core areas (Valonen 1984). Their long-term use was connected with the role of the fur trade and other commodities and assets that some houses utilised from the inland Sámi and fishing areas. In the 1200s, there was a ‘middle’ distance of 40–60 kilometres from the core houses to the wilderness territories in selected known places like in Satakunta, as the settlement and farming economies were more fixed. In the last stages of the known wilderness territories, in the mid-1500s, they were in close proximity to the core houses. The traditional justice system of these communities revolved around the *käräjälaitos*; an endemic communal place and organisation, which was often held on a circle of stones with the important community representatives present (Salo 1997).

Valonen (1984) summarises the land uses of the wilderness communities. The distance from the core family house to the fishing-hunting territories could range from 100–260 kilometres from South to North. He considers that it was mostly the men who participated in this seasonal migration, but we do not have written documentation to present a case for the presence of women. Salo (1997) states that it is really not known how the endemic system of wilderness uses emerged pre-historically. Jutikkala (1942) agrees. It is sufficient to say for the purposes of this paper that they constitute the *endemic time-spaces* of the Finns. They could be also inherited, sold, re-distributed (similar to a siida system) and switched. Salo (1997) points out that while the wilderness areas were assigned to houses and families, the collective hunting of moose and deer required also the community to work together to succeed.
Within each case three thematic stages will be used to analyse events which have taken place through time: (1) the ‘traditional’ wilderness and community uses of the lands in the case studies are described. They revolve for the most part around small-scale fisheries, collective and seasonal hunting economies and slash-and-burn forestry and farming (Salo 1984); (2) the transition from a relatively intact ecosystem to a modern production space of peat and forestry illustrates the key drivers of change from the early 1900s to 2000; and (3) the post-industrial spaces and enduring resource interests illustrate the current moment in time, especially in the context of Linnunsuo. The ‘traditional’ in Finnish-Karelian land uses have received due criticism for having been attached to the various stages of national romanticism and Karelianism movements (Alanen 1931; Virtanen 1950; Voionmaa 1965; Salo 1984, 1997, 2013a, 2013b; Valonen 1984). While such criticism is welcomed and much-needed, relevant information can still be derived from the early classical works of documented village terrestrial land uses (Salo 2013a).

The lack of recognition of these collective, inherent rights of Sámi and Finnish communities is problematic from the viewpoint of these diverse interpretations of environmental justice. As long as this is the case, the contemporary decisions and land use choices of the state of Finland contain internal tensions (Lehtinen 2003; Määttä 2003; Schlosberg 2007; EPA 2015). To narrow down the cases, two examples focus on community commons. These areas have been, and to a certain degree still are, used and taken care of by the various collectives for their pre-state traditional land occupancy. The lack of mechanisms to protect such communal rights and commons produced the first environmental refugees within Finland in the 1960s due to the construction of large-scale reservoirs for hydropower in Sompio (Kauhanen 2014: 331).

As both geographical and legal discussions on EJ are emerging fields, this paper applies only preliminary directions of scholarly debate within Finland for the topics at hand in relationship to collective rights. For the sake of space, the numerous legal national acts of the environment are not reviewed in this initial inquiry. Rather, following Berger (1999), the case is outlined using the notion of the fundamentally differing values of the pre-state societies and the state with its agencies in the territory of modern Finland in their relationship to the environment (Lehtinen 2003; Ervasti 2012: 120). These value differences that have not been addressed in the context of environmental justice render the actions of the state problematic in regard to decisions that affect the said communities and territories. Legally, the Constitution Act of Finland (1999, Section 2; emphasis added) defines this modern nation-state to be a democratic republic:

The powers of the State in Finland are vested in the people, who are represented by the Parliament. Democracy entails the right of the individual to participate in and influence the development of society and his or her living conditions. The exercise of public powers shall be based on an Act. In all public activity, the law shall be strictly observed.

In the context of discussions of environmental justice issues in Finland, there are various relevant legislative norms. Of relevance here is Section 20 – Responsibility for the environment – of the Constitution of Finland (1999, Section 20; emphasis added), which states:

Nature and its biodiversity, the environment and the national heritage are the responsibility of everyone. The public authorities shall endeavour to guarantee for everyone the right to a healthy environment and for everyone the possibility to influence the decisions that concern their own living environment.

Additionally, Section 22 – Protection of basic rights and liberties – states: “The public authorities shall guarantee the observance of basic rights and liberties and human rights.” (The Constitution of Finland 1999, Section 22). These basic rights and liberties can be limited in situations of emergency, as defined by Section 23 – Basic rights and liberties in situations of emergency (1112/2011; entry into force 1.3.2012) – of the Constitution of Finland (1999, Section 23; emphasis added):

Such provisional exceptions to basic rights and liberties that are compatible with Finland's international human rights obligations and that are deemed necessary in the case of an armed attack against Finland or in the event of other situations of emergency, as provided by an Act, which pose a serious threat to the nation may be provided by an Act or by a
Government Decree to be issued on the basis of authorisation given in an Act for a special reason and subject to a precisely circumscribed scope of application. The grounds for provisional exceptions shall be laid down by an Act, however. Government Decrees concerning provisional exceptions shall without delay be submitted to the Parliament for consideration. The Parliament may decide on the validity of the Decrees.

Amongst many scholars in North America, Berger (1999) argued that the rights of the North American indigenous peoples and their particular rights had been subjected for the most part to interpretation defined by the settler societies in South and North America since 1492 (also Schlosberg 2007; Mertens et al. 2013). This has led, for the most part, to a situation which is in violation to the modern interpretations of environmental justice – development impacts on the environment and responsibilities associated with such actions have by-passed the indigenous societies of the Americas (Harvey 1996). This overall process has over the past 500 years caused massive ecological devastation, the transformation of habitats, societies and peoples as well as the extinction of masses of ecosystems and species. Berger (ibid 1999: xii.) refers to this as a “long and terrible shadow”. At the core of his arguments is the realisation that the settler societies and the indigenous peoples of the Americas have had fundamentally different values in regard to society, which then have caused the various environmental conflicts that persist to this day.

Turning to the Finnish case, when independence from Russia was established in December 1917, the neighbouring countries recognised the new nation-state. A brutal civil war ensued, which was partially driven by the unsolved land ownership question of rural and peripheral areas (Lehtinen 2009: 538). The immediate conflict of 1918 was solved by granting the possibility of land ownership to village peasants in the late 1910s and 1920s. The zoning and demarcation of lands throughout the country developed with the idea that the state would be the ultimate ruler of the uses of lands and waters. These measures, however, did not address the pre-state collective uses of lands and waters. Some of them were defined in the legal agreements between the Sámi and the Russian Empire (Itkonen 1948a). The state of Finland, subsequently, inherited them when it became independent. The period of the Swedish rule until 1808 involved decisions by the kings in Stockholm to declare the wilderness lands as the Crown property in the 15th and 16th centuries (Alanen 1931).

Traditional land use in Finland

The two empirical cases below, using geographical analysis and selected research literature, illustrate the contested contexts, in respective terms, for the notions of environmental justice in Finland in relations with the state. Lehtinen (2003, 2009: 538) confirms that local communities remain the focal points and forums of development of the sense of justice in Finland. The main stress is on the understanding that the EJ is built on “fair treatment and meaningful involvement” of people (Rechtschaffen & Gauna 2003; EPA 2015). The Constitution of Finland, in theory, provides similar individual rights (1999; Section 20):

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\text{Nature and its biodiversity, the environment and the national heritage are the responsibility of everyone. The public authorities shall endeavour to guarantee for everyone the right to a healthy environment and for everyone the possibility to influence the decisions that concern their own living environment.}
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Schlosberg (2007: 210) converges with the EPA (2015) view. According to him there is a need to “continue to reflexively evolve the crucial role of participatory and discursive institutional structures in achieving just ends” in order to produce real change and address the environmental-ecological injustices.

The state does not address the collective rights of the pre-state societies in Finland as a separate entity or being. As a result of pan-Nordic customary habit, everymans right provides the possibility to travel across all the forests and lands of Finland, but the specific, endemic historical-collective uses of these lands have not been recognised. These collectives, in this paper, include two types of pre-state societies:
a. The contemporary Sámi societies of Finland whose land and water rights have emerged from the pre- and early historic siida indigenous land use territories. Siidas evolved as self-governing indigenous land use territories of seasonal cycles. In the 1500s they still remained for the most part as endemic and autonomous.

b. Those Finnish village areas and uses of lands and waters, such as the lake Kuivasjärvi area, where the pre-state wilderness hunting and fishing territories constituted the endemic social self-organisation of these economies and societies. The wilderness communities, in part, resisted the Swedish Crown and its governance in the Ikaalinen and Kuivasjärvi regions.

The state governance of such community lands, which may have pre-state uses kept to this day, manifests itself through the legislative actions of the government and state-owned ‘crown’ enterprises. Those of relevance here are:

a. State Forest Enterprise is the state enterprise of Finland that controls over 12 million hectares of land and waters for economic and conservation aims (Metsähallitus 2015),

b. VAPO State Energy Company which, in relation to the case here, focuses on peat production by draining and industrially mining marsh-mires (VAPO 2015).

Pre-state Sámi territories and land uses

Sámi are indigenous peoples of Finland that used and owned most of the inland boreal areas discussed in this paper prior to the arrival of the Finnish society at some point in pre-history (Alanen 1931; Salo 1997). Those Sámi living in Satakunta and North Karelia faced a range of experiences – slavery, assimilation, withdrawal and migrations – as the Finnish pre-historic society advanced inland (Itkonen 1948a, 1948b). In historical times, the state of Finland inherited the responsibilities and relationships that the Crowns of Sweden and Russia had had with the Sámi at the time of independence in 1917 (Vilkuna 1971). There are three Sámi nations today in Finland: the Inari Sámi, Skolt Sámi and the North Sámi. The North Sámi of which number the most. The Sámi land use and occupancy today is a direct result of the pre- and early historical self-organisation through the Sámi siida territories that partially still functioned as governing units for the communal land and water uses at 1917 (Vilkuna 1971; Aikio et al. 2010). In fact, the Skolt Sámi had formed agreements with the Czar already in the 16th century on specific hunting, fishing and reindeer herding territories and their exclusive uses (Itkonen 1948a).

The changes of the 20th and 21st centuries have fundamentally altered the Sámi capacity and uses of the lands and waters on both regional and local scales (see on scales Harvey 1996: 203–204; Lehtinen 2009: 537; Aikio et al. 2010). However, many contemporary families and social units, through their collective reindeer herding and other forms of land use, maintain a direct continuation of occupancy of the said territories. For example, one of the most brutal actions by the state was to construct the Lokka and Porttipahta reservoirs, the largest in Europe, without proper consultations with the Sámi or other local people (Vilkuna 1974; Aikio 1977; Kauhanen 2014). Present day environmental justice conflicts regarding the Sámi emerge from two direct natural resource uses that the state defines to be a monopoly of decisions, benefits and equity (Rechtschaffen & Gauna 2003; Schlosberg 2007; EPA 2015). State Forest Enterprise ‘owns’ over 90% of the lands in the so-called Sámi home area of Finland (consisting of Utsjoki, Inari, Enontekiö and Vuotso).

Another example of on-going breaches is the emerging state-facilitated land use in the 2010s, which included the licensing of international mining activities within the Sámi space. TUKES (2015), the national body responsible for the permits, reserves the right to allocate industrial land uses in the Sámi territories. The Sámi have argued, for example the case of diamond mining exploration in Utsjoki, on the basis of both collective and individual rights that have been in breach (Tunón et al. 2015). Some of the breaches of EJ have relevance as individual right breaches (The Constitution of Finland 1999), but for the purposes of the inquiry here, it is the collective, undetermined rights of the Sámi that are violated through the state actions and decisions (Aikio 1977; Raitio 2003; Anaya 2004; Aikio et al. 2010). This emerges as a major issue in the context of having none of the inherent Sámi rights issues solved, despite decades of discussion (Lehtinen 2003; Raitio 2003).
Finnish wilderness space: case of Kuivasjärvi

Wilderness areas were documented quite well in Western Finland in the River Kokemäenjoki catchment area as is visible in Figure 1. It shows the position of the home villages of the hunters in relation to the wilderness sites north and northwest from the core areas. At the headwaters of River Kokemäenjoki is the Lake Kuivasjärvi. In the basin of the lake the pre-state wilderness hunting and fishing territories of the local, ethnically Finnish peoples were established in the pre-historic through to the middle-historical period. Documented sites and uses of lands existed until the late 1500s. It is one of the sites where this endemic use of lands can still be traced relatively clearly. The land uses and wilderness territories have been documented recently on over 20 maps (Mustonen 2016).

A Sámi presence from pre-historic times occupied Kuivasjärvi basin (Salo 1997, 2013b). In the 17th century there was a Swedish Crown-induced arrival of raitiosamelaist (Sámi who had been hired to reintroduce reindeer herding in the basin) (Itkonen 1948a, 1984b). This ‘second’ wave of Sámi to the area, which was by then predominantly a Finnish cultural zone, may have contributed to the rich oral traditions regarding the Sámi of the basin.

Salo (2013a: 102) provides an overview of the development of traditional Finnish land use from pre-history to early historical times. Figure 2 summarises his arguments in the context of the Kuivasjärvi area and shows the borderline between Sámi and Finnish communities. According to Salo (ibid.), the wilderness seasonal village territory has been the basis of the seasonal occupancies. He attributes the concept of family and clan territories to have derived from early German influences. Expansion of the wilderness territories inland starting from 300 AD imported this land use inland. He sees the establishment of village territories to have been a endemic process prior to the establishment of the Crown. These communities owned their forests, beaches, water and natural meadows. The wilderness territories then emerged as the fishing and hunting territories of these village centres (ibid.).

Alhonen, Papunen and Sarkki-Isomaa (1996) explain that the preservation of the Finnish wilderness land uses can be explained by the ‘remote’ location of the Kuivasjärvi catchment area at the headwaters of the River Kokemäenjoki, which is well away from those Finnish areas which earlier switched to farming. Ethnic Finns seem to have arrived in the region from the south in Ikaalinen and Hämeenkyrö. Between the 1200s and 1500s there was an influx of Savonian and Bothnian Finns. The Savonian families included Korhonen, Laurikainen and Kuivanen. The Kuivasjärvi endemic wilderness culture, especially during the period from the 1200s to 1500s was therefore an amalgamation of the ‘Eastern’ Savonian influences as well as the Western tradition. Alanen (1931) determines that while the wilderness land uses ended with the Swedish Crown decisions in the late 1500s, aspects of this cultural continuum led many scholars to have interest in the area in the 19th and early 20th centuries. Valonen (1984) demonstrates that it was here that the wilderness system was the clearest and easiest to document.

One of the most famous of these wilderness societies was called Tarsia (Alhonen et al. 1996). It had established borders from Lake Kankarijärvi to Lake Linnajärvi. It contained endemic sacrificial and sacred places, including the now lost Hiidenvenhe site. Various wilderness territories remained a battleground of families and villages until the 17th century due to the rich resources they contained (hunting and fishing areas). In the 1630s permanent houses started to be established in the Parkano and Kuivasjärvi area, which officially ended the endemic wilderness period for good (Alhonen et al. ibid.). However, the endemic governance of natural resources persisted. Raussi (1966) describes the endemic fisheries and self-governance of the local communities from the early 19th century. Voionmaa (1965) argues that the Finnish villages had land uses and social organisation through family- and ‘clan’ collectives. Valonen (1984) and Salo (1997) confirmed that the various practices of hunting and fishing kept the remnants of the traditional land uses even though the land ownership and uses had been, essentially, amalgamated with the larger polities of the Swedish and Russian Crowns since the late 1500s.

Ecologically the communities had a relatively low impact on the boreal ecosystems, even though occasional overharvests may have happened. Interestingly, Hut tunaen and Meriläinen (1984), using pollen and sediment sampling, provide a view that the traditional slash-and-burn farming would have
caused nutrient and organic loading on the lakes and ponds in areas where it was practiced. While the traditional culture had started to change since the 1500s, the natural environments around the Kuivasjärvi basin were still able to sustain the livelihoods and subsistence lifestyles until the 1930s. The final ‘death punch’ arrived in the form of the industrial forestry and peat production that began in the region in the mid-1940s (Salmi 1946). Figure 3 shows one of the examples of traditional wilderness economy that survived until the 19th century – the traplines for forest birds in Kuivasjärvi that were seen as being more effective than guns.

The traditional-cultural landscapes, filled with oral histories, land uses and occupancies, emerge as ‘vacant spaces’ from the geographies of centralised industries. After the Second World War, Finland was assigned the task of paying war debt to the Soviet Union (Björn 2014). Being a pre-industrial society the options of fulfilling these demands were limited. The state solved this question by allowing VAPO and State Forest Enterprise to initiate a far reaching programme for the production of peat for energy as well as converting the ‘vacant spaces’ of boreal marsh-mires and other areas into industrial forestry by using ditching, clear cuts and drainage of areas (Salmi 1946). Björn (ibid.) documents how the lands and waters were affected by a rapid modernisation of the economy in peripheries from the 1940s. Kauhanen (2014: 303) says this invalidated all reflections of justice. The communal land and water uses inter-mixed with the massive loss of ecosystems, biodiversity and the introduction of a command and control economy were justified as a ‘state need’.

Mustonen (2016) documented the human experience of this period in the Kuivasjärvi villages. Local fishermen, born in the 1930s and 1940s, describe these state actions concerning the natural resources on the state lands around Kuivasjärvi. Agencies did not consult with local communities. In

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**Fig. 1.** A map of wilderness (*erämaa*) sites in the Lake Kuivasjärvi and surrounding areas in the 1500s and 1600s.
the catchment area itself the production for peat expanded in the 1970s. The state monopoly enterprises formed a kind of ‘closed circuit’ – VAPO was able to clear-cut State Forest Enterprise’s forests and marsh-mires and then open them for peat production. All activities could be agreed within the state apparatus, without interference from the public. Kuivasjärvi fishermen stress that this was the ‘politics’ of the time in Cold War Finland. Local communities or people could not protest these actions. The activities and economies of VAPO and State Forest Enterprise were also welded into local politics and local village councils, thus commanding the social power and legitimacy of these activities.

The environmental impact of this rather forced form of modernisation was massive. This is visible in Figure 4, which highlights the peat production areas around the basin. The organic loading of the lakes increased without any controls. Coinciding with the peat production and clear-cut forestry the agricultural practices were industrialised; this included the use of chemical nutrients. This sped the eutrophication process of the Lake Kuivasjärvi. For the environmental justice context, the exclusive uses of watersheds for industrial gains superseded the local and wilderness village uses and rights (Mustonen 2013; 2014a); this resulted in breaching the endemic collective rights these villages have had and partially still have (Voionmaa 1965; Raussi 1966). The wilderness territories were assigned to specific family and hunter uses, but the land base of the areas was seen as collective with the village commons (Lehtinen 2003).

The attached Figure 1 features a geographical analysis of land use in the Kuivasjärvi basin and the surrounding areas for over a decade. It combines oral histories, a literature review and place name investigations to provide a view of the earliest known wilderness territories in the region. These

Fig. 2. Locations of the traditional Finnish houses and known Sámi camps in 1540s in the Lake Kuivasjärvi and surrounding areas.
territories were endemic time-spaces. The remnants of whose land uses were preserved in the Kuivasjärvi territories into the early 20th century. Even in the 2010s elements of these uses of lakes and endemic relationships have been documented in the scientific literature. Since the 1940s, the state energy company VAPO targeted the Kuivasjärvi basin and the neighbouring areas as the major sites of peat production and mining. Natural boreal terrestrial and aquatic ecosystems were seen as non-profitable, empty vacant spaces. They could, according to the state development ideology dominant in the post-World War 2 Finland, be converted into production sites for the industries (Salmi 1946; VAPO 2015). Forest ditches altered the ecological balance and thus wrecked the surviving wilderness economies of the area (fishing and hunting) from the 1950s to the 1980s. This was done in addition to VAPO by State Forest Enterprise and other forestry actors that control large portions of the catchment area of Lake Kuivasjärvi without consultation or, more precisely, without “fair treatment and meaningful involvement” or free, prior and informed consent (Schlosberg 2003; EPA 2015). In the context of EJ, the problem emerges from the unresolved collective land use histories of the wilderness territories. The Swedish Crown solved the issue by deciding in the 17th century that they are to be state lands. Village and local hunter-fisheries farm territories then slowly developed into zoned lands and formed the contemporary municipalities and other units of local state governance in the basin.

The dual land uses of VAPO and State Forest Enterprise in the basin are based on state interpretation that those lands annexed by the Swedish Crown in the 17th century can be used by modern industrial actors for the production of energy and forestry (Donner-Amnell 2003; Lehtinen 2003; Raitio 2003). Viewed from today, this is in breach of EJ in several ways. Firstly, the cumulative environmental impacts of these state actors are still causing pollution to the lakes, rivers and ecosystems of the area (Ebbeson 1996; Lehtinen 2003; Määttä 2003). Additionally, this constitutes a potential breach of Section 20 of the Constitution Act but is beyond the premises of this paper. Secondly, the wilderness lands that the Crown annexed in the 17th century were transferred to the state of Finland in 1917 as state lands.

Fig. 3. An example of a wilderness (erämaa) hunting economy surviving until the early 1900s. The trapline of Kalle Lähdemäki.
(Lehtinen 2003; Salo 2013a). No active claims may be possible to directly regain these ‘public’ lands into local control or management. However, a moratorium of these VAPO and State Forest Enterprise industrial land uses should be considered until their impacts and socio-historical relevance have been properly investigated. The local villages are direct descendants of these wilderness lands, so they should be involved in the modern co-governance of these areas (Carlsson & Berkes 2005). Legally, the state still sees things very differently. The mentality of the ‘vacant spaces’ continues. The state reserves the right to discontinue even the individual rights based on “the event of other situations of emergency” (Section 23; The Constitution of Finland 1999). This leaves it to the state to determine when and in what conditions such actions would happen.

**Case of Linnunsuo marsh-mire in the Jukajoki Basin, North Karelia**

The second case study of the transformation of wilderness territories into the ‘vacant spaces’ of industrial uses comes from the eastern part of Finland. There the Karelian villages constitute the traditional land uses of the area, as is visible in Figure 5, an old map from the 19th century. The absence of roads, infrastructure and large-scale land uses indicate that the wilderness boreal ecosystems and basins are still intact. Virtanen (1950) reviews family use areas, occupancy and seasonal cycles of the wilderness territories of the Karelian communities; this includes the ones located in the villages of present-day North Karelia (where the ethnic composition of villages is mixed due to the changes in mid-17th century when the Karelian residents were replaced in many places with Savonians arrivals;
see Saloheimo 1986; Björn 1991). Savolainen (1979) describes the community life using visual histories in Iломantsi from late 19th to early 20th centuries. Härkönen (2006) provides a personal memoir and community-based account of *Lutin tasavolta*, a remote wilderness community in Iломantsi, that includes the seasonal cycles and land uses.

One of the earliest Karelian, and later Savonian-Karelian, villages is Selkie in present-day North Karelia. Records first indicate it existed in the early 16th century (Saloheimo 1986; Björn 1991, 2014). Within the Selkie territory there is Linnunsuo, which is a “Marshmire of Birds”. Most likely this toponym indicates the role of forest grouse and capercaillie as the central birds of spring (rarer) and the autumn harvest for the community. Rinne (1947) stresses that the village territories ‘owned’ their communally used hunting areas. The endemic uses of the Linnunsuo mire included summer and autumn berry picking, moose, forest hare and beaver hunting as well as seasonal duck and geese harvests. Saloheimo (1986) indicates that the Jukajoki basin was a site of competition for natural hays in the 16th century between Selkie and Heinävaara villages. At that time the river was known as Heinäjoki (River of Hay). In later times mosses were collected from the Linnunsuo mire for subsistence farming as dry beds for cows (Nokelainen 2014). Sites of tar production are at the edges of Linnunsuo. A winter road crossed Linnunsuo in earlier times.

Linnunsuo is a part of the Jukajoki river basin and surrounded by Kylmäsuo and Töppösuo marshmires, which still contain intact nature. A special feature of the area is the iron sulphates in the soil, which once dried form acidic discharges. Up until the early 20th century both oral and written histories indicate that the levels of ecological disturbance remained fairly low or took place in the context of subsistence farming, fisheries and the small-scale harvest of timber texts. Huttunen and Meriläinen (1984) make the case that slash-and-burn farming would have increased organic loading and nutrient flows to the waters. Iron collection towards the end of the 19th century represents one of the first larger-scale harvests of natural resources from the watershed (Björn 1991). Things were about to change towards the end of the 1930s and in the 1940s with the Second World War looming on the horizon. In terms of socio-ecological system, there was a great shift in the late 1940s when families arrived from the ceded Karelia after the Continuation War and were re-settled along the Jukajoki River (Palomäki 1960). They cleared new fields and farm sites from the forests in the watershed.

The 120 hectare Linnunsuo marsh-mire was purchased by VAPO for peat production in the early to mid-1980s. Prior to this the marsh-mire had been partially ditched as a part of the state forestry programmes (Nokelainen 2014). The site was seen as a ‘vacant space’ for development at the time as is visible in Figure 6.

Cultural geographer Nokelainen (2014) traces the development and oral histories of the contemporary villagers at the time of development. Selkie village council was in favour of the development (in the early 1980s). Landowners were not invited to the process. Residents remember that VAPO purchased the lands ‘cheaply’ and indicated that if the landowners would not sell they would be ‘forced to sell’. Nokelainen (ibid.: 43) indicates that the company intimidated the local people: “VAPO acted without any remorse against the villagers who did not know any better. Only a few individuals had the courage to resist the company.” Peat production on the site continued from the 1980s to 2010. A turning point came in the summer 2010 when an acidic discharge was released from the VAPO site, which killed the fish in Jukajoki River. This led the company to stop their operations. In 2011 VAPO decided to install a man-made wetland unit, 120 hectares, to control the acidic discharges and organic loading. Between 2012 and 2016 the Linnunsuo wetland developed also into a nationally relevant bird habitat; especially for waders. During the open season the area is visited daily by bird-enthusiasts. The area is co-managed so that Selkie hunters can harvest a few ducks and geese after 15 September when most of the waders have departed for migration.

This case of rare development constitutes a post-industrial restoration of a previously ‘lost’ marsh-mire as the satellite image portrays in Figure 7. It provides for the discussion here a third stage: from traditional land uses to industrial ‘vacant spaces’ of ecological damages into a ‘post’-period of restored wetlands of ecological importance. In Linnunsuo the principles of EJ are somewhat met with progressive attempts to address the damages created by a top-down industrial land use. While the original habitat and land uses have been lost, Linnunsuo provides a third stage, of which there are not many comparative reflections, of a restored wetland that provides for recreational and hunting values.
The issues of land and water equity problems in Finland persist to this day. They come in at least two different forms: firstly, the indigenous territories of the Sámi and the state interpretation to to ‘own and use them’; and, secondly, as the remnants of the traditional Finnish wilderness territories that the Swedish Crown annexed in the 17th century (Lehtinen 2003). Cases of equitable solutions exist, such as the relative village autonomy of the island Ulko-Kalla, even though they are nationally less known (Käki 1969). This research investigates two cases of community(-controlled) commons. They are territories, habitats and socio-cultural areas that have been subjected to state power and actions since 1917. This impact intensified increasingly from the mid-1940s and continues for the most part today (see also Vilkuna 1974). These state agencies, State Forest Enterprise and VAPO, have been discussed in this paper to illustrate the on-going problems of these breaches of EJ, unclear land stewardship and user rights (Raitio 2003).

From the viewpoint of environmental justice, both in the international and domestic context and in part also from the Constitution viewpoint, the state of Finland is an undefined actor in those lands, which may possess pre-state collective rights (Berger 1999; Lehtinen 2003, 2009; Lehtinen & Rannikko 2003; Schlosberg 2007; EPA 2015). They have (had) different values for which they suffer (Berger 1999). The modern state has defined the individual rights of the area and reserved the definition of collectives to be a part of the state apparatus and/or limit and extinguish such rights (Sec. 23; The Constitution of Finland 1999). What could be the possible solutions to these problems? Lehtinen (2009: 538) pinpoints the “non-predictable clustering of interventions constantly displacing the individuals and their communities.” This means that the assault of impositions continues. Local communities continue to remain in the margins as victims or at best as receivers of global and state socio-economic and natural resources decisions. According to Raitio (2003) modern democracy is a poor vehicle for the participatory rights of the indigenous and local-traditional communities (Smith 1999; Battiste 2000; Anaya 2004; Mertens et al. 2013). They remain special cases. Academically, a critical self-reflection of priorities is thus in need (Lehtinen 2009). Ervasti (2012: 165) proposes the need to negotiate these conflicts towards a solution.

Fig. 5. Old map of the Jukajoki basin from the late 1800s.
In the field, land use and occupancy studies, including oral history documentation in some Sámi and Finnish villages, have proven to be meaningful vehicles to make invisible histories visible. Moreover, similar steps as what Berger (1977, 1999) did in Northern Canada through community hearings in the 1970s could be initiated in Finland. These measures should include:

1. Specifically revisiting the events, processes and all relevant social issues surrounding the pre-state uses of lands in the relevant communities. It is expected that such a new inquiry should also lead to a reassessment of the impact on these communities.

2. Recognition of the conflict of interests between the Sámi, the indigenous peoples of Finland, and the state over the land and water ownership, indigenous rights and indigenous governance of the Finnish part of Sápmi, which is the Sámi homeland. The Finnish state has the obligation it inherited from the Swedish and Russian Crown to look after the rights of the Sámi in the areas they live. The Sámi of Finland have never ceded any of their rights or title to their lands away in an agreement with the state.

3. All industrial activities should be ceased until such a time that the rights and relevant other processes have been cleared. A full moratorium should come into effect immediately.

4. Following the models developed by Berger (1977) and others, a full community-based hearing and documentation process should be initiated regarding the events surrounding the situation in Finland. An international Commission of neutral parties should be called to monitor this process.

5. The aim of all these measures should be a long-term agreement between the state and the Sámi regarding the rights and the title to the waters, land, air and all things of Sápmi as well as the

Fig. 6. Peat production on Linnunsuo 1805–2011.
equitable status of local Finnish villages.

6. In terms of addressing the ecological problems of the industrial land uses, the case of Linnunsuo as a post-production man-made wetland with significant ecological values and community engagement, provides a very interesting case model to be implemented in other areas suffering both socially and ecologically from the negative impacts of peat production.

For the Sámi it seems that their situation calls for restitutive rights to amend the historical loss of lands. For the Finnish areas, due to the cultural fragmentation, collaborative management may provide possibilities for the new governance of resources where the issues can be decided jointly (Carlsson & Berkes 2005). These measures could, in their part, answer the urgent need of a lack of environmental justice in the Finnish and perhaps also in the Sámi cases, and they could solve the unclear legal status of these community commons through such land reform of co-management (Schlosberg 2007).

**Conclusion: community commons – reform of land**

This article has discussed in brief the notion of environmental justice and its emerging definitions in the Finnish context (Lehtinen 2003, 2009; Rechtschaffen & Gauna 2003; Schlosberg 2007; EPA 2015). ‘Fair treatment and meaningful involvement’ has been stressed in this interpretation. It has been implemented in two cases – Lake Kuivasjärvi basin and the Linnunsuo marsh-mire – and has included a review of the indigenous Sámi territories. The environmental justice concept has been reviewed against the fundamental legal document of the Republic of Finland, the Constitution of Finland, and domestic literature (Donner-Amnell 2003; Lehtinen 2003, 2009; Lehtinen & Rannikko 2003; Määttä
2003; Raitio 2003; Ervasti 2012). The constitutional sections 20, 22 and 23 are included here to demonstrate both the individual rights of citizens regarding the environment and the state capacity to limit such rights. Then, by using geographical and literature analysis interpreted from territorial maps, two cases of collective, pre-state (before year 1917) land uses and rights have been presented. They included firstly the wilderness uses of lands in Kuivaa and secondly the Linnunsuo marsh-mire with reference to Sámi siida territories. They are, and have been, community commons and land use areas established prior to state rule (Vilkuna 1971; Aikio 1977; Nokelainen 2014).

It is argued that these pre-state cases have different, endemic values that constituted and partially still constitute their time-spaces and uses of territories. They are collective uses of lands. In nation-state times (after year 1917) state agencies have interpreted that they own and therefore can utilise and decide on the uses of these lands. Companies have seen these areas as ‘vacant production spaces’ to be developed, or in the case of Sámi home area as places to be conserved in parts. This constitutes a breach of environmental justice as understood in the modern context; especially in regard to ‘fair treatment and meaningful involvement’ (Schlosberg 2007; Nokelainen 2014; EPA 2015). However, the concepts and interpretations of environmental justice come in many forms, and it continues to be an evolving framework. The applicability of North American and global definitions in regard to a Finnish case and argumentation remains to be seen.

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References

Aikio, P. (1977) Saamelaisen ekosysteemin murtuminen Lapin paliskunnassa. Suomen Luonto 2.
Aikio, P., Aikio, A., Mustonen, K. & Mustonen, T. (2010) Drowning reindeer, drowning homes: indigenous Sámi and hydroelectric development in Sompio, Finland. Snowchange Cooperative, Kontiolahti.
Alanen, V. (1931) ”Satakunnan Lappi” – Entisen Parkan lonnosta ja varhaisimmasta asutuksesta. In Satakuntalainen osakunta (ed). Satakunta – kotiseutututkimusia IX, 81–142. Satakuntalainen osakunta, Vammala.
Alhonen, P., Papunen, P. & Sarkki-Isomaa, S. (1996) Ikaalisten entisen emäpitäjän historia I vuoteen 1640. Honkajoen kunta, Ikaalisten kaupunki, Jämijärven kunta, Kankaanpään kaupunki, Kihniön kunta ja Parkano, Vammala.
Anaya, J. (2004) Indigenous peoples in international law. Oxford University Press, New York.
Battiste, M. (2000) Reclaiming indigenous voice and vision. University of British Columbia Press, Vancouver.
Berger, T. (1977) Northern frontier; northern homeland – The report of the Mackenzie Valley pipeline inquiry. Parts I and II. Minister of Supply and Services, Ottawa.
Berger, T. (1999) A long and terrible shadow: white values, native rights in the Americas since 1492. University of Washington Press, Seattle.
Björn, I. (1991) Suur-Ilomantsin historia: Enon, Ilomantsin ja Tuupovaaran historia vuoteen 1860. Enon, Ilomantsin ja Tuupovaaran paikallishistoriatoimikunta, Pieksämäki.
Björn, I. (2014) Rajan maakunta: Pohjois-Karjalan historia 1939–2014. SKS, Helsinki.
Carlsson, L. & Berkes, F. (2005) Co-management: concepts and methodological implications. Journal of Environmental Management 75(1) 65–76. https://doi.org/10.1016/j.jenvman.2004.11.008
Cram, F., Bagele, C. & Mertens, D. (2013) Journey begins. In Mertens, D., Cram, F. & Bagele, C. (eds.) Indigenous pathways into social research: voices of a new generation, 11–40. Left Coast Press, Walnut Creek, CA.
Donner-Amnell, J. (2003) Uusi, kestävä ja oikeudenmukainen Suomi? In Lehtinen, A. & Rannikko, P. (eds.) Oikeudenmukaisuus ja ympäristö, 130-159. Gaudeamus, Helsinki.
Ebbeson, J. (1996) Compatibility of international and national law. Iustus Förlag, Uppsala.
[EPA] Environmental Protection Agency (2015) Environmental justice. <http://www.epa.gov/environmentaljustice/> 26.05.2016
Salmi, M. (1946) Pohjois-Satakunta; eräs polttoturveteollisuutemme tuleva keskupaikka. In Valonen, N. & Nikkilä, E. (eds.) Satakunta – kotiseutututkimuksia XII, 90–102. Satakuntalainen osakunta, Vammala.
Salo, U. (1984) Esihistoriallisen asutuksen jatkuvuudesta Suomen rannikolla. In Societas Scientiarum Fennica (ed.) Suomen väestön esihistorialliset juuret, 175–190. Societas Scientiarum Fennica, Oulu.
Salo, U. (1997) Ihmisen jäljet Satakunnan maisemassa: kulttuurimaisemman vuosituhannet. SKS, Helsinki.
Salo, U. (2013a) Luonto ja kulttuuri: muinaissuomalainen elämänmäritys. Amanita, Somero.
Salo, U. (2013b) Tuoni, Pohjola, taivas: arkeologian ja kalevalaisten runojen tuonelat. Amanita, Somero.
Saloheimo, V. (1986) Pohjois-Karjalan historia 2. Karjalaisten kulttuurin edistämissäätiö, Joensuu.
Savolainen, M. (1979) Ilomantsin kyläkuvaajia. SKS, Helsinki.
Schlosberg, D. (2007) Defining environmental justice: theories, movements and nature. Oxford University Press, New York. https://doi.org/10.1093/acprof:oso/9780199286294.001.0001
Sheridan, J. & Longboat, R. (2006) The Haudenosaunee imagination and the ecology of the sacred. Space and Culture 9(4) 365–381. https://doi.org/10.1177/1206331206292503
Smith, L. (1999) Decolonizing methodologies. Zed Books, New York.
Tanskanen, M. (2000) Näkyvän takana. Tutkimus metsäojitetun suomaiseman kulttuurisuudesta. Joensuun yliopisto, Joensuu.
The Constitution of Finland. (1999) 731/1999 English. <http://www.finlex.fi/en/laki/kaannokset/1999/en19990731>. 25.05.2015.
Thrift, N. & May, J. (2001) Introduction. In Thrift, N. & May, J. (eds.) Timespace – Geographies of temporality, 1–46. Routledge, London.
Tukes (2015) About Tukes. <http://www.tukes.fi/en/Tieto-meista/About-us-something/>. 26.05.2015.
Tunón, H., Kvarnström, M. & Malmer, P. (2015) Report from the project: Indigenous and local knowledge in a scoping study for a Nordic IPBES assessment. Swedish Biodiversity Center, Uppsala.
Valonen, N. (1984) Vanhoja lappalais-suomalaisia kosketuksia. In Societas Scientiarum Fennica (ed.) Suomen väestön esihistorialliset juuret, 73–96. Societas Scientiarum Fennica, Oulu.
Vapo (2015) From firewood to a pioneer of bioenergy. <http://www.vapo.fi/en/vapo-group-2/our-story>. 20.11.2016.
Vilkuna, K. (1971) Mikä oli lapinkylä ja sen funktio. In Sihvo H (ed). Kalevalaseuran vuosikirja 51: Vanhaa ja uutta Lappia, 201–238. WSOY, Vaasa.
Vilkuna, K. (1974) Lohi – Kemijoen ja sen lähistöineen lohenkalastuksen historia. Otava, Keuruu.
Virtanen, E. (1950) Itä-karjalaisten kalastusoikeudesta ja -yhtöistä: Etnososiologinen tutkimus. Kansatieteellinen arkeisto VIII, Suomen muinaismuistoyhdistys, Helsinkin.
Voionmaa, V. (1965) Suomen karjalaisten heimon historia. WSOY, Helsinki.