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Environmental Justice of mining: A case-study of the copper extraction conflict in Laver, Sápmi

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Abstract

Global demand for key minerals are on the raise. Low-quality mineral deposits require larger land-areas and generate higher amounts of waste. This creates socio-ecological impacts on local livelihoods and ecosystems. Indigenous communities are particularly impacted by extractive industries. The experiences of unjust outcomes for local communities has resulted in a growing number of mining conflicts. In settler colonies, contemporary mining conflicts tend to be influenced by colonial ideologies and practices. This study aims to analyze a mining conflict in Laver, northern Sweden, through the lens of Environmental Justice which examines justice in terms of distribution, recognition, and procedure. The conflict was characterized as a clash between three different national interests: minerals, nature, and traditional reindeer herding, valued differently by different actors in the conflict. Data collected through semi-structured interviews reveal that the distribution of costs and benefits between actors in the conflict is uneven, that cultural distinctiveness is misrecognized and that there is no procedural justice. In other words, collected data suggest that environmental justice is not achieved. I argue that environmental injustice is influenced by Sweden's colonial legacy and that indigenous rights to land, culture, and self-determination are denied to accommodate Sweden's continued mineral extraction.

Keywords: mining, environmental conflicts, environmental justice, settler colonialism, indigenous rights

Sammanfattning

Här följer en sammanfattad beskrivning av uppsatsämnet, val av metod och teori, resultat och slutsats.

Bakgrund

Den globala efterfrågan på mineraler ökar i takt med ekonomisk tillväxt (Henckens et al., 2016) och har lett till en ökad mineralproduktion världen över (Brown et al., 2019). Samtidigt har jordens mineralresurser minskat (Urkidi & Walter, 2018). Pågrund av låga mineralhalter tar moderna gruvor större landytor i anspråk, använder mer kemikalier och genererar mer avfall (Ibid.). Detta har orsakat höga hälso- och miljöproblem som främst drabbar de som bor nära gruvor (Martinez-Alier, 2001). Ökad gruvbrytning har orsakat "gruvkonflikter" (Temper et al., 2015).

Den svenska staten förespråkar en kraftig expansion av den svenska gruvindustrin (Government Offices of Sweden, 2014). Idag bryts 96 % av all malm på traditionellt samiska marker och detta riskerar möjligheterna för fortsatt traditionell renskötsel (Maruyama, 2017). Sametinget kräver ett stopp på mineralutvinning tills den Svenska staten skrivit under konvention ILO 169, en internationell konvention som säkerställer urfolks rätt till land (Sami Parliament in Sweden, 2014).

År 2007 röstade Sverige för antagandet av FN:s deklaration för ursprungsfolkens rättigheter (icke-binande) som uppmanar stater att respektera urfolks rätt till land och självbestämmande (Ojala & Nordin, 2015). Sverige har även ratificerat internationella konventioner¹ om att skydda urfolks kulturarv (Lawrence & Kløcker Larsen, 2016).

Det här är en fallstudie om en eventuell gruvetablering i Laver, Älvsbyns kommun, Norrbotten. Boliden Mineral AB vill bryta låghaltig koppar (0,22 %), guld, silver och molybden i ett dagbrott (Boliden Mineral AB, 2019). Dagbrottet skulle bli det största någonsin i Sverige (Naturskyddsföreningen, 2020a) och gruvverksamhetens totala markyta uppskattas till 4 900 hektar (Lawrence & Kløcker Larsen, 2016) och. I området finns tre riksintressen: värdefulla mineraler, värdefulla naturvärden (Natura 2000 klassade) och traditionell renskötsel (Ibid.). Jag har studerat vilka miljömässiga, sociala och ekonomiska

¹ FN:s konventionen om medborgliga och politiska rättigheter (1976, Artikel 27) och Konvention om Biologisk Mångfald (1993, Artikel 8).

konsekvenser en gruvetablering skulle få och beskriver hur olika aktörer erkänts, och deltagit, i beslutsprocessen.

Metod

För att samla in och analysera data användes kvalitativa forskningsmetoder (Bryman, 2012). I augusti 2019 var jag i Boliden, Älvsbyn och Arvidsjaur för att samla in material till studien. I januari 2020 var jag åter i Älvsbyn för att samla in material. Jag genomförde semistrukturerade intervjuer med representanter för Boliden Mineral AB, Älvsbyns kommun, Miljögruppen Pite Älvdal, Semisjaur Njarg sameby, Länsstyrelsen i Norrbotten och Svenska Samernas Riksförbund. Privatpersoner, företagare och renskötare intervjuades också. Se bilaga (appendix) 1 för full lista över deltagare och bilaga 2 för intervjuguide. Totalt genomförde jag 37 intervjuer med sammanlagt 45 deltagare.

Teori

För att analysera och diskutera mina resultat använde jag mig av koncept från två teoretiska forskningsfält: politisk ekologi och miljömässig rättvisa. Politisk ekologi politiserar miljöförändringar (Robbins, 2012). Jag använder koncept från politisk ekologi för att "förstå hur tillgång och kontroll av resurser påverkar människors uppehälle" (Watts, 1983, p. 2). Studier i historisk politisk ekologi behandlar mänskliga relationer till naturen över tid (Davis, 2009). I synnerhet hur koloniala idéer har påverkat, och fortsätter att påverka, människans syn på naturen och dess användning (Davis, 2009; James Fairhead & Leach, 1995; Robbins, 2012).

Krav på miljömässig rättvisa (*environmental justice*) startade med protester i USA på 1980talet (Urkidi & Walter, 2018). Demonstranterna menade att icke-vita, fattiga medborgare fick utstå oproportionerligt lidande när miljöfarligt avfall placerades i deras närområden (Ibid.). Idag används begreppet miljörättvisa också i forskning om orättvis fördelning av miljöproblem (Schlosberg, 2003) och behandlar ofta hur urfolk utsätts för orättvisa (Keeling & Sandlos, 2009; Muir & Booth, 2012; Persson et al., 2017). För att uppnå miljörättvisa bör sociala grupper som utsätts, eller har utsätts, för förtryck ges särskilt erkännande (Young, 1990).

För att analysera miljörättvisa i fallet Laver använde jag tre begrepp som ingår i miljörättvisa: distribution av fördelar och nackdelar, erkännande av kulturell distinktion och deltagande (Schlosberg, 2003, 2007). Distribution av fördelar och nackdelar behandlade vilka konsekvenser en gruva i Laver medför, positiva och negativa, och vem som kommer att påverkas av dem. Erkännandet av kulturell distinktion innebar i det här fallet hur Samisk kultur och identitet erkänns och respekteras i förhållande till en gruvetablering. Deltagande innebar en analys av hur olika aktörer (privatpersoner, organisationer och samebyar) deltagit i beslutsprocessen kring en gruva och vilken påverkan det haft på beslutet.

Resultat

Fyra frågor styrde mitt arbete. Nedan följer en sammanfattning av svaret på varje fråga baserat på min analys och diskussion av mina resultat. Intervjucitat som styrker mina slutatser återfinns på svenska nederst på sidorna i kapitel 5.

1. Vad är det för en typ av miljökonflikt och vilka aktörer är inblandade?

En eventuell etablering av en gruva i Laver har skapat en konflikt mellan intressen och värden. Det finns en konflikt mellan olika riksintressen, då en gruva riskerar säkerställandet av värdefulla naturområden och traditionell renskötsel i området. Olika aktörers inställning till en gruva styrs också av olika värden. Boliden och Älvsbyns kommun är positiva till en gruva och deras argument baseras på ekonomiska värden, som inkomster till aktieägare och skatteintäkter. Miljögruppen Pite Älvdal och Semisjaur Njargs sameby är emot en gruvetablering och baserar sina argument på ekologiska och kulturella värden, som bevarandet av biologisk mångfald och bibehållen rätt att utöva Samisk kultur. Dessa värden står i konflikt med varandra eftersom de inte kan samexistera.

2. Hur ser den förväntade distribueringen av fördelar och nackdelar ut?

De huvudsakliga fördelarna med en gruva beskrevs som skapandet av lokala arbetstillfällen, inflyttning och ökade kommunala skatteintäkter. De största nackdelarna beskrevs som lokal miljöpåverkan, främst på vattenkvalité och biologisk mångfald, och risken för ett dammhaveri. För Semisjaur Njargs sameby skulle en gruva innebära minskat vinterbete, vilket påverkar rätten att bedriva traditionell renskötsel.

Min analys bekräftar att fördelar och nackdelar är ojämnt fördelade. En gruva skulle främst gynna Boliden och invånare i Älvsbyns kommun (dock är det osäkert hur mycket och hur länge kommunen gynnas av en gruvetablering). De största kostnaderna för en gruvetablering skulle bäras av de som bor i närområdet kring den nya gruvan, de som idag nyttjar området för rekreation och företagande samt samebyn som använder marken för att utöva renskötsel. Jag menar att den låga mineralersättningen som tillfaller staten (0,05 % av värdet på mineraler) ytterligare ökar klyftorna mellan vinnare och förlorare.

3. Till vilken grad har kulturell distinktion erkänts och respekterats i processen och diskursen kring en gruvetablering i Laver?

Jag fann att renskötselns betydelse för samisk kultur, samisk närvaro i kommunen och betydelsen av markerna kring Laver för samebyn inte erkändes av utomstående aktörer. Samiska intressen upplevdes behöva stå åt sidan för andra markintressen. Jag menar att dessa slutsatser kan härledas till hur staten värderat och (inte) inkluderat samiska intressen genom historien av kolonialisering av Sápmi.

4. Till vilken grad har olika aktörer deltagit i beslutsprocessen?

Privatpersoner och organisationer har bjudits in till informationsmöten om en gruva i Laver av kommunen och Boliden. Min analys beskriver hur deltagande upplever att de inte getts tid eller möjlighet att uttrycka sina åsikter under dessa möten och att de generellt ser svårigheter att påverka beslutet om en gruva i kommunen. Representanter för samebyn uttrycker att konsultationer med gruvbolaget inte tagit full hänsyn till deras önskemål och att Minerallagen gör det svårt för Samiska aktörer att påverka beslutsprocessen nämnvärt. Jag menar att statens ambition att öka svensk mineralexploatering, och dess stödjande av gruvindustrin, minskar privatpersoners, intresseorganisationers och samiska aktörers möjligheter att påverka beslutsprocesser som rör gruvexploatering.

Slutsats

Resultaten från min analys liknar tidigare resultat från studier av miljörättvisa och gruvdrift i Europa, Kanada och Australien (Gibbs, 2003; Keeling & Sandlos, 2009; Muir & Booth, 2012; Suopajärvi et al., 2016). Fallet Laver kan därför ses som ett typiskt exempel på miljöorättvisa i västvärlden.

Vad får det här för konsekvenser? En gruva i Laver skulle orsaka förluster av ekologiska och kulturella värden i närområdet som drabbar aktörer som inte själva kan påverka situationen avsevärt. Jag menar att svensk kolonialhistoria formar nutida miljöorättvisa. Min analys visar hur en gruva i Laver, liksom fortsatt mineralexploatering i Sápmi, kränker urfolks rättigheter till land, kultur och självbestämmande.

För att säkerställa urfolks rättigheter till land och självbestämmande i Sverige förespråkar jag att Sverige snarast skriver under och ratificerar ILO konvention 169. Kravet att Sametinget bör ha vetorätt i frågor om exploatering på traditionella samiska marker skulle öka graden av Samiskt självbestämmande. Ett meningsfullt deltagande som möjliggör för privatpersoner och organisationer att påverka beslut om ny gruvdrift bör även säkerställas. Införandet av gruvskatt, som distribueras proportionerligt till de regioner varifrån naturresurser kommer ifrån, bör genomföras för att jämna ut klyftor mellan de parter som vinner respektive förlorar på gruvdrift.

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To my friends and fellow critical political ecology students, my family, and my partner, thank you for your support and encouragement throughout this research-adventure.

I dedicate this thesis to everyone who struggles for recognition, rights, and ultimately, justice.

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Hej minister, kan jag byta nåt ord fast du har så litet bord Det här rör faktiskt vår jord Vet du om att vi tar självmord för att vi är för små för att finnas för att det som rör få inte kan hinnas Kan du förstå, en vill inte försvinna när en levt så länge vidder kan minnas

Är det demokrati när massan styr över såna som vi Jag vill vara fri, mer än inuti Är det nåt jag gör är det att höra hit

Urfolkskvinna, snölejoninna, jag är regnbågen på din näthinna²

² (Sofia Jannok, 2016, track 14)

1 Introduction

The global demand for minerals is increasing in pace with economic growth (Henckens et al., 2016). Mineral extraction increased from 25 100 000 tons in 2000 to 37 200 000 tons in 2013 (Brown et al., 2019; Taylor et al., 2006). The annual global extraction of the key minerals copper and zinc increased by 3 % in the same period (Rodríguez-Labajos & Özkaynak, 2017). Mining is promoted by governments and the private sector because of its visible benefits to economic growth (Suopajärvi et al., 2016). Since the 1980s, 90 states have liberalized their mining legislation to increase Foreign Direct Investments in the mining sector (Urkidi & Walter, 2018), thereby intensifying mineral extraction (Hurley & Ari, 2011).

To meet the demands for increased mineral production, extraction frontiers are expanding (Rodríguez-Labajos & Özkaynak, 2017). At the same time, since global ore deposits have declined (Urkidi & Walter, 2018) there is a need to mine lower quality deposits, requiring larger amounts of land to produce metals. Hence, new mines; often cover larger areas of land, use more chemicals, and generate larger amounts of waste due to low-quality deposits. The large scale transformation of landscapes and the increased environmental pressure caused by these mines have generated great local socio-ecological impacts and disrupted local livelihoods and environments (Hurley & Ari, 2011). Since new technology allows mining companies to extract minerals in low-quality deposits, Urkidi and Walter (2018) suggest that there is no real "peak metal". Instead, continued extraction is limited by what is considered bearable socio-ecological costs (Ibid.).

Research has shown that socio-ecological burdens from mining disproportionately affect local communities (Martinez-Alier, 2001). This has led to an increase in mining conflicts (Temper et al., 2018; Vieth Ror, 2018). Over 300 cases of mining conflicts have been analyzed in the Environmental Justice Atlas (Temper et al., 2018). Conflicts are caused by a variety of context-specific factors; however, a common driver is an experience, or fear, of socio-environmental degradation creating unjust outcomes (Rodríguez-Labajos & Özkaynak, 2017).

A conceptual framework has been developed to analyze environmental justice (EJ) outcomes in environmental conflicts (Schlosberg, 2003). The EJ framework assesses the distribution of costs and benefits, how cultural distinctiveness of social groups is recognized, and how actors participate in decision-making processes (Schlosberg, 2007). The framework has also been used to explore mining conflicts (Bustos et al., 2017; Keeling & Sandlos, 2009; MartinezAlier, 2001; Rodríguez-Labajos & Özkaynak, 2017; Urkidi & Walter, 2011; Vieth Ror, 2018). Indigenous people are especially vulnerable to land-use changes and environmental degradation (White, 2013) and often bear a disproportionate amount of mining's social and environmental costs (Keeling & Sandlos, 2009; Koivurova et al., 2015; Muir & Booth, 2012; Place & Hanlon, 2011).

The bulk of research has focused on mining conflicts in the South. However, mining affects indigenous people also in the North (Muir & Booth, 2012; Sandlos & Keeling, 2016; Vieth Ror, 2018). For example, mineral extraction in Scandinavia threatens traditional Sami livelihoods as it alters land available for reindeer herding (Koivurova et al., 2015).

Political ecologists have analyzed how colonial ideologies shape understandings of ecologies and environmental change in the Global South (Fairhead & Leach, 1995; Watts, 1983). Since the beginning of the 2000s, political ecologists have turned to study similar patterns in the Global North (Holifield, 2015). However, the link between settler colonialism in the North and the environmental justice of mining remains understudied.

Political ecology and EJ are concerned with issues of environmental marginalization and inequality and strive to make this visible to correct situations of injustice (Holifield, 2015). By combining conceptual tools from political ecology and EJ, my research strives to fill a knowledge gap on how mining conflicts take place in settler colonies in the Global North.

This study examines the case of a potential copper mine in Laver, Northern Sweden. The mineral company Boliden Mineral AB (hereafter 'Boliden') intends to establish an open-pit mine to extract ore deposits containing low qualities of copper (0,22 %) (Geological Survey of Sweden, 2014). If the Laver mine were to move forward as planned, it would become the largest open-pit mine in Sweden (Naturskyddsföreningen, 2020a), with an industrial area covering approximately 4 900 hectares (Lawrence & Kløcker Larsen, 2016).

Three national interests compete in this area: i) valuable minerals, ii) valuable nature and iii) traditional reindeer herding (Mining Inspectorate of Sweden, 2016). In 2016, Norrbotten County denied the company's application for a mining concession in the area due to the risks a mine would pose to Natura 2000 protected ecosystems and traditional Sami reindeer herding (Ibid.). The project is still pending and the next decision in the permission process currently rests with the Swedish government (Boliden Mineral AB, 2019).

1.1 Objective and research questions

The objective of this thesis is to contribute to the EJ literature about mining conflicts in settler colonies in the Global North. In doing so, I strive to contribute with case-specific insights about EJ and provide relevant policy recommendations. This study aims to characterize the mining conflict in Laver, northern Sweden, and applying an EJ framework. I examine perceptions from different actors on how the costs and benefits from the proposed mine would be distributed, how cultural distinctiveness is recognized, and how the procedure includes different actors in the decision-making. The study aims to answer the following research questions:

- 1. What is the nature and origin of the conflict and what actors are involved?
- 2. What is the expected distribution of costs and benefits?
- 3. To what extent is cultural distinctiveness recognized and respected in the process and discourse around establishing a mine in Laver?
- 4. To what extent have the different actors been included in the decision-making process?

The thesis is structured in the following manner. The second chapter outlines the conceptual framework used in the study, which includes a political ecology approach and the EJ Framework (Schlosberg, 2003, 2007). The third chapter provides background information and sets the Swedish context. In chapter four, I explain the methodology to collect and analyze data. In the fifth chapter, I present and analyze the findings from the study. In the discussion chapter, I discuss findings in relation to EJ literature from the north and relevant political ecology concepts. The final chapter provides concluding remarks.

2 Theoretical Framework

The conceptual framework used for this study consists of two main parts. First, I adopt a political ecology approach and use concepts from historical political ecology to frame my research. Second, I analyze data using the EJ Framework (Schlosberg, 2003, 2007).

2.1 Political Ecology

Political ecology sprouted from research in development geography and cultural ecology and grew into a discipline in the 1970-1980s (Robbins, 2012). Robbins (2012) emphasizes that political ecology is "an explicit alternative to 'apolitical' ecology" (2012, p. 14). Unlike apolitical ecologies, political ecology politicizes environmental change (Robbins, 2012). Blaikie and Brookfield (1987) write that political ecology "combines the concerns of ecology and a broadly defined political economy" (1987, p. 17). Political ecology also aims to "understand access and control over resources and its implications for livelihoods" (Watts, 1983, p. 2).

Robbins (2012) defines environmental conflict as one of the dominant narratives in political ecology. The transformation of landscapes in the process of mineral extraction often exclude groups from environmental resources, causing conflict (Bebbington, 2012). Robbins (2012) also notes that environmental conflicts have "shown to be a part of a larger gendered, classed, and raced struggles" (2012, p. 22).

In regards to environmental conflict, political ecology has a longstanding interest in analyzing the distribution of costs and benefits (Robbins, 2012). The Marxist geographer Harvey (2004) describes this as a process of accumulation by dispossession. It includes processes of privatization, commodification, and financialization of common resources (Ibid.). The concept of accumulation by dispossession has been used to describe how the appropriation of land and natural resources cause dispossession when actors accumulate resources at the expense of others (Fairhead et al., 2012; Harvey, 2004). Mining is one of the sectors where the process has been observed (Svarstad & Benjaminsen, 2020). I will use the concept to discuss the distribution of costs and benefits of a mine in Laver.

This research uses theoretical tools from historical political ecology. Historical political ecology is a sub-field of political ecology that focuses on society-nature relationships of the past and present (Davis, 2009). Scholars have studied conflicts over access to land and

resources over time (Cavanagh, 2017; Gómez-Baggethun et al., 2013) and revealed how colonial narratives influence conflicts today (Davis, 2009; James Fairhead & Leach, 1995; Robbins, 2012). Keeling and Sandlos (2009) note that historical PE can be used to understand the ideologies and practices of the past and how they are linked to contemporary injustices.

The narrative of 'terra nullius' (meaning 'land of no one') is examined by political ecologists (Geisler, 2012; Simpson & Bagelman, 2018; Veracini, 2016). The notion of terra nullius can be traced back to the Roman civilization, where land not belonging to the empire was perceived as land without an owner available for occupation (Geisler, 2012). Since the narrative can be used to justify the appropriation of perceived empty lands, terra nullius narratives have influenced the establishments of settler colonies (Banerjee, 2000; Geisler, 2012; Simpson & Bagelman, 2018; Veracini, 2016). In chapter six I discuss how the terra nullius narrative justified and continues to justify the colonialization of Sápmi and how the Swedish colonial legacy influence EJ.

2.2 Environmental Justice Framework

The term EJ grew out of social movements in the US (Urkidi & Walter, 2018). In 1982, activists in Warren County, North Carolina, mobilized protesters against a hazardous waste landfill planned to be opened near a poor neighborhood predominantly inhabited by an African-American community (Urkidi & Walter, 2011). From these first protests, an EJ movement grew in the US. The movement claimed that the costs and benefits from environmental interventions were unevenly distributed (Schlosberg, 2003), and shed light on how uneven distribution of environmental risks reflected social, economic and cultural inequalities (Schlosberg, 2007). Once EJ claims were confirmed in academic studies and governmental reports, the concepts of EJ has become more widely accepted in academia (Ibid.).

EJ combines concerns for the environment and civil rights (Urkidi & Walter, 2011). It grew into an academic field studying how aspects of the physical environment and social differences meet and interact (Walker, 2012). The EJ analysis is rooted in concerns of environmental racism and dispossession (Rodríguez-Labajos & Özkaynak, 2017). It is a normative field, where studies often emphasize how societies could be more environmentally just (Svarstad & Benjaminsen, 2020; Walker, 2012).

Today, both the EJ movement and the academic field have grown in terms of geography and the number of topics covered in struggles and journal articles (Rodríguez-Labajos &

Özkaynak, 2017). The EJ framework includes three concepts: justice as distribution, justice as recognition, and procedural justice (Schlosberg, 2003, 2007).

2.2.1 Justice as distribution

For the past four decades, *justice as distribution* has been the main focus for political theorists analyzing justice (Schlosberg, 2007). The concept is concerned with *what* costs and benefits are created in an environmental intervention and *how* they are distributed (Ibid.).

According to Walker (2012) different actors have different needs and are more or less vulnerable to environmental interventions. Walker (2012) notes that some actors have more responsibility than others for the outcomes of an intervention, implying a degree of responsibility to repair or compensate for potential environmental harm (ibid.). I aim to distinguish the vulnerabilities, needs, and responsibilities of actors in the case study.

Distribution is a key aspect of the EJ framework but does not give a full analysis of justice (Svarstad & Benjaminsen, 2020). Young (1990) and Urkidi and Walter (2018) argue that a justice analysis must take the processes causing maldistribution into account. To grasp the complexity of EJ, there is a need to broaden the analysis beyond distribution to include recognitional and procedural justice.

2.2.2 Justice as recognition

Young (1990) argues that the maldistribution of costs and benefits follows a pattern and that the structural reasons for maldistribution can be traced to oppression. According to Young (1990), "where social group differences exist and some groups are privileged while others are oppressed, social justice requires explicitly acknowledging and attending to those group differences in order to undermine oppression" (Young, 1990, p. 3). This means that a lack of recognition of group difference enhances injustice (Schlosberg, 2007).

What *recognitional justice* means is contested (Schlosberg, 2007). According to Urkidi and Walter (2011), "recognition not only refers to the individual right to self-recognition, but most importantly, to the recognition of collective identities and their particular needs, concerns and livelihoods" (2011, p. 685). Further, Fraser (2000) argues that social relations are key to understand why misrecognition occurs and suggests that the social subordination of certain groups has been institutionalized in society.

Fraser (1998), p. 7) conceptualizes three processes of misrecognition: a) *a general practice of cultural domination*, b) a *pattern of nonrecognition*, and c) *disrespect*. She doesn't exemplify what a general practice of *cultural domination* means but states that *nonrecognition* means that a social group is made invisible (ibid.). Patterns of *disrespect* are defined as when a group is continuedly mistreated by other actors (Schlosberg, 2007). The three processes can be used as tools to analyze the level of recognition given to a social group.

Environmental injustice occurs when group differences are not recognized and/or respected (Whyte, 2018). According to Whyte (2018), "failure to respect or acknowledge difference ultimately is also about the undermining of the ecological conditions required for any society to express difference in the first place" (2018, p. 121). Shaw (2018) notes that environmental-decision making based on a non-indigenous view of the environment often tends to create unjust outcomes for indigenous people. Overall, the misrecognition of cultural differences tends to shape negative outcomes for non-dominant social groups in society (Whyte, 2018).

Finally, the inability to recognize cultural differences among indigenous communities may jeopardize their cultural survival (Schlosberg, 2003). The EJ activist Lance Hughes, director of Native Americans for a Clean Environment, says "We are not an environmental organization, and this is not an environmental issue. This is about our survival" (cited in Schlosberg, 2003, p. 91). For many indigenous communities, concerns for EJ are closely connected to a struggle for recognition of rights (Schlosberg, 2003).

The level of recognition enjoyed by a social group also influences their status in environmental decision making, thus impacts procedural justice (Schlosberg, 2007). For indigenous communities, misrecognition can lead to a "procedural marginalization" where decision-making structures do not provide a space to express indigenous concerns (Shaw, 2018). Recognitional justice is key to achieve procedural justice (Schlosberg, 2007).

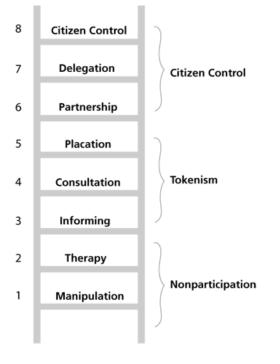
2.2.3 Procedural justice

Schlosberg (2007) defines *procedural justice* as "fair and equitable institutional processes" (2007, p. 25). Bell and Carrick (2018) note that there are significant existing inequalities in environmental decision-making. Urkidi and Walter (2018) write that structures disrespecting social groups must be eliminated to not exclude participation in the process. Therefore, it becomes important to highlight institutionalized oppression when analyzing procedural justice (Young, 1990).

Bell and Carrick (2018) outline three principles to conceptualize procedural justice: *equality*, *proportionality*, and *plurality*. *Equality* means that the "equality of something" should be ensured; be it to participate, express concerns, or vote. *Proportionality* implies that power in the decision-making process should be proportional to the stakes that a person or group has in relation to an intervention. For example, in a proportionally just decision-making process, a family who needs to sell their property due to a polluting industry located by their house would have more influence in the decision-making process than a family not affected by the industry. Lastly, *plurality* calls for the inclusion and recognition of different social groups with different experiences of injustice in the decision-making process (Ibid.).

In addition, Hunold and Young (1998) have developed five ideal principles of procedural justice (Hunold & Young, 1998, p. 88-89). The first principle is *inclusiveness*, where a fair process would ensure participation by social groups that might otherwise lack the resources or capacities to participate. The second principle is *consultations over time*. This principle implies that participants should receive the necessary information and time to prepare to make well-prepared contributions to the decision-making process. The third principle, *elimination of gross power disparities*, calls for sharing information with all participants as well as providing economic support to weaker parties to enable their equal participation. The fourth principle is *shared decision-making authority*. According to this principle, none of the participants (not even public authorities) have the ultimate power to make a decision, but it should be made jointly. Lastly, the fifth principle, *authoritative decision-making*, implies that the decision made in a consultation process with participants should be the final decision – not merely a recommendation (Ibid.).

Lastly, Arnstein (1969) developed a concept called the "Ladder for citizen participation". According to Arnstein (1969), participants can be involved in a formal decision-making process but have varying degrees of influence. To analyze to what extent and how genuinely participants are included in a decision-making process, eight degrees of participation are conceptualized on the ladder (see figure 1), from manipulation to citizen control. Figure 1: Degrees of citizen Participation (Arnstein, 1969).

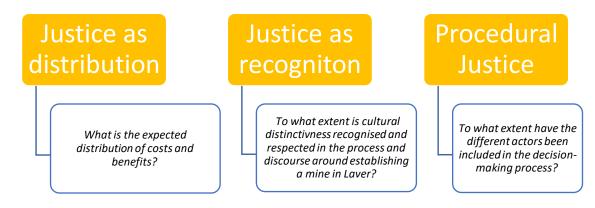


Arnstein's Ladder (1969) Degrees of Citizen Participation

The first two rungs, manipulation and therapy, are seen as *nonparticipation* since they refer to events where project-facilitators are mainly educating or comforting participants. The next three rungs – informing, consultation, and placation – are seen as *tokenism*. Participants may be involved, but do not impact the decision-making process. This stage is described as a "box-ticking" activity because it often generates little value for participants yet fulfill requirements of including participants. The last rungs of the ladder – partnership, delegation, and citizen control – are categorized as *citizen control*. Here, participants can negotiate and take partial or full control over the decision-making process (ibid.). In sum, the higher rung on the ladder, the more genuine and influential the participation becomes.

Lastly, the three concepts of the EJ framework are connected to research question 2, 3, and 4 (See figure 2):

Figure 2: EJ concepts related to the research questions



3 Background

3.1 The Swedish mining industry

Sweden is the largest mining economy in the EU (Larsen et al., 2018) and supplies the union with 90 % of domestic iron ore production (Lawrence & Larsen, 2017). Large scale mining of iron ore began in the late 1800s and was facilitated by the introduction of railroads and electricity in northern Sweden (Bernes & Lundgren, 2009). During the 1950s and 1960s, Sweden was the largest exporter of iron ore in the world (ibid.). In 2017, metal ores were the third-largest subcategory of natural resources extracted in Sweden (Statistics Sweden, 2018). Metal ore extraction in Sweden has increased from 48 234 tones in 1998 to 77 785 tones in 2017 (Ibid.). The mining industry generates about 3 % of the GDP in Sweden (Business Sweden, 2020).

The Swedish state actively promotes an expansion of the mining sector (Government Offices of Sweden, 2014). Currently, there are 15 active mines in Sweden and 24 proposed new mining concessions in various stages of the permission process (Geological Survey of Sweden, 2018a). Sweden's Mineral Strategy from 2013 aims to intensify mining by increasing the number of mines to 50 by 2030 (Government Offices of Sweden, 2014). Through the attraction of foreign investments, the state aims to increase mineral extraction in Sweden (Ibid).

By adopting the strategy, the Swedish state supports the mining industry by removing barriers, such as unfavorable legislation and taxes (Haikola & Anshelm, 2016). The liberal government writing the mineral strategy stated that the legislative changes would promote economic growth in Sweden and, in particular, in the sparsely populated areas in northern Sweden (Haikola & Anshelm, 2018)

Noteworthy, 0.2 % of the market value for minerals is paid by mining companies as royalties. The Minerals Act (1991:45) states that "three-quarters of the compensation shall accrue to property owners within the concession area and one quarter to the State" (Geological Survey of Sweden, 2018b). In other words, the Swedish state receives 0,05 % of the mineral value of minerals extracted in Sweden. Compared to international standards, this number is very low (Hela Sverige ska leva, 2020). In comparison with seven other mining regions (including Canada, Australia, and Brazil), Sweden and Finland have the lowest taxation rates for mining companies (Ibid.).

3.2 Environmental Justice and mining in settler colonies

Intensified mining increases the risk of environmental injustice for indigenous communities since extraction often impacts critical ecosystems and access to land (Fidler & Hitch, 2007; Muir & Booth, 2012; Place & Hanlon, 2011; Urkidi & Walter, 2018). The vast majority (96%) of all ore in Sweden is mined on traditional Sami territories (Maruyama, 2017). Similar patterns are observed in other countries, for example, the location of mineral bodies in Canada has led to a situation where "36% of First Nations communities are located within 50 km of a mine" (Keeling and Sandlos, 2009, p. 120). In general, indigenous communities in the Global North disproportionately bear the costs of increased mineral exploration (Fidler & Hitch, 2007; Muir & Booth, 2012; Sandlos & Keeling, 2016; Urkidi & Walter, 2018).

EJ studies of mining in settler colonies often concern environmental injustices faced by indigenous people (Haluza-delay, 2007). According to Veracini (2016), the creation of settler colonies is associated with the violent occupation of land that dispossesses indigenous people. Simpson and Bagelman (2018) argue that settler colonialism is to be considered an ongoing structure. The Sami Parliament in Sweden notes "the legal and political systems in Sweden regarding Sami Indigenous People are still products of colonial mechanisms and State-determined structural processes that have yet to be updated to be in accordance with Indigenous Peoples' Rights" (Sami Parliament in Sweden, 2015, p. 2). Sweden's colonial legacy will be outlined later in this chapter.

Further, the EJ literature suggests that colonial practices and ideologies continue to influence mining policies in settler colonies across the Global North (Gibbs, 2003; Keeling & Sandlos, 2009; Muir & Booth, 2012). In settler colonies such as Canada (Keeling & Sandlos, 2016), Australia (Gibbs, 2003), and Sweden (Ojala & Nordin, 2015), commercial extraction of natural resources promoted by governments is viewed by indigenous people as a process of continued colonialization. The extraction harms indigenous people since it brings further dispossession, marginalization, and negative health impacts (Gibbs, 2003; Place & Hanlon, 2011; Sandlos & Keeling, 2016).

3.3 Environmental justice and mining in Sweden

In recent years, conflicts between mining interests and the interests of local citizens, environmental groups, and indigenous communities have been observed in northern Sweden, in Kallak and Rönnbäcken for example (Ojala & Nordin, 2015). According to Persson et al., (2017), conflicting values are represented by different actors in mining conflicts. On the one hand, economic values, based on a worldview promoting development and economic growth, are promoted by the government and by the mining industry. On the other hand, ecological and cultural values, emphasizing environmental protection, the safeguarding indigenous culture, and recreational activities, are promoted by environmental organizations and indigenous communities as well as local citizens, (Ibid.).

Different interests cause tension and conflict. The Swedish state and mining corporations assume that a mine can co-exist with other livelihoods, such as reindeer husbandry (Lawrence & Kløcker Larsen, 2016). On the contrary, the Sami Parliament describes mining as a threat to their existence (Sami Parliament in Sweden, 2017). The Parliament demands the immediate halt of mineral extraction until the Swedish state signs the *ILO convention 169*, granting indigenous people land rights (Sami Parliament in Sweden, 2014).

Mining projects have far-reaching implications for Sami in Sweden (Lawrence & Larsen, 2017). Other industrial encroachments, such as wind power and hydropower plants, already compromise the possibility to practice traditional reindeer herding (Lawrence & Kløcker Larsen, 2016). Since reindeer husbandry is closely connected to culture, encroachments risk Sami cultural survival (Lawrence & Kløcker Larsen, 2016; Sami Parliament in Sweden, 2017).

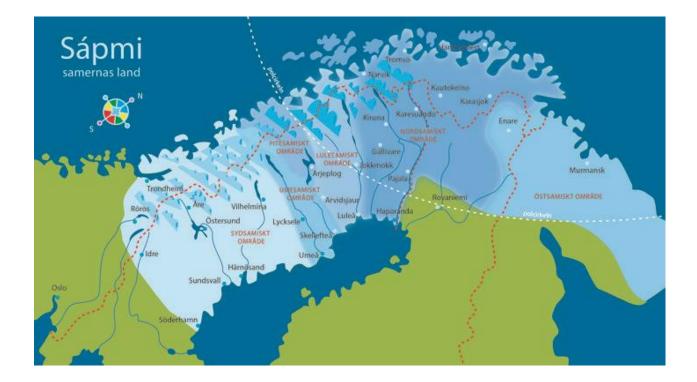
The Swedish mineral strategy, facilitating the state ambition to intensify mining, has been widely criticized by environmental organizations, indigenous leaders and academics (Haikola & Anshelm, 2018). The main criticism concern environmental, socio-economic, and ethnocultural effects of an expanding mining sector (Ibid.).

Further, Beland Lindahl et al., (2018) note that the Swedish mineral policy gives little and unequal room for local influence due to its centralized nature. The Mineral strategy assumes that all actors share its goals (Haikola & Anshelm, 2016). Despite this, dialogue and cooperation between public, private and civil society actors should be achieved to enhance the goals of the strategy, by ensuring a "common vision" and by prohibiting conflict (Ibid.). Interestingly, Haikola and Anshelm (2016) write that the mineral strategy never explicitly acknowledge the presence of a conflict of interests yet, take necessary measures to remove any conflicts of interests. Indeed, it becomes a national interest to eradicate opposition to fulfill state interests in increased mineral production (Ibid.). In relation to EJ, Sweden's colonial settler history has formed power relations that shape current Sami policies (Lantto & Mörkenstam, 2008). Ojala and Nordin (2015) note that this legacy plays a role in creating contemporary environmental conflicts.

3.4 Sweden's colonial legacy

The Sami are an indigenous people living in Sápmi, a geographic area covering the northern parts of Sweden, Finland and Norway and the Kola Peninsula of Russia (see figure 3) (Langston, 2013). Sápmi has been inhabited by Sami people since the retreat of the glaciers that covered the area 10,000 years ago (Ibid.).

Figure 3: Map of Sápmi (Samer.se, 2020)



The colonialization of the Swedish part of Sápmi began in the early 16th century (Ojala & Nordin, 2015). Before the colonialization process, the Sami had a relatively high social status and were regarded as important trading partners to the Swedes (Langston, 2013). However, this changed when the state became interested in natural resources, such as mineral deposits, found in Sápmi (Ibid.). The deposits, the land, and the Sami became regarded as assets of the Swedish Crown (Ojala & Nordin, 2015). The Sami were considered inferior to the majority population (Lantto & Mörkenstam, 2008) and Sami were used as forced labor in the first mines in the 17th century (Maruyama, 2017; Ojala & Nordin, 2015). Ojala and Nordin (2015)

note how Sápmi was referred to as the "West Indies" of Sweden by prominent political figures at the time, and how Sami were compared to Native Americans. This confirms that the Swedish state compared Sápmi to other colonies at the time.

An important part of the colonialization of Sápmi was the introduction of the Reindeer Grazing Act in 1886 (Össbo & Lantto, 2011). Through the adoption of the Act, traditional Sami territories became the property of the Swedish Crown (Ibid.). Use rights to the land were assigned to reindeer herders (Persson et al., 2017). However, since only about one-third of the Sami were reindeer herders at the time, the majority of Sami were excluded from use rights (Lantto & Mörkenstam, 2008). Until today, the Act determines Sami use-rights of land and resources (Lantto & Mörkenstam, 2008). Since the Act was introduced, Sami ownership of traditional territories within Swedish borders has gained no official support (Lawrence, 2014).

During the 19th century, the Swedish state did not view the Sami as capable citizens to be included in a liberal society (Lawrence, 2014). This form of social Darwinism was commonly used by other colonial administrations at the time to legitimize the dispossession of indigenous people (Cavanagh, 2019; Gibbs, 2003).

Further, racial biology was a strong feature of the Swedish Sami Policy from the late 19th century to the first half of the 20th (Maruyama, 2017). Policies were influenced by racist ideologies (Lantto & Mörkenstam, 2008; Persson et al., 2017) that legitimized dispossession and displacement of Sami (Ojala & Nordin, 2015).

Sweden's colonialization of Sápmi is not recognized in the history curriculum in Swedish schools or the official documentation (Maruyama, 2017). Maruyama (2017) notes that this makes the colonial legacy largely invisible to the majority population unaffected by colonial policies and this risk to harm the cultural well-being of the indigenous population. Ojala and Nordin (2015) argue that "there is a marked unwillingness of the Swedish state to recognize the colonial ideologies and practices in its relations to the Sami people through time" (2015, p. 10). In sum, it becomes evident that the Sami in Sweden are "dealing with a colonial legacy that has not yet been recognized as such" (Mercer, 2006, p. 2). On the contrary, Lantto and Mörkenstam (2008) note that historical attitudes of discrimination against Sami tend to influence present discourse and policy in Sweden.

3.5 Indigenous Rights in Sweden

An estimated number of 20,000 – 35,000 Sami live within the borders of the Swedish nationstate (Sami Parliament in Sweden, 2016). The Sami Parliament writes that an indigenous people is distinguished by a "will to maintain, develop and transfer ethical identity, culture and social institutions and the use of traditional living environments to future generations" (Sami Parliament in Sweden, 2016). The Swedish parliament recognized the Sami as an 'indigenous people' in 1977 which, according to international law, hold the right to cultural special treatment. The Sami are also recognized as one of five national minorities in Sweden (Ibid.).

The Instrument of Government (*Regeringsformen*) – one of the four parts of the Swedish Constitution – states that the ability of the Sami people and other ethnic minorities to maintain and develop culture and association shall be promoted (Svensk författningssamling, 2010)³. This statement was introduced into the Instrument in 2010 following a government bill (National Union of the Swedish Sami, 2017).

Several international conventions and declarations oblige Sweden to protect the culture of minorities (National Union of the Swedish Sami, 2017). Sweden ratified the 1992 *Convention on Biological Diversity (CBD)* (Ibid.), which states that parties of the convention shall "...*respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity..." (<i>CBD*, 1992, Article 8 (j)).

In 1971, Sweden ratified the *International Covenant on Civil and Political Rights (ICCPR)*, which gives protection to the traditional lifestyles and culture of the Sami (OHCHR, 2016). Article 27 reads: "*In those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with the other members of their group, to enjoy their own culture, to profess and practice their own religion, or to use their own language*" (OHCHR, 2019).

This article has shown to be influential in cases like the case of a mine in Laver. In the case of Omniayak vs. Canada, Comm. No. 167/1984, state extraction of natural resources was

³"Samiska folkets och etniska, språkliga och religiösa minoriteters möjligheter att behålla och utveckla ett eget kultur- och samfundsliv ska främjas". Law 2010:1408, Instrument of Government, 1:2, st 6.

considered not compatible with Article 27 since it destroyed livelihoods for indigenous people (National Union of the Swedish Sami, 2017). This case, and other similar cases tried by the Human Rights Committee, confirmed that activities prohibiting indigenous peoples from practicing their culture conflict with Article 27 of the ICCPR (Ibid.).

Sweden voted in favor when the UN Declaration on the Rights of Indigenous Peoples was adopted in 2007 (Ojala & Nordin, 2015). The declaration states that all indigenous people are entitled to rights to territories traditionally owned or used (Article 26) and to self-determination (Article 3) (UNDRIP, 2007). The right to self-determination is also recognized in the CBD (article 8j) (CBD, 1992) and the ICCPR (Article 1) (OHCHR, 2019). The ratifications of the above-mentioned legal instruments bind the Swedish state, either legally or by fear to lose reputation, to protect Sami culture.

Of particular relevance to the Sami people living in Sweden, Sweden has not ratified the 1989 *ILO-convention Indigenous and Tribal Peoples Convention number 169* (often only called '*ILO convention 169*') (National Union of the Swedish Sami, 2017). A state investigation⁴ notes that Sweden does not recognize and respect land rights for indigenous peoples in accordance with the *ILO convention 169* (SOU, 1999). The Swedish parliament voted no to ratification the convention in 2015 (Oddasat, 2015). According to the National Union of the Swedish Sami (*Svenska Samernas Riksförbund*), the state has not ratified the convention since ratification would give indigenous peoples the right to own the land they used historically (Ibid.). Noteworthy, both Denmark and Norway have ratified the *ILO convention 169* (Merrild et al., 2016; Nygaard, 2016).

Article 15 in the *ILO convention 169* introduced the principle of free and prior informed consent (FPIC) in the decision-making processes (Merrild et al., 2016). The *UN Declaration on the Rights for Indigenous People* also encourages nation-states to follow the principle in matters relating to land, culture, and resources (*UNDRIP*, 2007). In other words, even though Sweden is not regulated under the *ILO convention 169*, Sweden is advised to follow the principle of FPIC.

The Swedish state has received critique from the UN Human Rights Committee and the Committee on the Elimination of Racial Discrimination for not defining Sami use-rights and not ratifying the *ILO convention 169* (Oddasat, 2015). The Swedish Sami policy has been

⁴ SOU 1999:25

critiqued by the Sami people and Sami Parliament for not signing the *ILO convention 169* and for the lack of respect of the indigenous right to self-determination (Lantto & Mörkenstam, 2008).

3.6 Case study: a mine in Laver, northern Sweden

Laver, in Älvsbyn municipality, Norrbotten County (the northernmost part of Sweden) is one of the proposed new sites for mining in Sweden (see figure 4). Norrbotten county is inhabited by 3 % of the country's total population yet it covers a quarter of the total Swedish land area (Haikola & Anshelm, 2019). Heavy export-oriented industries, such as iron-ore and steel production, have been the main source of economic growth in the county for centuries. Due to a geographically uneven economic growth, the county has experienced out-migration since the 1970s (Ibid.).

In September 2019, 8090 people lived in Älvsbyn municipality (Regionfakta, 2019). Overall, the municipality is scarcely populated with an average of five inhabitants per square kilometre (Statistics Sweden, 2018a). The main employment sectors are health care, manufacturing, extraction, education, and construction. Only 22 % of the total population aged 20-64 in Älvsbyn has received higher education (compared to the national average of 41 %) (Ibid.).

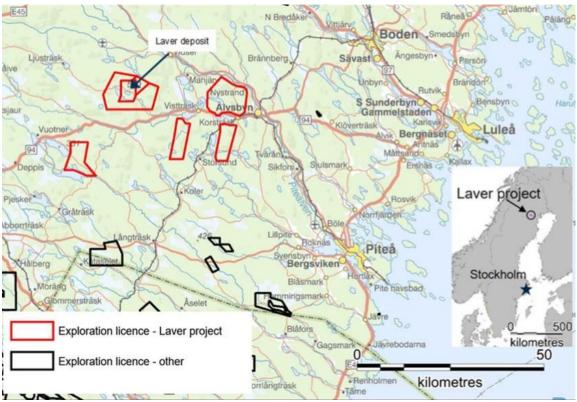


Figure 4: Map of the Laver-project (Boliden Mineral AB, 2019):

The area has been known to be mineral-rich since the 1930s (Geological Survey of Sweden, 2014). Between the years 1936 and 1946, the mineral company Boliden Gruvaktiebolag (later changing the name to the current Boliden Mineral AB), conducted underground mining of copper on the site (Boliden Mineral AB, 2019). The old mine in Laver was closed in 1946 due to low profitability (P4 Norrbotten, 2007).

In 1951, only a few years after the mine was closed, one of the mining dams collapsed. This led to the contamination of several water bodies and the deaths of several species (Naturskyddsföreningen, 2020a). Since then, the area has experienced higher levels of cadmium, copper, cobalt, and zinc in ecosystems, and, in 2015, Boliden was fined for unauthorized environmental conduct (Westerlund & Simma, 2018).

More than 80 years after opening the first mine in Laver, a new mine has been proposed by the very same company at the very same site. In 2013, Boliden began searching for minerals in the area, and it resulted in the discovery of a mineral deposit with a large volume of minerals near the surface. The Geological Survey of Sweden concluded that the area held approximately 1 100 million tons of minerals (Geological Survey of Sweden, 2014). The proposed mine is an open-pit copper-gold-silver-molybdenum mine (Boliden Mineral AB, 2019).

The waste generated from an open-pit mine risk polluting water bodies and groundwater in the mining area (Place & Hanlon, 2011). To separate the ore from waste rock requires a chemical treatment (Ibid.). Place and Hanlon (2011) describes that "the waste from this process contains acid-generating sulphides that react with air and water to produce sulphuric acid that can leach out of the waste and pollute the surrounding environment" (2011, p. 165).

According to the current project plan, the northern dams of the mine would be located about eight kilometers away from the Piteå-River (Naturskyddsföreningen, 2020b). The Piteå-river provides drinking water to almost 40 000 inhabitants of Piteå municipality (Ibid.). Also, the area where the mine would be located in a Natura 2000 area, where habitats are protected under EU-directive to prevent the extinction of valuable species (Naturvårdsverket, 2019).

As of today, the mining company has been granted seven exploration licenses in the area around Laver, covering a total area of 30 697 ha (Boliden Mineral AB, 2019). To be granted an exploitation concession, the project "must not be inappropriate in relation to other public interests, such as nature protection areas, transport arteries or reindeer husbandry" (Geological Survey of Sweden, 2019b). If there is a disagreement between the country administrative board (*länsstyrelsen*) and the Chief Mining Inspector (*Bergmästaren*) on the impacts from a mine in relation to other public interests, decision-making authority will be granted to the government (ibid.).

This is what has happened in the case of Boliden's application for exploitation. The county administrative board in Norrbotten (*Länsstyrelsen Norrbotten*) claimed that the establishment of a mine in Laver would cause a significant and permanent impact on parts of Natura 2000 areas, as well as severely impacting reindeer herding (Mining Inspectorate of Sweden, 2016). The board proposed the Swedish Mining Inspectorate to reject Boliden's application and, in 2016, the Swedish Mining Inspectorate rejected the company's application (Ibid.). Currently, no mining concession has been granted to the mining company for the Laver-project (Boliden Mineral AB, 2019). Since 2016, Boliden has appealed to the Swedish Government, which has not yet said when they will make a decision (Ibid.).

4 Methodology

This research takes a feminist approach to methodology. Feminist research methods stress the importance of creating space for stories representing a broad spectrum of positions, experiences, genders, and ethnicities (Öhman, 2017). The female Sami scholar Öhman (2017) writes that she strives to write in a way that people feel respected and seen. This approach guides my work.

Qualitative methods were used to collect and analyze data. Bryman (2012) states that a welldesigned qualitative approach can facilitate an in-depth understanding of experiences and meanings held by research participants. The study aims to capture the complexity of the case and take an inductive approach to theory (Ibid.). The following sections outline the methods used for data collection and data analysis as well as my reasoning around research ethics and positionality.

4.1 Collection of background information

To collect background information I reviewed academic sources, media coverage, policy documents as well as grey literature. Academic literature was used to review the state of the art knowledge on EJ and mining in the Global North. To familiarize myself with the debate about mining conflicts in Sweden and current mining projects, I reviewed relevant news from national media as well as local news sources from northern Sweden. Policy documents were used to learn about the legal process of a mine in Laver. Grey literature, such as websites from the mining company, as well as NGO's, informed my actor analysis. Overall, the information gathered shaped the outline of my fieldwork as it determined what actors to include, where to travel, and ultimately, what questions to ask.

4.2 Fieldwork

Fieldwork was conducted for five weeks, three weeks in August 2019, and two weeks in January 2020. Before the first round of fieldwork, I contacted key informants, collected background information, and drafted an interview guide. Before the second round of fieldwork, I prepared a presentation and contacted additional informants.

In August 2019 I visited the office of the mining company in the town of Boliden. I conducted two formal interviews with a representative for the company and I had the opportunity to visit the mine in Boliden. Later I traveled to Älvsbyn where the majority of the

fieldwork was carried out. Members of the environmental group Pite Älvdal guided me around the old mine in Laver.

Also, I participated in a three-day social gathering with the Sami Association in Arvidsjaur (Arvidsjaurs Sameförening) in Arvidsjaur (one hour drive from Älvsbyn). To gain a sense of trust and familiarity, I assisted in gáhkku-baking, a traditional Sami bread, and socialized with members of the association. Through initial contacts, I met reindeer herders who I interviewed.

In January 2020, I traveled back to Älvsbyn to conduct additional interviews. I presented my study at a social meeting place⁵ and the local high-school to meet local citizens to interview.

4.3 Semi-structured interviews

A purposive sampling strategy and snowball sampling were used to collect data. Bryman (2012) describes purposive sampling as a strategic way to gather data directly relevant to the research inquiry. This strategy allowed me to sample a variety of key informants. To meet more respondents willing to take part in the research, I applied a snowball sampling technique. Snowball sampling is a method where established contacts can lead to new respondents relevant to the study (Bryman, 2012).

To gain an in-depth understanding of the participant's view of a new mine in Laver, 37 semistructured interviews were conducted (see a list in Appendix 1). The format of semistructured interviews allowed for a focused discussion around themes relevant to my research questions (Bryman, 2012). My interview guide covered three main themes according to my research questions: distribution of costs and benefits, recognition, and participation (see interview guide in Appendix 2). Questions were added when I interviewed participants with unique insights on certain topics.

A total number of 45 research participants were interviewed for this study (in 37 interviews since some were group-interviews), covering a wide range of actors. These included representatives from the mining company, indigenous communities (seven participants), the local environmental group (three participants), officials from Älvsbyn municipality (two participants), local politicians (three participants), business representatives (two participants), local citizens (25 participants), Norrbotten County and a mining expert (see Appendix 2).

⁵ A discussion-café held at ABF Norr in Älvsbyn. In English, ABF stands for "Worker's Educational Association".

Before the first interview, I conducted a pilot interview with a sample of three respondents to test my interview guide before proceeding with the rest of the interviews. As Bryman (2012) notes, testing the interview guide allowed me to adjust the guide for it to better suit the purpose of the study.

Commonly, a time and a place (based on the convenience of the research participant) had been agreed upon ahead of the interview. Interviews took place in the homes or offices of research participants, or public meeting places. In Arvidsjaur, I also conducted interviews outdoors. When possible, I offered the interviewee coffee and/or lunch.

Prior to each interview, I introduced myself and the purpose of my research and gave the participant an information letter about the study. I received written informed consent from all research participants. An interview lasted from 30 minutes to up to two hours, commonly one hour. All interviews were audio-recorded.

4.4 Analytical framework

To answer the first research question, I described the mining conflict and identified the actors involved. To answer research questions two through four, I used the EJ framework, see table 1 (Schlosberg, 2003, 2007).

Research question:	2. What is the expected distribution of costs and benefits?	3. To what extent is cultural distinctiveness recognized and respected in the process and discourse around establishing a mine in Laver?	4.To what extent have the different actors been included in the decision- making process?
Concept:	Justice as distribution	Justice as recognition	Procedural justice
Analytical tools:	 Identification of costs and benefits Vulnerability, needs, responsibility (Walker, 2012). 	Patters of misrecognition (Fraser, 1998): - Cultural domination - Non- recognition - Disrespect	Principles for participation defined by Bell and Carrick (2018) and Hunold and Young (1998). Ladder of citizen participation (Arnstein, 1969).

4.5 Data analysis

To analyze the data, I conducted a content analysis. Berg and Lune (2012) describe content analysis as a process used to interpret text material and code it to address research questions. The method was used to identify patterns in the data and group them into themes (ibid.).

To analyze the text from transcribed interviews, I conducted a narrative analysis. Narrative analysis is used to interpret the data by "listening to the words of the text and understanding better the perspective(s) of the producer of these words" (Berg & Lune, 2012), p. 355). I analyzed the manifest and latent content of the text. The manifest content is the actual words used by the interviewees, which can be quantified (Berg & Lune, 2012). The latent content is the symbolism of the words used (Ibid.). The two facets in a narrative analysis allowed me to analyze both to which degree a phenomenon is present in the data and what the research participant meant by using words to describe phenomena. Considering the normative nature of EJ inquiries, I agree with Bryman (2012), who notes that analyzing the meanings ascribed to social phenomena is key.

The analysis was carried out in four phases. First, I began by transcribing all interviews to have the full text to examine in preparation for the analysis. Then, I identified themes emerging from the data and categorized them. When the themes were identified, I conducted a narrative analysis to review manifest and latent content. Lastly, I linked the manifest and latent content to the EJ framework to answer my research questions.

4.6 Research Ethics

Ethical considerations are at the core of feminist research (Scheyvens, 2014). My work was conducted properly to avoid causing harm to research participants or myself. Considering the political sensitivity of the case, assuring anonymity for all research participants was key (Scheyvens, 2014). To ensure transparency I informed participants about the research process and its objectives (Ibid.). The study followed the recommended procedures for research in Norway and the process for collecting and storing primary data has been accepted by the Norwegian Data Protection Official for Research.

This research project includes indigenous research participants. For many indigenous communities, the term "research" is linked to colonial and imperial interventions (Porsanger, 2004). Research on or about indigenous peoples has often enhanced unequal power structures and enabled the exploitation of land and resources at the expense of indigenous livelihoods

(Ibid.). I am conscious of these harmful research-practices. I view all research participants as co-producers of knowledge (Martin, 2017) and emphasize that this is a study conducted *with* indigenous research participants, not on or about (Singh & Major, 2017).

A sense of respect and reciprocity guides my work. As a way to show respect to research participants, I will share my findings in wider, non-academic forums and engage in future discussions concerning the topic (Öhman, 2017). I plan to host a workshop at the Jokkmokk Winter Market, an important meeting place for Sami as well as Swedes, and a workshop in Älvsbyn, after completing this thesis. I intend to provide an accurate EJ analysis of the Laver-case which can inform policy.

Martin (2017) notes the importance to consider positionality when researching with indigenous people, communities, and entities, as it enhances the understanding of meaning and context from which the researcher or research participant speaks, acts, and thinks (Ibid.).

To position myself in this research, I will provide a brief introduction. I'm a white Swedish woman, born and raised in southern Sweden. My father is from the province of Jämtland, northern Sweden. He grew up in Strömsund municipality, where the three Sami communities' practice traditional reindeer herding (Sami Parliament in Sweden, 2019b). Through him, I have come to learn about Sami culture and practices.

The Swedish colonial legacy and its influence on current policy were long unknown to me. Through education, diverse friendships, and travels I have learned to critically examine how colonial structures create and continue to reinforce, injustices. I am aware of my privileged position and I strive to contribute to social and environmental justice through my work. I will continuously reflect on my positionality and its implications (Scheyvens, 2014).

5 Analysis

5.1 Characterization of the conflict

A mine in Laver presents a conflict of interest. Three national interests exist on the land of the proposed mine: valuable minerals, traditional reindeer herding, and valuable nature reserves (Naturskyddsföreningen, 2020b). According to the Environmental Code *(Miljöbalken)*, national interests are geographical areas with valuable qualities for the nation, either preserve or exploit (*The Environmental Code*, 2000).

In 2014, the Geological Survey of Sweden, an expert agency for issues relating to bedrock, determined the copper findings in Laver to be of "national interest" (Geological Survey of Sweden, 2014). The minerals are considered of great importance for the mineral-provision of Sweden in a short and long-term perspective (Ibid.).

The Swedish law states that reindeer husbandry is a national interest that should be protected (*The Environmental Code*, 2000). According to the National Union of the Swedish Sami, the proposed mine in Laver would bring considerable harm to reindeer herding in the area (National Union of the Swedish Sami, 2017).

Ecosystems in the area have been classified as of national interest due to its status as a Natura 2000 area (Mining Inspectorate of Sweden, 2016). The environmental association Pite Älvdal states that a mine may bring significant damage to the ecosystems in the area (Naturskyddsföreningen, 2020b). According to the Environmental Code, when there are conflicting national interests in an area, exploitation can only be granted permission if it does not fundamentally disturb environmental or cultural values (*The Environmental Code*, 2000).

Different national interests represent conflicting values such as notions of growth and development versus notions of environmental and cultural protection. Valuable minerals are extracted to sustain economic growth, i.e. economic values are attached to the interest. Since reindeer herding is related to Sami culture, it is an interest holding cultural values. Lastly, valuable nature reserves reflect ecological values. These values are not compatible as the extraction of minerals compromise other values. In the case of Laver, actors argue for the prioritization of different values.

5.1.1 Actors analysis

Reviewing academic literature and policy documents as well as media coverage about the establishment of a mine in Laver, I identified the following actors as relevant to my study: Boliden, Älvsbyn municipality, the Sami community Semisjaur Njarg and the environmental group Pite Älvdal. The following sections describe each actor group and their position towards a mine in Laver.

Boliden

Boliden is the mineral company applying for exploitation concession for the Laver-project (Boliden Mineral AB, 2019). The ownership of Boliden is divided between Swedish accounts (26 %) and foreign accounts (62 %) (Boliden Mineral AB, 2020b). However, the majority of the company's shareholders are Swedish (Boliden Mineral AB, 2020d). Boliden currently operates in Sweden, Norway, Finland, and Ireland where it prospects, mines and refines mainly zinc and copper, but also gold, silver, and lead (Boliden Mineral AB, 2020a).

In Sweden, the company currently operates three mines: Boliden Aiktik, Boliden Garpenberg, and mines in the Boliden area (Boliden Mineral AB, 2020c). Boliden Aiktik, located outside of Gällivare in Norrbotten County, is currently the largest open-pit mine in Sweden (Boliden Mineral AB, 2020e). The company states that "around 38,472 Ktonnes of ore were processed to form metal concentrates containing copper, gold and silver" in Boliden Aiktik in 2018 (Ibid.).

The dam burst of the old mine in Laver is not the only controversial accident in a Boliden mine where environmental costs have affected local communities and environments. In 2000, Boliden Aiktik experienced dam failure (Länsstyrelsen i Norrbottens län, 2001). Approximately 1,6 Mm3 contaminated water with high levels of copper flowed via the industrial site into two nearby rivers. An investigation by the County Administrative Board concluded that the dam failure was caused by shortcomings in Boliden's operations (Ibid.).

A similar event occurred in Spain in 1998, where a tailing pond failure occurred in the Boliden Aparisa mining operation in the Aznalcóllar open pit mine. The event caused acid and metal-rich water to flow out and around 1.3-1.9 Mton of mine tailings contaminated the physical surroundings. The event caused severe long-term damage to the local environment (Eriksson & Adamek, 2000).

Älvsbyn municipality

Älvsbyn municipality is in favor of a new mine in Laver (Jonsson, 2015). The municipality considers the mine as an investment enhancing local development by generating socioeconomic benefits. In particular, the municipality views the employment opportunities associated with a mine as attractive (Zimmer, 2014). The perceived impact of this job creation will be discussed in more detail in the following analytical section.

The Sami community Semisjaur Njarg

The community of Semisjaur Njarg is a so-called mountain reindeer herding community (*fjällsameby*) in Norrbotten county (Sami Parliament in Sweden, 2018). In Sweden, there are 51 reindeer herding communities (*samebyar*) (Sami Parliament in Sweden, 2019a). The communities were created as colonial institutions and reflect the state-effort to regulate diverse reindeer herding groups in manageable units (Lawrence & Larsen, 2017). The communities are both a geographical area where reindeer herding is conducted and an economic and administrative organization with its own elected board. They operate as legal entities that represent their members (Sami Parliament in Sweden, 2019a). According to Norrbotten County, the community of Semisjaur Njarg is allowed to herd up to 9000 reindeer in their winter-herd (Sami Parliament in Sweden, 2018).

Reindeer herding is an all-year nomadic practice that requires large areas of land to allow seasonal grazing (Lawrence & Kløcker Larsen, 2016). Today, Semisjaur Njarg uses summer pastures close to the Norwegian border and winter pastures in Norrbotten County. The community consists of two groups, Tjidjakk and Tjallas. Each group is divided into winter-herding groups. The proposed mine is located in the area used by one of the winter-herding groups of Tjidjakk, the Laver-winter group (Ibid.). Semisjaur Njarg has opposed the establishment of a mine in the area (Lawrence & Kløcker Larsen, 2016) and this position is supported by the Sami Parliament in Sweden (Björne & Kejonen, 2015). A community member said:

*"We are against. Because it is such a large encroachment. It is like they take away all winter grazing pastures for one group. It disappears. Everything. So, we are against "*⁶ Int. 18

⁶ "Vi är emot. Eftersom det är ett så pass stort intrång. Det är som att dem tar bort allt vinterbete för en grupp. Det försvinner. Allt. Så vi är emot". Int. 18

The environmental group 'Pite Älvdal'

The environmental group Pite Älvdal (*Miljögruppen Pite Älvdal*) is a local association that was formed in 2015 by concerned citizens opposing a mine in Laver (Naturskyddsföreningen, 2020b). The association is a local chapter of the national environmental organization "Swedish Society for Nature Conservation" (Naturskyddsföreningen) (ibid.). The group raises awareness about socio-ecological implications that they fear a mine would cause. Members of the association guide visitors around the site of the old mine to inform others about its environmental impacts (Naturskyddsföreningen, 2020b). The association has about 200 members (according to its members).

As the actor analysis describes, the establishment of a mine in Laver presents a conflict of interests and values. The following sections will outline what EJ implications this mine may have.

5.2 Environmental Justice analysis

5.2.1 Distributional Justice

The proponents of a new mine, such as representatives from Älvsbyn municipality and citizens, view greater benefits than costs. The main benefits described are local socioeconomic benefits: increased employment opportunities, increased tax revenues, and local development.

If a mine is established in Laver, the municipality and Boliden claim that 600-700 jobs would be created (referring to the similarly scaled Boliden Aiktik mine). Even if the final number of jobs might be less due to automatization, the municipality still emphasizes that a mine would have a significant positive effect on the local economy. Boliden calculates that for every mining-job, 4,8 jobs are created in other sectors needed to supply the mine, thus, creating a spin-off effect. The plans for a new mine bring hope to local entrepreneurs since the investment could generate growth in local trade. Some respondents also mention that a mine would become a future tourist attraction.

Inmigration is described as one of the main local benefits. New employment opportunities in the municipality would attract new citizens to Älvsbyn, which would lead to increased tax revenues. Income tax is described as essential to maintaining social services, such as schools and elderly homes, that currently risk being closed due to lack of resources. For some, a new mine is considered a "savior" since immigration would keep the small villages populated.

Boliden, as well as local politicians, claim that Boliden does not have a tradition of "fly-in fly-out" where miners commute long distances to work but, instead, a high percentage of employees living in nearby towns. However, actors opposing mining claim that employees will most likely commute and not contribute to income tax. They refer to other mining-towns, such as Gällivare and Kiruna, with high numbers of employees commuting.

A new mine is perceived by its proponents as a back-bone of future development. One respondent expected:

"Better roads, better streets. Better everything. That is what follows industrial development" ⁷Int. 12

Others mentioned that a mine might not contribute to development but could, at least, hinder a stagnation. A respondent said:

"And even if it doesn't generate new jobs it might secure the existing ones. Because that is what it is all about. Today we are, we are too few who live here. And a clear sign of that is all the empty shops on Main Street".⁸ Int. 28

The opposition, such as members of the environmental group and local citizens, acknowledge similar benefits but argue that these will be temporary and less significant. They claim that the opportunity for local businesses to increase their trade will reduce after the mine is built. Similarly, employment opportunities are believed to be numerous only during the construction of the mine. They also argue that mining jobs are created at the expense of other livelihoods, such as reindeer herding, tourism, and fishing.

The proposed operational time of the mine (20 years to begin with) is noted to be very short. The temporary socio-economic gains from a mine in Laver is compared to other industries that have been prevalent in northern Sweden during the 19th and 20th century. One respondent said:

"But it is probably like with everything, it is only during that time. They would be like the railroad workers but in a mine. They would move in, build, and move on. Just like when they

⁷ "Bättre vägar, bättre gator. Bättre allt. Det är ju det som följer med en industriell utveckling" Int. 12

⁸ "Och även om inte det genererar kanske några nya jobb så kanske säkerställer det dem gamla. För det är litegrann det det handlar om också så att säga. Vi är ju idag, så är vi ju för lite folk som bor här. Och ett säkert tecken på det är ju alla tomma lokaler som finns efter Storgatan." Int. 28

constructed the hydropower plants. Porjus flourished when they built the power plants in Porjus. Storjasjöfallet, yeah. But after that time there's really nothing left"⁹ Int. 21

Automatization is described as the main reason why the more permanent mining-jobs are not anticipated at the level that Boliden and the municipality predicts. Respondents refer to previous industries that have been rationalized, like the industrial forestry, and where jobs have been lost.

Respondents argue that resource-rich regions do not benefit financially since companies do not pay taxes locally. This, together with the low royalties from mining, leaves little financial benefits to the areas from which resources are exploited. As one respondent exemplified:

"Take Jokkmokk for example, it could have been the richest municipality in Sweden. They have enormous amounts of hydropower, but a few years ago they could only afford to have every second streetlight on. And they have vast areas with forests. The price for wood has been high and the state has generated great profits for the forest industry. But how much stays in Jokkmokk?"¹⁰ Int. 13

In summary, a mine in Laver is seen by its proponents as an investment that would generate significant socio-economic benefits. The opposition acknowledges the same benefits but argues that they would be temporary and less significant.

Actors opposing a mine perceive high environmental and social costs. A mine is described as a "threat" to the ecosystems in the area. The environmental group Pite Älvdal fear that the Natura 2000 protected water bodies will be polluted by the toxic mining-waste. A member of the group said:

⁹ "Men det är förmodligen som med allt, det är bara den tiden. De kommer vara som några "gruvrallare". Den flyttar in, bygger och drar vidare. Precis som dem som byggde krafverken. Porjus blomstrade ju en tid när dem byggde kraftverken i Porjus. Storasjöfallet, ja. Men sen så blir det liksom inget kvar." Int. 21

¹⁰ " Se Jokkmokk tillexempel, det skulle kunna vara Sveriges rikaste kommun. Där har man ju enorm vattenkraft, men för några år sedan hade man bara råd att ha varannan gatulampa tänd. Och de har ju enorma arealer med skog. Det har ju varit ett högt pris på skog och staten har enorma intäckter från skogsindustrin. Men hur mycket stannar i Jokkmokk?" int. 13

"This is a deposit of immense amounts of poison. Numerous heavy metals, chemicals, lots of poison. And this shall stand there until the next ice age. If the dam failure does not come before that. And that is what we fear" ¹¹ Int. 8

A potential dam failure is a great concern for the environmental group. They see the entire water system of the Pite river as threatened if the walls of the dam storing waste-water would burst and release toxic wastewater. According to the environmental group, a dam failure would pollute the drinking water for more than 30 000 inhabitants in Piteå municipality and an estimate of 60 households located in the area are likely to be directly affected. Referring to the dam failure in Laver in the 1950s, respondents argue that a new mine poses a greater risk since the dam will be larger and the walls higher.

Even without a dam failure, the group anticipates that a mine would negatively affect water quality. They have taken their own water samples close to the old mine and one member said:

"The fish in the fen "Småträsket" has elevated contents of cadmium and copper in the fish. Cadmium is really dangerous. You can get cardiovascular diseases, cancer, and the kidneys... and then just imagine, what happens to the animals that graze by the old tailings?"¹² Int. 6

The environmental group stated that the experiences of environmental degradation from the old mine reflect the expected ecological impacts of a new mine.

According to its critics, a mine in Laver would cause additional environmental degradation. Dust carrying heavy metals would affect local air quality and ecosystems negatively. Respondents refer to Boliden Aiktik in Gällivare where locals experience this. A mine would also increase CO2 emissions. Since it would be located on afforested land used by the forest industry, a mine reduces that particular land's capacity to act as a carbon sink while also increasing CO2 emissions. According to environmentalists, the vast land area needed for the industrial establishment would also generate irreversible harm to biodiversity, wildlife, and ecosystem services in a Natura 2000 classified area.

¹¹ "Men då är det så att det här är ju en deponi av enorma mängder gifter. Det är ju ett flertal tungmetaller, kemikalier, massor med gifter. Och det här ska då stå till nästa istid. Om inte dammhaveriet hinner ske före det. Och det är det vi fruktar" Int. 8

¹² "The fish in the fen "Småträsket" has elevated contents of cadmium and copper, in the fish. Cadmium is really dangerous. You can get cardiovascular diseases, cancer and the kidneys… and then just imagine, what happens to the animals that graze by the old tailings?" Int. 6

Respondents described how a mine in Laver would alter the possibilities to enjoy recreational activities, such as hunting, fishing, hiking, and berry picking. A mine would also impact nature-based tourism. Some local citizens also mention that it would impact the land available for reindeer grazing. Respondents living close to the proposed mining site stated that the adverse environmental impacts would make them move away if a mine is established.

Respondents who identify as Sami see the potential loss of winter pastures as the greatest cost. Since the proposed mine is located on pastures used by the Tjidjack group, one of the two groups in the community of Semisjaur Njarg, the Tjidjack reindeer herders would lose access to winter grazing pastures. Reindeers need to migrate to gain a varied diet and to let unused as pastures revegetate and a mine in Laver would cut off the migration routes for reindeer in the Sami community.

The lost access to land requires alternative strategies. To compensate for lost grazing pastures, Boliden is willing to reimburse herders to feed the reindeers. Reindeer herders claim that feeding is costly, time-consuming, and not beneficial for the health of the reindeer. Today, unusual weather conditions, increasing with climate change, force herders to feed reindeer in emergencies. Respondents emphasize that feeding animals are not a part of traditional reindeer herding. A reindeer herder commented on this:

"Yes, you will be reimbursed... but what do I need money for? I have nowhere to herd my reindeer. If I receive a lot of money to feed them, yes but ehm... you know what, then I could buy some cows. Because that is not how reindeer herding should be done, to feed them like that"¹³ Int. 18

Another alternative is to relocate to other grazing pastures. To relocate is described as expensive, time-consuming, and undesirable since families risk losing social contacts as well as connection to the land. To relocate might not even be a viable option. In the area around Laver, no alternative grazing areas are available since these are occupied by other reindeer herders. Being forced to share pastures would increase competition over land, which could become a source of internal conflict. In this way, a mine in Laver would indirectly affect other reindeer herding communities, such as the nearby community of Östra Kikkejaur.

¹³ "Javisst, du får ersättning men... vad ska jag med pengar till? Jag har ju ingenstans att ha renarna. Om jag får jättemycket pengar för utfodring, ja men eh... vet du då kan jag köpa några kor. För det är ju inte så renskötsel ska vara uppbyggd att du ska mata dem och så". Int. 18

The last alternative is to decrease the number of reindeer in Semisjaur Njarg altogether. This would directly reduce the herders' income. If herders need to abandon herding, it leads to a loss of manpower sharing the work of the community.

There are three active reindeer herders in the Laver-area that will be directly affected by an industrial encroachment (Lawrence & Kløcker Larsen, 2016). According to Sami respondents, the direct impact on the Tjidjakk-winter group will affect the entire community as well as other reindeer herding communities. I argue that the relatively low number of jobs that would be lost due to the establishment of a mine cannot be traded for jobs in the mine since reindeer herding represents an invaluable cultural heritage.

The many years of uncertainty if a mine would be established or not has caused health issues, such as anxiety, sleep deprivation, and depression, amongst reindeer herders. Overall, my findings confirm previous studies of the consequences facing the Sami community if a mine is established in Laver (Lawrence & Kløcker Larsen, 2016).

The loss of rights to practice reindeer herding around Laver undoubtedly weakens Sami culture. For example, it may affect the Sami language. Reindeer herding is described as a "language carrier" since language is closely connected to the herding practices. If herding practices change or disappear, language would be less frequently used. Even if language can be taught in school, a respondent said that it would become "*knowledge with no use*" (Int. 7).

Respondents emphasize that the spiritual connection to ancestors through the land is lost when the land is exploited. However, a respondent said that it is rarely talked about with authorities and project investors since the perspective is not very accepted in a Western context.

Changed herding practices, such as feeding reindeer or using vehicles to transport animals, results in a loss of traditional knowledge. One respondent said that the Sami have been good at adapting to changed conditions in the past but that it has had implications:

"You cannot maintain a culture and at the same time demand that it should adapt to the Western (culture). Something must give way. Adaptation always has a price" ¹⁴ Int. 4

¹⁴ "Man kan inte bevara en kultur och samtidigt kräva att den ska anpassa sig till det västerländska. Nåt av det måste ge vika. Anpassningen har alltid ett pris." Int. 4

A direct loss of land makes it increasingly difficult to motivate the youth to become reindeer herders, something that is already a challenge. A respondent said that her children might not even be able to consider becoming reindeer herders in the future.

Every Sami person practicing culture is seen as a carrier of culture who may pass culture on to the next generation. The reduced possibility to practice reindeer herding, a fundamental part of Sami culture, may reduce the number of people who practice Sami culture. A respondent described this relationship:

"It is of great importance to remember that every encroachment that reduces the land available for a Sami community will have repercussions for culture. And this affects all Sami. So, every Sami is affected. In a negative way of all kinds of exploitations"¹⁵ Int. 4

Based on the statement above, and similar statements made by other Sami, I conclude that a mine in Laver has the potential to weaken Sami culture and it should, therefore, be looked at in a comprehensive context and not only be seen as having simply isolated localized implications.

In sum, actors opposing a mine in Laver describe high socio-ecological costs. Reindeer herders express that a mine in Laver is a threat to their livelihoods and cultural practices. Based on my findings, I argue that indigenous rights to land and culture are denied with a mine in Laver.

Concerning responsibility, needs, and vulnerability, the actor groups have different roles. Boliden aims to establish a mine and is therefore viewed as the actor responsible for the consequences brought by the extraction. The need for an undisturbed landscape is important to people living near the designated mining area and for those using the area for recreational purposes. The Sami community is dependent on the land for their livelihoods and culture and so, for them, the costs of a mine would be high. In other words, the actors using the land are the most vulnerable to environmental- and land-use changes.

Costs and benefits are unevenly distributed. I conclude that a mine in Laver will mainly benefit the corporate actor and the municipality, however, to what extent remains uncertain.

¹⁵ "Det är ju oerhört viktigt att minnas att varje ingrepp som minskar en samebys marker får återverkningar på kulturen. Och det berör alla samer. Så att varenda same är berörd. På ett negativt sätt av alla exploateringar." Int. 4

The mining company would benefit greatly by generating profits. The local benefits were perceived to be more or less significant, however, of short term benefit to the municipality. Due to low royalties from mining, I conclude that the Swedish state cannot be viewed as a significant beneficiary. The greatest costs of environmental destruction are shifted on to local citizens using the land. If the Sami community is denied access to land, their livelihoods are altered and Sami's rights to land and culture are denied. If a mine is established in Laver, local citizens in Älvsbyn and the indigenous community are faced with distributive injustice.

5.2.2 Recognitional Justice

The analysis of recognitional justice focuses on the recognition of the cultural distinctiveness of the Sami community. Considering the history of colonization of Sápmi, I see the need to direct explicit attention to how group difference is recognized to eliminate oppression (Young, 1990).

EJ implies that the needs and livelihoods of vulnerable groups are recognized (Urkidi & Walter, 2011). Members of Semisjaur Njarg stated that Boliden is unwilling to discuss which measurements they would take to ease the everyday work of the reindeer herders in case of a mine. The respondent from Boliden stated that the company currently does not have a plan for what measures to take in Laver to compensate the community, but that they have so-called "development projects" in other locations where their operations have altered the possibilities for reindeer herding.

However, the unwillingness to discuss measures crucial to the community cannot be seen as recognizing the needs of the community. Also, according to members of Semisjaur Njarg, Boliden does not take the cumulative effects of other industrial activities affecting the community into account when describing the impacts on the community. This signals the lack of recognition of the needs and livelihoods of the social group.

To achieve EJ, collective identities must be recognized (Urkidi & Walter, 2011). My data reveals that representatives from Älvsbyn municipality have a weak understanding of Sami cultural identity. A respondent said:

*"We do not have Sami culture. Well, we have citizens here who are Sami and own reindeer, but the Sami culture does not exist here"*¹⁶ Int. 14

This respondent referred to Sami culture as wearing traditional clothing and making cultural performances and claimed that these aspects are not present in Älvsbyn. The statement represents stereotyping of what true 'Sami' is. It also underlines how reindeer herding is not recognized as an important aspect of Sami culture.

In Sweden, matters related to reindeer herding are handled by the Ministry of Enterprise and Innovation (*Näringsdepartementet*) (Government Offices of Sweden, 2020) and Sami respondents expressed that this "reduces" the herding to a purely economic matter. The classification also translates into a "lack of will" (Int. 7) from the mining company to discuss how traditional reindeer herding can be maintained. According to the respondents, this classification doesn't recognize reindeer herding as a key part of Sami culture. This is also reflected in statements from citizens:

*"Reindeer herding is small, but it is not so enormously different than other industries"*¹⁷ Int. 11

In Älvsbyn municipality, the general recognition of Sami presence is low. A respondent said:

*"To me, it is incredibly important to highlight the Sami presence in the municipality. And the fact that Sami people live here. Because they don't seem to understand that"*¹⁸ Int. 10

Further, local politicians show a weak understanding of the practices of Semisjaur Njarg. A representative from the municipality mentioned that Sami communities want to be reimbursed when losing access to land since the communities prefer to feed reindeer over migrating with them as it reduces their workload. This view contrasts statements from Semisjaur Njarg. Others mentioned that they are not sure if the area around Laver is even used for reindeer herding. A respondent said:

¹⁶ "Vi har ju ingen samisk kultur. Alltså, vi har ju samer här som är renägare men den samiska kulturen finns ju inte här". Int. 14

¹⁷ "Rennäringen är liten men den är ju inte så oerhört mycket mer speciell än andra arella näringar." Int. 11

¹⁸ "För mig är det oerhört viktigt att lyfta det samiska närvaron i kommunen. Och att det finns samer som bor här. för det verkar man inte ha någon förståelse för" Int. 10

"I have lived here all my life, but I have never seen a reindeer up there. Until we started talking about a mine. But now I have been up there for a few years and now there has not been any reindeer"¹⁹ Int. 12

The same respondent stated that he does not understand, and, when I asked what he does not understand, he said:

"That this is so important to them. And I need to try to understand it even though I do not see it in practice. But I think this is how everyone in our village reasons. You become surprised every time this seems irreplaceable. But why? They have never been there. They have never been up in that area. But that is how I see it. They might be there at night. They might be there when I'm not there. And of course, these types of things create tensions"²⁰ Int. 12

This statement, and similar statements given by respondents in Älvsbyn, reflects the poor knowledge held by outsiders about the cultural practices of Semisjaur Njarg.

The importance of land to traditional reindeer herding is not recognized by mining proponents. Local citizens argue that the amount of land required for a mine in Laver is not significant. This non-recognition is well-captured in this statement:

"If you look at the total picture, no one will notice that you locate a mine there. A mine there is not even statistically measurable if you view the national amount of land. It will be very hard to see. But sure, someone will be affected, that's right. But the question is, it does not seem to be a matter of life and death as far as I understand. It is not even close"²¹ Int. 28

Indeed, a majority of citizens in favor of a mine do not think a mine would cause significant harm to the indigenous community. They argue that reindeer herding has been able to survive encroachments in the past, such as industrial hydropower development, without suffering considerable harm. The representative from Boliden also stressed, more than once, that the

¹⁹ "Man har ju bott där i hela sitt liv, men man har ju aldrig sett någon ren däruppe. Förrän vi började tala om gruvan. Men nu har jag varit upp några år och nu har det inte varit några renar där". Int. 12

²⁰ "Att det är så viktigt för dem. Och jag måste ju försöka förstå det även fast jag ser det liksom inte praktiskt. Men så tycker jag att alla som bor i våran by resonerar. Man blir liksom häpen varje gång det verkar vara omsitligt. Allstå varför? Dem har ju aldrig varit där. Dem har ju aldrig varit där uppe i området. Men det är ju som jag har sett det. Dem kanske är där på nätterna. Dem kanske är där när man inte är där. Och det är klart att det är ju sånt där som gör att det blir slitningar" Int. 12

²¹ "Om man tittar på den totala bilden så kommer ingen märka att det läggs en gruva där. Det är inte ens statistiskt mätbart, en gruva där, om man tittar på nationella tillgångar. Så att det är otroligt svårt att se. Och då blir det ju, jo men visst, någon kommer att påverkas, så är det. Men frågan är, det hänger inte på liv och lem vad jag kan förstå. Det är inte ens i närheten" Int

location of the Laver-mine was ideal since it would not cause significant harm to people residing in the area. In this statement, the harm caused to the indigenous community is not considered.

Overall, outsider perception of Sami cultural identity and traditional reindeer herding practices signals a misrecognition of cultural distinctiveness. Since the cultural importance of reindeer herding, as well as the importance of land, is played down in the discourse of the mining proponents, a pattern of *non-recognition* is identified.

Further, Sami respondents state that Sami's interests have to "stand aside" for the interests of the majority population and the State. A respondent said:

"There's a culture or view that the state has nurtured which is based on the notion that if there's a need for Sami territories, whichever, then the Sami needs to step back" Int. 10^{22}

This statement reflects a pattern of continuous *disrespect* of Sami interests. By adopting the Mineral Act, to enhance state interests of increased mineral exploitation, respondents argued that the State legitimized discrimination against Sami interests. A representative for the National Union of the Swedish Sami said:

"The Mineral Act is a very clear 'exploitation-legislation' that actually assumes that Sweden should exploit. That we should mine these minerals, it has been like this for a very long time. The state has insinuated that this is how it should be. It has occurred at the expense of other rights. They have taken Sami rights and the right to herd reindeer"²³ Int. 31

Lastly, misrecognition places indigenous culture at risk. Sami respondents fear that additional exploitation will eliminate the possibility to practice traditional reindeer herding in the long run. One respondent said:

²² "Det finns en kultur eller en syn som staten har förvaltat som bottnar i att finns det behov av samisk mark, vilka som helst, så är det samerna som ska stå tillbaka." Int. 10

²³ "Minerallagstiftningen är ju en väldigt tydlig exploateringslagstiftning som egentligen förutsätter att sverige ska exploatera. Att vi ska bryta dem här mineralerna, det har ju varit så under väldigt lång tid. Staten har ju ansett att det ska vara så. Då har det fått ske på bekostnad av andra rättigheter. Man har tagit samiska rättigheter och renskötselrättent". Int. 31

*"I don't think the reindeer husbandry can tolerate much more. We would have to stop this now. We cannot... we cannot just export Sápmi. We have the right to practice reindeer herding."*²⁴ Int. 19

BOX 1. A reindeer herder told me:

"...there was this old man, he was around 80 years old then, and I thought he was rambling because he drew a map a long, long time ago and said 'this is how it is going to be in the future, you may patronize me if you want but reindeer herding will disappear in certain areas. Because we need tourism, the mining industry, this and that.' You know, he meant that there would be no space along the entire Swedish mountain range, because there we have mines, there we have tourism, and we will have no space for reindeer herding. Eh. I thought this old man was bonkers. But the more I see how things develop I start to think that he might be right!" Int. 18 (see translation in Appendix 3)

To summarize, Sami culture is misrecognized in the Laver-case. A pattern of *non-recognition* is found as the cultural practices and livelihood needs are poorly understood and respected. The finding that Sami's interests need to accommodate the interests of the majority is identified as a pattern of *disrespect* since it does not seem to be isolated to the case of Laver. Based on my findings, I argue that the rights to culture remain unrecognized.

5.2.3 Procedural Justice

I start by analyzing participation in the decision-making of a mine in Laver, using the "ladder of citizen participation" (Arnstein, 1969) before analyzing principles for procedural justice defined by Bell and Carrick (2018) and Hunold and Young (1998).

First, locals have been invited by the municipality and by Boliden to meetings in Älvsbyn with regards to the plans of a mine. One person said:

"Information-meetings have been accessible which is good for those who are worried, scared, have thoughts, questions"²⁵ Int. 3

²⁴ "Jag tycker inte att rennäringen tål så mycket mera. Nu måste vi väl sätta stopp. Det kan inte… vi kan inte bara exportera Sápmi. Vi har ju en rätt att bedriva renskötsel". Int. 19

²⁵ "Det har funnits tillgång till informationsmöten vilket är bra för dem som är orologa, rädda, har funderingar, frågeställningar" Int. 3

The meeting venue was large and gathered around 500 people. Two respondents reflected upon the meeting:

"No, it was information. We were not allowed to ... they were the ones who talked. Someone raised their hand; it was almost full in there. Boliden was there, and also the head of the local government and the municipal commissioner ... and they were all just overwhelmingly positive "²⁶ Int. 26

" It was clear that Boliden ruled the meeting. What questions brought and so. And this, the time, we started at 19:00 or 18:30, and there was supposed to be time for questions. Yes, but that time was 10 or 15 minutes. I interrupted and asked a question. And there were a lot of people, they don't have a chance. And they are shy. It is impossible to have a consultation then. It was information, and it was solely in favor of opening a mine. That is why the municipal commissioner called to inform. And then the last municipal commissioner pronounced exactly what Boliden told her. She carries their message. That is how things are done"²⁷ Int. 24

Members of the environmental group claimed that they have even been hindered from asking questions at a meeting hosted by Boliden. One respondent said that the moderator of the meeting was asked by local politicians in Älvsbyn not to let the group ask questions during the meeting. When I asked why she thinks this happened she said: *"They really want to have a mine. And we are very disturbing"*²⁸ Int. 8

My data reveals that citizens have been invited to meetings to be informed by decisionmakers and the mining company about the process, not to influence it. Little time and

²⁶ "Nä det var information. Vi fick inte... det var dem som pratade. Någon som räckte upp handen, men det var nästan fullt där inne. Boliden var där, och så kommundirektören och kommunalrådet... och dem var ju bara överväldigande positiva" Int. 26

²⁷ "Det är klart att Boliden styr ju mötet va. Vilka frågor man tar upp och så. Och det här, tiden, vi började kl sju eller halv sju, det skulle finnas tid för frågor. Jamen den tiden är ju 10, eller 15 minuter. Jag avbröt själv och ställde nån fråga. Och det var så mycket folk, dem har ju ingen chans. Och dem är blyga och så. Så det är helt omöjligt att ha samråd då. Det är en information, den var ju enbart positiv för att öppna en gruva. Det var ju därför kommunlrådet kallade till det och informerade. Och sen har ju förra kommunalrådet uttalat sig precis vad Boliden sagt åt henne. Hon bär ju deras budskap. Så går det till" Int. 24

²⁸ "Man vill så gärna ha gruvan. Och vi är väldigt störande" Int. 8

possibilities were given for participants to voice their opinions, and citizens do not seem to have been asked for their opinion. In general, local citizens and members of the environmental group said that they find it difficult to influence the decision-making process. Noteworthy, those respondents who did not share the interests of the mining company or the municipality did not see the potential to significantly influence the decision. One respondent said that this is due to the power of economic actors:

"If it becomes a decision that is beneficial for Boliden and they decide to start a mine, then it doesn't matter if 500 people or a thousand or five-thousand say no, they will build a mine" ²⁹Int. 3

I conclude that the meetings have achieved the third step of the "ladder of citizen participation" namely the step of "informing" citizens (Arnstein, 1969). This part of the ladder is described as participation as *tokenism* (Ibid.).

Second, members of Semisjaur Njarg have been consulted by the mining company. One respondent commented on the consultation process:

"But really, I cannot blame the company for not having a dialogue with the reindeer herding community? The problem is though, they know from the company's side that the Mineral Act is written to make it easier for companies to make industrial investments of this kind. So, their perspective has been that 'okay, we talk to you, we have a dialogue with you but we actually we do not care about what you say because we will get this through anyway" Int. 7. ³⁰

According to members of the community, the consultation process is only a "show" since the Swedish mineral policy disregards Sami interests. Respondents said that consultations do not ensure meaningful Sami influence on decision-making since their interests are not prioritized in legalizations.

²⁹ "Blir det ett beslut som är gynnsamt för Boliden och dem bestämmer sig för att dra igång gruvan, då spelar det ingen roll om 500 stycken eller tusen eller femtusen säger nej, då blir det gruva" Int. 3

³⁰ "Men egentligen, jag kan väl inte klandra bolaget för att inte ha haft en dialog med samebyn? Problemet är ju litegrann att man vet från bolagets sida att minerallagen är skriven för att underlätta för bolagen att göra industriinvesteringar av den här typen. Så deras ingång har varit att "okej, vi pratar med er, vi för en dialog med er men egentligen så struntar vi i vad ni säger för att vi får igenom det här ändå". Int. 7

On the contrary, the representative from Boliden said that the company has a good collaboration with the community and emphasized that this of great importance to Boliden. The representative underlined that the community has the opportunity to raise complaints and express their opinions at any time.

According to members of Semisjaur Njarg, Boliden has not been attentive to their statements given in the consultation process. For example, one proposed location of the mine was perceived as less harmful for the reindeer herding. The community requested the company to choose this location. According to Semisjaur Njarg, this location was not chosen. The community concluded that their statements have been either ignored or marginalized by the mining company. Respondents argued that the company has fulfilled its duty of consulting the community, however, that it has not resulted in real outcomes for Semisjaur Njarg. I conclude that the consultation process has achieved the fourth step of the "ladder of citizen participation", namely "consultation" (Arnstein, 1969), which is also described as participation as *tokenism*.

In general, Sami respondents see very limited possibilities to influence the decision of a mine in Laver, despite being claimants in the case. Respondents claimed that Sami people need to have a greater influence on land use decisions that significantly impact their livelihoods. This is in line with the principle of *proportionality* (Bell & Carrick, 2018), stating that the most impacted groups should be given proportional influence. This principle is not realized in the case of the process in Laver.

I note that the principle of *shared decision-making authority* (Hunold & Young, 1998), where decisions are made jointly with participants, is not reflected in the case of Laver. Respondents say that decisions are made "over their heads" by powerful actors, such as the Government. A Sami respondent said: "Many people that you think 'what do they know about reindeer herding?' that will make the decision". Int. 17³¹

Further, according to processes for mining, public authorities do not consult communities. Instead, this responsibility is left to corporate actors. The community-members of Semisjaur Njarg do not view the relationship with the mining company as equal. One respondent reflected on this:

³¹ "Många människor som man tycker 'vad har dem för insikt i renskötseln?' som ska besluta". Int. 17

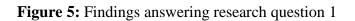
"It becomes a very uneven playing field. Take Boliden and look at their financial resources. And then look at the financial and human resources of a reindeer herding community and you will soon notice that it becomes very distorted" Int. 31³²

This statement reflects that the principle of procedural justice where *gross power disparities are eliminated*, is not achieved (Hunold & Young, 1998). Respondents described the consultation process as expensive for Semisjaur Njarg, draining their time, and financial resources. On the contrary, Boliden said that the company reimburses community members who participate in consultations. In my data, it is one word against the other.

However, other factors referred to earlier suggest that the two actors are not equal in this process. Without defined Sami land rights, and with legislative biases favoring mineral expansion, the power dynamics become skew. Also, my data confirms that local politicians have promoted a mine and encouraged Boliden to establish a mine in the municipality. This signals an alliance between local politicians and the mining company. The political support from local politicians, as well as mineral policies, further diminishes the importance of feedback from the Sami community. In other words, I conclude that the principle of *equality* (Bell & Carrick, 2018) is not achieved in the decision-making process.

In sum, citizen participation and consultation both qualify as participation as *tokenism* (Arnstein, 1969) since it leaves little room for participants to significantly influence the process. After analyzing procedural justice principles such as *proportionality, shared decision-making, the elimination of gross power disparities* and *equality,* (Bell and Carrick, 2018; Hunold and Young 1998), I conclude that procedural justice is not being achieved in the case of Laver.

³² "Det blir en väldigt ojämnlik spelplan. Ta boliden och titta på deras ekonmiska resurser. Och så tar du en sameby och tittar på deras ekonomiska och personella resurser, så kan du snart se att det blir väldigt skevt. Int. 31



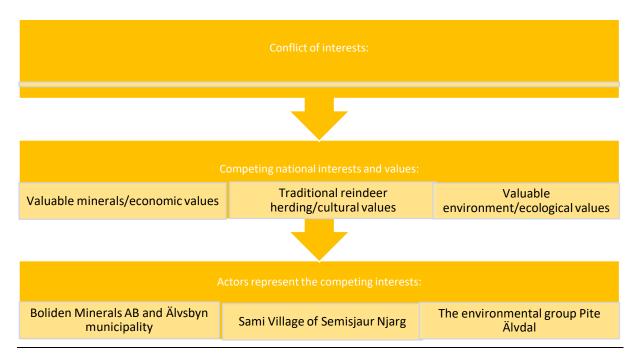


Figure 6: Findings answering research question 2, 3 and 4

Distribution	 Benefits: local socio-economic benefits such as employment opportunities, in-migration and income tax. Costs: environmental degradation and loss of recreational activities. Loss of winter grazing pastures for indigenous community, compromising rights to culture. Costs and benefits are unevenly distributed. If a mine is established, local citizens in Älvsbyn and the indigenous community are faced with distributive injustice.
Recognition	 The cultural distinctivness of Sami is misrecognized as the patterns of non-recognition and disrespect are found. Non-recognition: cultural identity, practices, needs and livelihoods are not fully recognized and respected. Disrespect: Sami express that their interests need to stand aside to accommodate the interests of the majority.
Procedure	 Citizen participation and consultation are both qualified as participation as <i>tokenism</i>. The main finding is procedural injustice, due to the unsatisfying fullfillment of principles for procedural justice.

6 Discussion

And it all starts to make sense

Why the Western man destroys things he doesn't understand³³

The main findings of this research are consistent with overall patterns described in previous literature of EJ of mining in the north. Three elements are particularly salient in these patterns: indigenous people disproportionately bear the costs of extraction; cultural distinctiveness is not recognized, and token participation. This chapter begins by contextualizing the main findings from Laver with previous literature, as well as providing policy recommendations to reduce detected environmental injustice. Secondly, I discuss the narrative of 'terra nullius' in relation to my findings of misrecognition. I argue the narrative play a role in practices of self-legitimization when establishing a mine in Laver, i.e. the continuous colonization of Sami territories. In the last section, I discuss how patterns of misrecognition are rooted in Sweden's colonial legacy.

6.1 Distribution

In the case of a mine in Laver, costs and benefits are unevenly distributed. Similar costs (environmental degradation, land use restrictions, and the fear of an environmental disaster) and benefits (employment, in-migration, and tax revenues), are described in other cases of mineral extraction in the European North, studied by Suopajärvi et al. (2016). Similar to the case of Laver, Muir and Booth (2012) note that mining in Canada implies high costs for local, often indigenous, communities dispossessed of lands, livelihoods, and environments of high cultural value. This leads to loss of livelihoods, culture, and traditional knowledge (Ibid.).

The uneven distribution of costs and benefits is amplified by the low royalties paid according to the mineral value (Persson et al., 2017), which allows for further cost-shifting to local communities and the environment. Interestingly, the former Swedish Prime Minister Fredrik Reinfeldt claimed in 2012:

³³ (Nakho Bear and the Medicine for the People, 2014, track 4)

"Our mining industry and our iron ore is for us what oil is for Norwegians. An amazing wealth, an opportunity to build future investments, future development and we think that it is important for us to help and reinforce this in different ways" (Herminge, 2012).

In this statement, the former Prime Minister compared apples with an entire orchard. Norwegian petroleum cannot be compared to the Swedish mining industry. In Norway, oil companies are taxed 78 % of profits (Norsk Petroleum, 2019). In 2019, the state received 126 billion NOK in tax revenues from the petroleum sector. The high taxes on petroleum are set to "benefit the society as a whole" (Norsk Petroleum, 2019).

In 2018, the royalty share of 0,05 % from mineral value generated 3,4 *million* SEK to the Swedish state (Geological Survey of Sweden, 2019a). To compare, the two largest mining companies, Boliden and LKAB, made 15 *billion* SEK profits the same year (Ibid.).

Also, the incomes from natural resource extraction are not proportionally distributed across the country (Hela Sverige ska leva, 2020), meaning that resource-rich regions do not benefit more than other regions despite experiencing local environmental degradation following extraction. The view of the mining sector as an engine for development (Persson et al., 2017) is, in my view, a well-sustained fantasy since it brings little benefit to citizens overall. Based on these factors, I conclude that the case of Laver is a part of a greater process of accumulation by dispossession shaped by an expanding mining sector in Sweden.

Employment in the Swedish mines has decreased. In 1960, the mining industry employed 16 000 people. In 2018, this number had reduced to 7000 people. Noteworthy, despite increased mineral production the demand for labor has decreased (Geological Survey of Sweden, 2019a). This underlines the skepticism towards the perceived number of jobs to be created by a mine in Laver.

A mine in Laver would alter access to land currently used by Semisjaur Njarg. However, the process of dispossession started when the Swedish Crown claimed ownership to land in Sápmi (Ojala & Nordin, 2015). Until today, Swedish authorities have the right to give exploration permits to mining companies willing to invest in extraction on traditional Sami territories (Geological Survey of Sweden, 2020). By not clearly defining and respecting indigenous rights to land, the Swedish state facilitates the continuous dispossession of Sami (Lantto & Mörkenstam, 2008).

If extraction is to take place, some policy recommendations could enhance benefit-sharing from mining in Sweden. To address the socio-ecological impacts of mining experienced by local communities, so-called "impact and benefit agreements" (bilateral agreements between corporations and communities) are commonly written to share royalties from extraction which take place on traditional indigenous territories (Fidler & Hitch, 2007; Söderholm & Svahn, 2015).

Progressive taxation is another option. In Norway, taxes on resource extraction are high and decentralized, meaning that tax revenues generated in one region benefit that particular region (Söderholm & Svahn, 2015). Unlike regions in Sweden, resource-rich regions of Norway may benefit proportionately from extraction (Ibid.). In Canada and Russia, mining companies pay taxes to regions where they operate (Hela Sverige ska leva, 2020). To address distributional injustices, I recommend a similar taxation strategy in Sweden together with raised royalties. In this way, this part of Sápmi may benefit financially from resource extraction.

6.2 Recognition

This case study finds that Sami culture is misrecognized, as patterns of *non-recognition* and *disrespect* are found in the data. The case confirms similar findings of recognitional injustice concerning mining in the Global North (Muir & Booth, 2012; Place & Hanlon, 2011; Sandlos & Keeling, 2016). For example, the importance of traditional caribou herding to the West Moberly First Nation in British Columbia, Canada, was not recognized and this resulted in the establishment of a coal mine on critical habitats for the caribou (Muir & Booth, 2012). In general, patterns of misrecognition may ultimately dispossess indigenous communities.

The inability to recognize cultural distinctiveness in mining activities stem from a structural non-recognition of indigenous rights. Haluza-Delay et al. (2009, p. 12) write that First Nations in Canada are "faced with systemic environmental injustice" due to "the failure by the Canadian state to recognize underlying and inalienable Aboriginal title and rights to traditionally used land and natural resources". In Sweden, this non-recognition can be traced to undefined land rights for Sami (Lantto & Mörkenstam, 2008).

Claims for recognitional justice in mining conflicts are a part of a larger struggle for the recognition of indigenous rights, especially rights to land (Ojala & Nordin, 2015; Persson et al., 2017; Place & Hanlon, 2011). Struggles against large-scale industrial establishments in Sweden, such as mining (Ojala & Nordin, 2015; Persson et al., 2017), wind power

(Lawrence, 2014), or hydropower (Össbo & Lantto, 2011) are all considered as claims to recognize Sami ownership of traditional territories. The highly contested EJ case of a mine on traditional Sami territories in Gállok, Norrbotten, has become a symbol for this struggle (Ojala & Nordin, 2015). The case has been compared to the important struggle against a hydropower dam in Alta, Norway, which resulted in increased recognition of indigenous rights in Norway (Ibid). I emphasize that defining and respecting indigenous land rights may enhance the possibility of achieving recognitional justice since it would strengthen the recognition of cultural distinctiveness of social groups.

Misrecognition risks indigenous cultural survival (Schlosberg, 2003). A mine in Laver, and an expanding Swedish mining sector in general, compromise the possibility to practice traditional reindeer herding. This violates Sweden's commitment to protecting indigenous culture, as stated in the Swedish constitution and as agreed to when ratifying the *CBD* and the *ICCPR*. Misrecognition will be further discussed in section 6.4 and 6.5.

6.3 Procedure

In the case of Laver, procedural justice is not being achieved. The finding of limited citizen participation is reflected in the aims of the Swedish mineral strategy. The strategy has been criticized for silencing differing opinions and for not adequately providing space for discussion (Haikola & Anshelm, 2018). It is clear from my analysis that local politicians and Boliden share interests of establishing a mine, and this finding can be seen as a part of a greater alliance between politics and industry to promote an expanding mining sector in the Global North (Suopajärvi et al., 2016). O'Faircheallaigh and Corbett (2006) write that the blurred lines between industry and state ambitions can limit meaningful participation, especially for indigenous actors. Due to structural biases favoring the mining industry, I see great obstacles for critical voices to significantly influence in the decision-making process.

Indigenous people across the Global North have experienced a sense of token inclusion (Bowman, 2011; Kuokkanen, 2019; Merrild et al., 2016; Muir & Booth, 2012; O'Faircheallaigh & Corbett, 2005; Place & Hanlon, 2011; Sandlos & Keeling, 2016). In general, increased indigenous participation during the past decades has not resulted in increased influence (Kuokkanen, 2019; O'Faircheallaigh & Corbett, 2005).

In a study comparing indigenous governance and extractive industries in Canada, Greenland, and Sápmi, Kuokkanen (2019) find that indigenous governance institutions are not

adequately addressed in decision-making. According to Kuokkanen (2019), colonial practices and ideologies persist and limit effective indigenous participation.

For example, the Sami Parliaments in Norway and Sweden have a consulting status when it comes to indigenous affairs, but no control over traditional Sami territories (Kuokkanen, 2019; Lantto & Mörkenstam, 2008). This means that the indigenous governance institutions can merely comment on the plans of extractive industries, but do not have real influence over the final decision (Kuokkanen, 2019). Governments of the respective nation-states can go ahead with plans for new mines despite opposition from the Sami Parliament, such as in the case of a mine in Kvalsund, Norway, (Kuokkanen, 2019) and Rönnbäcken, Sweden (Ojala & Nordin, 2015). I view this as process of procedural marginalization, where the mere structures do not allow indigenous actors to take part on equal terms (Shaw, 2018).

The lack of indigenous influence violates the indigenous right to self-determination (Ojala & Nordin, 2015). The UN Committee on the Elimination of Racial Discrimination expressed its concern about the fact that the Swedish Mineral Act allow for industrial exploitations to "proceed[s] in the Sami territories without Sami communities offering their free, prior and informed consent" (UN Committee on the Elimination of Racial Discrimination, 2013).

Limited Sami influence in decision-making has also been observed in the case of hydropower and wind power development in Sweden (Össbo & Lantto, 2011). Persson et al., (2017) suggests that by the practicing of the principle of FPIC, as stated in the *ILO convention 169*, the cultural distinctiveness of Sami could be recognized. In this way, recognitional justice and procedural justice for Sami could be enhanced (Ibid.).

Are there alternative pathways for participation? Critical academics, activists, and environmental groups demand that a consensus between mining companies and involved stakeholders is reached before proceeding with new mining projects (Haikola & Anshelm, 2016). This would enhance the principle of *shared decision-making authority* (Bell & Carrick, 2018).

The Sami Parliament in Sweden demands a Sami veto-right against extractive projects (Sami Parliament in Sweden, 2014). Unlike in Sweden, municipalities in Norway have the right to veto against extractive industry establishments (Nygaard, 2016). This has proved to generate a greater indigenous influence over decisions, and it enabled the municipality of Kautokeino, with a Sami-population in the majority, to reject the proposal of a mine (Johnsen, 2016; Nygaard, 2016). A veto right for indigenous actors strengthens the principle of

proportionality as well as increase their level of self-determination. I find these policy recommendations key to improving procedural justice in environmental decision-making.

The discussion about distribution, recognition, and procedure illuminated how Laver is a typical case of environmental injustice related to extractive industries in the Global North. I argued that misrecognition and procedural injustice denies Sami rights to culture and self-determination. I will now turn to discuss my findings in relation to the terra nullius narrative and Sweden's colonial legacy.

6.4 The narrative of 'Terra nullius'

The narrative of 'terra nullius' has been used to justify the appropriation of land previously occupied by indigenous people (Banerjee, 2000; Geisler, 2012; Simpson & Bagelman, 2018; Veracini, 2016). Simpson and Bagelman (2018) argue that indigenous people were disregarded by settlers based on racist stereotypes. For example, when settlers first arrived in the Lekwungen territory, now commonly known as Vancouver Island, Canada, settlers did not believe that the advanced agricultural systems on the island could be the work of the Lekwungen people since they viewed them as wild and barbaric (Simpson & Bagelman, 2018). This view enabled settlers to colonize land (Ibid.).

Similarly, in Sápmi, the Sami were perceived as inferior since they, in the eyes of the spectator, lacked developed property rights (Persson et al., 2017). Based on this they were disregarded as landowners (Ibid.). The perceived "emptiness" of Sápmi in the 17th century legitimized the beginning of resource extraction (Langston, 2013).

There is a clear connection between the terra nullius narrative and accumulation by dispossession (Veracini, 2016) since the narrative creates a perception that the settlers can legitimately occupy land (Simpson & Bagelman, 2018). This rationale is key to the expansion of settler colonialism (Simpson & Bagelman, 2018; Veracini, 2016).

The narrative still influences settler colonies. Veracini (2016) notes that "terra nullius, unlike other typically colonial ideas that had to go underground, is today publicly alive and shamelessly kicking" (2016, p. 174). Examples of the narrative can be found in recent statements from mining companies. During a presentation about a new mine in Gallók (Kallak), Sweden, located within the area used by Jåhkågasska Sami community, the CEO of the British mining company Bewolf was asked about the opinions of the local people (Persson et al., 2017). The CEO answered by showing a photo of dense forest with no people

and said, "What local people?" (Ibid.). Similarly, in the early 20th century it was seen as ideal to place large-scale hydropower plants in the "wilderness" since it would cause no harm there (Össbo & Lantto, 2011). These justifications for industrial development in Sápmi reflect a contemporary use of the narrative.

The findings of misrecognition in this case-study echo a narrative of terra nullius. Statements made by local politicians and representatives from the mining company reflect the idea of an empty landscape and where a mine would cause insignificant harm. If no one is there, how can they possibly be harmed by a mine? The narrative facilitates the dispossession of Semisjaur Njarg since it marginalizes the costs involved for the indigenous community. Overall, I argue that the narrative of terra nullius legitimizes the corporate colonialization of traditional indigenous territories.

6.5 Sweden's colonial legacy and its implications for environmental justice

My analysis illustrates patterns of *non-recognition* and *disrespect*, and I argue that these patterns have roots in Sweden's colonial legacy. Tuhiwai Smith (1999) notes that 'practices linked to the last century [...] are still employed to deny the validity of indigenous peoples' claim to existence, to land and territories, to the right of self-determination' (1999, p. 1). In Sweden, Lantto and Mörkenstam (2008) argue that "the historically discriminatory attitude, based on racial and cultural hierarchies, tend to be recreated into inequities in the present debate" (2008, p. 40). For example, use rights to land and resources for Sami are still based on the perception of 'indigeneity' present when the Reindeer Grazing Act was written in 1886 since the current version of the Act builds upon the original one (Lantto & Mörkenstam, 2008). This is one example of how colonial legacies still influence perceptions of Samihood and the enjoyment of Sami rights today.

Fraser (2000) notes that misrecognition can become institutionalized when a social group is subordinated by another group. Persson et al., (2017) notes that the Sami are a subordinate actor in decision-making concerning mines. According to Persson et al., (2017) historical misrecognition of Samihood and Sami rights is institutionalized since the state "is a colonial power exercising power over Sami population" (Persson et al., 2017, p. 25). To illustrate how historic patterns of misrecognition are influential today, I will relate my findings to the history of Swedish settler colonialism.

First, not recognizing the importance of reindeer herding to Sami culture is an example of *non-recognition*. I view this as a structural misrecognition since it has been institutionalized. At the beginning of the 20th century, reindeer herding was not considered to be different from other economic enterprises in Sweden (Lantto & Mörkenstam, 2008). Lantto and Mörkenstam (2008) argue that the view "immediately called into question why reindeer herding as an ordinary economic activity ought to be treated differently than other trades, and why reindeer herders as profit-seeking businessmen should be treated differently than other citizens" (2008, p. 35).

Today, reindeer herding is referred to and managed as another "industry" (*näring*) by the Swedish Government under the Ministry for Enterprise and Innovation (Government Offices of Sweden, 2020). Sami people also use this term (*rennäring*) (Sami Parliament in Sweden, 2020), however, respondents said that the classification of reindeer herding as an industry question claims for recognition of cultural distinctiveness as it eliminates the cultural importance to reindeer herding.

Further, Maruyama (2017) notes that opposing interests, such as reindeer herding and mining, are often considered from a macro-economic perspective. This tends to result in decisions favoring interests capable of generating local economic benefits (Ibid.). The reduction of reindeer herding into a comparable industry, in reality, implies that small administrative entities, such as the Sami communities, need to compete against profit-driven, capital intensive mining corporations. This competition further denies Sami rights to land and culture, not recognized in the economic discourse (Maruyama, 2017). I view the institutionalized classification of reindeer herding as an 'industry' as a structural obstacle to achieve recognitional justice.

Secondly, according to Schlosberg (2007), a pattern of *disrespect* can be identified when a group is continuously mistreated. In my study, this pattern is identified since the idea that Sami interests need to make room to accommodate the interests of the majority can be traced back in time.

The official conceptualization of the Sami lifestyle as 'unfit to modern society' justified the introduction of large industrial projects, such as mining (Langston, 2013), agriculture, and large-scale forestry on traditional Sami territories during the 19th century (Lantto & Mörkenstam, 2008). According to Össbo and Lantto (2011), the development of large-scale hydropower in the 20th century was made possible due to "a refined colonialism, immersed by

the industrial visions of modernization and the interpretative privilege of the majority society and its attitudes or blindness towards the Sami people and reindeer husbandry" (2011, p. 340). In other words, Sami were dispossessed to accommodate state interests in past centuries.

State interests continue to gain priority at the expense of Sami rights. For example, the current rapid development of wind power on traditional Sami territories is an example of how the environmental ambitions of the Swedish marginalize Sami interests (Lawrence, 2014). In Piteå municipality, close to Älvsbyn, the Swedish Ministry of Environment has accepted a proposal for what would be the world's largest wind power park (Markbygden) on the traditional lands of Östra Kikkejaur Sami community. Approximately 25 % of the Sami community's reindeer herding pastures are predicted to be lost due to the establishment (Ibid.).

If interests, such as wind power development and reindeer herding, cannot exist, the Ministry of Environment states that wind power projects are prioritized over the reindeer herding (Lawrence, 2014). Össbo and Lantto (2011) write that interests described as the "common good", such as increased production of renewable energy, tend to ignore the interests of the indigenous population (Össbo & Lantto, 2011).

According to Lantto and Mörkenstam, (2008) the prioritization of the "common good" at the expense of Sami interests "has always been a forceful argument for a limited system of rights, and this perspective is not abandoned" (2008, p. 38). This discussion highlights that the case of Laver, where the interests of the municipality and the mining company disregard Sami interests, follow a historical pattern of *disrespect*.

7 Conclusion

This study aimed to characterize the conflict of an open-pit mine in Laver, northern Sweden, and analyze the conflict according to the three pillars of EJ: distribution, recognition, and procedure. Four main findings were obtained in relation to my research questions.

First, the establishment of an open-pit mine in Laver has spurred a conflict of interests and values. Three conflicting national interests are located on the area where a mine is proposed: i) valuable minerals, ii) valuable environment (classified as a Natura 2000 area) and iii) traditional reindeer herding, representing conflicting values of development, conservation, and tradition. Will the largest open-pit mine ever to be operated in Sweden become established, enabling the extraction of valuable minerals needed to supply the increasing demand for copper? Or will the area be left as it is, allowing for the continued protection of Natura 2000 areas and for Sami to practice traditional reindeer herding?

The actors involved in the conflict advocate for different paths. The mining company and Älvsbyn municipality are in favor of a mine since it is believed to generate profit for company shareholders and generate socio-economic benefits for the municipality. Their goals reflect economic values. On the contrary, the local environmental group of Pite Älvdal and the Sami community of Semisjaur Njarg oppose a mine to protect ecological and cultural values. The different values represented by the actors cause tension and conflict since they are not perceived to be compatible.

Second, I found an uneven distribution of benefits and costs. The main benefits described were local socio-economic benefits such as employment opportunities, immigration, and increased tax revenues. The main costs described were environmental degradation, negatively affecting water quality and biodiversity. A mine would also reduce winter grazing pastures for Sami reindeer herders, which is linked to Sami rights and culture.

I conclude that a mine in Laver will mainly benefit the corporate actor and the municipality, however, to what extent remains uncertain. The greatest costs of environmental destruction are shifted on to local citizens using the land as well as the Sami community denied access to land to practice reindeer herding, which ultimately denies the rights to culture. If a mine is established in Laver, local citizens in Älvsbyn and the indigenous community are faced with distributive injustice.

Third, I found that cultural distinctiveness was not recognized and respected in the process and discourse. The cultural identity and needs of the Sami community were not well recognized. I conclude that cultural distinctiveness is misrecognized based on identified patterns of *non-recognition* and *disrespect* found in the discourse and process of a mine in Laver.

Lastly, all actors have not been included in the decision-making process in a meaningful way. I conclude that participation in this case of Laver can be labeled as *tokenism*. After assessing principles for procedural justice, I conclude that procedural justice has not been achieved in this case.

The environmental injustice found in the case of Laver is consistent with the findings in the EJ literature and the case-study shares similarities with other cases of extractivism in settler colonies in the Global North.

I discussed how the process of accumulation by dispossession is enhanced by the terra nullius narrative and I argued that it is used as a tool for industry and politics to achieve their ambitions, in this case, to increase extraction. I view this as a part of a continuous process of settler colonialism. Moreover, I linked my findings of misrecognition to colonial ideologies and practices in Swedish colonial history and argued that the colonial legacy influences current patterns of misrecognition.

What are the implications for environmental injustice? In the case of Laver, a mine would cause great socio-ecological losses, unevenly affecting vulnerable actors with little chance of influencing the decision. In regard to the respect for indigenous rights, the continued exploitation of natural resources in Sápmi threaten the cultural well-being of Sami. My main argument is that environmental injustice in the case of Laver violates internationally recognized indigenous rights to land, culture, and self-determination. This argument applies to other cases of mineral extraction in Sápmi.

To respect indigenous rights to land and self-determination, I strongly recommend Sweden to sign and ratify the *ILO convention 169*. I also view the possibility for Sami communities to have veto-power in decision-making regarding extractive activities as of great importance. To address procedural injustice in Sweden, meaningful citizen participation in decision-making processes regarding new mines must be ensured. Further, to reduce distributional injustice, a national tax on mineral extraction should be introduced. National taxes generated from extraction should also be distributed proportionately to the regions where extraction takes

place. Lastly, the implementation of benefit-sharing mechanisms could address the adverse impacts that vulnerable communities face from mining.

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9 Appendix 1: List of interviews

- 1. Representative from Boliden AB
- 2. Representative from Boliden AB
- 3. Citizen in Älvsbyn
- 4. Citizen in Älvsbyn
- 5. Public official in Älvsbyn Municipality
- 6. Member A of Pite Älvdal Environmental Group
- 7. Member of Semisjaur Njarg reindeer herding community
- 8. Member B of Pite Älvdal Environmental Group
- 9. Member A of Pite Älvdal Environmental Group
- 10. Citizen in Älvsbyn
- 11. Citizen in Älvsbyn
- 12. Local politician
- 13. Member C of Pite Älvdal Environmental Group
- 14. Local politician
- 15. Citizen in Älvsbyn
- 16. Public official in Älvsbyn Municipality
- 17. Member of Semisjaur Njarg reindeer herding community
- 18. Member of Semisjaur Njarg reindeer herding community
- 19. Member of Östra Kikkijauri reindeer herding community
- 20. Member of Östra Kikkijauri reindeer herding community and a local citizen
- 21. Citizen in Älvsbyn
- 22. Group interview with citizens in Älvsbyn
- 23. Two citizens in Älvsbyn
- 24. Citizen in Älvsbyn
- 25. Citizen in Älvsbyn
- 26. Citizen in Älvsbyn
- 27. Citizen in Älvsbyn
- 28. Citizen in Älvsbyn
- 29. Two citizens in Älvsbyn
- 30. Business representative
- 31. Representative for the National Union of the Swedish Sami
- 32. Citizen in Älvsbyn
- 33. Representative from Norrbotten County
- 34. Group interview with citizens in Älvsbyn
- 35. Local politician
- 36. Business representative
- 37. Mining expert

10 Appendix 2: Interview guide

Ask the interviewee to introduce him/herself

Opening question: how do you view a potential establishment of a new mine in Älvsbyn municipality?

Theme 1: Values

- What is of importance to you in the area around Laver?
- How would you describe the importance of the area to other people that you know?
- How do you use the area today?
- In who's interest is it that a mine is established?
- In who's interest is it that a mine is not established?
- According to you, who's interests are most accounted for?

Theme 2: Participation in the decision-making process

- What do you think about the decision-making process for a mine in Laver?
- Have you taken an active role in the participation process for the proposed mine in Laver?
- If yes: why have you been engaged?
- If no: why have you not been engaged?
- Has there been opportunities to express your views? If yes, what opportunities?
- Have you had the chance to influence the decision-making process?
- In general, are you satisfied or dissatisfied with the process? Why?
- According to you, what actor is most influential in the decision-making process? Why?

Theme 3: Distribution of costs and benefits

- What consequences would a new mine in the municipality cause?
- What benefits could it bring to you, your family and the society in general?
- What negative consequences could it bring to you, your family and the society in general?
- How do you think other people you know would think about this?
- Who is negatively affected by a mine?
- Who is positively affected by a mine?

Co-existence between activities:

- How do you view the possibility for different activities, such as mining, traditional reindeer herding, tourism, forestry etc. to co-exist in the area around Laver?

11 Appendix 3: Translation Box 1:

... det var en gubbe, en äldre herre, han var kring 80 år då, jag tyckte ju han var ganska svammlig, för han ritade för länge länge länge sen en karta och så sa han såhär kommer det bli, framtiden: du må ju dumförklara mig om ni vill men, renskötseln kommer att försvinna i vissa områden. För att vi behöver turism, gruvnäring, ditt och datt. Du vet, han menade på att det fanns inte plats längs hela sveriges fjällkedja, för här har vi gruvor, där har vi turism, där har vi renskötseln. Äh. Helt snurrig tänkte jag att gubben var. Men ju mer jag ser att det går framåt alltså då har jag börjat tänka på att han kan ju ha rätt!" Int. 18



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