# The right to mine?

# Discourse analysis of social impact assessments of mining projects in Finnish Lapland in the 2000s

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### **ABSTRACT**

Lapland, the northernmost county of Finland, has promising mineral deposits and over half of all Finnish mining operations. In the 2000s two new metallic mineral mines were opened in Lapland, while three projects are undergoing the environmental impact assessment procedure (EIA). This process also involves a social impact assessment (SIA) that reports on the expected impacts of mining on the host communities. SIAs influence the permit process and the ensuing activity and officially represent the views of the local people in the planning and decision-making process.

In this study, social impact assessments are examined by discourse analysis introduced by Maarten Hajer. The document analysis identified three recurrent story lines shared by all the investigated SIAs. A story line combines elements from different domains and suggests a common understanding on an issue. The second phase of the discourse analysis was to analyse these story lines in the context they were produced.

The first story line sees mines as the only way to develop the remote regions of Lapland. Large-scale mining projects are seen as a solution to economic problems, unemployment and out-migration. The second story line stresses the importance of mines in supporting the "general interest" of the whole province. After the Second World War, the intensive use of natural resources was justified by national interests; now it is justified by the interests of the region. The third story line argues that nature has no intrinsic value – it is merely a resource to be used. With the help of such story lines, SIAs grant the right to mine in Lapland.

Keywords: mining, social impact assessment, story line, discourse analysis, Lapland.

#### INTRODUCTION

It has long been known that Finnish Lapland is rich in minerals. The first gold rush swept through the northern parts of Lapland already in 1868, but large-scale mining did not start to develop until Finland joined the European Economic Area (EEA) in 1994 and the EEA treaty allowed international mining companies to start operations in Finland. Since then, promising mineral deposits have been found in Eastern and Northern Finland and in Finnish Lapland in particular, the northernmost county of Finland, covering almost one third of the Finnish land area (Regional Council of Lapland 2013). According to the Finnish Safety and Chemicals Agency (2013), the surveillance and permit consideration authority in mining in Finland, more than half of all Finnish mining operations are located in Lapland. In the 2000s, five new metallic mineral mining projects have started an environmental impact assessment process in Lapland and two of these have already started production: Agnico Eagle opened the Kittilä gold mine in 2009, while First Quantum Minerals launched the Kevitsa copper and nickel mine in 2012.

The expectations are even higher. The Regional Council of Lapland estimated in the regional industrial programme in 2012 that the mining industry's revenue would rise by more than tenfold and the number of jobs would more than triple in a decade. Since then, the mining industry has faced financial problems, mineral prospecting has decreased and there are currently no ongoing mining construction projects in Finland (Ministry of Employment and the Economy, 2014). Despite this recent downturn, it is likely that the mining industry will continue to expand in the long run. For example, the European Union needs to increase domestic production of critical raw materials such as metallic and high-tech metals (COM, 2008; COM, 2013).

A metallic mineral mine is a huge industrial project. It demands immense investment, hundreds of employees, and the building of infrastructure and new services. Mining as a new industrial project brings inevitable changes to the host communities. These changes are analysed in social impact assessments (SIA) that focus on "intended or unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions" (International Principles for Social Impact Assessment 2003).

Currently in Finland, social impacts of large mining projects are assessed as a part of the environmental impact assessment (EIA). The Environmental Impact Assessment Act (EIA Act) came into force in Finland in 1995. Since then, it has been obligatory to assess the environmental impacts of large projects such as open-pit mines with an area of more than 25 hectares or if extracted material amounts to more than 550,000 tonnes per year (Hokkanen 2001, 110–111; Kokko et al. 2014, 21; Pölönen et al. 2011). Project developers, such as mining companies, draw up an assessment programme where the overall frame of assessment is reported. Authorities may give statements and other stakeholders opinions about the plan, followed by a statement on the assessment programme by the coordinating authority. The results and findings of the process, typically conducted by a consultant firm, are published in an assessment report. It is possible to submit statements and opinions also after this. The statement issued by the coordinating authority ends the EIA procedure as such and is followed by a permit procedure making use of the data produced in the EIA process. (Kokko et al., 2014, 21-23.)

What this procedure means in practice is that social impacts are assessed before the mining permit process and the ensuing activity. In this sense, the whole concept of a social impact assessment is misleading. SIAs do not tell us about real impacts in the daily lives of people and communities in different phases of the mining project (see Kokko et al., 2014, 21-40; Suopajärvi, 2013). Instead, they are about local people's *expectations* of the mining project; hopes and fears of the changes caused by the project in local life.

Despite this inadequacy, SIAs have a substantial role in the decision-making process of a mining project. Whether or not a mine opens is decided in a permit process where the social impacts are not assessed. Hence, social impact assessments come to represent local people in the decision-making process. "There are no longer any innocent words", says Pierre Bourdieu (1991, 40), referring to the importance of symbolic constructions. Although he discusses language and symbolic power on a more general and abstract level, the idea that an understanding of the world and thus the world itself is a result of symbolic struggles (or domination) is a relevant frame to keep in mind also in this case study. Social impact assessments are instruments of knowledge and communication, which suggest legitimate understandings of meaning of the mining projects for the local people. They are legitimate because the SIAs are the work of specialists and they are part of a legally defined environmental impact assessment procedure, which in Bourdieu's language could be seen as a relatively autonomous field of production and circulation – the field of academically-trained experts and consultants, authorities and a mining company, which funds the whole procedure. (Bourdieu 1991, 163–170.) It

therefore pays to ask what kind of representations are given to mining projects in SIAs that have the power to speak for the local people in this relatively autonomous planning process. The article is based on discourse analysis of social impact assessments in all five metallic mineral mining projects launched in Finnish Lapland in the 2000s.

The article is structured as follows: the next section introduces the cases, the discourse analysis method developed by Maarten Hajer (e.g. 1995; 2003; 2006) and the data used in the research. I will then briefly describe the economic development of Finnish Lapland in recent decades before moving on to discuss the three main story lines that frame the general meaning of mines: (1) mines are the only way to keep remote regions alive, (2) mining is in the "general interest" of Lapland, and (3) the natural environment is a mere resource for economic development. The last section contains the conclusions.

# CASES, DATA AND METHOD

In this article I analyse social impact assessments of five new metallic mineral mining projects launched in Finnish Lapland in the 2000s. Of these five projects, two have led to the opening of a mine: Kittilä mine and Kevitsa mine. Both of these have already conducted new EIA processes with regard to extending production capacity. The Kittilä gold mine (formerly known as the Suurikuusikko mine) opened in 2009. It is run by Agnico-Eagle Finland, which completed an EIA on expanding operations in 2012 that would increase the production capacity from 5,000 kilograms to 7,500 kilograms of gold per year. The Kevitsa multi-metal mine was opened in 2012, but even before this, Kevitsa Mining, part of First Quantum Minerals, initiated an EIA linked to increasing the size of the mining concession and boosting output. Until 2005, Arctic Platinum Partnership was engaged in planning the Suhanko mine to extract platinum group metals in Southern Lapland, but the project was postponed because of feasibility problems (Helsingin Sanomat, 29 April 2005). In 2012, Gold Fields Arctic Platinum started a new EIA process concerning the expansion of mining in the Suhanko area. The process was completed in March 2014 by the statement of the coordinating authority (Regional Centre for Economic Development, Transport and the Environment in Lapland). Also the Hannukainen iron mine, planned by Northland Resources, has completed the EIA process, but the project was put on hold in 2014 because the company had financial problems. Near the Russian border, Yara International is planning a phosphorus and niobium mine Sokli (see e.g. Nurmi 2010).

MINE	COMPANY	ORE	MUNICIPALITY	EIA REPORT
Suurikuusikko -> Kittilä mine	Riddarhyttan Resources Ltd	Gold	Kittilä	June 2001
Kittilä mine, extension	Agnico Eagle Ltd	Gold	Kittilä	May 2012
Suhanko I	Arctic Platinum Partnership Ltd	PGE, nickel, copper, gold	Ranua, Rovaniemi (Tervola)	October 2003
Suhanko II	Gold Fields Arctic Platinum Ltd	PGE, nickel, copper, gold	Ranua, Rovaniemi (Tervola)	October 2013
Kevitsa	Scandinavian Minerals Ltd	Nickel, copper, PGE	Sodankylä	August 2006
Kevitsa mine, extension	First Quantum Minerals Ltd	Nickel, copper, PGE	Sodankylä	April 2011
Sokli	Kemira Growhow Oyj/ Yara International ASA	Phosphorus, niobium	Savukoski	May 2009
Hannukainen	Northland Resources Inc.	Iron, gold, copper	Kolari	August 2013

The data consist of 97 pages of eight environmental impact assessment reports in five mining projects (see table 1). The analysis concerns the chapters titled *Social impact assessment* or *Socio-economic impact assessment* in the EIA reports. The data were analysed using Maarten Hajer's discourse analysis approach (Hajer 1995, 2002, 2006; also Hajer & Versteeg 2005). Social impact assessments may be seen as discussions as any other oral or literal utterances. Discussion is the object of analysis, whereas discourse is an ensemble of ideas, concepts and categories through which meaning is given to phenomena and which is produced and reproduced through an identifiable set of practices (Hajer 1995, 60; Hajer 2002, 63; Hajer 2006, 67; also Hajer & Versteeg 2005, 175–176). Hence, discourse analysis has two tasks: (1) to analyse the content of the discussion and (2) to analyse the practices where the discourse is (re)produced.

In this article, I will not analyse discourse practices as such. In the SIAs examined, the data used in the reports are gathered by means of questionnaires, interviews and focus group discussions among local people, but it would demand a study of its own to grasp, for example, the democratic quality of the SIAs; how inclusive, open, accountable, reciprocal and sound the SIA processes in different cases have been (Hajer & Versteeg 2005, 176). Instead, the focus of the article is in identifying discourses or general argumentative rationalities and meanings that are given to the mining projects in the SIAs. As Marten Hajer and Wytske Versteeg (2005, 176) argue, "for interpretative environmental policy research, it is not an environmental phenomenon in itself that is important, but the way in which society makes sense of the phenomenon".

The first phase of the study was document analysis. Because SIAs are written in a scientific style, there was no use to search for myths or metaphors as suggested by Hajer, but instead there were recurrent *story lines* going through all the SIAs. A story line is a construction that answers the question: what is this all about? They are "narratives on social reality through which elements from different domains are combined and that provide actors with a set of symbolic references that suggest a common understanding". (Hajer 1995, 62; 2003, 103–105; 2006, 69.) Different domains were indeed combined in the data. The discussion about a mine, about a concrete industrial project, was not a discussion about just a single mining project. It drew on different domains of the social world such as regional development, natural resource management, periphery-centre dichotomy, division between private and general interests, and so on. In the document analysis I have read the social impact assessments in environmental impact assessments, mainly posing this simple question: what is mining about? What kind of meanings are given to mining in these discussions and how? What kind of argumentative

regularities are repeated in the different SIAs? What kind of "condensed statements" summarise such a complex phenomenon as mining and its impacts on local communities and environments (Hajer 2006, 69). Three identified story lines are described in the next sections with examples from the studied EIA reports.

The second phase of the discourse analysis was to examine story lines in the context they were produced; "what is the historical, cultural and political context in which a particular account of 'truth' arises?" (Hajer & Versteeg 2005, 176). Discursive constructions emerge in socio-political practices and they also vary and change (Hajer 2006, 66–67). Hence, I have attempted to explain why these story lines could arise in mining SIAs in Finnish Lapland in the 2000s by using research literature and regional statistics. But before an analysis of the story lines, I will briefly discuss economic development in Lapland in recent decades.

# RESOURCE EXTRACTION, TOURISM AND PUBLIC SERVICES: REGIONAL DEVELOPMENT IN LAPLAND

Nature and natural resources have been the foundation of economic development and well-being in Lapland. After the Second World War, forestry and the forest products industry took a leading role in the Finnish economy both regionally and nationally, and Lappish forests provided timber for production (Lehtinen 2006, 33; 215; Raitio 2008, 27–32). Further, one of the largest hydroelectric power projects in Europe was launched in Lapland immediately after the war. A scheme for harnessing the river Kemijoki started at the end of the 1940s and is still underway. Kemijoki Ltd., a stateled company founded in the 1950s, is planning its 17th hydropower plant in the river basin, and there are two large water reservoirs in the upper reaches of the river system. Logging and the construction of hydropower have historically provided a living for Laplanders, along with small dairy farms, reindeer herding and a subsistence economy based on fishing, hunting and berry-picking. (Suopajärvi 2003.)

At the end of the 1960s, Finnish Lapland underwent a rapid restructuring of its economy: mechanisation of logging and construction reduced the need of labour, and small farms could not provide a living for the post-war baby boom generation. Industry and refining did not develop significantly in the region because of long distances, a small market area and a lack of capital. Hence, the modernisation of production did not lead to new employment opportunities; instead, Lapland became

a province of out-migration. During the so-called Big Move of 1966–1970, almost 5% of the Lappish population emigrated to work in Swedish factories or out-migrated to Southern Finland (Kerkelä 1998; Regional Council of Lapland 2011b; see also Snellman 2005, 99–101).

While the extractive industries declined, the service sector began to grow from the 1960s onwards. The structures of the welfare state were put in place, and municipalities developed their services, but throughout the 1970s Lapland was an area of unemployment and a declining population. Better prospects emerged during the 1980s, when large-scale tourism started to emerge. Since then, tourism has been the fastest-growing private-sector industry in the province, thanks to the pristine environment, which is the main reason for travelling to Lapland (Jokimäki et al. 2007, 13; Regional Council of Lapland 2007, 2011a).

In the 2010s, Finnish Lapland is an example of an Arctic region where the traditional economy is in decline (about 5% of the employed population mainly in agriculture, in milk production in 2010) and the service sector dominates (72%). The share of industry is 20%. The public sector, consisting mainly of municipalities, is a major employer, offering almost 40% of the jobs in the county. (Regional Council of Lapland 2014; see also Duhaime 2004, 69–84; Megatrends 2011, 58–65.) Hence, mining as a developing industry is welcomed to the county in regional programmes and strategies (Regional Council of Lapland 2012, Regional Council of Lapland 2014).

#### MINES ARE VITAL FOR THE FUTURE OF RURAL LAPLAND

The main story line is that mines are essential as a livelihood and in terms of the future of the remote regions of Lapland. The reasoning is that mines bring new job opportunities, increase migration into the region and give a boost to all sectors of business and industry. Mining projects also support the maintenance and development of public services.

Without substantial investments and development it is difficult to increase employment and promote economic growth. Thanks to new jobs and increased purchasing power, the pressure to reduce services will diminish. New production activity will also reduce the willingness of active and skilled workers to move away from Kittilä municipality. (Suurikuusikko EIA report 2001, 86.)

Potential increases in the number of employees and in the size of the population brought about by the mine are expected to profoundly affect the local way of life at the municipal level, as well as to improve the provision of and access to municipal and commercial services. (Kevitsa EIA report 2006, 292.)

This reasoning stems from the fact that Finnish Lapland has been and still is an area of unemployment and weak economic development compared to the rest of the country. Unemployment has consistently been several percentage points higher than the Finnish average. The average unemployment rate was 13% in 2011 and 2012, compared with nine per cent in Finland as a whole. High unemployment rates have led to outmigration: young people are moving to the more prosperous South where there are better job opportunities. Lapland has been a region of out-migration for decades. The population number was at the lowest level since 1953 at the end of the year 2012, with under 183,000 people living in Lapland and the share of elderly people rising. (Regional Council of Lapland 2011b; Regional Council of Lapland 2013.)

This story line also has a historical background in Lapland. In the last phases of the Second World War, during the so-called Lapland War, the retreating German troops applied a scorched earth tactics, destroying infrastructure such as roads, bridges, electricity and telephone lines, burning homes as well as public buildings. In some regions, 90–95 per cent of all buildings were destroyed (Tuominen 2005, 152). Hence, life in post-war Lapland started from zero. The Finnish government was anxious to get the wheels of industry turning again and needed Lappish natural resources for economic development. Because of a lack of private capital, the state took the leading role in the utilisation of natural resources in the North. As a result, Lapland became a significant producer of timber and hydropower. Large logging sites and the construction of hydropower plants to harness Europe's largest river, Kemijoki, were the main employers for decades after the war, alongside small-scale farming, reindeer herding and a subsistence economy (see Suopajärvi 2003, 209–213).

The story line is therefore a logical continuation of modern thinking: large-scale utilisation of natural resources is seen as the only way to develop a sparsely populated Lapland. Nature is understood as a resource, industrial productivity is the mode of production and the idea of development is based on rational calculations concerning workplaces, employment rates, population development, tax revenue and the creation of economic growth (see Beck 1992, e.g. 200–201; Beck & Lau 2005, 525–540; also e.g. Egri 1999, 59–61). In sum, the story line about mines bringing vitality is not only

familiar but also attractive and inspires a sense of optimism about the prospects of a region currently in decline.

In the immediate vicinity of the project area are several village communities that are at risk of withering away if no new jobs are created in the region. These villages include Portimo, Narkaus and Mauru-Peurajärvi. (Suhanko EIA report 2003, 201.)

According to the SIA, the perceptions of what is desirable vary, but no positive effects will be realized if the mine does not come into being. Overall, it is likely that the independent development of the region as a residential and working environment will continue to change for the worse because of a shortage of farming and other rural sources of livelihood. (Kevitsa EIA report 2006, 149.)

In this story line, there are no opportunities for positive development in rural Lapland other than mines. Some SIAs state that mines will harm reindeer herding, one of the region's traditional occupations, but reindeer herding is considered to offer a minimal number of jobs.

There has been little discussion on how mining and the associated increase in heavy vehicle traffic will affect tourism, the fastest growing industry in Lapland since the 1980s. For example, between 1993 and 2004, registered overnight stays increased by 2.7% per year, reaching a total of more than 2 million in 2005. Since then, the number of registered overnights has remained at the level of 2.1–2.2 million per year, thanks largely to the pristine environment that draws people to the region (Jokimäki et al. 2007, 13; Jokinen & Sippola 2007; Regional Council of Lapland 2007; 2011a; Suopajärvi 2003, 211–213; Tuulentie 2007). Clearly, one reason for the lack of debate about the possible impact of mining on tourism is that the planned Hannukainen iron mine is the only mine to be situated within a short distance (10 km) of an important tourist resort, Ylläs, which hosted about 324,000 overnights of tourists in 2009 (Regional Council of Lapland 2011a).

Story lines are not fixed. There may be variations in the way in which a story line frames an issue (e.g. Hajer 2006, 69). For example in the case of the Sokli mine, which would be sited near the Russian border, the SIA expresses doubts about the mine's potential benefits, given especially that there was an alternative site on the Russian side for processing phosphorus ore, the Kovdor concentrator plant.

In the SIA, a fear is expressed that the project will have a minimum impact on employment on the Finnish side. Summarizing the social impacts of the alternative reveals a strong suspicion that "natural resources are profitably exploited elsewhere, while the pollution remains in Finland". (Sokli EIA report 2009, 10.)

This case-specific story line ties in with the discussion that Lapland may become nothing more than a supplier of raw materials to the mining industry and that hopes of a prosperous future will be crushed. This theme also emerges in general discussions about the uses of natural resources in the North: critics claim that the benefits of resource extraction will not stay within the region. Hence, local people will become increasingly dependent on decisions made outside the region (e.g. Arctic Human Development Report 2004, 71–72; Lehtinen 2006; Strauss 2012, 96–99).

There is also a concern that mines will employ mainly non-resident workers, who will never belong wholly to the community. This fear is expressed especially in cases where the lifetime of the mine is assumed to be quite short, 20 years or less.

The problem may present itself if jobs are not reserved for the people who live in the municipality but [are] instead given to non-resident workers, who are feared to cause social problems. An important way to reduce problems and strengthen trust is open communication between the mine owners and local people. (Kevitsa extension EIA report 2011, 292–293.)

To conclude, the story line about mines bringing prosperity to rural Lapland stems from the fact that Lappish people and authorities of small rural municipalities have been struggling with economic problems. It appeals to communities that for decades have suffered from unemployment and out-migration of young people. Hence, new employment opportunities and tax revenues become the most valued aspect of a mining project. On the other hand, non-resident workers are opposed and there is a concern that global mining companies do not employ local people or care for the future of the communities in which they operate. Despite these concerns, the main idea of the story line is that mines offer hope and trust in the future to local people, communities and small rural municipalities.

#### MINES SERVE THE GENERAL INTEREST OF LAPLAND

Social impact assessments report the concern of people living in the vicinity of a planned mine that the mine could pollute the surrounding area. Such by-products of mining as noise, dust and possible toxic substances may have negative impacts on water systems and pose risks to people's health.

On the basis of this study, the most significant drawbacks of the mine are health and safety risks. The residents have a lot of uncertainty about the effects of the mine on the surface and ground water in their residential area. (Suhanko EIA report 2003, 168.)

A story line not only defines the issue in question but also creates the social and moral order of a situation (Hajer 1995, 64). The story line of general interest encourages – and even obligates – local people to sacrifice their natural environment and private interests for the sake of the general good. In the studied SIAs, general interests refer to the provincial level, that is, to the region of Lapland.

In summary, based on the results of the interviews, it can be concluded that the beneficiaries of the Kevitsa mine are not only the employees of the mine and the business community, but also a strengthened regional economy as a whole. Naturally, the mining company will draw benefit, but the benefit will add to the common good via a number of channels. (Kevitsa EIA report 2006, 148.)

The mining industry will create long-term jobs, and mainly so that negative impacts are local and positive impacts at the least regional. "The mining industry will be a pillar of Lapland's industry in the future." (Kevitsa extension EIA report 2011, 292.)

The general interest story line has undergone a change since the early post-war years. In those days, general interest referred to the national interest; to rise from the ravages of war, Finland needed natural resources and the contribution of all citizens for the sake of the fatherland (Poropudas 1998). In the 2000s, national interest has been replaced by regional interest: mines were to be built for the sake of Lapland. There are several reasons for this shift: globalised production chains, changes in the role of the state and regionalisation created by the European Union. The globalisation of production, finance and markets affects not only nations but also resource regions that may be termed peripheral (see Franks et al. 2013). For example, mining is a global business,

which means that changes in the prices of ore or global economic fluctuations directly affect the operating conditions of northern mines. During post-war industrialisation, the state was the guarantor of the development of business and industry in Lapland. Northern Finland was heavily dependent on state policy. In recent decades, the state has withdrawn from industrial activity in Lapland. Moreover, Finland joined the European Union in 1995 and the European idea of a "Europe of regions" has spread to the North: regional competitiveness is a catchword in Lappish discussion, as elsewhere (Kerkelä 1998).

To conclude, the general interest story line refers to the general interest of the province, that is, Lapland. It pertains to the region beyond the vicinity of a mine. The general interest represents the mining company, its employees, business and industry, municipalities, the regional economy and hence all who live or operate in the region. It is apolitical in nature: it constrains real political debate about burdens and benefits of mining and a discussion about the goals and impacts of the industry. The opposite of general interest is private interest, namely the interest of people living in the immediate vicinity of a mine. They are expected to understand the advantages that the mine brings and to sacrifice their home area for "others", whoever they may be.

# **NATURE AS A NATURAL RESOURCE**

Mining changes the local environment once and for all. It turns forests and marshland into industrial sites. Nevertheless, few expressions of sorrow for the loss of the environment are to be heard. The third story line emerging from the data holds that nothing of value is lost even though mining projects change the natural environment.

The mining project would narrow down but not prevent the opportunities of inhabitants e.g. to go fishing, snowmobiling, berry- and mushroom-picking, etc. (Suurikuusikko EIA report 2001, 88).

The mining project can be carried out without causing irreparable harm to the environment (Suhanko EIA report 2003, 201).

In this story line there is no intrinsic value to nature. The environment is also regarded as replaceable: local people are expected to find other places for their nature-based activities. One reason for this argumentation is that Lapland is a large province (100,369 km2), making up about 30% of Finland's land area, yet its share (182,856 on 30 October 2012) of the Finnish population is only 3.5%. The population density in the region is

two inhabitants per square kilometre. (Regional Council of Lapland 2013.) A phrase commonly heard in the province is, "[T]here is plenty of room in Lapland." Thus, it is assumed that there is space for all nature-based livelihoods and practices, be they mining, forestry, tourism, reindeer herding or subsistence economy.

The story line continues the Western tradition of modernisation: nature is something "out there"; it is to be controlled and tamed for human needs. Nature is a resource for economic growth and material progress, having neither intrinsic value nor other meanings to people. (E.g. Dryzek 1997, 12–13; Egri 1999, 59–61; Macnaghten & Urry 1998, 7; Sutton 2007, 59.) In the case of the North, the modern story is perhaps even stronger than in other places around the world. It is the idea of man conquering Northern nature, the fight against nature in harsh conditions that is described both in tales of the North and in scientific research (e.g. Moss 1994; Shields 1991; see also Haila 1999, 50–51).

The approach to nature also describes much about the human world and the premises of the organisation of society (see Haila 1999, 56-57). Two important factors characterise the relationship between people and the environment in this context. First, a specific feature of Lapland is that the state owns most of the land area, 67 per cent, and its ownership was even larger, almost 80 per cent, after the Second World War (Kankaanpää et al. 2013; Suopajärvi 2003, 210). The management and utilisation of natural resources have traditionally been in state control, leaving local people without much say. Second, forestry and mining are nowadays run by global companies. There is no local (and increasingly less national) ownership in these fields, with the result that all decisions are made in the headquarters of companies, and Lapland is merely a resource region. Moreover, an increasing volume of European Union legislation and an interest in Northern issues among global environmental groups and international media mean that Lapland is most often dealt with from an external viewpoint. This can easily be regarded as Southern colonialism: "it rises from the experience of humiliation based on marginalization (from the central information flows) and deep, heritage-like experiences of injustice" (Lehtinen 2006, 62, see also 63; 207-208; Ridanpää 2003, 107–108). The only remedy for the feeling of powerlessness thus engendered may be to depreciate the meaning of nature and nature-based traditional practices.

To conclude, in this story line nature is something "out there" – it is the Other that should be tamed to satisfy human needs. Nature is a merely natural resource in a modern sense. Nature has no intrinsic value, and there is plenty of room also for mining in Lapland.

#### CONCLUSIONS

In Finnish procedure, social impact assessments (SIAs) are made as a part of environmental impact assessments (EIA) in the planning phase of large environmental projects. In mining projects in Finland, EIA is obligatory if an open-pit mine is being planned with an area of more than 25 hectares or if extracted material is more than 550,000 tonnes per year. The EIA process informs the permit procedure, which decides whether a mine can be opened and on what conditions. The article has analysed the social impact assessment sections in the EIA reports of all metallic mineral mining projects launched in Finnish Lapland in the 2000s. The study has sought to analyse what kind of meanings were given to mining in the social impact assessments that formally represent local people in the planning phase of a mine.

By using a discourse analytical approach introduced by Maarten Hajer, I have identified three main story lines in the empirical analyses. Story lines are summaries of a kind – they are narratives that make sense of complex issues such as mining and its impacts by simply answering the basic question of what mines are all about. While story lines change and there may be variants of them, the dominant narratives are shared stories that gain force by continuous reproduction.

The first story line maintains that in rural Lapland, mines bring hope of a prosperous future to small communities struggling with unemployment, economic problems and out-migration. In the second story line, mines are important because the general interest, namely regional development, requires local people to sacrifice their home areas and traditional practices for the good of the many. "General interest" is a label that prevents political discussion about the burdens and benefits of mining by evoking a simple dichotomy between small local and broad general interests. The third story line argues that there is plenty of room in sparsely populated Lapland. Nature has no value or meaning per se; it is only a resource for economic development. There are some critical tones, but the dominant story lines tell us that using the riches of the soil will bring a prosperous future for communities in rural Lapland and that mining also supports the regional development of Lapland in general. Based on the analysis, it may be claimed that SIAs are giving the right to mine in Lapland.

#### **ACKNOWLEDGEMENTS**

The article is based on work done in two projects: Different land use activities and local communities in mining projects, granted by Tekes, the Finnish Funding Agency for Technology and Innovation (2011–2013) and Sustainable mining, local communities and environmental regulation in Kolarctic area, funded by the Kolarctic ENPI CBC (2013–2014). I want to thank the funders of the projects. I am also grateful to two anonymous referees for their constructive criticism and proposals that helped to improve the article.

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